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## Pathway analyses on spiritual leadership and religiosity toward innovative behaviour of church youth

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**Abstract:** This research aims to analyse and determine the pathways of spiritual leadership and religiosity and their associated mediators on church youth's innovative behaviour. A questionnaire survey was adopted to collect the primary data from youth in an Indonesian church. Subsequently, the data were analysed using the SEM-PLS approach to test the hypotheses. The results show a new phenomenon that spiritual leadership and religiosity as crucial variables cannot directly affect church youth's innovative behaviour significantly but require going through the mediator of creative role identity. In their pathway analyses, religiosity has been perceived as more important than spiritual leadership. The research contributes and provides insightful references for church youth's leadership. It also can be referred to by other countries or youth leadership in general.

**Keywords:** spiritual leadership; religiosity; uncertainty avoidance; creative role identity; church youth innovative behaviour.

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## 1 Introduction

In the face of increasingly complex challenges within the church, church youth are expected to be equipped with high spiritual qualities, intellectual capacity with resilience, and commendable moral qualities, by taking an active and creative role in proclaiming the Gospel to others and becoming future church leaders. Leadership theory can help churches implement leadership styles and structures that can facilitate the development of a theological-spiritual dimension (Jenssen, 2018). Religiosity is a belief in God equipped with a commitment to comply with the principles set by God. Individuals accustomed to religious attitudes generally take good actions in their activities (Retnawati et al., 2018).

These two main variables affect the church youth's innovation behaviour, especially in coping with the current practice of online worship. Previous studies have been reviewed and considered (refer to Subsection 2.6 in literature review). Mainly, Yang et al.'s (2020) study has been referred to and modified for this research. Their research determined the relationship of spiritual leadership to uncertainty avoidance and creative role identity on employees' innovative behaviour. This study adds the religiosity variable into the model from the perspective of church youth. Therefore, this research aims to analyse and determine the pathways of spiritual leadership and religiosity and their associated mediators on church youth's innovative behaviour. Choudhary et al. (2020) argued that employees' ability to innovate or the tendency of individuals to engage in innovative work behaviour (IWB) is one of the most critical skills demanded by employers. The model developed by Yang et al. has not been tested for the youth generation and a social environment. Hence the studies proposed to develop Yang et al. findings in a different culture in Indonesia, particularly for its pathways of spiritual leadership and religiosity towards uncertainty avoidance, creative role identity, and church youth's innovation behaviour. The findings would render meaningful strategies for church youth's leadership and could be referred by other countries or youth leadership or development programs.

## 2 Literature review and development of conceptual framework

The theoretical framework of this research involves several theories, including spiritual leadership, social media utilisation, congregational satisfaction, and congregational loyalty.

### 2.1 *Spiritual leadership*

Spiritual leadership is a leader's values, attitudes, and behaviours, including vision, faith, and altruistic love to motivate oneself and others through feelings of meaning and membership to form a feeling of spiritual prosperity. It consists of three principal components: vision, hope/faith, and altruistic love (Wang et al., 2019).

The theory of spiritual leadership is an emerging paradigm that links spirituality and leadership (Fry et al., 2005). The spiritual concept refers to recognising and developing the essence of animating power to improve humans (Fry and Cohen, 2009). Spiritual leadership is leadership that can inspire, awaken, influence, and move through example, service and compassion, and the implementation of values and other divine attributes. Spiritual leadership involves the motivation and inspiration of leaders and followers to love and serve others. Increased understanding of one's core values and self-identity will positively impact thinking, motivation, and behaviour with a spiritual leadership pattern (Fry et al., 2005).

Spiritual leadership for church youth aligns closely with a person's ability to influence a group of members to work to achieve agreed goals and targets (Robbins, 1994). According to the Christian World View, leadership requires individual responsibility and strength to work in team collaboration for a better future. In addition, Valk (2010) suggests that a leader could also distinguish right and wrong by learning from past events related to the present. Then, Lafkas et al. (2021) stated that in realising leadership, the church needs to provide encouragement and a forum for learning and skills in leadership.

