

UNIVERSITI PUTRA MALAYSIA

INFLUENCE OF SPIRITUAL INTELLIGENCE, AGE AND TENURE ON WORK PERFORMANCE OF NURSES IN SELECTED HOSPITALS, PENINSULAR MALAYSIA

ANITA BINTI ABDUL RANI

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Ву

ANITA BINTI ABDUL RANI

Thesis Submitted to the School of Graduate Studies, Universiti Putra Malaysia, in Fulfillment of the Requirements for the Degree of Doctor of Philosophy

April 2015

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DEDICATIONS

May Allah accept this little effort

To add a bit of knowledge to others,

Thank You Allah

In loving memories of

My father, Abdul Rani bin Sulaiman

My mother, Hashimah binti Nordin.

With my heartiest love for:

My husband, Imaduddin Abidin,

My daughters,

Nur Rusyda Hannah, Nur Maisarah and Nur Aisyah Saadah,

And my sisters,

Azura and Aniza

Thank you very much

Abstract of thesis presented to the Senate of Universiti Putra Malaysia in fulfillment of the requirement for the degree of Doctor of Philosophy

INFLUENCE OF SPIRITUAL INTELLIGENCE, AGE AND TENURE ON WORK PERFORMANCE OF NURSES IN SELECTED HOSPITALS, PENINSULAR MALAYSIA

By

ANITA BINTI ABDUL RANI

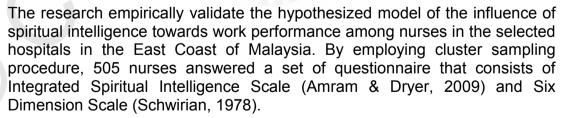
April 2015

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Spiritual Intelligence has been discussed through out many years. Previous reseach studies on it have been explored extensively in the context of human development, organization, education and health. The importance of spiritual intelligence are found in the healthcare service as nurses deal with stressful environment that can effect their performance. Spiritual intelligence as believed can give a positive attitude and productive in work will lead to good quality of care. However, there are few studies on it in examining the effect of spiritual intelligence with nurse's work performance especially in Malaysia.

Applying Tischler's model (2002) and a great support from Theory of Work Performance (Blumberg & Pringle, 1982), this study attempts to identify important item among domains in spiritual intelligence from nurse's perceptions, to determine the relationship of nurses' spiritual intelligence and their work performance, to examine demographic factors as a moderator between spiritual intelligence and work performance and to test the best model of Nurse's Work Performance (NWP).



The hypothesized model was analysed using structural equation modelling (SEM) with AMOS software version 18.0 in order to test the relationships on the impact of spiritual intelligence on work performance. In addition, this study also investigated the moderating effect of age, tenure and work place



location on the model. The findings from the modelling analysis revealed the fit statistics of the hypothesised model i.e. p-value = 0.000, normed chi-square=3.999, CFI=0.972, TLI=0.963, GFI=0.939 and RMSEA=0.077. This showed that the model is valid and acceptable.

In addition, the findings showed that the moderating factor of nurse's age and hoslital's location is not significant and it could be concluded that the model is applicable to all nurse's age and all hospitals involved in this study. The findings also suggested that the spiritual intelligence can give a positive effect on work performance. The research makes several theoretical contributions and also paves the way forward to empower spiritual intelligence in nursing schools and training centres to enhance nurse's work performance especially in East Coast of Malaysia.



Abstrak tesis yang dikemukakan kepada Senat Universiti Putra Malaysia sebagai memenuhi keperluan untuk Ijazah Doktor Falsafah

KESAN KECERDASAN SPIRITUAL, UMUR DAN TEMPOH BERKHIDMAT KE ATAS PRESTASI KERJA JURURAWAT BEBERAPA HOSPITAL TERPILIH DI SEMENANJUNG MALAYSIA

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2

Pengajian Pendidikan

Kecerdasan Spiritual telah dibincangkan oleh ramai penyelidik secara meluasnya dalam konteks pembangunan manusia, organisasi, pendidikan dan kesihatan. Kepentingan kecerdasan ini mula menjadi perhatian bagi pengkaji di dalam kualiti perkhidmatan kesihatan. Kecerdasan spiritual dilihat mampu memberi sikap positif dan meningkatkan prestasi kerja boleh membawa kepada kualiti jagaan yang baik. Walau bagaimanapun hanya sedikit yang mengkajikan kesan kecerdasan spiritual terhadap prestasi kerja jururawat terutamanya di Malaysia

Menggunakan Model Tischler (2002) dengan sokongan kuat daripada Teori Prestasi Kerja (Blumberg & Pringle, 1982), kajian ini bertujuan untuk mengesahkan model hipotesis pengaruh kecerdasan spiritual terhadap prestasi kerja jururawat di hospital-hospital terpilih di Pantai Timur Malaysia. Dengan menggunakan prosedur persampelan kluster, 505 jururawat menjawab satu set soal selidik yang terdiri daripada Skala Bersepadu Kecerdasan Spiritual (Amram dan Dryer, 2009) dan Skala Enam Dimensi (Schwirian, 1978).



