THE RELATIONSHIP BETWEEN SPIRITUAL LEADERSHIP, SPIRITUAL WELL-BEING AND JOB SATISFACTION IN THE MALAYSIAN SHIPPING INDUSTRY: A PILOT STUDY

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ABSTRACT

Spiritual leadership is a relatively new concept in leadership literature. It aims to intrinsically motivate the leaders and the followers for their spiritual well-being. Job satisfaction is a critical concept with various antecedents and consequences. The situational and dispositional factors or the combination of both factors determine the level of satisfaction of the employees toward their job. This pilot study aims to validate the 26-items of Spiritual leadership Theory scale (SLT) measuring spiritual leadership and spiritual well-being constructs, and 25-items of Abridged Job Descriptive Index (aJDI) measuring job satisfaction in the Malaysian shipping industry. The study was conducted among 175 employees of 20 shipping agents companies in the East Coast of Peninsular Malaysia. The results of exploratory factor analysis and confirmatory factor analysis led to some modifications of the survey instruments for future comprehensive research on the spiritual leadership theory in the Malaysian context.

Keywords: Spiritual Leadership, Spiritual Well-being, Job satisfaction, Exploratory Factor Analysis, Confirmatory Factor Analysis

1. INTRODUCTION

The relationship between spirituality and work-related variables such as job satisfaction has been the subject of a limited number of empirical studies (Duffy 2006). Ghazawi and Smith (2009) noted employees who view work as a means of spiritual expression will have a more positive outlook, contribute more, "effectively creating better working conditions, and leading to higher levels of job satisfaction" (p. 305). Clark et al. (2007) remarked that although the past years have shown a growing interest in the relationship between spirituality and job satisfaction, only a few empirical investigations have provided support for the claimed positive influence of spirituality on job satisfaction. Millman et al. (2003) and Garcia-Zamor (2003) have found that certain dimensions of spirituality, particularly those associated with life coherency such as meaning making and sense of purpose, were positively related with various aspects of work-related variables such as job satisfaction and involvement.

Studies on the link between spirituality and organizational leadership; and the impact of spirituality to employees outcomes such as absenteeism, productivity, turnover, ethicality, stress, and health are growing and have become a central issue in current trend of spirituality studies (Fairholm, 1998; Fry, 2003; Giacalone & Jurkiewicz, 2003). Justin (2010) states that in the past decade there has been a heightened curiosity concerning the impact of spirituality on leadership practices, as there were evident that the effectiveness of the leaders has been associated with their spiritual values and practices (Reave, 2005). How spirituality impact the organizations and individuals; such as leaders and followers (employees) are the main areas of empirical research which tend to highlight the importance of spirituality in the workplace. Nevertheless, Thompson (2000) states that most leadership research giving less attention to spiritual issues, and those spiritual qualities are commonly
overlooked in relation to leadership positions. Previous leadership theory mainly focused on the aspects of physical, mental, or emotional elements of human interaction in organisations and neglected the spiritual component (Fry, 2003). This pilot study aims to validate the 26-items of Spiritual leadership Theory scale (SLT) measuring spiritual leadership and spiritual well-being constructs, and 25-items of Abridged Job Descriptive Index (aJDI) measuring job satisfaction in the Malaysian shipping industry.

2. LITERATURE REVIEW:

Spiritual leadership

Spiritual leadership can be viewed as a field of inquiry within the broader context of workplace spirituality. Fry defined spiritual leadership as “the values, attitudes, and behaviors that are necessary to intrinsically motivate one’s self and others so that they have a sense of spiritual wellbeing through calling and membership” (2008, p. 108). The theory of spiritual leadership is developed within an intrinsic motivation model that incorporates vision, hope/faith, and altruistic love, theories of workplace spirituality, and spiritual well-being; where the spiritual well-being variables are meaning/calling and membership (Fry et al., 2005).

The spiritual leadership is about creating value for the organization, through the employees (Fry, 2003). Fry (2005) states that a leader who highly values honesty, integrity, forgiveness, compassion, and helping others would have different attitudes and behave very differently toward followers than if he or she ultimately valued egoistic need satisfaction and personal ambition. It can be said that the followers are strictly motivated with the spiritual leaders, who create different atmosphere. This atmosphere composes a coherence between the leaders and the followers, which affects the working environment positively. Fry (2003) mentions that people have to satisfy some certain needs to survive and he considers spirituality as one of these basic needs. Fry and Cohen (2009, p. 267) also maintained that spiritual leadership involved tapping into both followers and leaders “for spiritual well-being”.

