Religiosity & Spirituality

by Drt Drt

The Role of Religiosity and Spirituality in Motivating and Improving Students' Performance in Indonesia

ABSTRACT

Aims: This study aimed to investigate the relationship model of religiosity, spirituality, intrinsic motivation, and extrinsic motivation with students' performance in Indonesian students based on different beliefs or religions in the country.

Methodology: This study used a survey method with a questionnaire conducted on 628 students as a sample. The relationship between all variables was tested using Pearson's correlation and the direct relationship between the independent variables on the dependent variable using multiple linear regression analysis. Furthermore, the mediating model test was conducted using structural equation modeling with a two-step approach.

Results: The findings showed that motivation, religiosity, and spirituality affected students' performance. Furthermore, intrinsic and extrinsic motivation serially mediated the relationship model between religiosity and spirituality with students' performance.

Conclusion: This paper addressed the need to understand how to motivate and improve students' performance from a religious and spiritual perspective. The findings of this paper can be used to identify curriculum preparation that includes religiosity in it to increase students' motivation and performance. Furthermore, this paper has demonstrated that religiosity and spirituality are very important for students in Indonesia because they can increase motivation so that student achievement becomes better.

Keywords: extrinsic motivation, intrinsic motivation, religiosity, spirituality, students' performance

1. INTRODUCTION

Religiosity is still an interesting subject for researchers, with some academic studies getting associated with religiosity and student religiosity commitment (Khalid et al., 2020; Sutantoputri & Watt, 2012). In much of the literature, religiosity and spirituality are two interchangeable terms (Javanmard, 2013). Several studies have shown the significant influence of religiosity and spirituality on individual's existence (Osman-Gani et al., 2013) including life pattern, behavior, and work, while possessing a substantial gap regarding the relationship between religiosity and spirituality with performance. Religious beliefs have the ability to make significant differences on individual behavior and performance, by providing a frame of reference in making decisions, especially in both multi-cultural and multi-religious environments (Osman-Gani et al. 2013).

Despite their extensive use in research, religiosity and spirituality do not have a universally accepted definition (Piedmont & Friedman, 2012). Religiosity and spirituality are not the same phenomenon, even though most people agree that the two are constructively related (Labbe & Fobbes, 2010). Further in this study the two constructs are independent, with religiosity being a religious zeal as adopted by McGregor et al. (2010). Meanwhile, spirituality is an individual's perception of beliefs, intuition, lifestyle choices, practices, and rituals, which are all considered as spiritual condition as adopted by Delaney (2005).

Furthermore, although still a debate, the relationship between religiosity, spirituality, academic motivation and performance has been confirmed. The relationship between religiosity and academic motivation has been supported by many researchers (see Bronson, 2016; Holland, 2016; Khalid et al., 2020; Mayhew & Bryant, 2013; Trevino & DeFreitas, 2014 for review). In addition, religiosity has also been discovered to be related to and influence students' performance (see Abu-Raiya & Pargament, 2015; Fatima et al., 2016; Li & Murphy, 2019; Persaud & Persaud, 2016 for review). However, several other researchers discovered no relationship between religiosity and academic performance (Henning et al., 2015; Khalid et al., 2020; Zubairu & Sakariyu, 2016).

The present study aims to examine the relationship between religiosity, spirituality, motivation, and students' academic performance. According to the Job Demands-Resource (JD-R) model, religiosity and spirituality are personal resource variables that affect the results of individual behavior (Schaufeli & Bakker, 2004). In addition, Self-Determination Theory (SDT) explained that individual's behavior outcomes are also most influenced by the type of motivation (i.e., intrinsic and extrinsic motivation (IM and EM)) (Moon et al., 2020). This study was conducted at religious affiliated universities in Indonesia. This is due to the fact that when respondents are selected from universities not affiliated with religion, majority and minority groups are assumed to have an impact on their activities and assessments (Rockenbach et al., 2015).