Model hipotesis telah dianalisis menggunakan Permodelan Persamaan Struktur (PPS) dengan perisian AMOS versi 18.0 untuk menguji hubungan kecerdasan spiritual terhadap prestasi kerja. Di samping itu, kajian ini juga melihat kesan moderator umur, tempoh perkhidmatan dan lokasi tempat kerja di dalam model. Dapatan kajian analisis model mendedahkan statistik padanan dengan nilai-p=0.000, khi kuasa dua relatif=3,999, CFI=0.972, TLI=0.963, GFI=0,939 dan RMSEA=0.077. Ini menunjukkan bahawa model tersebut adalah sah dan dapat diterima. Sebagai tambahan, analisis Bayes juga telah dijalankan untuk mengesahkan keputusan yang didapati sebelumnya. Kesimpulannya, hubungan antara kecerdasan spiritual dan prestasi kerja adalah signifikan secara statistik. Selain itu, kajian

menunjukkan bahawa faktor moderator umur dan tempoh bekerja adalah tidak penting dan boleh dibuat kesimpulan bahawa model ini terpakai kepada semua hospital-hospital yang terlibat dalam kajian ini.

Kajian ini telah memberi beberapa sumbangan secara teorinya dan membuka ruang bagi memupuk dan menekankan kecerdasan spiritual di sekolah kejururawatan dan latihan untuk meningkatkan prestasi kerja jururawat terutamanya di Semananjung Malaysia.



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This is not the end, this is beginning of a brighter life. May Allah have mercy for me through it.

This thesis was submitted to the Senate of Universiti Putra Malaysia and has been accepted as fulfillment of the requirement for the Degree of Doctor of Philosophy. The members of the Supervisory Committee were as follows:

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- The research conducted and the writing of this thesis wa under our supervision;
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TABLE OF CONTENTS

ABS7 ACKN APPF DECL LIST LIST	RACT TRAK NOWLEDGEMENTS ROVAL ARATION OF TABLES OF FIGURES OF ABBREVIATIONS	Page i iii v vi vii viii xiv xv xv
CHAF	PTER	
I	INTRODUCTION Background Work Performance among Nurses From Spirituality to Spiritual Intelligence Problem Statement Research Questions Research Objectives Hypothesis of the Study Significance of the Study Limitations of The Study Definition of the Terms	1 2 4 6 8 8 8 8 9 10 10
II	LITERATURE REVIEW Introduction Work Performance Components of Work Performance Work Performance Theories Work Performance Demographic Factors Work Performance Appraisal Nursing Competencies Nurse's Work Performance	13 13 15 16 18 19 20 22

Factors Affecting Nurse's Work Performance

Emergence of Spiritual intelligence Theories and Models

The Triarchic Theory of Human Intelligence

The Theory of Multiple Intelligence

Theories of Nurse's Work Performance

Spirituality and Connectedness with God

Models of Spiritual Intelligence

Spirituality and Religiousity

Nurse's Assessment

Varieties of intelligence

Intelligence Theory

Spiritual intelligence

24

26

27

29

29

30

31

32

34

35

37

38

Definitions and Concepts of Spiritual Intelligence Component of Spiritual Intelligence Spiritual Intelligence Measurement Past Research on Spiritual intelligence SI : The Organisational Research SI : The Psychological Research SI : The Educational Research SI : The Educational Research SI : The Nursing Research Spiritual Intelligence and Demographic Profiles Gaps in Spiritual Intelligence and Nursing Research Theoritical Framework Hypothesis Summary	e 39 42 45 46 46 48 49 50 51 52 54 55 56
III METHODOLOGY Introduction Research Design and Framework Population Sample Size Sampling Procedures Instrumentation Pilot Study Modification of The Questionnaires Validity Data Analysis Data Editing and Coding Data Screening Normality of Data Set Checking of Multicollinearity Statistic Technique for Data Analysis Descriptive Analysis Correlation Analysis Correlation Analysis Confirmatory Factor Analysis Structural Equation Modeling Invariance Analysis Rational for Using Structural Equation Modeling Statistical Technique for Testing Hypothesis Analysis and Results of Measurement Model (CFA) Results of Normality Test Summary	57 57 58 59 60 60 62 64 65 66 66 66 66 66 67 67 67 67 67 67 67 67
IV RESULTS AND DISCUSSION Introduction Profile of Respondents Test of Reliability Analysis of Items in Domain of Spiritual Intelligence Analysis and Results of Structural Model Test of Moderation Effects	78 78 80 81 86 88

