An Effect of Spiritual Education and Non-Work Role Commitment on Role Strain and Job Satisfaction

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ABSTRACT

The aim of this work is to explore the relationship between nonwork role and work performance to identify the interrelationship between work and nonwork roles. The employees who belong to a company that is built upon a particular religion are required to play multiple roles at workplace as worker with Christian or vice versa. In this situation, individuals have to have multiple identities for engaging given roles. Managing multiple identities and roles has long been a concern for individuals at work. Although participation in nonwork domains has been recognized for contributing to work, a battery of studies continues to focus on the conflict between work and nonwork. On the other hand, non-work roles deplete these resources and thereby reduce his or her ability to enact work roles. That is, work and nonwork roles may be complementary, but they may conflict each other. Thus, the effects of work and nonwork roles are inconclusive. Furthermore, it is often difficult to characterize the nonwork experience because there are few systematic studies of this domain. For these reasons, we attempted to investigate the relationship between nonwork role and work performance. Through empirical tests, we found that non-work role commitment has statistically significant effect on role strain. On the other hand, non-work role commitment has not significant influence on job satisfaction. Second, spiritual education has significant negative effect on role strain. On the other hand, spiritual education has not significant influence on job satisfaction. In addition, spiritual education has significant positive effect on non-work role commitment. Lastly, role strain has not statistically significant effect on job satisfaction. In the final part of the paper, the conclusions and implications of the study are highlighted.

Keywords: Spirituality, Spiritual Education, Non-Work Role Commitment, Role Strain.

1. INTRODUCTION

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Abstract: *The major aim of present work is to explore the relationship between nonwork role and work performance to identify the interrelationship between nonwork and work roles. The employees who belong to a company that is built upon a particular religion are required to play multiple roles at workplace as worker with Christian or vice versa. In this situation, individuals have to have multiple identities for engaging given roles. Although participation in nonwork domains has been recognized for contributing to work, a battery of studies continues to focus on the conflict between work and nonwork. On the other hand, nonwork roles deplete these resources and thereby decrease his or her ability to conduct work roles. That is, work and nonwork roles may be complementary, but they may conflict each other. Thus, the effects of work and nonwork roles are inconclusive. Furthermore, it is often difficult to characterize the nonwork experience because there are few systematic studies of this domain. For these reasons, we endeavoured to investigate the relationship between nonwork role and work performance. Through empirical tests, we found that non-work role commitment has statistically significant effect on role strain. On the other hand, non-work role commitment has not significant influence on job satisfaction. Second, spiritual education has significant negative effect on role strain. On the other hand, spiritual education has not significant influence on job satisfaction. In addition, spiritual education has significant positive effect on non-work role commitment. Lastly, role strain has not statistically significant effect on job satisfaction. In the last section, the conclusions and implications of the study are highlighted.*

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INTRODUCTION

Work has been thought to have an influence on life outside of work (Rousseau, 1978). Factors outside of work can also affect the individual's reaction to the work (Rousseau, 1978). Thus, work and outside of work are not distinguished, but are interrelated each other. Each domain requires a specific role to individual.

The employees who belong to a company that is built upon a particular religion (e.g., mission schools, church schools, Christian hospital, and so forth) are required to play multiple roles at workplace as worker with Christian or vice versa. In this situation, individuals have to have multiple identities for engaging given roles. Sometimes, these roles may create conflict with roles in the workplace due to different requirements from multiple role demands, especially each role requires a considerable amount of time commitment. Commitment refers to the importance of a role to the individual's self-concept (Perrone & Civietto, 2004). In this reasons, how to manage the role is very important to reduce the conflict and maintain a balance between work and nonwork roles.

Managing multiple identities and roles has long been a concern for employees at work (Rothbard, Rphilips & Duumans, 2005). Although participation in nonwork domains has been recognized for contributing to work, a battery of studies continues to focus on the conflict between work and nonwork (Kirchmeyer, 1993). Participation means the substantial time spent in the role (Perrone & Civietto, 2004).

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Work roles require a person's resources such as time, commitment, and energy and thereby decrease his or her ability to play nonwork roles (Kirchmeyer & Cohen, 1999). On the other hand, nonwork roles exhaust these resources and thereby weaken his or her ability to enact work roles (Kircmeyer & Cohen, 1999). For instance, commitment in the nonwork role could include engagement in activities such as parenting and church as community work. That is, work and nonwork roles may be complementary, but they may conflict each other. Thus, the effects of work and nonwork roles are inconclusive. Furthermore, it is often difficult to characterize the nonwork experience because there are few systematic studies of this domain (Rousseau, 1978).

The purpose of present study is to explore the relationship between nonwork role and work performance to identify the interrelationship between work and nonwork roles.

LITERATURE REVIEW AND HYPOTHESES

Spiritual Education

Although spirituality isn't something companies traditionally have allowed employees to express at workplace, it is an essential part of every one of us (Ashmos & Duchon, 2000).

Spiritual at work is associated with individuals who understand themselves as spiritual beings whose souls need nourishment at work (Ashmos & Duchon, 2000). It is also related to people who experience a sense of connectedness to one another as well as to their workplace community (Ashmos & Duchon, 2000). The human relations movement emphasized job satisfaction and employee happiness (Ashmos & Duchon, 2000). Accordingly, companies pursuing the spirituality at work expect a self-growth and productivity improvement in organization by nourishment of spirituality.