Spiritual well-being

Spirituality and spiritual well-being may be used interchangeably and congruently (Ellison, 1983; Paloutzian & Ellison, 1982). Well-being is defined by Merriam Webster Online as “the state of being happy, healthy, or prosperous”. Spiritual well-being is defined as people’s perception of the quality of their spiritual life (Paloutzian & Ellison, 1982), while Hawks, Hull, Thalman, & Richins (1995) defined spiritual well-being as “a sense of relatedness or connectedness to others, a provision for meaning and purpose in life, the fostering of wellbeing (through a stress buffering effect), and having a belief in and a relationship with a power higher than the self”. Spiritual well-being has been conceptualized as satisfaction with one’s spiritual life domain (Lee, Sirgy, Efraty, & Siegel, 2003). In the context of this study, spiritual well-being is defined as a “self perceived state of the degree to which one feels a sense of purpose and direction” (Fry, 2005).

Job satisfaction

Porter and Lawler (1968) define job satisfaction as an unidimensional construct; that is, you are generally satisfied or dissatisfied with your job. They further explain that job satisfaction is people’s affective (emotional) response to their current job conditions. Locke (1976) then defined job satisfaction as “a pleasurable or positive emotional state resulting from one’s job or job experiences” (p.1300). Job satisfaction is a critical construct because job dissatisfaction has been acknowledged as the single most important reason people leave their job (Sturges & Guest, 2001). However, the actual aspects of job satisfaction that caused people to leave their job are not specified and vary according to circumstances around the people’s experience in the organisation. The situational and dispositional factors or the combination of both factors determine the level of satisfaction of the employees toward their job.

The most notable situational influence on job satisfaction is the nature of the work itself - often called “intrinsic job characteristics.” Managers need to be aware that they can shape organisational (situational) factors through job enrichment such as task significance, task identity, work autonomy, role clarity, an effective communication (feedback) system and allowing participation in the decision making process, as these factors all affect the employee’s satisfaction attitude (Fried & Ferris, 1987). To achieve a high
level of job satisfaction, it is important to have a good fit between an employee and his or her work environment because the work environment (e.g., leaders and organizational culture) could be an important predictor of the employee’s job satisfaction (Taris & Feij, 2001). Snyder (1990) found that the degree of an employee’s job satisfaction could be different depending on the leadership style of his or her managers or leaders. In another perspective, Davis-Blake & Pfeffer (1989) claim that an accumulating body of evidence indicates that differences in job satisfaction across employees can be traced, in part, to differences in their disposition or temperament (House, Shane, & Herold, 1996). However, how exactly disposition affect job satisfaction is inconclusive despite its contributions to the understanding of the causes of job satisfaction (Erez, 1994). Judge and Bono (2001) found that a key personality trait, core self-evaluation, correlates with employee job satisfactions which indicate that there is in fact a relationship between disposition or personality and job satisfaction. In 1965, Kornhauser have assumed that person variables such as mental health and personality are primarily influenced by satisfaction and not vice versa (Arvey et al., 1991). Konhauser also established that job satisfaction is significantly associated with general mental health indices. Hammermeister et al. (2005) conclude that “spiritual well-being happens to have a positive influence on most aspects of health” (p. 80), including mental health. In that sense, it is posited that spiritual well-being is positively associated with mental health of the employees, and also a significant influencer of job satisfaction. Individual spirituality has been empirically found to be positively associated with life satisfaction (Wolf, 1998) and more specifically with job satisfaction (Brown 2003, Komala & Ganesh 2007).

Relationship Between Spiritual Leadership, Spiritual Well-Being and Job satisfaction

Many studies across diverse arrays of organisations so far support a significant positive influence of spiritual leadership through spiritual well-being on employee life satisfaction, organizational commitment and productivity, various measures of work unit performance, and sales growth (Fry, 2005). Spiritual leadership fosters spiritual well-being, which then positively influences employee life satisfaction, corporate responsibility, organizational commitment and productivity, and financial performance (Fry & Slocum, 2008).