Hypothesis Testing	89
Summary	91
V CONCLUSION, IMPLICATION AND RECOMMENDATIONS Introduction Conclusions Implications Implication for Theory Implication for Practice Recommendations Summary	92 92 95 96 97 98 98
REFERENCES	100
APPENDICES	123
BIODATA OF STUDENT	148
LIST OF PUBLICATIONS	149

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LIST OF TABLES

Table		Page
1	Nursing Competencies Based on Group	22
2	Staff Nurses in East Coast Malaysia for Years 2011	59
3	Description of Spiritual Intelligence and Work Performance Questinnaire of NWP	62
4	Reliability Analyses for ISIS and 6-D Scale	63
5	Item Modifications	65
6	Stages in The Structural Equation Analyses	69
7	Recommendations: Rules of Thumb	71
8	Analysis Technique of Data	73
9	Variance Estimate (VE) for Each Variable in the Model	75
10	Average Variance Estimate (Diagonal), Squared Correlation Diagonal	76
11	Test of Normality Assumptions	76
12	Hospitals' Profile	78
13	Respondents' Profile	79
14	Reliability Analyses for ISIS and 6-D Scale	80
15	Descriptive Statistics for The Spiritual Intelligence	81
16	Nurse's Level of Spiritual Intelligence	82
17	Descriptive Statistics for Domain Consciousness in Spiritual Intelligence	83
18	Descriptive Statistics for Domain Transcendence in Spiritual Intelligence	84
19	Descriptive Statistics for Domain Meaning in Spiritual Intelligence	84

20	Descriptive Statistics for Domain Grace in Spiritual Intelligence	85
21	Descriptive Statistics for Domain Truth in Spiritual Intelligence	85
22	Table of Fit Analyses of the Structural Model86	
23	Results of the Multiple Group Modeling 88	
24	Hypothesis and Summary of Results 89	
25	Result for Hypothesis 1	93
26	Result for Hypothesis 2	95

G

Figure		Page
1	Theory of Work Performance	17
2	System-Focused Modul of Work Performance	17
3	Theoretical Framework of the Study	54
4	Research Framework	58
5	Confirmatory Factor Analysis (CFA) for Nurse's Work Performance Hypothsized Model	74
6	Confirmatory Factor Analysis (CFA) for Nurse's Work Performance Hypothsized Model Results of NWP Model	

LIST OF FIGURES

LIST OF ABBREVIATIONS

AMOS	:	Analysis of Moment Structure
AGFI	:	Adjusted Goodness-of-Fit
AVE	:	Average Variance Extracted
CFA	:	Confirmatory Factor Analysis
CFI	:	Comparative Fit Index
CR	÷	Composite Reliability
CR		Critical Ratio
DF		Degree of Freedom
ML	:	Maximum Likelihood
GFI		Goodness-of-Fit Index
RMSE	A :	Root Mean Square Error of Approximation
SEM	:	Structural E5quation Modeling
SD	:	Standard Deviation
SE		Standard Error
SKT		Sasaran Kerja Tahunan
SPSS		Statistical Package for Social Science
TLI		Tucker-Lewis Index
ISIS	:	Integrated Spiritual Intelligence Scale
6-D Sc	ale :	Six Dimensions Scale

CHAPTER I

INTRODUCTION

Background

Workplace at times can be a challenging and stressful place for employees. In most cases, stressful workplace can cause serious problems such as decline in job satisfaction and increase of incidents related to depression and burnout to occur among employees (Kendal, Murphy, O'Neil & Bursnall, 2000). These critical problems unfortunately can affect employees' behavior towards their work which may eventually deteriorate their work performance (Yusuf & Thornberry, 2010).

High performance workers are important for organizations to achieve their goals, develop products, provide quality services and attain competitive advantage (Reichheld & Sasser, 1990). Moreover performance is important for the individual himself to achieve his personal goal at work. Generally, work performance can be defined as behaviours and actions that are related to the organisation's targets and can be measured in terms of each individual level of contribution (Campbell, Gasser & Oswald, 1996).