### 2.2 *Religiosity*

Religiosity is a complex concept and difficult to define for at least two reasons. The first reason is the uncertainty and imprecise nature of the English language. Roget's Thesaurus reveals that religiosity is synonymous with religiosity, orthodoxy, faith, belief, piety, devotion, and holiness in everyday language (Lewis and Mawson, 1978).

According to McDaniel and Burnett (1990), religiosity is a belief in God equipped with a commitment to obey the principles believed to be set by God. Religiosity becomes the principle that governs the ideals of life, which is reflected in the values and attitudes of people, which, in turn, shape the behaviour and practices of people and various institutions influenced by religion (Farmer et al., 2003). Religiosity also includes beliefs, practices, knowledge, experiences, and the effects of these elements on daily activities (O'Connell in Abou-Youssef et al., 2015). A religious individual believes in God, obeys His laws, fears His punishment, develops an interest in his religion and practices it, and is patient and does not succumb to temptation (Souiden and Marzouki, 2015).

### 2.3 *Uncertainty avoidance*

Uncertainty is a broader concept that includes risk and opportunity and the difference between levels of ambiguity. Uncertainty is an essential concept in organisational dynamics, as emphasised by leading economists such as Cantillon, Mangoldt, Knight, and Keynes (Hébert and Link, 1989; Ekelund and Hébert, 1990). An individual in the organisation needs to take arbitrage, venture, and innovate since uncertainty is a fact of economic life (Van Praag, 1996; Wennekers and Thurik, 1999). Leaders are considered the main drivers who always face uncertainty in bringing the organisation to its vision.

Uncertainty avoidance is how members of a cultural group feel threatened by uncertain or unknown situations (Hofstede and Hofstede, 2005). Cultures with low uncertainty avoidance can accept uncertainty in life more quickly, so they generally have a strong desire to take risks. They have control over conflict and competition. In addition, they also assume that something different in the environment is not threatening. Therefore, they highly tolerate creative and new behaviour (Hofstede in Thomas and Mueller, 2000).

Meanwhile, cultures with high uncertainty avoidance usually avoid conflict and competition, so they usually fixate on specific behaviour patterns. Conversely, in low uncertainty avoidance cultures, they are more receptive to the inherent uncertainty in their lives and tolerant of the unusual. They do not feel threatened by different ideas or societies (Samovar et al., 2013). Therefore, they have a low tolerance for something they consider 'different' and new (Hofstede in Singh, 2006).

### 2.4 *Creative role identity*

Creative role identity means that individuals identify themselves as creative workers in the organisation (Farmer et al., 2003). This self-attribution comes from two primary sources: feedback about the self from others and related self-views (Riley and Burke, 1995). If there is a match between input from others and their views, individuals tend to regard them as supporting and proof of their views and apply them to their role identity. Based on identity theory, Petkus (1996) proposed a specific type, creative role identity, which is the extent to which an employee sees the role of being a creative employee as part of his or her job-related identity (Farmer et al., 2003). Employees with creative role identities proactively take on being creative in the workplace and perceive creative behaviour as a central component of self (Tierney and Farmer, 2011). According to Farmer et al. (2003), employees with creative role identities can be more creative at work and actively find new solutions to their problems. In particular, creative role identity reflects whether an employee views himself or herself as a creative person (Farmer et al., 2003). As a result, individuals with a robust creative role identity will pay more attention to new information, increasing their creative self-efficacy because they believe they are creative (Tierney and Farmer, 2011). *Creative role identity* is a variable measure adapted from Callero's (1985) role identity scale to measure the creative role of employees related to understanding the importance of employee creativity in the workplace.

### 2.5 *Church youth's innovative behaviour*

Various studies have identified and measured the characteristics of innovators. Organisational innovation is defined as the management practices and procedures and

innovative processes used to respond to environmental changes, particularly in the use of new technologies, and in order to meet various new needs and expectations, which lead to the creation of comparative advantage (Allameh et al., 2020). The traits of innovators are rare, and much of the literature mentions creativity as a personality trait. This trait assumes that creativity alone is insufficient to innovate regardless of other personal characteristics. Kirton (1976), innovative products and adapter sizes have been developed and are suitable for adult employees working in large organisations.