Fry et al. (2011) utilised a SLT scale of spiritual well-being to test a dynamic relationship between spiritual leadership and spiritual well-being (i.e., a sense of calling and membership), and key organizational outcomes in a sample of emerging military leaders. The findings revealed a positive and significant relationship between spiritual leadership and spiritual well-being; and spiritual well-being was found to mediate the relationship between spiritual leadership and organisation commitment. The study also concludes that overall spiritual leadership model provides support that the variables comprising spiritual leadership (i.e., hope/faith, vision, and altruistic love) form a higher order formative construct that positively influences spiritual well-being in groups (i.e., calling and membership).

There are no studies found to date that attempted to examine specifically the relationship between spiritual leadership and overall job satisfaction; or spiritual leadership and facets of job satisfaction. This area of study is largely remained unexplored and need to be addressed to further understand the impact of spiritual leadership to various organizational outcomes. However, there is a study by Aydin and Ceylan (2009) to investigate the relationship between spiritual leadership, organizational culture and employee satisfaction on workers of metal working manufacturing industry in Turkey. The findings of the study revealed that employee satisfaction has strong correlation with organizational culture and spiritual leadership. In addition to that, results also indicate that spiritual leadership does not have as much considerable effect as the cultural dimensions on employee satisfaction in metal working area.

Many studies on the relationship between spiritual well-being and job satisfaction have been conducted in health care related settings, and found a positive relationship between these two constructs (Clark, et al., 2007; Duggleby, Cooper & Penz, 2009; Smalls, 2011). Nevertheless, all the empirical studies on spiritual well-being mentioned above utilised a various survey instrument of spiritual well-being which included religious aspects as one of its dimensions. This current study adopts Fry’s spiritual leadership theory (SLT) scale which is free from any religious elements. Bodla & Ali (2012) conducted a research to investigate whether
leadership spirituality affect the individual outcomes i.e. performance, organisation commitment and job satisfaction and the role of spiritual well-being as mediator on the banking sector in Pakistan. The results found a positive relationship between spiritual leadership and elements of spiritual survival/well-being, Caring/meaning and membership as the dimensions of spiritual well-being were found to have positive relationship with individual outcomes. In the nutshell, spiritual well-being was found significantly correlated with job satisfaction. The study also observed a mediation effect of spiritual well-being to the relationship between spiritual leadership dimensions and organizational outcomes.

Measuring instrument of spiritual leadership, spiritual well-being and job satisfaction

1. Spiritual Leadership Scale (SLT)

Fry has developed the only theory of spiritual leadership that has been extensively tested and validated in a variety of settings. Many studies have been conducted in more than 100 organisations including schools, military units, city offices, and corporations (Malone & Fry, 2003; Fry & Slocum, 2008; Fry et al., 2005). This study adopted the Spiritual Leadership Scale created by Fry et al. (2005), totaling 26 items. The three dimensions of spiritual leadership - vision, hope/fait, and altruistic love were measured using survey questions developed and validated especially for spiritual leadership theory (Fry, 2008; Fry & Matherly, 2006). The vision section of the questionnaire measured whether an organization creates a vision that calls for feelings of meaningfulness in employees (5 items). Hope/fait measured employee affirmation for expected tasks and the firm belief that the vision/purpose/mission of the organization could be achieved (5 items). Altruistic love measured the altruistic love of organisations and leaders toward the employees (7 items). Fry’s spiritual leadership theory includes not only these three dimensions of spiritual leadership but also spiritual well-being. Two dimensions of spiritual well-being – meaning/calling and membership are among the measures included in the Fry’s spiritual leadership theory. Meaning/calling measured employees’ feelings of meaningfulness toward work (4 items). Membership measured employees’ feelings of being understood and appreciated (5 items).

Previous studies have consistently confirmed the spiritual leadership causal model and the reliability and validity of the items measured (Fry, 2003, 2005, 2008, 2009). The questionnaire utilizes a 5-item Likert scale (from strongly disagree to strongly agree). The scales exhibited adequate coefficient alpha reliabilities between 0.83 and 0.93 in previous studies (Fry et al., 2005). In the Malaysian context, a study by Jamaludin et al. (2011) showed coefficient alpha reliabilities of 0.906, while a study by Mansor et al. (2013) revealed coefficient alpha for spiritual leadership dimensions were between 0.798 to 0.904.