Many 'mission companies' established based on specific religion can realize easily the spiritual environment at work. Especially these companies attempt to growth of spirituality of employees by providing a spiritual education. Education is one of way to proliferate and strength a specific belief of employees.

Non-Work Role Commitment

Nonwork orientations refer to a reaction to the nonspecific treatment of diverse nonwork related domains (e.g., family, self, community, or leisure) (Hall, Kossek, Briscoe, Pichler & Lee, 2013). Hall, Kossek, Briscoe, Pichler & Lee (2013) found that three different types of nonwork orientations such as family orientation, personal life orientation, and community service orientation. A family orientation means that the degree to which one attaches importance to family needs relative to one's career role (Hirschi, Herrmann, Nagy & Spurk, 2016). A personal life orientation is defined as a focus on the time for oneself to pursue personal interests, whereas at the same time engaging in a career (Hirschi, Herrmann, Nagy & Spurk, 2016). Finally, a community service orientation is about a high concern for being able to engage in service to the community where one lives at the same time one is pursuing a career (Hirschi, Herrmann, Nagy & Spurk, 2016). Nonwork orientations captures these three and distinct dimensions (Hirschi, Herrmann, Nagy & Spurk, 2016). Religious-related work commitment is related to a community service orientation.

Role Strain

Role strain is a result of individuals' psychological commitment to their social roles (Perrone & Civietto, 2004). Thus, role strain is caused by manifold commitments to various domains of an individual's

life (Nair & Gaither, 1999). Perrone & Civietto(2004) contend that a high level of commitment to several roles could lead to role strain. Role strain refers to the extent to which a person feels strains within one role that are incompatible with the pressures that arise in another role (Nair & Gaither, 1999). According to role theory, every role in which an individual participates has its own prescribed set of responsibilities that are partially determined by the expectations of role givers, those individuals with whom the focal person interacts during role activities (Weer, Greenhous & Linnehan, 2010). Individuals' commitment to a role reflects the importance of that role to their self-identity and individuals seek to reaffirm their self-identity though their actions, they should be more willing to respond selectively to the demands of roles to which they are highly committed because they have multiple identities (Weer, Greenhous & Linnehan, 2010).

Job Satisfaction

Previous studies suggested that engagement in multiple roles is generally positively related to increased well-being (Hirschi, Herrmann, Nagy & Spurk, 2016). These effects are likely to occur because multiple roles (work role at work and nonwork role at church) can buffer negative effects of one role by success and satisfaction in another role (Hirschi, Herrmann, Nagy & Spurk, 2016). Job satisfaction is defined as a universal feeling of happiness, contentment, or fulfillment with work life (Perrone & Civietto, 2004).

While many studies found that positive effects of commitment in multiple roles on general well-being at work, the few studies lead to contradictory results (Hirschi, Herrmann, Nagy & Spurk, 2016). Weer, Greenhous & Linnehan (2010) asserted that an extensive commitment to nonwork roles was overall negatively related with job performance because of negative effects of expended emotional energy on nonwork roles that surpassed the more minor positive indirect effects through resources acquired from nonwork roles.

Furthermore, there is comparatively little attention to the effect of employees' commitment to nonwork roles on their functioning at work (Weer, Greenhous & Linnehan, 2010). In regard to the negative outcomes of multiple domain participation, considerable researches have been aimed at identifying their antecedents (Kirchmeyer, 1993). On the other hand, there are little efforts to explore the negative spillover to other domains (Kirchmeyer, 1993).

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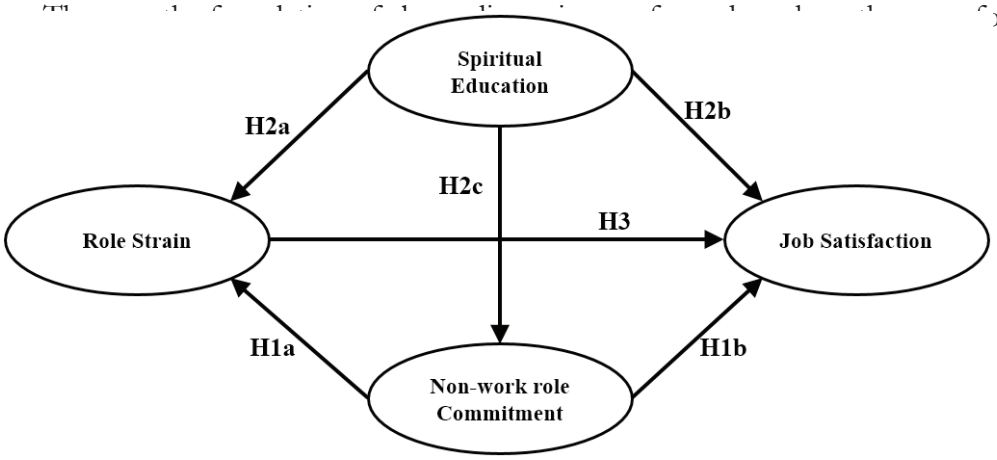

M o d e l

MEASUREMENT MODEL ANALYSIS

Data Collection

The present study took advantage of a survey technique for data collection in the field. The aim of survey research is to collect data on a sample chosen to represent a population. The survey research can contribute to theory building as well as explain or predict a phenomenon (Malhotra & Grover, 1998).