In contrast, this is exciting work based on the entrepreneurial model within companies and may apply to something other than our broader innovation concept. Finally, it is hoped that personality structure indicators such as the 'Big Five' can show the distinctive personality characteristics of innovators. Some think such an innovator will have imagination, curiosity, high energy, a strong desire for autonomy, freedom of social order, and self-confidence. However, some believe that such remote measures cannot predict innovation achievement or entrepreneurial outcomes.

## *2.6 Hypothesis development*

### *2.6.1 Spiritual leadership and uncertainty avoidance*

Aronson et al. (2006) conducted a study entitled 'The impact of leader personality on new product development teamwork and performance: the moderating role of uncertainty'. This study examines the leader personality's effect on new product development (NPD) project performance under different uncertainty conditions. The model in this study places teamwork as a mediating variable between the leader's personality and NPD performance. We used structural equation modelling to examine the two personality influence models. The study results indicate that spiritual leadership positively and significantly influences uncertainty avoidance.

Afsar et al. (2016) conducted a study to analyse transformational leadership in nurse managers through creative self-efficacy variables, trust in supervisors, and uncertainty avoidance. The study was conducted on 322 nurses and head nurses who work in the public hospital sector using confirmatory factor analysis (CFA). The results showed that transformational leadership has a positive relationship with uncertainty avoidance. Therefore, this study addresses the following hypotheses (H):

H1 Spiritual leadership positively affects uncertainty avoidance.

### *2.6.2 Spiritual leadership and creative role identity*

Wang (2020) conducted research entitled 'Research on the cross-level effect of spiritual leadership on employees' creativity'. This study analyses the effects and mechanisms of spiritual leadership through workplace spirituality on employee creativity. The results of the hierarchical statistical analysis of 192 valid supervisor-employee questionnaire datasets show that spiritual leadership significantly and positively affects creativity and workplace spirituality. Workplace spirituality has a hierarchical intermediary effect between the impact of spiritual leadership on employee creativity. Furthermore, creative role identity plays an essential role in increasing the effectiveness of spiritual leadership and motivating employees. Thus, the contribution of the findings of this study is to show that there is a positive and significant influence between spiritual leadership on creative role identity (shown through creativity in the workplace).

Xinyu and Zhihua (2020) conducted a research entitled ‘Research on the cross-level effect of spiritual leadership to employees’ creativity’. This study analyses the effects and mechanisms of spiritual leadership through workplace spirituality on employee creativity. With a hierarchical statistical analysis of 192 valid supervisor-employee questionnaire datasets, the results show that spiritual leadership significantly and positively affects creativity and workplace spirituality, and that workplace spirituality has a hierarchical intermediary effect between the impact of spiritual leadership on employee creativity. The result shows an important role in increasing spiritual leadership’s effectiveness and motivating employee creativity. Therefore, this study addresses the following hypotheses (H):

H2 Spiritual leadership positively affects creative role identity.

### *2.6.3 Spiritual leadership and church youth innovative behaviour*

Yang et al. (2020) conducted a study entitled ‘The chain mediation effect of spiritual leadership on employees’ innovative behavior’. This study aims to determine the relationship between spiritual leadership and employees’ innovative behaviour through individual values and role activities. This study uses structural equation modelling and bootstrapping approaches. The result of this research is that spiritual leadership positively influences employees’ innovative behaviour. Thus, the contribution of this study’s findings is to show a positive and significant influence between spiritual leadership and church youth innovative behaviour (shown through the innovative behaviour of employees). Therefore, this study addresses the following hypotheses (H):

H3 Spiritual leadership positively affects church youth’s innovative behaviour.