2. Abridged Job Descriptive Index (aJDI)

Stanton et al. (2001) stated, “The JDI has been described as the most popular and widely used measure of job satisfaction. The instrument was translated into nine different languages and administered in at least 17 countries” (p. 1105). According to DeMeuse (1985) and Zedeck (1987), the JDI is one of the most frequently used measures of job satisfaction. Stanton et al. (2001) state that the JDI has been widely used and considered as the most reliable measure of job satisfaction. The JDI is a useful tool for spotting different problem areas in organisations. JDI scores also can be used to show the affects of planned or unplanned changes in jobs (Balzer et al., 1997). It is designed to be a multifaceted measure of job satisfaction applicable to a wide range of workers (Balzer et al., 1997; Smith et al., 1969). Landy and Conte (2004) states that if a measure is facet-based, overall job satisfaction is typically defined as a sum of the facets. They explained that overall job satisfaction can be determined by mathematically combining scores based on satisfaction with specific important aspects of work or a single overall evaluative rating of the job information related to specific facets or elements of job satisfaction.

The JDI consists of five scales that are reflective of common facets of job satisfaction; Satisfaction with Work, Satisfaction with Supervisor, Satisfaction with Co-worker, Satisfaction with Pay and Satisfaction with Promotion. Satisfaction With Work scale measures employees’ satisfaction with the work itself, for example, whether the job satisfies a need to increase knowledge or to use a variety of skills. Satisfaction With Supervisor scale assesses employees’ satisfaction with their supervisor, particularly supervisor’s competency and
feedback. Satisfaction With Co-workers scale measures employees’ satisfaction with their fellow employees, that is, their satisfaction with work-related interactions and whether or not employees like their co-workers. Satisfaction With Pay scale addresses the employees’ attitudes about pay and the perceived differences between actual pay and expected pay. Satisfaction With Promotion scale reflects employees’ satisfaction with the company’s promotion policy, for example, frequencies and importance of promotions. For each scale, the JDI provides a list of adjectives or short phrases. Respondents are asked to indicate whether each word or phrase applies to the particular facet of his or her job being assessed.

The JDI has undergone two revisions since its initial development almost 40 years ago (Balzer et al., 1997). An abridged version of the JDI was recently developed and made up of 5 questions for each facet for a total of 25 questions. Abridged Job Descriptive Index (aJDI) developed by Stanton et al. (2001) was used to assess job satisfaction in this study. The respondents in this study described how well each of the words or phrases described their work in a 5-point Likert-type scale from strongly disagree, disagree, neutral, agree, strongly agree, on the right side of each item on the surveys. Even though this scoring system is different from the standard JDI scoring system: which based on a 3-point scale “yes”, “no”, or a question mark (“?”), research has proven that that the reliability, stability, and validity of the five JDI subscales are not significantly different across these two forms of scoring system (Likert-type vs. yes-no-? scaling); (Johnson, Smith, & Tucker, 1982). This is also to address the problems faced by the researchers using a “yes”, “no” response format (Bartolo & Furlonger, 2000). Hanisch (1992) found the (“?”), neutral response was more representative of dissatisfaction.

Leong and Vaux (1992) reported that the five JDI scales show excellent internal consistency and stability and that the dimensional structure of the measure is “stable, robust, and congruent over a wide range of occupational types and levels” (p. 330). Regarding internal consistency, Balzer et al. (1997) reported alpha coefficients for the JDI scale between .86 and .91; specifically, Work (.90), Supervision (.91), Co-workers (.91), Pay (.86) and Promotions (.87). Stanton et al. (2001) reported alpha coefficients for the aJDI scale between .75 and .84, specifically, Work (.84), Supervision (.83), Co-workers (.76), Pay (.75) and Promotions (.82).

3. METHODOLOGY

Population and data collection method

The population consisted of 175 employees of 20 shipping agents companies in the East Coast of Peninsular Malaysia. A cover letter accompanied the SLT, JDI, and demographics instruments have been administered to the participants via their respective human resource personnel. Anonymity is assured as mentioned in the cover letter of the questionaires. Employees were directed to read the instructions and complete the SLT, JDI, and demographics instruments. The instruments were returned to the respective human resources departments and collected by the researcher. A total 146 questionaires were returned and usable for analysis using SPSS and AMOS softwares.

Instrumentation

A questionnaire which included questions on (1) respondents’ demographic details, (2) spiritual leadership, (3) spiritual well-being, and (4) job satisfaction was developed for the study.

Demographic details such as (1) age, (2) gender, (3) education level, (4) years with organisation, (5) years with leaders, and (6) nature of job, were asked to provide an understanding of the background information of the respondents participating in the study.