The survey design for this study is cross-sectional in which data is collected at one point in time from a sample that represents a population (Malhotra & Grover, 1998). The unit of analysis for this study is the individual.

The questionnaires were distributed to the organizations included in one foundation with identical religious spirituality. The reason for selecting such foundation is as follows. Initially, this foundation is an organization consisting of spiritual workplace. Secondly, the reason for selecting just one foundation is that different spiritual workplace reflects different tendency, and, thereby, causes spirituality differences.

As far as the survey is concerned, the persons in charge of human resources from the organizations included in this foundation were informed of the purpose of this study through e-mail. To the individuals who agreed to participate in this research, 200 copies of the printed questionnaire were sent through mail and 113 questionnaires were returned. 10 questionnaires determined unsuitable for analysis due to problems such as non-response, duplicated response and insincere response (lining, same value used for more than 5 items) were excluded and remaining 103 copies (response rate: approximately 51.5%) were used for the final analysis. This exceeded the minimum response rate of 20% proposed by Malhotra & Grover (1998).

To analyze the collected data, Microsoft Excel 2016, SPSS version 23 for Window and SmartPLS version 2 M3 were used.

Demographic Characteristics

The respondents consisted of 65 males (63.1%) and 38 females (36.9%). Overall, the subjects consisted of 51 office workers (49.5%) 23 assistant managers (22.3%) 20 section heads (19.4%), 3 heads of department (2.9%), 2 directors (1.9%), 2 executive directors (1.9%) and 2 presidents (1.9%). Futhermore, the subjects consisted of 7 high school graduates (6.8%), 8 two-year college graduates (7.8%), 3 college degree program completers (2.9%), 57 four-year university graduates (55.3%), 27 master degree earners (26.2%) and etc.

Variables and Measures

We adopted existing scales in order to gain the content validity in survey research. The sources of scale as following:

Non-work role commitment refers to the extent to which one is determined to commits to non-work role, and 5 items were selected from a study by Yim & Byeon (2015), Yim (2015b). For example, items such as "I make efforts for my spiritual growth at work." and "I am concerned about my spiritual growth at work." were used.

Spiritual education refers to organization members' response to spiritual education run at work, and 3 items were selected from a study by Jeong & Yim (2014), Yim (2016). For example, items such as "I believe that spiritual education run at work contributes to company development." and "I believe that spiritual education run at work contributes to enhancing work performance." were used.

Role strain refers to the extent to which a role required for spiritual activity conflicts with a role required for work, and 5 items were selected from a study by Kelloway & Barling (1990). For example, items such as "I once thought that a job at work is connected to a job at church." and "I once felt that the boundary between a job at work and a job at church is ambiguous." were used.

Job satisfaction refers to the extent to which one is determined to be fully satisfied with one's job, and 3 items were selected from a study by Bruck, Allen, & Spector (2002). For example, items such as "I am satisfied with my given job.", "I am generally satisfied with what I do at work." and "I will continue to be enthusiastic at my current work." were used.

Respondents answered to all items using a five-point Likert type scale with the anchoring ranging from 1 (Strongly Disagree) to 5 (Strongly Agree). We also asked to respond to demographic information such as sex, age, position, years of service, and education level.

Common Method Bias Tests

A survey technique was used for collection of data required for model testing. However, since such survey was distributed in a form of cross-sectional design and it asked for responses to causes and outcomes at the same time, it is not free from the potential presence of CMB (Common Method Bias).

Namely, there is a possibility that outcome variables may be contaminated because predictor variables and outcome variables for the same person are measured at the same time. Either a pre-control method or a post-control method can be used to control such problem. A post-hoc diagnostic technique was used for checking the CMB.

The most commonly used diagnostic technique for evaluating common method variance is Harman's one factor model. Harman's one factor technique is a method used to determine there is a problem with common method variance when all factors are revealed to be single factors as a result of conducting principal component analysis (PCA) and when the involved factor is revealed to be the majority of explanatory variance (Podsakoff, MacKenzie & Podsakoff, 2003). As a result of conducting the analysis with this technique, although the initial factor's explanatory power of 32.292 exceeded the rule of thumb of 25% prior to rotation (Ayyagari, Grover & Purvis, 2011), because it did not exceed half the total variance explained of 69.330, it is difficult to assume that there is a presence of CMB (Podsakoff & Organ, 1986).

In addition, as a result of observing the results of the correlation analysis among latent variables shown in Table 3, since the highest value is 0.505 and no high correlation was indicated among variables, it can be assumed that the influence of common method bias is insignificant (Malhotra, Kim & Patil, 2005). One point to pay attention to is that the respective correlation coefficients cannot exceed 0.8 in order to determine there is no problem with multicollinearity (Bagozzi, 1994).