### *2.6.4 Religiosity and uncertainty avoidance*

Sekerdej et al. (2018) conducted a study that aims to examine how uncertainty and religiosity shape the attitudes of value-violating and value-consistent groups. Using multiple regression analysis, the study was conducted on 80 white citizens in Poland. The results show that religiosity/belief in God, when associated with uncertainty avoidance, can increase the prejudice of the value-violating group but simultaneously increase the positive attitude towards the value-consistent group. Therefore, this study addresses the following hypotheses (H):

H4 Religiosity positively affects uncertainty avoidance.

### *2.6.5 Religiosity and creative role identity*

Zysberg and Schenk (2013) conducted research entitled ‘Creativity, religiosity, and political attitudes’. This study aims to test the hypothesis that there is a direct relationship between the variables of religiosity, political attitude, and creativity. The analytical method used is regression analysis and SEM analysis. The study’s results revealed a relationship between religiosity, political and social attitudes, and mothers’ and fathers’ education on creativity. Therefore, this study addresses the following hypotheses (H):

H5 Religiosity positively affects creative role identity.

### 2.6.6 Religiosity and church youth innovative behaviour

Osiri et al. (2019) conducted a study entitled 'A cross-country study of innovation and religiosity'. This study aims to analyse the relationship between religion and innovation at the country level. The study was conducted in 141 countries using regression analysis. The results showed that religiosity had a negative relationship with innovation, with the strongest effect observed for religious intolerance. Therefore, this study addresses the following hypotheses (H):

H6 Religiosity positively affects church youth's innovative behaviour.

### 2.6.7 Uncertainty avoidance and creative role identity

Adair and Xiong (2018) conducted a study entitled 'How Chinese and Caucasian Canadians conceptualize creativity: the mediating role of uncertainty avoidance'. This study examines the cultural value mediators of the relationship between culture and the relative weight placed on novelty versus usefulness when conceptualising creativity with a sample of Caucasian Chinese and Canadian undergraduate students. The results showed a negative and significant relationship between uncertainty avoidance and creativity. This study also found that uncertainty avoidance mediates the relationship between culture and preference for novels versus the valuable dimensions of creativity. Therefore, this study addresses the following hypotheses (H):

H7 Uncertainty avoidance positively affects creative role identity.

### 2.6.8 Uncertainty avoidance and church youth innovative behaviour

Li et al. (2011) conducted a study entitled 'Why and when supervisor developmental feedback impact innovative behavior: the perspective of self-regulation theory', examining how supervisor feedback affects employee innovative behaviour. A multi-time survey method was used in this study to collect data from 310 employees in Chinese companies. The results showed that supervisor feedback positively affected employees' innovative behaviour through the mediating effect of self-goal setting. Furthermore, the study found that high uncertainty avoiders were likelier to increase their self-goal setting and engage in innovative behaviour.

Uzkurt et al. (2018) conducted a study entitled 'The impact of environmental uncertainty dimensions on organizational innovativeness: an empirical study on SMEs'. This study aimed to examine the effect of environmental uncertainty factors on the innovation of small and medium enterprises (SMEs). The data for this study were collected from 156 SMEs in Turkey. SMEs are considered essential in the country's economic growth, especially in developing countries like Turkey. The research findings reveal that market/demand and technology turbulence positively affect SME innovation. Then the main research hypothesis results show that the greater the environmental uncertainty, the higher the company's innovation is substantially accepted. This research contributes to the body of innovation literature development and provides direction for managers and researchers in influencing corporate innovation. Therefore, this study addresses the following hypotheses (H):

H8 Uncertainty avoidance positively affects church youth's innovative behaviour.