Table 1: Instruments

<table>
<thead>
<tr>
<th>Study variables</th>
<th>No of items</th>
<th>Source of scale</th>
<th>Type of scale</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spiritual leadership</td>
<td>17</td>
<td>Fry (2005)</td>
<td>5-points Likert scale</td>
</tr>
<tr>
<td>Spiritual well-being</td>
<td>9</td>
<td>Fry (2005)</td>
<td>5-points Likert scale</td>
</tr>
<tr>
<td>Job satisfaction</td>
<td>25</td>
<td>Stanton et al. (2001)</td>
<td>5-points Likert scale</td>
</tr>
</tbody>
</table>

Statistical Package for the Social Sciences (SPSS) version 17.0 and AMOS version 17.0 were used for the statistical analyses.
4. FINDINGS & DISCUSSION

Exploratory Factor Analysis (EFA)

For this study, three EFA have been carried out separately for spiritual leadership, spiritual well-being and job satisfaction construct. Before further analysis of EFA could be conducted, the values of Kaiser-Meyer-Olkin (KMO) Measure of sampling adequacy should be greater than 0.50 (Hair et al., 2010), and Bartlett’s Test of Sphericity should be statistically significant at $p < 0.05$. The results of KMO and Bartlett’s Test of Sphericity for all constructs satisfy the minimum requirements as suggested by Hair et al. (2010).

As recommended by Tabachnick and Fidell (2001); Pallant (2007); and Hair et al. (2006), the current study employed the most commonly used orthogonal approach, the Varimax method, which aims to minimise the number of variables that have high loadings on each single factor. In this study, loading below 0.5 was ignored, because higher loading provides a clearer guide to what the factor is measuring (Hair et al., 2006). Kaiser’s criterion or eigenvalue rule is one of the most frequently used techniques in EFA. Using this rule, only factors with an eigenvalue of 1.0 or more can be retained for further investigation (Pallant, 2007). The percentage of variance criterion is a technique based on achieving a specified cumulative percentage of total variance extracted by successive factors (Hair et al., 2006). As stated by Hair et al. (2006), the satisfactory cut-off point of 60% or less is acceptable in social science research.

During the EFA for spiritual leadership construct, seven items did not load higher than .50 on any of the factors and were dropped from the subsequent analyses of factors associated with spiritual leadership domains. One item from the original ‘vision’ scale (VS5) joined items from the ‘hope/faith’ scale. For spiritual leadership construct, the sub-dimensions were finally reduced to two (altruistic love, hope/faith) from the original three (altruistic love, hope/faith, vision). These dimensions were later renamed after completing the CFA test. As for the spiritual well-being construct, the EFA extracted two factors with factor loading of items more than .50. However, factor two only consisted of two items (MC1, MC2). Therefore, EFA was re-run for a single factor and the results revealed that only items from original ‘membership’ scale remained and retained for further analysis. The EFA for job satisfaction construct resulted in four factors been extracted with loadings more than .50. All items from the original co-worker scale were excluded; whereas, one items from ‘promotion’ and two items from ‘pay’ were also excluded. The summary of retained and dropped items for all constructs were shown as Appendix A.

Measurement Models

Confirmatory Factor Analysis (CFA) was conducted using the results from EFA. The aim of the CFA is to validate the scale before data collection process for future survey is conducted. There were four measurement models assessed for the constructs of the study i.e. spiritual leadership, spiritual well-being, job satisfaction, and overall measurement models combining all the constructs. Based on the CFA, the convergent validity, discriminant validity, unidimensionality and reliability of the constructs were established.