Table 1

Underlying Structure of Factors

Measurement Variables	*Factor*				*Communality*	
	1	*2*	*3*	*4*	*Initial*	*Extraction*
SpiritEdu1	-0.104	-0.063	0.067	**0.768**	0.500	0.569
SpiritEdu2	0.023	0.059	-0.024	**0.873**	0.629	0.766
SpiritEdu3	0.280	0.087	0.033	**0.648**	0.612	0.632
NonWork1	**0.802**	0.082	0.011	0.031	0.655	0.619
NonWork2	**0.775**	-0.025	0.056	-0.089	0.658	0.582
NonWork3	**0.575**	-0.236	-0.068	0.129	0.586	0.563
NonWork4	**0.602**	-0.045	-0.072	0.285	0.588	0.586

NonWork5	**0.599**	-0.231	0.132	0.054	0.589	0.593
RoleStrain1	0.275	**-0.594**	-0.011	-0.022	0.579	0.553
RoleStrain2	-0.021	**-0.816**	0.052	-0.007	0.664	0.656
RoleStrain3	-0.023	**-0.778**	-0.094	-0.001	0.644	0.598
RoleStrain4	0.160	**-0.641**	0.016	-0.009	0.550	0.518
RoleStrain5	-0.097	**-0.718**	0.020	-0.001	0.468	0.469
JobSatisfaction1	-0.128	-0.050	**0.686**	0.076	0.416	0.485
JobSatisfaction2	0.177	0.026	**0.861**	-0.032	0.601	0.791
JobSatisfaction3	0.018	0.044	**0.741**	-0.009	0.527	0.549
Eigenvalue	5.167	2.778	1.893	1.255		
% of Variance	32.292	17.363	11.829	7.847		
Cumulative %	32.292	49.655	61.484	69.330		

KMO and Bartlett's Test		
KMO Measure of Sampling Adequacy.		0.789
Bartlett's Test of Sphericity	Approximate Chi-Square	825.286
	Degree of Freedom	120
	Significance	0.000

Extraction Method: PAF.

Rotation Method: Oblimin with Kaiser Normalization.

Exploratory Factor Analysis

In the process of conducting an empirical study, researchers must estimate a measurement model prior to testing hypotheses to avoid incorrectly interpreting structural relationship (Anderson & Gerbing, 1988). Through such process, researchers can discover a clear structure of factors. For this process, EFA (Explanatory Factor Analysis) was conducted.

EFA is used to secure parsimonious of explanatory concepts (Tinsley & Tinsley, 1987). Namely, EFA is a process for finding the best solution for summarization of information under the condition to minimize loss of information included in the variables proposed by researchers (Hair, Black, Babin, Anderson & Tatham, 2006; Meyers, Gamst & Guarino, 2006). Factor analysis was conducted through two procedures: a procedure for evaluating whether or not collected data are suitable for factor analysis and a procedure for revealing underlying structure of factors through factor analysis.

As far as data adequacy is concerned, adequacy of the number of samples was measured based on the quantitative standards as the first step, and data quality was measured based on the qualitative standards as the second step (Yim, 2015). According to the general recommendation standards, the minimum number of samples is 100 (absolute threshold) and the ratio between samples and items to be measured is 5:1 or 10:1 (relative threshold) (Ferguson & Cox, 1993; Treiblmaier & Filzmoser, 2010). In this study, since 103 samples were used and 16 items were measured, the ratio between samples and items complied with the standard ratio of 5:1, and, therefore, the quantitative standard was satisfied (Yim, 2015). However, such absolute standard could serve as a problem of oversimplification (Treiblmaier & Filzmoser, 2010). Accordingly, a number of scholars propose that structure of factors must be selected in accordance to other standards rather than relying on the absolute number of samples.

To conduct EFA, it is necessary to reveal suitability of correlation matrix in advance (Ferguson & Cox, 1993). Accordingly, in this study, qualitatively characteristics of data were evaluated through KMO (Kasier-Meyer-Olkin Test of Sampling Adequacy) and Bartlett's test of sphericity. KMO is an index which shows adequacy of correlation required for factor analysis. In general, above 0.5 is considered the lowest recommended value, above 0.7 is considered satisfactory, and above 0.8 is considered very suitable (Ferguson & Dox, 1993; Frohlich & Westbrook, 2001; Hair, Black, Babin, Anderson & Tatham, 2006; Meyers, Gamst & Guarino, 2006). Bartlett's test of sphericity helps determine whether or not samples are suitable through evaluating a null hypothesis that no significant correlation exists among variables (Meyers, Gamst & Guarino, 2006), and statistically significant cases (Sig.<0.05) are considered suitable (Yim, 2015). In this study, KMO achieved a meritorious level of 0.789 and it can be determined that factorability of

correlation matrix is good (Treblmaier & Filzmlser, 2010). In addition, Bartlett's test achieved significant results, and, therefore, rejected a null hypothesis that no sufficient correlation exists among measurement variables. Accordingly, it can be determined that such test is not suitable for deducting suitable structure of factors (Dziuban & Shirkey, 1974). As a result, it can be determined that the sample is suitable for factor analysis (Yim, 2015).