Work performance can be influenced by individual differences which include individual's abilities, personality and motivation. A considerable amount of studies have been conducted to look at the influence of individual differences on work performance. Campbell, Gasser and Oswald (1996) propose that declarative knowledge, procedural knowledge and skills, and also motivation are the factors that influence work performance. They explained declarative knowledge as knowledge of facts, principles, goals and the self while procedural knowledge and skills include cognitive and psychomotor skills, physical skill, self-management skill and interpersonal skill. Personality and motivation comprise choice to perform, level of effort and persistence of effort (Campbell, Gasser & Oswald, 1996). Campbell, Gasser and Oswald (1996) also highlight that most of the individuals perform work based on their level and persistence of efforts.

In other study, Farh, Dobbin and Cheng (1991) mention two components; quality of work and quantity of work that can influence work performance. While Rosenthal, Guest and Peccei (1996) emphasis on individual effort. They posited that successful performance can be attributed to personal skills and abilities, hard work and effort put in the task and also positive circumstances and the relative ease of the task at hand. Others identify task performance (Borman & Motowildo, 1993), contextual performance (Borman & Motowildo, 1993), contextual performance (Borman & Motowildo, 1993) and adaptive performance (Ilgen & Pulakos, 1999) as work performance factors. Adaptive performance includes handling emergencies, handling work stress, solving problems creatively, dealing with

uncertain situations, learning, having interpersonal skills and adapting to new environment, culture and physical demands (Pulakos, Arad, Donovan & Plamondon, 2000). These findings suggest that there are two categories of factors that can influence work performance which are employee themselves and their work surroundings. Both are important factors to produce high performance employees.

Out of the listed work performance factors, spiritual and religious aspects have attracted the interests of many researchers of lately. Fifty four years back, Weber (1958) found that religious factor is an important influence to shape work-related attitudes. Extended by other studies that stressed on religious and spiritual dimensions as the key factors in shaping human experience, meaning and behavior (Kripner & Welch, 1992), forming individual's ethical values (Harpaz, 1998; Niles, 1999) and helping to handle difficulties and challenges at workplace (Bell & Taylor, 2004). Studies that associate religious faith and value with their followers' attitude such as a muslim consider working as a 'worship' that encourage them to be hard working, innovative, creative, spontaneous and coorperative (Ali, 1992; Ali, 1988). Protestant followers considered working as a 'calling' and making them to embrace the working value such as hardworking, industriousness, persistent, avoid laziness which could enhance organizational success (Hassall, Muller & Hassall, 2005; Jones, 1997).

Work Performance among Nurses

Nursing is one of the most stressful professions (Selye, 1976). Greenhaus and Beutell (1985) point up the hectic schedule and regular interactions with stressful circumstances can decreased nurse's life satatisfaction. Nurses' performance declines under stressful situations and on top of that they have to meet patients' expectations to be treated well. They have to provide a bulk of direct patient care activities including assessment, monitoring, evaluation and treatment to the patients (Barker, 2009). Nurses are required most of the time to play their role delicately to ensure the quality and safety of patients attended. This is because nurses' work tasks are related significantly to patient outcomes (Torangaue, Cranley & Jeffs, 2006). In addition, several studies discover that among healthcare workers, nurses have high risk of having occupational injuries (Punnet, 1987; Carayon & Gurses, 2005).

The Ministry of Health, Malaysia received 251 complaints from various media such as emails, phone calls, letters and newspaper reports about nurses. The complaints include 1.59% of not being punctual, 11.55% of bad behaviour, 3.58% of authority misuses and 54.58% of providing bad services. From all the complaints, 8.30% of the complaints were on nurses and 3.02% on medical assistants (Section of Complaints and Medico-Legal, Ministry of Health Report, 2006).

From the year 2006 until 2008, 54.47% of the 128 complaints were on bad service quality in both private and government hospitals (Section of Complaints, Enforcement and Legal Medico-Ministry of Health, Malaysia. Ministry of Health, Malaysia Report 2008). In 2009, negligence (16.36%) and ethics (7.64%) were types of complaints received by the Private Medical Practice Control Section of Ministry of Health. This proves that nurses work need to be given attention as their work encompasses patients' safety.

Satisfaction with hospital care is a topic of interest among patient and families. This is where nurses play their roles. A review of the literature indicates that patients' satisfaction with nursing care is influenced by nurses' technical competence and interpersonal relations between nurses and patients (Radwin, Farquhar, Knowles & Virchick, 2005; Johansson, Oleni, & Fridlund, 2002; Laidlaw, Kaufman, Macleod, Sargeant & Langille, 2001). Furthemore, Wysong and Driver (2009) found that besides technical skills, interpersonal and critical skills are important for nurses to perform well. In general, these three domains are used to measure and assess nurse's skill.