Spiritual leadership construct consisted of two variables i.e. altruistic love (six items) and hope/faith (four items). All these items were then subjected to a CFA with initial measures of fit satisfy the values as recommended by Zainuddin (2012). However, SMCC for item ‘AL7’ was the lowest (.39) as compared with other items; therefore, it was decided to drop item ‘AL7’ to improve the validity of the construct. Another CFA was conducted (without item ‘AL7’) in the re-specified model and the measures of fit as recommended by Zainuddin (2012) for spiritual leadership were summarised by GFI (.956), CFI (.990), RMSEA (.037) and Chisq/df (1.20) and hence, the model was judged to have an acceptable fit. All measures associated with the construct were statistically significant with the correct positive signs. With respect to the Squared Multiple Correlation Coefficient (SMCC) or R-Squared, all measures for spiritual leadership have the coefficient of more than 0.4, being greater than 0.3 as suggested by Hair et al. (2006). Thus, all observed variables are strongly significantly associated with spiritual leadership. Composite reliability for altruistic love (.875) and hope/faith (.774) exceeds the minimum threshold of 0.7 while the average variance extracted of altruistic love (.584) and hope/faith (.534) satisfy the minimum threshold of 0.5. This indicated that the retained items were considered reliable as well as valid for this construct measure (Hair et al., 2006).
After the CFA for first order latent construct had been conducted, the research was continued by running the second order CFA for the main construct that was spiritual leadership. The factor loadings of the main construct towards its sub-variables were estimated in order to confirm the theorized second order construct loads onto its respective sub-variables. The results show that the effects of spiritual leadership towards altruistic love (.54) and hope/faith (.64) were highly significant. Overall, the model was adequately fit to the data based on the model fitness indexes given.

Spiritual well-being construct is a one-factor construct after EFA and consisted of five items. All these items were then subjected to a CFA with the measures of fit as recommended by Zainuddin (2012) for spiritual well-being were summarised by GFI (.972), CFI (.983), RMSEA (.082) and Chi$/$df (1.979) and hence, the model was judged to have an acceptable fit. All measures associated with the construct were statistically significant with the correct positive signs. With respect to the Squared Multiple Correlation Coefficient (SMCC) or R-Squared, all measures for spiritual leadership have an acceptable coefficient, being greater than 0.3 as suggested by Hair et al. (2006). Thus, all observed variables are strongly significantly associated with spiritual well-being. Composite reliability (CR) for spiritual well-being (0.857) exceeds the minimum threshold of 0.7 while the average variance extracted (AVE) of 0.547 satisfy the minimum threshold of 0.5. This indicated that the retained items were considered reliable as well as valid for this construct measure (Hair et al., 2006).

After the CFA for first order latent construct had been conducted, the research was continued by running the second order CFA for the main construct that was job satisfaction. The factor loadings of the main construct towards its sub-variables were estimated in order to confirm the theorized second order construct loads onto its respective sub-variables. The results show that the effects of job satisfaction towards work (.87), supervisor (.60), pay (.41) and promotion (.58) were highly significant. Overall, the model was adequately fit to the data based on the model fitness indexes given.

**Overall Measurement Model Fit**

In this section, an overall measurement model test consisted of all constructs has been conducted to test the adequacy of the measurement model. The results show that all standardised factor loadings were above 0.60. The measures of fit as recommended by Zainuddin (2012) were summarised by GFI (.837), CFI (.940), RMSEA (.057) and Chi$/$df (1.466) and hence, the model was judged to have an acceptable fit. All measures associated with the construct were statistically significant with the correct positive signs. With respect to the Squared Multiple Correlation Coefficient (SMCC) or R-Squared, all measures for job satisfaction have an acceptable coefficient, being greater than 0.3 as suggested by Hair et al. (2006). Composite reliability (CR) for all constructs exceeds the minimum threshold of 0.7 while the average variance extracted (AVE) of all constructs exceed the minimum threshold of 0.5. Therefore, the CFA results for overall constructs exhibited a satisfactory values with regards to the fit indices, unidimensionality, convergent validity and reliability. Overall measurement model was depicted in **Appendix B**.

**Validity of the Constructs**

In the validation process of the research survey instruments, there are two basic validities, namely
content and construct that can be assessed to get the uniqueness of the measures. Content validity is the subjective assessment of the measures affiliated with the face validity for informal as well as common sense evaluation of the scales and measures by the expert judges (Malhotra, 2002). Content validity involves the subjective assessment of scale measures or characteristics of the included variables (Malhotra, 2002). For this study, all construct measures were derived from the close extant studies having a higher reliability consistency (not less than .70).

Convergent validity refers to “the extent to which the scale correlates positively with other measures of the same construct” and “discriminant validity is the extent to which a measure does not correlate with other constructs from which it is supposed to differ” (Malhotra, 2002, p.294). In other words, convergent validity is evidenced when correlations between theoretically similar measures are high, while for discriminant validity, correlations between theoretically dissimilar measures should be low (Trochim, 2006). Spector (1992, p. 47) notes that, “discriminant and convergent validities were frequently studied together and involve investigating the comparative strengths or patterns of relations among several variables”. As both convergent and discriminant coefficients are used to support or refute a claim of construct validity (Zhu, 2000, p.190), these were assessed and discussed in the following section.