PAF (Principal Axis Factoring) was used as the extraction method for EFA. Factor loadings above 0.5 (Campbell & Fiske, 1959), eigenvalues above 1.0 (Campbell & Fiske, 1959; Hair, Black, Babin, Anderson & Tatham, 2006) and extracted variance standards were used as the factor retention standards (Gefen & Straub, 2005). In addition, variance explained must be above 60% (Hair, Black, Babin, Anderson & Tatham, 2006). Through such technique, 4 factors were discovered and none of these factors indicated crossloadings (loadings at foreign factor above 0.4). Crossloading refers to a case where each measurement item has high level factor loadings on more than two latent variables (Hair, Black, Babin & Anderson, 2010). Depending on strict standards, above 0.32 is considered crossloading from time to time. However, in general, a case where more than two factors indicate factor loading above 0.4 is considered crossloading (Hair, Black, Babin & Anderson, 2010). In this study, crossloading above 0.4 did not exist.

From ±0.30 to ±0.40 is proposed as the minimum standard for factor loadings (or factor coefficients) and ±0.50 is determined to be adequate (Hair, Black, Babin, Anderson & Tatham, 2006). In addition, as far as confirmatory analysis is concerned, ±0.7 is considered an important variable (Nunnally & Bernstein, 1994).

As the next step, communality for each of the deducted items was evaluated. Communality refers to the extent to which one variable develops covariance with remaining variables used in analysis. In general, it is a concept similar to explanatory power (SMC: squared multiple correlation) used in multiple regression (Meyers, Gamst & Guarino, 2006). According to the general standards, a communality above 0.5 is proposed as the standard (Hair, Black, Babin, Anderson & Tatham, 2006), and a communality above 0.7 is proposed as the strict standard from time to time (Costello & Osborne, 2005). In addition, it is recommended to remove items with communality below 0.4 (Costello & Osborne, 2005). As far as the results deducted in this study are concerned, since the lowest communality was 0.469 and such value is close to 0.5, it can be determined that each of the deducted items has sufficient explanatory power. In addition, since total variance explained for all factors was 69.330, such value exceeded the standard of 60%.

In addition, the results deducted through EFA serve as the basis for convergent validity and discriminant validity of measurement items (Segars & Grover, 1993), and are used for verifying validity and applicability of the proposed instrument (Dinev & Hart, 2004).

Reliability and Validity Tests

In the process of measuring the constructs proposed in the research model, verifying appropriateness of instrument is very important in deducting results relating to the proposed research model. In this study, for this process, reliability and validity of the measurement model were assessed. Reliability test was conducted to confirm internal consistency, and validity test was carried out to test convergent validity, discriminant validity and construct validity.

Item reliability can be considered secured when a high value (above 0.707) is loaded on parent

latent variable and a low value is loaded on foreign latent variables in crossloading analysis. According to previous studies, each factor loading in crossloading analysis should be more than 0.5 (Gefen & Straub, 2005). However, some scholars contend that, for more than 50% of measurement variable to be explained through the involved constructs, item reliability must exist at loadings above 0.7 (Hulland, 1999) or above 0.707 (Gefen, Straub & Boudreau, 2000). In this study, since the lowest loadings loaded on each factor were 0.708, the standard was satisfied. In addition, since no measurement variable indicated high loadings on foreign factors, it can be determined that there is no problem with item reliability (Sarstedt, Ringle, Smith, Reams & Hair, 2014).

Table 2

PLS Cross-Loadings Analysis

	SpiritEdu	*NonWorkCom*	*RoleStrain*	*JobSatisfaction*
SpiritEdu1	**0.805**	0.277	0.076	0.216
SpiritEdu2	**0.885**	0.363	0.033	0.176
SpiritEdu3	**0.892**	0.512	0.096	0.239
NonWork1	0.389	**0.781**	0.309	0.150
NonWork2	0.267	**0.775**	0.372	0.170
NonWork3	0.352	**0.808**	0.499	0.083
NonWork4	0.503	**0.816**	0.321	0.107
NonWork5	0.347	**0.823**	0.494	0.253
RoleStrain1	0.113	0.525	**0.829**	0.056
RoleStrain2	0.029	0.358	**0.823**	0.074
RoleStrain3	0.013	0.331	**0.766**	-0.081
RoleStrain4	0.112	0.420	**0.809**	0.066
RoleStrain5	0.002	0.238	**0.708**	0.012
JobSatisfaction1	0.176	0.038	0.011	**0.759**
JobSatisfaction2	0.259	0.250	0.085	**0.939**
JobSatisfaction3	0.158	0.112	-0.038	**0.818**