2.6.9 Creative role identity and church youth innovative behaviour

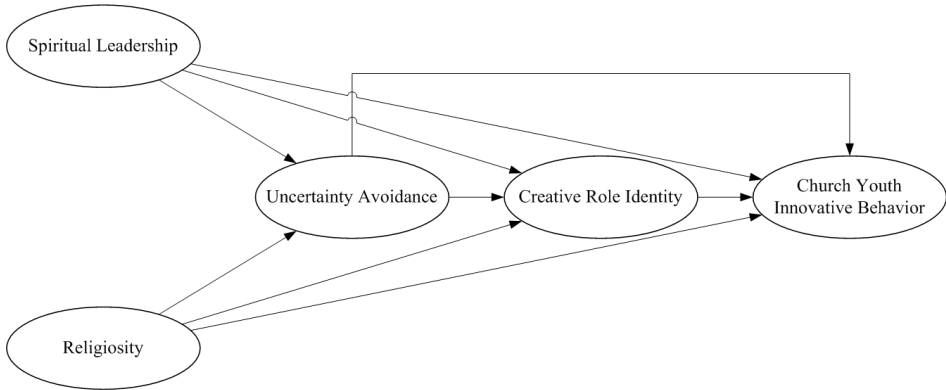
Yang et al. (2020) conducted a study entitled ‘The chain mediation effect of spiritual leadership on employees’ innovative behavior’. This study proposes a chain mediation model to examine the relationship between spiritual leadership and innovative employee behaviour through individual values and role identity. In this study, 309 valid leader-follower matching questionnaires from ten internet companies and 21 manufacturing companies in China were collected through the field study. SEM analysis was used to test a theoretical concept/confirm a theoretical concept. SEM analysis with bootstrapping is used to test the relationship between variables that exist in a model, both indicators and constructs, or relationships between constructs. The relationships between the variables to be tested are shown in the nine proposed hypotheses. The results show that spiritual leadership has a positive effect on innovative employee behaviour, spiritual leadership has a negative effect on uncertainty avoidance, spiritual leadership has a positive effect on creative role identity, uncertainty avoidance has a negative effect on creative role identity, uncertainty avoidance has a negative effect on innovative behaviour, and role identity. Creativity has a positive effect on innovative behaviour. Therefore, this study addresses the following hypotheses (H):

H9 Creative role identity positively affects church youth’s innovative behaviour.

The above studies show that the church youth is the missing group and research gap. There is a need to address this gap and promote youth leadership in churches, particularly under a different mode of online service. Based on this hypothesis, the research model analyses the relationship between spiritual leadership, religiosity, uncertainty avoidance, creative role, and innovative church youth. This study develops and tests the model proposed in Figure 1.

The conceptual framework of this study connects the relationship between variables, where spiritual leadership and religiosity influence church youth’s innovative behaviour as mediated by uncertainty avoidance and creative role identity variables, as shown in Figure 1.

**Figure 1** Conceptual framework



### 3 Method

The population in this study were all youth in the Protestant Batak Karo Church Permata in Jakarta – Kalimantan region with 1,976 people. In this study, simple random sampling was used as a sampling technique. Simple random sampling consists of some elements chosen randomly, where each element or member of the population has an equal chance of being selected as a sample. The sample of 350 people was obtained from 15 classical Batak Karo Protestant churches in Jakarta – Kalimantan region. The description of the research respondents can be shown in Table 1. This research was conducted in January 2021 through a survey method using questionnaires.

Data analysis used the structural equation modelling-partial least square (SEM-PLS) analysis model using the WarpPLS package computer program. SEM is a field of statistical study that can be used to solve research problems, where both independent and dependent variables are unmeasured variables. SEM can simultaneously test a series of relationships that are relatively difficult to measure, which the relationship in question is a relationship formed from one or more independent variables with one or more dependent variables (Hair et al., 2006).

The structural model shows the causality structure between the latent variables. In contrast, the measurement model is used to support the latent variables, which are confirmed by the dimensions of the explanatory variables. One of the SEM analysis techniques is component-based SEM or variance (PLS). PLS can analyse as well constructs formed with reflective indicators and formative indicators. PLS is one of the alternative methods that can answer the above problems because PLS is a soft method or soft model which, in its calculations, does not require strict assumptions, both regarding the distribution of the observed variables and the sample size, which does not have to be large (Ningsi, 2018).