An area of motivation receiving less attention from researchers is religion, as question remains about its abilities being used as a source of motivation. Based on the JD-R and SDT models, this study contributes empirically to the literature on whether the influence of religiosity and spirituality on student performance is mediated by motivation, especially IM and EM. Moreover, this study also has the ability to expand the literature on religiosity and spirituality with their relation to motivation and performance. The results were expected to be useful for regulators and policy makers which are related to religion and education in the country.

Religiosity is often observed as a formal, institutional, and visible expression and which is typically operationalized with beliefs and practices related to certain religions (Iannello et al., 2019). Meanwhile, spirituality is conceptualized as a search for the meaning of life and personal relationships with people (Worthington et al., 2011), which are operationalized as desires, thought patterns, meaning of life experienced in contexts inside and outside religious context (Villani et al., 2019).

Spirituality often associated with religious practice, yet not synonymous with religiosity (Ashar & Lane-Maher, 2004). Religiosity and spirituality have also been reported to show more relationship than independent constructs (Hill & Pargament, 2003). Also, both have unique and sharp variances, which show the differences within their correlation, while also being important variables in life and organizational research (King & Crowther, 2004). Moreover, they also have a significant influence on individual attitudes and behaviors, which possess the potential to affect people in an organization (Osman-Gani et al., 2013).

The literature in the field of religiosity and spirituality deals more frequently with student involvement and its outcomes (Bowman & Small, 2012). Religious participation while in school is related to academic performance (Bowman & Small, 2012). Religion and religiosity concepts have also been reported to contribute to motivation (Grobler & Grobler, 2015) and performance (Bickerton et al., 2014; Moon et al., 2020). Meanwhile the motivational theory was observed to have the ability in providing operational frameworks through empirical research (Guven, 2013).

According to Kotze and Kleynhans (2013), religious individuals have better academic performance than those with less religious. This was further supported by the study of Bowman et al. (2015), which discovered a relationship between religiosity and academic results, such as GPA. Due to the Western culture, individuals are more intrinsically motivated who do not need other factors such as religiosity to support them (Trovino & DeFreitas, 2014), indicating that the relationship between religiosity and academic motivation is still rare (Bronson, 2016; Guven, 2013). Furthermore, Fatima et al. (2016) discovered that religiosity was significantly correlated with intrinsic motivation (IM) and extrinsic motivation (EM). Generally, the research only shows a relationship, and does not explain how individuals use religion as a source of motivation.

Meanwhile, spirituality actually affects performance through IM (Moon et al., 2020). The JD-R model suggests that personal resources can improve individual outcomes through motivation (Bakker & Demerouti, 2007). Religiosity and spirituality are personal resources that include sacred beliefs, practices, and experiences that can motivate, so that they can improve performance (Bickerton et al., 2014). Furthermore, SDT explains the mediating effect of motivation on the relationship between religiosity and spirituality and performance (Moon et al., 2020). Religiosity and spirituality cause individuals to feel comfortable and inspired in doing their work (IM) or cause individuals to do tasks out of obligation or fear being judged guilty of negligence (EM). Fornaciari et al. (2005) used students to confirm the effect of spirituality on motivation and performance. Several researchers have also confirmed the importance of spirituality for individual performance (Duchon & Plowman, 2005; Kinjerski & Skrypnek, 2004) and motivation (Bickerton et al., 2014; Krishnakumar & Neck, 2002). Generally, researchers discovered that spirituality has an effect on IM (Bickerton et al., 2014; Moon et al., 2020).