As the next step, reliability was evaluated using internal consistency. Reliability refers to "the extent to which a same concept calculates consistent results" (Bohrnstedt & Knoke 1994; Carmines & Zeller 1979). Therefore, reliability is more related to how variables are measured than what are measured. In general, test-retest method and internal consistency evaluation method are used for testing reliability (Hair, Black, Babin & Anderson, 2010). Since testing reliability through test-retest method indicates no significant changes in responses when measured at many points in time, the basic hypothesis is that it is reliable to conduct measurement at one point in time (Hair, Black, Babin & Anderson, 2010). Internal consistency is the most frequently used method. It evaluates reliability based on the hypothesis that measurement items used for measuring construct are highly correlated (Hair, Black, Babin & Anderson, 2010). To evaluate correlation among measurement items explaining construct, internal consistency is used to evaluate reliability. Internal consistency is a reliability estimator that is based on average correlation coefficients among measurement items (Nunnally & Bernstein, 1994). Cronbach's Alpha and Composite Reliability (CR) were used to evaluate internal consistency of measurement model. The reason for using two indexes is because Cronbach's Alpha tends to indicate lower bounds and Composite Reliability tends to indicate upper bounds. It is appropriate to use both of these indexes (Hair, Ringle & Sarstedt, 2013). Both of these indexes assume that internal consistency exists when achieved values are above 0.6 for exploratory research and above 0.7 for any other researches (Hair, Black, Babin & Anderson, 2010; Nunnally & Bernstein, 1994). In this study, as shown in Table 3, the minimum value acquired from Cronbach's Alpha and Composite Reliability was 0.806 and 0.879, respectively. Since the standard was satisfied in both of these cases, it can be determined that there is no problem with internal consistency.

Table 3

Correlation Analysis with Reliability

	SpiritEdu	*NonWorkCom*	*RoleStrain*	*JobSatisfaction*
SpiritEdu	**0.862**			
NonWorkCom	0.467	**0.801**		
RoleStrain	0.083	0.505	**0.788**	
JobSatisfaction	0.247	0.191	0.042	**0.842**
Cronbach's alpha	0.831	0.861	0.852	0.806
Composite Reliability	0.896	0.899	0.891	0.879
AVE	0.743	0.641	0.621	0.709

* Value on the diagonal represents the square root of AVE

Convergent validity refers to the extent to which diverse measurement items signify the same conceptual construct (Dinev & Hart, 2004). Convergent validity was evaluated through AVE (Average Variance Extracted) which signifies the variance explained through each construct. AVE is an instrument which determines whether or not the variance secured through construct is greater than the variance caused by measurement error (Fornell & Larcker, 1981). According to the recommended threshold, convergent validity is determined to exist when the original value is above 0.5. In this study, the minimum value is 0.621 and such value satisfies the standard (Fornell & Larcker, 1981).

Discriminant validity refers to the extent to which a construct is significantly differentiated from another construct (Hair, Black, Babin & Anderson, 2010). Namely, discriminant validity evaluates the extent to which the related constructs differ (Dinev & Hart 2004). Discriminant validity was confirmed through comparing crossloadings in crossloading analysis, and through comparing square root of AVE and correlation coefficients in correlation analysis (Gefen, Straub & Boudreau, 2000; Gefen & Straub, 2005). Discriminant validity can be determined to not exist when no crossloading exists in crossloading analysis. In this study, no crossloading was discovered (Sarstedt, Ringle, Smith, Reams & Hair, 2014).

As the next step, discriminant validity can be determined to exist when no correlation coefficient greater than square root of AVE is found to exist as a result of comparing correlation coefficient and square root of AVE among latent variables. In this study, the maximum correlation coefficient was 0.505 and the minimum square root of AVE was 0.788. Since such values satisfy the standard, it can be determined that there is no problem with discriminant validity (Fornell & Larcker, 1981). Construct validity consists of two components: convergent validity and discriminant validity (Malhotra & Grover, 1998). Accordingly, construct validity can be determined to exist when convergent validity and discriminant validity are secured. In this study, since the two standards are satisfied, construct validity can be determined to exist (Bagozzi & Yi, 1988).

STRUCTURAL MODEL ANALYSIS

In this study, PLS-SEM (Partial Least Square Structural Equation Modeling) technique was used to test the proposed research model. SEM is a technique suitable for estimating diverse relationships among latent variables (Shek & Yu, 2014). In addition, its strength is that it measures measurements model and structural model at the same time.

PLS-SEM technique is used in the following cases: when sample size is not quite large, when collected data are not normal distribution, when prediction is the purpose, when model is complex, and when explanatory research is conducted (Haenlein & Kaplan, 2004; Ringle, Sarstedt & Straub, 2012). Moreover, it can be used in the following cases as well: when categorical variables are used, when formative measures are used, and when interaction terms are verified (Ringle, Sarsted & Straub, 2012). In this study, collected data are not normal distribution (see Table 4. normality test). When multivariate normality is secured, covariance-based SEM can be used. Since analyzing such collected data without securing multivariate

normality may result in estimation errors in the results, it is appropriate to use PLS-SEM comparatively free from normality of data (Hair, Sarstedt, Hopkins & Kuppelwieser, 2014). JAVA-based SmartPLS v2 M3 was used as the PLS-SEM analysis instrument (Ringle, Wende & Will, 2005).

Table 4

Results for Normality Test

	Kolmogorov-Smirnov[a]			*Shapiro-Wilk*		
	Statistic	df	Sig.	Statistic	df	Sig.
SpiritEdu	.144	103	.000	.942	103	.000
NonWorkCom	.118	103	.001	.958	103	.002
RoleStrain	.111	103	.003	.972	103	.028
JobSatisfaction	.174	103	.000	.949	103	.001

a. Lilliefors Significance Correction

As the next step, adequacy of sample size for SEM was examined. The sufficient statistical power of a test depends on sample size and effect size (Malhotra & Grover 1998). A sample size is the most important factor in establishing adequate power for a test (Malhotra & Grover 1998). Malhotra & Grover (1998) asserted that at least a sample size of 100 and an item to sample size ratio of more than 5 were needed to reduce statistical conclusion error. The total number of samples used in this study was 103 and such number is greater than 100. In addition, the total number of measurement items used in the survey was 16. According to the standard ratio of 5:1, the minimum number of samples that satisfies the standard is 80. Accordingly, although it is difficult to determine that 108 samples are quite sufficient, it is difficult to determine such number to be small enough to induce statistical conclusion errors.