**Table 1** Respondents descriptive statistics

No.	Characteristics	Criteria	Frequency (person)	Percentage (%)
1	Gender	Man	142	40.57
		Woman	208	59.43
2	Age	≤18 years	100	28.57
		19 s/d 22 years	100	28.57
		23 s/d 26 years	86	24.57
		27 years >=	64	18.29
3	Education	Senior high school	86	24.57
		3-year diploma	80	22.86
		4-year diploma	83	23.71
		Bachelor	101	28.86

In this study, descriptive respondents were supported by the characteristics of all youth in the Protestant Batak Karo Church. In this study, female respondents were the majority, as many as 208 people or 59.43%, while male respondents were 142 people or 40.57%. Based on age, 28.57% (100 people) of respondents aged less than 18 years, 28.57% (100 people) of respondents aged 19 to 22 years, 24.57% (86 people) of respondents aged 23 to 26 years, and the remaining 18.29% (64 people) are more than 27 years old. Research respondents aged <30 years or at least 15 years old have a high educational background. Namely, most are undergraduates and have reasonably good abilities in their fields.

#### 4 Result and discussion

The measurement of the outer model in the WarpPLS analysis is carried out in the first stage. There were two outer measurements, namely reflective and formative models. The weights and p-values for each indicator are shown in Table 2.

**Table 2** Measurement model evaluation

<i>Variable</i>	<i>Indicator</i>	<i>Measurement model</i>	<i>Weight</i>	<i>p-value</i>
Spiritual leadership (X1)	Vision (X1.1)	Formative	0.598	0.015
	Hope/faith (X1.2)	Formative	0.736	0.000
	Altruistic love (X1.3)	Formative	0.715	0.002
	Meaning/calling (X1.4)	Formative	0.675	0.001
	Membership (X1.5)	Formative	0.717	0.001
	Inner life (X1.6)	Formative	0.501	0.017
	Organisational commitment (X1.7)	Formative	0.725	0.001
	Productivity (X1.8)	Formative	0.700	0.002
	Satisfaction with life (X1.9)	Formative	0.588	0.004
Religiosity (X2)	Ideological (X2.1)	Formative	0.529	0.012
	Ritualistic (X2.2)	Formative	0.711	0.003
	Intellectual (X2.3)	Formative	0.653	0.008
	Consequential (X2.4)	Formative	0.522	0.033
	Experimental (X2.5)	Formative	0.720	0.001
Uncertainty avoidance (Y1)	Reflecting uncertainty (Y1.1)	Reflective	0.733	0.001
	Concerned with regulations (Y1.2)	Reflective	0.696	0.002
	Avoiding conflict and competition (Y1.3)	Reflective	0.790	0.001
	Have low achievement motivation (Y1.4)	Reflective	0.532	0.008
	Have high-stress level (Y1.5)	Reflective	0.689	0.003
	Avoiding change (Y1.6)	Reflective	0.527	0.008
	Trusting expert opinion (Y1.7)	Reflective	0.679	0.004
	Low participation in volunteer activities (Y1.8)	Reflective	0.604	0.004
Creative role identity (Y2)	Perceived co-worker expectations (Y2.1)	Formative	0.520	0.018
	Self-view for past creativity behaviour (Y2.2)	Formative	0.796	0.000
	Exposure to west culture (Y2.3)	Formative	0.555	0.025
Church youth's innovative behaviour (Y3)	Creativity (Y3.1)	Reflective	0.505	0.019
	Leadership (Y3.2)	Reflective	0.558	0.021
	Energy (Y3.3)	Reflective	0.557	0.014
	Self-efficacy (Y3.4)	Reflective	0.585	0.008
	Risk-propensity (Y3.5)	Reflective	0.745	0.002

Table 2 shows that all indicators in the latent variable are appropriate and reasonable. The next step is to choose one of the best indicators from several indicators in the latent variable. The best indicator is shown from the most significant weight value. The best indicator of spiritual leadership (X1) is hope/faith (X1.2), with the most significant loading factor of 0.736. The experience indicator (X2.5) is the best indicator of the religiosity variable, with a loading factor of 0.720. Then the best indicator in forming uncertainty avoidance (Y1) is avoiding conflict and competition (Y1.3), which has a loading factor of 0.790. Creative role identity (Y2) has the best indicator, namely self-view for past creativity behaviour (Y2.2), with a loading factor value of 0.796. The indicator with the highest loading factor of the church youth innovative behaviour variable (Y3) is risk-propensity, which is 0.745.