In the context of education, IM and EM are two independent constructs which are often associated with academic achievement or performance (e.g., Guay et al., 2015; Herath, 2015; Jenkins-Guarnieri et al., 2015; Lemos & Verissimo, 2014; Martin et al., 2018). Individuals are motivated intrinsically because of their desires or interests, while extrinsically they want to get an award or avoid bad judgments (Deci & Ryan, 2008). Intrinsic motivation and extrinsic motivation can also seem to be related in a religious context (Neyrinck et al., 2005), due to the fact that individuals are motivated both intrinsically and extrinsically in religion, with both IM and EM have different sizes. Apart from being independent variables, IM and EM are also likely observed as mediating variables (Nie et al., 2015; Orsini et al., 2018; Rodriguez et al., 2019).

The survey conducted by Godfrey and Morris (2008), used the ability of the differences in religious values to explain motivation, indicating that religion also has a direct relationship with educational results. Also, in the results of previous studies, a positive relationship was established and observed between religiosity and spirituality, with academic motivation and achievement (e.g., Abu-Raiya & Pargament, 2015; Bronson, 2016; Fatima et al., 2016; Holland, 2016; Jeynes, 2014; Li & Murphy, 2018; Semplonius et al., 2015; Trevino & DeFreitas, 2014). Moreover, individual religiosity was reported to have the ability to improve educational attainment (Butler-Barnes et al., 2012; Mooney, 2010). Also, positive correlation

was further discovered between spirituality and performance in organizations (e.g., Karakas, 2010; Koole [9] al., 2010; Mahoney & Cano, 2014). Therefore, these results led to the formulation of the following hypotheses:

H1: There is a significant positive relationship between religiosity, spirituality, motivation, and students' performance.

H2: There is a significant positive relationship between students' performance as the dependent variable and religiosity and spirituality as independent variables with motivation as the mediating variable.

2. MATERIAL AND METHODS

2.1. Data Source and Participants

This study focused on undergraduate students with different religious backgrounds, studying in private universities in Yogyakarta, Indonesia. The choice of students as respondents was also based on their similarities in performance appraisal and motivation, which was very much attached to learning at university. Therefore, respondents in this study were Indonesian citizens and were undergraduate students in the fields of economics, management, and business emanating from colleges or universities with superior accreditation.

The students' performance was assessed on students who have studied for four semesters, and were selected through non-probabilistic sampling techniques. This was in accordance with the criteria of the DIKTI (Ministry Of Education In Indonesia), known as the first evaluation at the end of the fourth semester, which will be drop when the student's GPA does not meet the minimum graduation standard. Due to the result of previous studies, the department selected was also uniform (Deary et al., 2007). The selection of students who were in the second year of the sampling was right because after three years of study, their religiosity decreased, while their spirituality increased, making it difficult to align (Bowman et al., 2015).

The number of respondents was determined based on multivariate criteria requiring five times the number of question items, as suggested by Hair et al. (2014). Moreover, the questionnaires used have 65 items, making the required respondents at least 325 people. During the data collection period (approximately six months), 628 complete questionnaires were obtained from 1000 questionnaires which were distributed to respondents according to the requirements (response rate of 62.8%). The questionnaires were filled while the students were on campus, with further results showing that respondents in this study included 369 female (58.76%) and 259 male (41.24%).

2.2. Measurement Scales

This study made used of five groups of questionnaires with each used to measure religiosity, spirituality, motivation (i.e. IM and EM), and students' performance which were adopted from previous studies. The religiosity questionnaire was adopted from McGregor et al. (2010) (e.g., "I am confident in my religious beliefs", α = 0.893). Spirituality constructs were measured using questionnaires from Delaney (2005) (e.g., "I find meaning in my life experiences", α = 0.883). Students' performance from Dysvik and Kuvaas (2011) (e.g., "I rarely complete a task before I know that the quality meets high standards", α = 0.791). Meanwhile IM and EM were based on Guay et al. (2003) (e.g., "In general, I do things in order to feel pleasant emotions", α = 0.801, "I do things because I do not want to disappoint certain people", α = 0.682 respectively). However, it is important to note that all the question items were measured using a five-point Likert-type scale with the answer ranging from strongly disagree represented by 1 to strongly agree which was indicated by 5.