**Convergent Validity**

Towards assessing convergent and discriminant validity, correlation coefficients and measurement of constructs in CFA along with standardized loadings were reviewed and discussed. In order to demonstrate convergent validity, correlations between constructs in respective measures were positively correlated with moderate to high coefficients. Further, CFA findings reported earlier indicated that all construct measures were unidimensional (loadings more than 0.60), and having an acceptable construct reliability (more than 0.70) which suggested that the construct measures achieved not only convergent validity but also discriminant validity (Ping, 2009).

**Discriminant Validity**

There are many methods suggested by literature to assess discriminant validity of the construct. Gaski (1984) recommends that the correlations among composite constructs must be lower than the respective standardised composite reliabilities. Fornell and Larcker (1981) further recommend that the average variance extracted (AVE) is 0.50 or to be greater than all corresponding squared construct correlations which is an additional evidence of discriminant validity of the constructs. While, Zainududdin (2010) states that the correlation between construct must be lower than 0.85 and also must be lower than the square root of AVE to establish a discriminant validity of the construct.

In this study, discriminant validity was examined by methods suggested by Zainududdin (2010). The correlation values among constructs are less than 0.85, and the value of square root of AVE are greater than the correlation values among constructs as shown in Appendix C. Based on the above discussion, it was established that the constructs of this study had overall demonstrated sufficient evidence of convergent and discriminant validity.

Reliability analysis was conducted using Cronbach’s alpha coefficient for internal consistency. The coefficient for all constructs range from .833 to .864 which were within acceptable limit. The coefficient for spiritual leadership construct was .833, the coefficient for spiritual well-being was .855, and the coefficient for job satisfaction construct was .864 and all values are well above the recommended value.

**Table 2: Reliability of the instruments**

<table>
<thead>
<tr>
<th>Construct</th>
<th>Number of Items</th>
<th>Cronbach's Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spiritual Leadership</td>
<td>9</td>
<td>0.833</td>
</tr>
<tr>
<td>Spiritual Well-being</td>
<td>5</td>
<td>0.855</td>
</tr>
<tr>
<td>Job Satisfaction</td>
<td>12</td>
<td>0.864</td>
</tr>
</tbody>
</table>

**Modifications of Questionnaires**

Based on the results of the pilot survey and after consulting with the expert in questionnaire design, several modifications were made to the questionnaire to be used in the future survey. First, the headings of the questionnaires have been re-worded to reflect the contents of the statements and to assist the target respondents in understanding the issues. The translation should
always aim at the conceptual equivalent of a word or phrase, not a word-for-word translation, i.e. not a literal translation (Billin, 2000). The examples were ‘Spiritual Leadership’ heading have been reworded to ‘Leadership Characteristics’, ‘Altruistic Love’ reworded as ‘Welfare Of The Employees’. An idiom was also rewritten by its meaning such as in Item 3 of Section 2 (Welfare of the Employees); “The leaders in my organization “walk the walk” as well as “talk the talk” has been changed to “The leaders in my organization always do what they say”.

Final Items for Future Survey

The data collected for pilot study were subjected to EFA and CFA analysis to test the reliability and validity of the research instrument. Following the analyses, the items in every construct were reduced and renamed accordingly before conducting a future survey. Based on the wordings of the retained items for spiritual leadership construct, the sub-dimensions were renamed as ‘Trust’ and ‘Inspiration’, as Fairholm (1997) states that trust and inspiration are among the areas that the leaders must be competent to gain follower acceptance. Appendix D presented the arrangement of the research instrument that to be used in future survey to measure spiritual leadership, spiritual well-being and job satisfaction.

5. CONCLUSION

This pilot study aimed to validate the measuring instruments of spiritual leadership, spiritual well-being and job satisfaction. The study was conducted in the shipping agents companies in the East Coast of Peninsular Malaysia. The findings from EFA and CFA revealed that some items were deleted to improve the validity of the instruments. As some items were deleted to improve the model’s fit and the measurement model was respecified, it may not have measured the latent variables in the manner originally intended by the developers of the instruments. The study shows that at least some of the constructs contained in the measuring instruments are not directly applicable to the kind of sample on which this study was done. The study results using the respecified factor structures are limited to the population and setting in this study. The importance of re-validating measuring instruments developed in one culture and to be used in a different country or culture, or even in a different kind of sample, is strongly emphasised by the outcomes of the analyses done in the present study. Future research could replicate the study by using a different population to shed more light on the structure underlying the study constructs.