Nurse's job is determined by the needs of their patients, patients' family members and healthcare system as well as the society (Chan & Morrison, 2000). In this case nurses are obligated to provide care to patients through assessment of the condition, diagnosis, planning, intervention and evaluation. On top of that, nurses are expected to give counseling and health education to patients and their family members.

In addition, nursing profession can be a factor to the health and welfare of society in all country. It is from their protection, promotion and restoration of health; prevention of illness and alleviation of suffering in the care of individuals, families and communities. In performing these responsibilities, nursing profession struggles to maintain the interest of society by ensuring that they are abide by the code of professional conduct. Nurses have to make their great effort to follow nursing standard of care which carefully assesses the physical, psychosocial and spiritual needs of each patient. They also offers compassionate and competent nursing care to meet each patient's needs, maintains accurate and proper documentation of care given to each patient, and gives correct information and education to each patient. Therefore, nurses are required to be competent in knowledge and skills related to the job, attitude towards given tasks and interpersonal skills. Nurses' incompetency will affect the provision of optimal care to the patient, image of the hospital services and the image of nursing profession (Abraham, 2002).

An excellent nurse is a nurse who achieves all the requirements needed. Work performance among nurses can be influenced by work motivation and work satisfaction (Springer, Payne & Petermann, 1998), environmental factor (Dean & Sharfman, 1996), environmental turbulences (Salyer, 1995), clinical experience and education (Mc Closky & Mc Cain, 1988), communication with supervisor and personal feedback from supervisor (Mc Closky & Mc Cain, 1988), career commitment (Mc Closky & Mc Cain, 1988) and satisfaction (Blegen, Goode, Johnson, Maas, McCloskey & Moorhead, 1992). Schwirian (1981) also mentioned that academic achievement, family origin, personal characteristics, employment characteristics; nursing school attended and nurse career behaviour are factors that boost nurse's performance.

With so many challenging aspects of their work to deal with, it is not surprising that several scholars have emphasized the importance of spirituality in nursing. Nursing is a stressful job that need nurses to be aware of their attitudes towards people especially their patients. In order to carry out effective nursing functions, nurses have to be trained and equipped with the right knowledge, behaviours and attitudes in order to promote health, help prevent diseases and care for the sick. It is important to explore and promote spirituality in nursing practice in order to allow caring and innovative care for their patient (Yang & Mao, 2007). The experience of spiritual well-being may foresee a positive attitude of a nurses toward spiritual care and as a result it can encourage the overall condition in assisting patients (Narayanasamy & Owens, 2001). This indicates that it is necessary to have a balance nurse physically and spiritually with scientific knowledge, technical competence and expertise (Dossey, 1988).

Nurses' spiritual well-being and attitudes affect their works in dealing with patients. Not only has it mattered to their nursing performance but also to the healthcare services that considered to be important to the country.

From Spirituality to Spiritual intelligence

Literature on spirituality suggests a person with higher levels of spirituality will live healthier, happier and more productive in work (Tischler, Biberman & Mckeage, 2002). Spirituality is an individual's personal, subjective beliefs and experiences on the ultimate power that is sacred to the person (Miller, 1999). Spiritual people demonstrate more positive social attitudes, more empathy and greater altruism. They also tend to feel more convinced with their work. In addition, those with higher spirituality also demonstrate more positive social psychological attitudes, greater social extroversion, greater adaptability or mental orientation, improved relationships with co-workers and supervisors, greater orientation towards positive values and less neuroticism, anxiety and sensitivity to criticism. Spirituality also brings a sense of independence, self-supportiveness, time competence and self-actualization in their self-awareness (Poll, 2005).

The practice of spirituality in workplace is about people when people perceive themselves as spirited beings, whose spirit desires and needs have to be energized through work (Marschke, 2008). Generally, it is a continuing search for meaning and purpose in life, the universe and a personal belief system (Myers, 1990). Developing and encouraging spirituality assures to provide several positive results related to organisational performance

including higher productivity, increased job satisfaction, lower turnover rates, positive ethical values, better attendance rates, and higher customer satisfaction (Whitmore, 2004; Garcia-Zamor, 2003).

As work becomes more challenging every day, it is natural that person turn to spirituality and religion for remedies, security and inner peace (Hudson & Sullivan, 1990) as mental and spiritual strength is a method to influence humans act in their works (Yosep, 2005). Moreover, an organisation that has spiritual employees shows better work performance and gains higher profit (Mitroff & Denton, 1999).