In addition, according to the rule of thumb, the minimum sample size for PLS-SEM is 10 times the number of measurement variables contained in the independent variable with the highest number of measurement variables (Hair, Sarstedt, Pieper & Ringle, 2012). In this study, since non-work role commitment with 5 measurement variables is the independent variable with the highest number of measurement variables, as a result of multiplying such number by 10, the minimum sample size becomes 50. In this study, since 103 samples were used, the standard is satisfied.

As the next step, to evaluate predictive validity of model, R^2 and Q^2 were evaluated. The minimum standard for R^2 representing explanatory power for endogenous variable(dependent variable) and good predictive validity of model is at least 10% of their variance explained (Sarstedt, Ringle, Smith, Reams & Hair, 2014; Sosik, Kahai & Piovoso, 2009). In this study, non-work role commitment was 0.2176, role strain was 0.2845, and job satisfaction was 0.069. Except for job satisfaction, the remaining values exceeded the recommended standards.

The standard for Stone-Geisser's Q^2, another index indicating predictive relevance of model, is above 0. Namely, predictive relevance of model is determined to exist when the value is above 0. In this study, the values were as follows: role strain: 0.158, non-work role commitment: 0.1405, and job satisfaction: 0.036(cross-validated redundancy). Since such values satisfied the standard, it can be determined that there is no problem with predictive relevance of model.

Table 5

Result of Model Fit Analysis

GoF[#]	*Effect Sizes for* R^2	*Average AVE*	*Cut-Off Value*	*Our Model Fit*[b]
Small	0.190	0.678	$GoF_{Small}=0.1$	0.359
Moderate	(Average R^2)		$GoF_{Moderate}=0.25$	
Large			$GoF_{Large}=0.36$	

a. A Global Fit Index (0≤GoF≤1)

b. The value is calculated by $\mathbf{GoF} = \sqrt{\overline{AVE} \times \overline{R^2}}\mathbf{GoF} = \sqrt{\overline{AVE} \times \overline{R^2}}$

As the final step, a fit index between data and proposed model was examined. In general, since Covariance-based SEM importantly considers model fit, diverse fit indices were developed (Mulaik, James, Alstine, Bennett, Lind & Stilwell, 1989; Tenenhaus, 2008). However, since PLS aims to maximize explained variance of endogenous variables, there is almost no fit index that relates to this. However, GoF(A Global Fit) reflecting the characteristics of PLS was proposed recently (Tenenhaus, 2008; Tenenhaus, Vinzi, Chatelin & Lauro, 2005; Wetzels, Odekerken-Schröder & van Oppen, 2009), and this index is on the basis of communality and R2. In this regard, PLS model's communality and AVE value are identical (Wetzels, Odekerken-Schröder & van Oppen, 2009). GoF proposed by Tenenhaus, Esposito Vinzi, Chatelin & Lauro (2005) determines the case to be: insufficient when values are above 0.1, okay when values are above 0.25, and outstanding when values are above 0.36 (Xiong, Skitmore & Xia, 2015). In this study, the value acquired from GoF was 0.359. Since such value is close to the outstanding value of 0.36, it is determined that model fit will not be a significant problem in model analysis. Accordingly, the final model was analyzed, and the analyzed results are as shown in Fig.2 and Table 6.

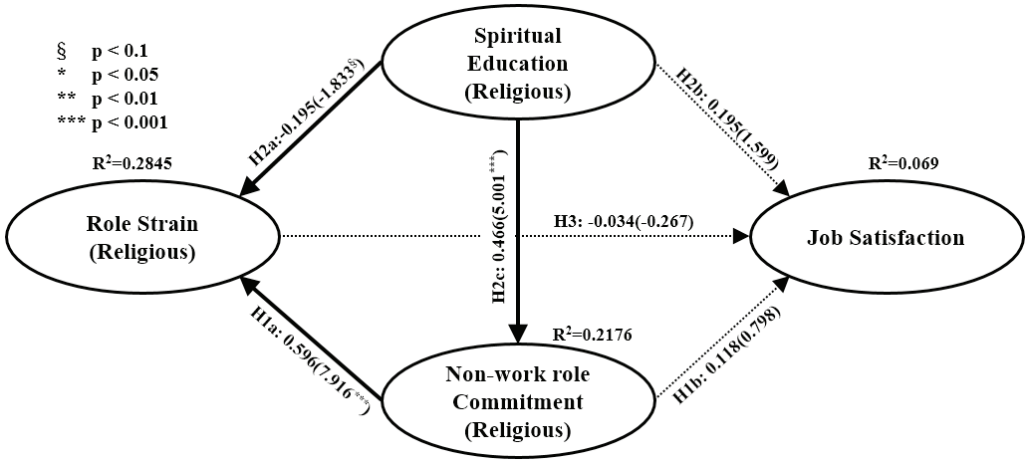

Figure 2: Results of Structural Equation Modeling Analysis

Through empirical tests above, we found that non-work role commitment has statistically significant effect on role strain (β=0.596, p<0.001). On the other hand, non-work role commitment has not significant influence on job satisfaction (β=0.118).