REFERENCES

6. Brown C. (2003). Low morale and burnout; is the solution to teach a values-based spiritual approach?. Complementary Therapies in Nursing & Midwifery 9, 57–61
Industrial-Organizational Psychologist, 23, 53-59.


research are vastly exaggerated. Academy of Management Review, 21, 203–224.


Psychological Measurement, 61(6), pp 1104–1122.


APPENDIX A: DROPPED AND RETAINED ITEMS AFTER EFA

<table>
<thead>
<tr>
<th>Construct/Sub-dimension</th>
<th>Initial items</th>
<th>Dropped items</th>
<th>Retained items</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spiritual leadership</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vision</td>
<td>5</td>
<td>4</td>
<td>1*</td>
</tr>
<tr>
<td>Hope/faith</td>
<td>5</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Altruistic love</td>
<td>7</td>
<td>1</td>
<td>6</td>
</tr>
<tr>
<td>Total</td>
<td>17</td>
<td>7</td>
<td>10</td>
</tr>
<tr>
<td>Spiritual well-being</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Meaning/calling</td>
<td>4</td>
<td>4</td>
<td>0</td>
</tr>
<tr>
<td>Membership</td>
<td>5</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Total</td>
<td>9</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Job satisfaction</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Work</td>
<td>5</td>
<td>0</td>
<td>5</td>
</tr>
<tr>
<td>Supervisor</td>
<td>5</td>
<td>0</td>
<td>5</td>
</tr>
<tr>
<td>Co-worker</td>
<td>5</td>
<td>5</td>
<td>0</td>
</tr>
<tr>
<td>Pay</td>
<td>5</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Promotion</td>
<td>5</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>Total</td>
<td>25</td>
<td>8</td>
<td>17</td>
</tr>
</tbody>
</table>

Note: * item joined Hope/faith
APPENDIX B: OVERALL MEASUREMENT MODEL

Fitness Indexes
ChiSq = 407.441
df = 278
P-Value = .000
ChiSq/df = 1.466
GFI=.837
AGFI=.795
TLI=.930
CFI = .940
NFI = .836
RMSEA = .057

APPENDIX C: CORRELATION MATRIX AND SQUARE ROOT OF AVE

<table>
<thead>
<tr>
<th>Constructs</th>
<th>PY</th>
<th>PR</th>
<th>WK</th>
<th>SV</th>
<th>SWB</th>
<th>ALT</th>
<th>HOP</th>
</tr>
</thead>
<tbody>
<tr>
<td>PY</td>
<td>.866</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>PR</td>
<td>.247</td>
<td>.770</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>WK</td>
<td>.374</td>
<td>.483</td>
<td>.854</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>SV</td>
<td>.178</td>
<td>.391</td>
<td>.525</td>
<td>.890</td>
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<td>SWB</td>
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<td>.335</td>
<td>.686</td>
<td>.471</td>
<td>.739</td>
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<tr>
<td>ALT</td>
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<td>.428</td>
<td>.363</td>
<td>.225</td>
<td>.517</td>
<td>.763</td>
<td></td>
</tr>
<tr>
<td>HOP</td>
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<td>.239</td>
<td>.161</td>
<td>.012</td>
<td>.302</td>
<td>.347</td>
<td>.712</td>
</tr>
</tbody>
</table>

Note: Square root of AVE in bold (diagonal)

APPENDIX D: ARRANGEMENT OF QUESTIONAIRE

<table>
<thead>
<tr>
<th>Questionnaire Section</th>
<th>Descriptions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Part 1</td>
<td>Demographic profiles (6 items)</td>
</tr>
<tr>
<td>Part 2</td>
<td>9 items measuring Spiritual Leadership (Trust: 5 items, Inspiration: 4 items)</td>
</tr>
<tr>
<td>Part 3</td>
<td>5 items measuring Spiritual Well-being</td>
</tr>
<tr>
<td>Part 4</td>
<td>12 items measuring Job Satisfaction (Work: 3 items, Supervisor: 3 items, Pay: 3 items, Promotion: 3 items)</td>
</tr>
</tbody>
</table>