Spirituality refers to individual search and experiential elements of the sacred, deep meaning, unity, connectedness, transcendence and highest human potential (Amram, 2009; Emmons, 1999). On the other hand, intelligence is an ability to solve problems or to discover things which are valued in one or more cultural surroundings (Gardner & Hatch, 1989). The concept of spiritual intelligence was developed by Emmons (1999), which he integrated the construct of spirituality and intelligence into a single construct called spiritual intelligence. It is followed by Wolman (2001), Vaughan (2002), Noble (2000), Nasel (2004), Levin (2000), Zohar and Marshall (2000), Halama and Strizenec (2004) and Amram (2007). As a result, spiritual intelligence is a combination of spirituality themes such as meaning, sacred experiences, interconnectedness and transcendence. The application of spiritual intelligence in life activities may enhance daily functioning, adaptation and well-being to produce things that are valuable within cultural context or community (Emmons, 1999; Amram & Dryer 2007; Amram, 2009). This is where spiritual intelligence plays its role to help people in assessing the most meaningful lessons of an action (Zohar & Marshall, 2000). The fullest use of one's spiritual intelligence is to help in grading his or her life.

Beck (1986; p148-156) classifies a person who practiced spiritual intelligence is balance in attititude such as; 1) reacheable and understanding; 2) good judgement of any situation and point of view; 3) knowledge of the interconnectedness of things, unity within diversity and patterns within the whole; 4) incorporate of body, mind, soul and spirit and of the various dimensions and commitments of their lives; 5) sense of wonder and mystery of the transcendent in life: 6) appreaciation, pleasure and modesty with respect to the good things of life; 7) confidence; 8) a courageous, 'spirited' approach to life; 9) energy; 10) independence; 11) recognition of the predictable; 12) love and affection; and 13) calmness, responsive, considerate, helpful. These positive attitudes in nursing career will lead nurses to give a better care to patients especially when there are needs for spiritual attention for terminally ills patients. Despite Beck's contentions, few or no known attempts have been made to explore these different dimensions of spiritual intelligence in the context of nurses, relating it to their work performance.

Studies have shown that individual knowledge, ability and attitude are important for an employee in order to have a high work performance. Their skills at solving problem as stated by Pulakos, Arad, Donovan and Plamandon (2000) are the beginning to see how spiritual intelligence can be an influence to individual work performance. Hedlund and Sternberg (2000) discover that intelligence quotient only explains 20% to 30% of professional success. It is important to prove their discovery to see how spiritual intelligence affects the success of individual performance at work. From their discovery a conclusion can be made employee with higher spiritual intelligence will perform better at work.

Problem Statement

Every individual in an organisation faces problem in his or her career either with supervisor, peers, the work itself and also some have innerself problems. It is believed that those problems will affect their work performance. In nursing career, nurses' performance declines under stressful situations, subsequently nurses have to meet patient expectation to be treated well by their families. Nurses who have personal problems might affect their work performance.

In research studies, the factors involved in nurses' work performance have been focused on work environment, work task and worker or nurse itself (Al-Ahmadi, 2009; Yang & Huang, 2005; Tzeng, 2004; Pai, Hsu & Wang, 1999; Ashworth & Morrison, 1991). There are few whom have explored the role of spiritual domain or spirituality on work performance meanwhile other researcher discussed how spiritual intelligence can make life better. Especially in Malaysia very few of it has been done among nurses in Malaysia especially using Structural Equation Modeling.

Intelligence plays an important role to solve problems in their lives or even in their work environment. On top of that, employees embark on individual search for deeper meaning in life when faced with problems. It is reported that depressed employees these days are in search of spiritual solutions to overcome their tensions and stress (Mitroff & Denton, 1999). Many forces have contributed to the revival of spirituality of a person and the use of spiritual intelligence not only in solving problems but also in being a better person when they make use of this intelligence in life.

Spiritual intelligence includes the ability to draw spiritual premises to predict, adapt and produce valuable outcomes (Emmons, 1999). When men work they used their intelligence in order to understand information and solve problems. Emotional intelligence is used to adapt with their emotions and spiritual intelligence is used to solve problems and generate results that are based on higher meaning and transiency.

Most researches that investigate spiritual intelligence in healthcare have only been carried out to see its relationship with patients suffering from physical health problems and who also suffered from cancer (Miller & Thoresen, 2003), spinal cord injuries (Matheis, Tulsky & Matheis, 2006), HIV/AIDS (Simoni, Martone & Kerwin, 2002), high blood pressure among men (Tartaro, Luecken & Gunn, 2005) and fibromyalgia (Anema, 2006). Only a considerable amount of research associated with nurses' spiritual intelligence that have been studied and till now most are still unknown in the Malaysian context. Little empirical data has been used to examine spiritual intelligence in the context of work performance in Malaysia, especially in producing the empirical modeling of spiritual intelligence.