Second, spiritual education has significant negative effect on role strain (β=-0.195, p<0.1). On the other hand, spiritual education has not significant influence on job satisfaction (β=0.195). In addition, spiritual education has significant positive effect on non-work role commitment (β=-0.466, p<0.001).

Lastly, role strain has not statistically significant effect on job satisfaction (β=-0.034). A summary of our findings is shown in Table 6.

Table 6
Result of Hypotheses Tests

Hypotheses	*Mean*	*Std. Dev*	*Path Coefficient*	*Std. Error*	*t value*	*p value*

H1a. Non-Work Role Commitment→ Role Strain	0.611	0.075	0.596	0.075	7.916	0.000
H1b. Non-Work Role Commitment→ Job Satisfaction	0.095	0.149	0.097	0.149	0.653	0.514
H2a. Spiritual Education→ Role Strain	0.096	0.120	0.083	0.120	0.692	0.489
H2b. Spiritual Education→ Job Satisfaction	0.250	0.111	0.247	0.111	2.219	0.027
H2c. Spiritual Education→ Non-Work Role Commitment	0.469	0.093	0.467	0.093	5.001	0.000
H3. Role Strain→ Job Satisfaction	-0.046	0.127	-0.034	0.127	-0.267	0.790

Note: $\dagger t_{0.1} \geq 1.680$, $*t_{0.05} \geq 1.960$, $**t_{0.01} \geq 2.576$, $***t_{0.001} \geq 3.291$

2. RESULTS AND DISCUSSION

The details discovered through this study can be organized as follows. Initially, non-work role commitment was found to have a positive influence on role strain. The survey conducted in this study targeted an organization displaying dark religious color. Such organization set a precondition to limit employment to believers. Moreover, it even set a condition that the applicant musts have received baptism at least a year ago. Namely, since all employees are believers, they can meet up at work and church. However, the problem is that their position assigned at work and position assigned at church may vary. For example, one's senior at work may be a deacon of church. However, although one is the junior one at work, one may be the church elders. In this case, their position at work and position at church may conflict with one another. Accordingly, it is interpreted that this result reflects the point that role strain may occur when actions concentrated on church activities are taken at work. Secondly, non-work role commitment was found to have no significant influence on job satisfaction. Ashmos & Duchon(2000) contended that work itself exists for spiritual growth. One point to pay attention to is that, although spirituality was originated from religion, spirituality cannot be looked at the way religion is looked at as of present time (Ashmos & Duchon, 2000). Spirituality is an activity of finding purpose and meaning of one's job (Ashmos & Duchon, 2000). For example, a professor willing to contribute to educating intellectual talents or a nurse willing to contribute to saving lives of people probably has nothing to do with religion. Accordingly, concentrating on non-work role commitment such as Bible study and church activity at work may not have any influence on job satisfaction. Thirdly, spiritual education was found to have a negative influence on role strain. In this study, role strain was caused by a conflict between position at work and position at church. Accordingly, such conflict can be decreased when priorities are set through religious spiritual education. Fourthly, spiritual education was found to have a significant influence on non-work role commitment. The purpose of spiritual education is to promote and reinforce religious spirituality. Accordingly, the result is determined to show that spiritual education may have a positive influence on individuals taking the time to concentrate on religious activities at work. Fifthly, spiritual education was found to have no significant influence on job satisfaction. It is interpreted that this result was achieved since religious spiritual education mainly reflects religious characteristics whereas it does not help organization members find the purpose and meaning of their job. Lastly, it was found that role strain has no influence on job satisfaction. This result conflicts with the results acquired from the existing studies that role strain has a negative influence on job satisfaction. In this study, the subjects who participated in the survey were all multiple role players with a job at church and a position at work. However, since they were employed as they were aware of their religious bases, it can be interpreted that this result is attributable to them being aware that role conflict exists, but still not desiring to connect this to their job performance. Namely, it can be interpreted that they do not desire to weaken their job performance because of their church-related service spirit.

3. CONCLUSION

As it has been, a company will continue to make efforts to enhance its organization's job performance. To make this happen, scholars and practitioners in the field have been continuously conducting studies to come up with ways to enhance job performance. In addition, they have been in search of new techniques for enhancing job performance as well. In this process, workplace spirituality has been attracting the attention.

Spirituality was originated from religion. Therefore, it still fails to completely escape its religious imagery. However, the ultimate purpose of spirituality begins from understanding the meaning and purpose of one's job through individual meditation. Accordingly, regardless of whether an organization is established with a religious purpose or not, to enhance job performance through spirituality, it is never a good idea to operate spirituality which reflects religious characteristics within an organization. Operating spirituality which reflects a particular religious color may induce organization members to create a conflict between work and non-work role, and this would ultimately prevent that organization from achieving job performance to be achieved through spirituality.

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