The next step is to measure the structural model. A structural model can be defined as the relationship between research variables. The coefficient of the structural model states the magnitude of the relationship between one variable and another. There is a significant effect between one variable on another variable if the P-value < 0.05. Table 3 shows the results of the analysis of the direct effect, while Table 4 shows the results of the indirect effect analysis, namely through mediation.

**Table 3** Result of direct effect analysis

<i>Relationship between each variable</i>	<i>Hypothesis</i>	<i>Parameter estimation</i>	<i>P-value</i>	<i>Decision</i>
Spiritual leadership → uncertainty avoidance	H1	0.235	0.007	Supported
Religiosity → uncertainty avoidance	H2	0.411	0.000	Supported
Spiritual leadership → creative role identity	H3	0.061	0.285	Not supported
Religiosity → creative role identity	H4	0.227	0.006	Supported
Uncertainty avoidance → creative role identity	H5	0.352	0.000	Supported
Spiritual leadership → church youth's innovative behaviour	H6	0.053	0.569	Not supported
Religiosity → church youth's innovative behaviour	H7	0.074	0.450	Not supported
Uncertainty avoidance → church youth's innovative behaviour	H8	0.310	0.001	Supported
Creative role identity → church youth's innovative behaviour	H9	0.439	0.000	Supported

The explanation of Table 3 is as follows:

- a The direct effect of spiritual leadership on uncertainty avoidance is 0.235 and 0.007 as the p-value (less than 0.05). The result means that spiritual leadership has a direct and significant influence on uncertainty. Given positive signs, it can be concluded that the higher the spiritual leadership, the higher the uncertainty avoidance.
- b The direct effect of religiosity on uncertainty avoidance is 0.411 and 0.000 as the p-value (less than 0.05). The result means religiosity has a direct and significant effect on uncertainty avoidance. Given that the path coefficient is positive, it can be concluded that the higher religiosity, the higher uncertainty avoidance.

- c The direct influence of spiritual leadership on creative role identity is 0.061, and 0.285 is the p-value (more than 0.05). The result means that spiritual leadership has a direct and insignificant effect on creative role identity. Given that the path coefficient is positive, it can be concluded that the higher the spiritual leadership, the higher the creative role identity.
- d The direct effect of religiosity on creative role identity is 0.227 and 0.006 as the p-value (less than 0.05). The result means a direct and significant effect of religiosity on creative role identity. Given that the path coefficient is positive, it can be concluded that the higher religiosity, the higher the creative role identity.
- e The direct effect of uncertainty avoidance on creative role identity is 0.352, and 0.000 is the p-value (less than 0.05). The result means a direct and significant effect of uncertainty avoidance on creative role identity. Given that the path coefficient is positive, it can be concluded that the higher the uncertainty avoidance, the higher the creative role identity.
- f The direct influence of spiritual leadership on church youth's innovative behaviour is 0.053 and 0.569 as the p-value (more than 0.05). The result means that spiritual leadership has a direct and insignificant effect on church youth's innovative behaviour. Given that the path coefficient is positive, it can be concluded that the higher the spiritual leadership, the higher the church youth's innovative behaviour.
- g The direct effect of religiosity on church youth's innovative behaviour is 0.074 and 0.450 as the p-value (more than 0.05). The result means a direct and insignificant effect of religiosity on church youth's innovative behaviour. Given that the path coefficient is positive, it can be concluded that the higher religiosity, the higher the church youth's innovative behaviour.
- h The direct effect of uncertainty avoidance on church youth's innovative behaviour is 0.310 and 0.001 as the p-value (less than 0.05). The result means a direct and significant effect of uncertainty avoidance on church youth's innovative behaviour. Given that the path coefficient is positive, it can be concluded that the higher uncertainty avoidance, the higher the church youth's innovative behaviour.
- i The direct effect of creative role identity on church youth's innovative behaviour is 0.439, and 0.000 is the p-value (less than 0.05). The result means a direct and significant effect of creative role identity on church youth's innovative behaviour. Given that the path coefficient is positive, it can be concluded that the higher the creative role identity, the higher the church youth's innovative behaviour.