2.3. Procedures

The content validity was tested by organizational behavior experts. After that, construct validity was evaluated using confirmatory factor analysis (CFA) with orthogonal methods and varimax rotation, and extracted according to the underlying theory. The minimum loading factor criteria was 0.4 as the question items were declared valid (Hair et al., 2014). Afterwards, the items were tested for reliability using internal consistency with Cronbach's Alpha greater than 0.6 (Hair et al., 2014). Moreover, the relationship between the variables was determined using correlation analysis, while the influence of all independent variables those of the dependent variable was evaluated using multiple regression analysis. The purpose of this study was to investigate the relationship model and no treatment was applied, therefore the correlational research design is more appropriate than experimental (Meyer et al., 2017). Furthermore, structural equation modeling (SEM) with AMOS was also used to test the model mediation with a two-step approach (Byrne, 2010).

3. RESULTS AND DISCUSSION

3.1. Validity and Reliability Analysis

A total of 58 question items and 5 variables were declared valid and reliable respectively. Based on the factor loading values between 0.450 and 0.756 recorded for religiosity constructs, 0.410 and 0.618 for spirituality constructs, 0.694 and 0.815 for students' performance constructs, 0.471 and 0.623 for IM constructs, and between 0.428 and 0.641 for EM constructs and the question items with factor loading value less than 0.4 were not used in subsequent measures. Furthermore, based on the reliability test conducted, the value of the Cronbach's Alpha used for religiosity, spirituality, students' performance, IM and EM were 0.893, 0.883, 0.791, 0.801, and 0.682 respectively. Therefore, since most of these values were above 0.6, the result clearly indicated that the variables are reliable (Hair et al., 2014).

3.2. Preliminary Analysis

Table 1 shows the results of the correlation test between the variables used in this study. The mean of religiosity, spirituality, IM, and EM variables was high (between 3.69 and 5.00), while all the standard deviations were moderate as indicated with the values between 0.4021 and 0.6210. Meanwhile, the average students' performance was classified as moderate (between 2.35 and 3.68).

Table 1. Mean, Standard Deviation, and Correlations between Research Variables

	Mean	SD	Σ	RE	SP	IM	EM	StP
Religiosity (RE)	3.9014	0.5950	0.896	1.000				
Spirituality (SP)	4.0849	0.4021	0.885	0.377**	1.000			
Intrinsic motivation (IM)	3.9443	0.5633	0.802	0.289**	0.453**	1.000		
Extrinsic motivation (EM)	3.8819	0.4621	0.686	0.205**	0.444**	0.465**	1.000	
Students' Performance (StP)	3.4900	0.6210	0.798	0.296**	0.279**	0.297**	0.247**	1.000

Notes: **correlation is significant at the 0.01 level (2-tailed)

Table 1 shows that there is a significant positive relationship between the variables used in this study (hypothesis 1 was supported). However, the correlations were not quite strong even though they were significantly positive. The correlation between variables did not

exceed 0.8 which means there was no multi-collinearity between the independent variables (Gujarati, 2004).

3.3. Result of Model Testing

The first model was to test the direct influence of religiosity, spirituality, IM, and EM as independent variables on students' performance as a dependent variable using multiple linear regression. The test results are shown in Table 2.

Table 2. Direct Impact of Religiosity, Spirituality, Intrinsic Motivation, and Extrinsic Motivation on Students' Performance

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	F Change	df1	df2	Sig. F Change
1	.391[a]	.153	.148	.57325	.153	29.165	4	623	.000

a. Predictors: (Constant), IM, RE, EM, SP

ANOVA[b]

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	37.022	4	9.255	28.165	.000[a]
	Residual	204.728	623	.329		
	Total	241.750	627			

a. Predictors: (Constant), SP, RE, EM, IM

b. Dependent Variable: Students' Performance

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Standard Error	Beta		
1	(Constant)	.887	.261		3.399	.001
	EM	.103	.048	.093	2.136	.033
	IM	.207	.059	.154	3.478	.001
	RE	.205	.042	.197	4.893	.000
	SP	.145	.070	.094	2.091	.037

a. Dependent Variable: Students' Performance

Table 2 shows that the four independent variables positively and significantly influenced students' performance. However, the effect of the four independent variables on the dependent variable was only 14.8%. There were many variables (85.2%) that affected students' performance which were not tested in this study.