Although past empirical research merely used descriptive and inferential statistics in measuring spiritual intelligence with other variables, few of it were done on modelling the domain in spiritual intelligence, for instance Fry, Vitucci and Cedillo (2005), King (2008) and Hammer (2009) used the Structural Equation Modelling (SEM) approach. Using different variables and measurement, this study aims to confirm the hypothesised model of Nurse's Work Performance (NWP) in order to have a good and applicable model.

It is found that spiritual intelligence can affect individual and organization itself. Most of research on spiritual intelligence already focus on most of work environment excluding work performance. The limitation of a study in examining spiritual intalligence and work performance can be the main reason to concentrate on it. Also several study has similar single relationship with spiritual intelligence for example relationship between spiritual intelligence and burn out behavior (Tabarsa, Bairamzadeh, Ghojavand & Tabarsa, thn), organizational culture (Karadag, 2009), job satisfaction (Rastgar, Davoudi, Oraji & Abbasian, 2012), staff hapiness (Isfahani & Nobakht, 2013), leadership (Tabatabei & Zavareh, 2014) professional ethics (Esfahani & Najafi, 2015), hospital performance (Asghari & Shirvani, 2015). All of this study used SEM in examining both relationship.

Spiritual Intelligence is a based on human treatment and emotional effect which every individual who have a certain level of spiritual intelligence, can control himself easily and can effect others (Zohar & Marshall, 2000). Therefore a a reseach focusing on spiritual intelligence on its own and relate to other important variable is needed for its important role in individual life.

In addition, the study purposed to examine the effect of moderating demographic variables on the relationship between spiritual intelligence and work performance. A more detailed discussion on the methodologies of the study is presented in Chapter III.

Research Questions

This study was conducted based on the following research questions:

- 1. What are the important items among domain in spiritual intelligence from nurse's perceptions and what are the level of nurse's spiritual intelligence?
- 2. What is the relationship between spiritual intelligence and work performance?
- 3. Does demographic factors moderate spiritual intelligence and Work performance?
- 4. Does the Nurse's Work Performance (NWP) model fit the data?

Research Objectives

In general, the objective of this study was to propose the model of spiritual intelligence in work place by examining the relationship between spiritual intelligence and work performance moderated by demographic variables. Specifically, the objectives of the research are as follows:

- 1. To identify important items among domains in spiritual intelligence from nurse's perceptions and to determine nurse's spiritual intelligence level.
- 2. To determine the relationship of nurses' spiritual intelligence and their work performance
- 3. To determine moderate effect of age, tenure and hospital's location between spiritual intelligence and work performance.
- 4. To test the best model of Nurse's Work Performance (NWP).

Hypothesis of the Study

Based on the research questions and objectives of the study and review of related literature, several hypotheses were developed. Appropriate inferential statistical analyses were used to determine whether the following hypotheses to be rejected or accepted at the designated level of significance:

- H1: There is positive significant relationships between spiritual intelligence and work performance.
- H2: Nurses' demographic factors moderates the relationship between spiritual intelligence.
 - H2a : Nurses' age moderated the relationship between spiritual Intelligence and work performance.
 - H2b : Nurses' tenure moderated the relationship between spiritual intelligence and work performance
 - H2c : Hospitals' location moderated the relationship between spiritual intelligence and work performance

Significance of the Study

An extensive literature show various factors of work performance. There has been a lack of empirical study conducted in Malaysia to examine the relationship between spiritual intelligence and work performance. There are also limited studies on spiritual intelligence model for a work performance developed. The following aspects show how this study is significant.

This research contributes significantly to the growing body of knowledge in Human Resource Development especially in theory that focus on individual performance Theory of Work Performance (Blumberg & Pringle, 1982), System-focused Model of Work Performance (Waldman, 1994) and Parson Theory (1959). Also in Emmons Model (1999) and Tischler Model (2002) that emphasize on spiritual intelligence and the relationship of spiritual intelligence and work performance. This research able to support their notion and study and added more value in human development literature.

The major significance in this study is to confirm spiritual intelligence can give a positive impact on work performance. Investigating nurse's spiritual intelligence and its relationship with their work performance is to have useful implications to the nurse since it provides a better understanding about how one's spiritual can affect their life. In particular awareness on spiritual intelligence has merit on nurses as it allows them to reflect on themselves. By reflecting on their spiritual intelligence, nurses can actually become more aware of and have better understanding in their work performance and also become empowered in it as they make the connection between spiritual intelligence and nurse's work performance. In doing so, nurses understanding of how they operate make it possible for changes and development to occur since nurses would also become more aware of factors that influence their success.