In addition to the direct effect, this study also examines the indirect effect to determine the effect of the mediating variable. The results of the indirect effect can be seen in Table 4.

All variables have positive pathways for one mediating path, which the uncertainty avoidance (Y1) variable is unable to mediate between spiritual leadership (X1) and church youth's innovative behaviour (Y3) with estimated path coefficient parameters of 0.049 and 0.206 as p values. Meanwhile, spiritual leadership (X1) has a significant positive effect on church youth's innovative behaviour (Y3) when meditating by creative role identity (Y2) with a path coefficient of 0.036 with a p-value of 0.000.

**Table 4** Estimation and indirect effect testing results for the mediating effects

<i>The influence between variables</i>			<i>Parameter estimation</i>	<i>P-value</i>
<i>Independent variable</i>	<i>Mediating variable</i>	<i>Dependent variable</i>		
Spiritual leadership (X1)	Uncertainty avoidance (Y1)	Church youth's innovative behaviour (Y3)	0.049	0.206
Spiritual leadership (X1)	Creative role identity (Y2)	Church youth's innovative behaviour (Y3)	0.036	0.000
Religiosity (X2)	Uncertainty avoidance (Y1)	Church youth's innovative behaviour (Y3)	0.072	0.006
Religiosity (X2)	Creative role identity (Y2)	Church youth's innovative behaviour (Y3)	0.054	0.010

Meanwhile, there is a positive and significant influence of the religiosity variable on church youth's innovative behaviour (Y3) as mediated by uncertainty avoidance (Y1) with a path coefficient of 0.072 with a p-value of 0.006 as well as for creative role identity (Y2) with a path coefficient of 0.054 with a p-value of 0.010.

## 5 Conclusions

The research has revealed a new phenomenon in spiritual leadership and religiosity, in which both key variables cannot directly affect church youth's innovative behaviour. However, these key variables will positively and significantly affect church youth's innovative behaviour through the mediator of creative role identity. Moreover, uncertainty avoidance can also mediate the path between religiosity and church youth's innovative behaviour. These results contradict the leadership style of employees' innovative behaviour as per all supported hypotheses of spiritual leadership, uncertainty avoidance, and creative role identity on employees' innovative behaviour (Yang et al., 2020). This finding serves as the first theoretical contribution of this research from the different cultural contexts in leadership studies. It also provides a concrete and empirical analysis for the future development of the theory of individual values from the perspective of young leaders.

The second contribution of the research is the uncovered mediating roles of uncertainty avoidance and creative role identity affecting church youth's innovative behaviour. Religiosity seems more accepted than spiritual leadership in their pathway analyses. This result aligns closely with the local situation on religiosity and its impact on innovative behaviour in Indonesia (Arifin et al., 2021) and general behaviour (Agarwala et al., 2019). This supporting evidence helps confirm the impact of religiosity on church youth's innovative behaviour. Meanwhile, creative role identity has also been confirmed as the only effective mediator for the critical pathways of spiritual leadership and religiosity.

The study results have found that spiritual leadership and religiosity can significantly influence church youth's innovative behaviour based on the GBKP church in Indonesia. The findings provide insightful references for church youth's leadership and generic youth leadership or related development programs. Nevertheless, certain limitations need to be considered in this research. First, the results need to be further examined from a multidimensional level study that involves different ethnical backgrounds of church

youth in other streams of churches. Moreover, other psychological factors can be added to the proposed framework to improve church youth leadership and innovative behaviour. Future studies should also be considered by collecting samples from other organisations or countries to investigate the proposed framework and enhance the body of knowledge in youth leadership.

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