The second model was the relationship of religiosity and spirituality with students' performance which was mediated by two dimensions of motivation was tested using SEM

with a two-step. The criteria used were GFI (goodness-of-fit index) and AGFI (adjusted goodness-of-fit index), CFI (comparative fit index), IFI (incremental fixed index), and NFI (normed fit index) that closed to 1.00. Moreover, the test conducted using SEM indicated a direct relationship between EM and IM as shown in Table 3.

Table 3. The Mediating Model Using SEM

	β	Critical Ratio
Religiosity → IM	0.146**	3.182
Religiosity → EM	0.051	1.184
Spirituality → IM	0.486**	10.541
Spirituality → EM	0.372**	7.321
IM → Students' Performance	0.115	1.180
EM → Students' Performance	0.336**	3.371
Religiosity ←→ Spirituality	0.400**	8.434
GFI= 0.989 AGFI= 0.917 χ^2=17.646 df= 2 CFI= 0.977 NFI= 0.975 IFI= 0.978		

This second model fits the data because the high GFI and AGFI values were recorded at 0.989 and 0.917 respectively. The CFI was 0.977, which indicated that the model had fitted with the data. The NFI and IFI values of 0.975 and 0.978 were recorded respectively. The model that fits the data showed that only EM affected the performance of Indonesian students. The mediating model results are, however, presented in Figure 1.
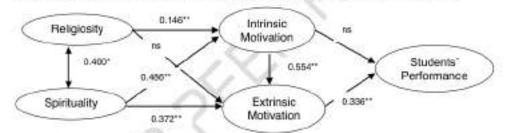
Figure 1. The Relationship Model That Fit with the Data and Theories

This study discovered that EM was influenced by spirituality, and was not influenced by religiosity. However, IM was influenced by religiosity and spirituality. The effect of IM on students' performance was mediated by EM. Furthermore, the results of the serial mediation analysis showed that the impact on the religiosity and spirituality of the students was fully serially mediated by IM and EM (hypothesis 2 was supported). In line with previous studies, the IM was also discovered in this model was also influencing EM, which indicated that the two types of motivation could not be used alone as a unit of analysis for the students. Table 3 also shows that religiosity and spirituality have an effect on each other.

The purpose of this study was to examine whether and to what extent the relationship between religiosity, spirituality, and academic motivation, and how these three relate to the students' performance. The main hypothesis of this research was focused on the significant role of religiosity and spirituality in determining motivation and students' performance.

The results further reinforced the results of previous studies stating that individual religiosity and spirituality had the ability to improve educational attainment, as measured by students' performance. This was further confirmed by the multiple linear regression analysis. Moreover, religiosity of students was also discovered to be associated with improvement in

academic motivation (e.g., Bronson, 2016; Guven, 2013; Holland, 2016; Jeynes, 2014; Mayhew & Bryant, 2013; Moon et al., 2020; Semplonius et al., 2015; Trevino & DeFreitas, 2014) and achievement (e.g., Abu-Raiya & Pargament, 2[25]; Li & Murphy, 2018; Kotze & Kleynhans, 2013; Persaud & Persaud, 2016). Moreover, a significant positive relationship was also established between religiosity and spirituality. In other words, religiosity and spirituality were related constructs. Religiosity and spirituality were also discovered to have affected motivation, with this fact aligning with the results of Fatima et al. (2016).