Moreover the model of spiritual intelligence and work performance confirmed in this study, would be a new finding to healthcare industry in Malaysia. The empirical evidence and findings on spiritual intelligence will provide insights and information to the Ministry of Health about nurses in Malaysia. It will also be a baseline information to the performance of nurses in the Ministry of Health at least in the East Coast of Malaysia. It may be beneficial to policy makers, human resource practitioners and nursing schools to formulate strategies which can cultivate nurses' spiritual intelligence. The identified approach might help organizations to develop more activities in enhancing the skills and attitude of nurses.

The significance of this study is also the employment of the structural equation modeling in the data analysis. It is a latest approach in some areas especially in Malaysia to examine the interrelationship among construct. In line with that more research using structural equation modelling can be done in human development research to find the best model of research.

Limitations of the Study

This study has several limitations to be highlighted. First, it measured nurses' spiritual intelligence using the Integrated Spiritual intelligence Scale (ISIS) by Amram and Dryer (2007) only. There are several instruments to measure spiritual intelligence like Wolman (2001) and Nasel (2004). In this study there was no specific religion that means respondent from various types of religions can volunteer to answer the questionnaire.

Second, the sample chosen for this study was from the East Coast of Malaysia and only involved Malay nurses only. The three states chosen, were Pahang, Terangganu and Kelantan. Therefore the generalisation for the findings are limited to hospitals in the East Coast of Malaysia or other hospitals that have similar culture only. However, the generalisation beyond the state of East Coast Malaysia could be made with further investigations.

Definition of the Terms

Spiritual intelligence:

Spiritual intelligence is defined as the ability to apply, manifest and embody spiritual resources, values and qualities to enhance daily functioning and wellbeing (Amram & Dryer, 2007).

Work Performance:

Behaviour which is associated with the accomplishment of expected, specified and formal role required on all individuals which are part of an organisation (Waldman, 1994).

Nurses:

Refers to nurses who graduated from an accredited, official nursing programme and held a professional license as a registered nurse or a practical nurse (Tzeng, 2003). In Malaysia, a nurse must meet the Malaysian Nursing Board Requirements where they must; a) have a certificate equivalents to General Certificate of Education (Sijil Pelajaran Malaysia), b) complete 3 full years of nursing training and c) have a minimum of 3 years clinical working experience (age limit above 21 years and below 56 years old). A registered nurse is a person who has undergone a formal course of nursing education and registered with the Malaysian Nursing Board.

Consciousness:

Consciousness is an aspect of an awareness and self-knowledge. This indicates the ability to increase awarenwss to use intuition and to create multiple opinion in ways to improve daily functioning and well-being. The consciousness domain includes three capability subscales: intuition, mindfulness and synthesis (Amram & Dryer, 2007).

Transcendence:

Transcendence is a basic capacity that allows a person to sense what is beyond worldly materials for example believe in the existence of the God (Zarina, Zulkifli & Noriah 2010). It is also a situation which goes beyond the separate egoic self into an interconnected wholeness. This domain reflects the ability to align the sacred and transcend egoism, with a sense of connectedness and holism in ways that improve functioning and well-being. The transcendence domain includes five capability subscales: higher-self, holism, practice, relatedness and sacredness (Amram & Dryer, 2007).

Meaning :

Meaning is significance experience in daily doings through a sense of rational and a request for service that include in the aspect of pain and suffering. This domain reflects the ability to experience meaning, link activities and experiences to values and construct interpretations in ways that enhance functioning and well-being, even in the face of pain and suffering. The meaning domain includes two capacity subscales: purpose and service (Amram & Dryer, 2007).

Grace :

Grace is to live in bringing into line with the sacred expression of love for and trust in life. This indicates inner-directedness (combining judgment and freedom) and love for life, drawing on the inspiration, beauty and joy inherent in each present moment to enhance functioning and well-being. It includes five capability subscales: beauty, discernment, freedom, gratitude, immanence and joy (Amram & Dryer, 2007).

Truth :

Truth is to line in honest acceptance, curiosity and love for all creation. This domain reflects the ability to be present to, love and peacefully surrender to truth, manifesting open receptivity, presence, humility and trust in ways that enhance daily functioning and well-being. The truth domain includes six

capability subscales: egolessness, equanimity, inner-wholeness, openness, presence and trust (Amram & Dryer, 2007).



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