Furthermore, the influence of religiosity and spirituality on students' performance was mediated serially by IM and EM. However, the influence of spirituality was also mediated directly by EM. Both religiosity and spirituality have an effect on IM, while EM does not. IM is a motivation arising because of the comfort and interest of individuals in learning that is influenced by dispositional factors such as religiosity and spirituality. Moreover, this impetus comes from religiosity and spirituality, which is in line with previous research indicating that spiritual culture enhances private growth and encourages self-esteem at a personal level (Karakas, 2010; Neyrinck et al., 2010).

This study also supported the results of previous studies which stated that IM and EM are not contradictory, but have a moderate relationship (Andreeva & Sergeeva, 2016; Lemos & Verissimo, 2014). This was observed from the results that students were motivated intrinsically and this further influenced their EM. This same pattern was recorded by Cameron (2001) and De[35] et al., (2001), showing a reciprocal interaction between the two motivational constructs. It is important for researchers to understand the motivation profile because it can provide instruction and resources to increase motivation and affect students' performance (D'Lima et al., 2014).

Motivation is a major component and concern in education which helps to improve students' performance. This encourages the understanding of the factors possessing the ability to increase it. The roles of a learning environment such as a religious-based institution, is considered to be able to influence students' academic motivation (Cohen et al., 2016; Engelland, 2014; Minton et al., 2015). Therefore, this means religion or religiosity lessons are needed, in order to improve the performance of students.

4. CONCLUSION

Religion has a major influence on motivation, educational achievements, all aspects of social life, and several kinds of success. Individuals with religious backgrounds are more placed to succeed in school and at work, due to their ability to focus more on what they want based on their possession of clearer and more confident thoughts and goals. Meanwhile, spirituality is not less important than religiosity with both discovered to be affecting educational attainment through motivation, which indicates that educational institutions need to consider them, in order to improve the academic achievement of their students. Therefore, there is a need for more in-depth research on individual religiosity and spirituality, in order to provide lecturers with more empirical evidence, for them to include both religious factors into motivating students, and improve their learning quality in universities.

Several limitations of this study were observed to have the ability to affect the results, when not properly addressed. First, self-assessment was used in this study, and it has a common method variance which usually produced bouncing beta. Therefore, future research requires other ratings to measure the dependent variable. Secondly, this research was cross-sectional indicating that it was impossible to consider the relationship observed between religiosity, spirituality, motivation, and students' performance as a causal relationship. However, it is important to note that the focus of this analysis was not to develop a causality

model, as it was used to examine the mediating model among the adherents of all three religions in Indonesia. Moreover, longitudinal studies were needed to develop an understanding of the relationship and influence of the independent, mediating, and dependent variables observed over time. Thirdly, the limitations of the respondents in this study mean that this research cannot be generalized to other religions, cultures and nations. Future research needs to use a large number of respondents and be conducted across a variety of religions, cultures, and other nations.

This research made several contributions. First, these results contribute to literature on the relationship between religiosity and spirituality through serial mediation of IM and EM. However it has not been able to explain the reasons religiosity and spirituality lead to beneficial or detrimental outcomes. The combination of the JD-R model and SDT provided an explanation of the mediating role of IM and EM in the relationship between religiosity and spirituality in students' performance. Based on the JD-R model, religiosity and spirituality are postulated as personal resources that trigger motivation. Meanwhile, based on SDT, motivation can serve as a mediator. Second, these results contributed to the literature on two types of motivation, IM and EM, which are positively related and not mutually exclusive. Analogous to AGT, this study was able to explain that IM and EM can be combined as motivators in education, even when EM has a direct effect on students' performance.

This study also contributed to the formulation of policies and curricula which continue to include religious activities in lectures. Religiosity and spirituality can encourage individuals to pursue performance through increased motivation. Therefore, these two factors must be maintained in religious affiliated universities in Indonesia. Universities must always intensify religious activities so that the religiosity of students does not fade. This was evidenced by the positive relationship between religiosity, spirituality, motivation, and students' performance.

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