UNIVERSITI PUTRA MALAYSIA

MODERATING EFFECTS OF RELIGIOSITY ON THE PREDICTORS OF HAPPINESS AMONG POSTGRADUATE STUDENTS IN MALAYSIAN PUBLIC UNIVERSITIES

MOHD AMIRUL RAFIQ BIN ABU RAHIM

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By

MOHD AMIRUL RAFIQ BIN ABU RAHIM

Thesis Submitted to the School of Graduate Studies, Universiti Putra Malaysia, in Fulfilment of the Requirements for the Degree of Master of Science

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DEDICATIONS

To spirits of my dear Mum, Jalina Othman and my dear Dad, Abu Rahim Sajak whom I can feel everywhere, every time... and for endless love and support of my wife, Nurzuhairah Abdul Wahid...
Abstract of thesis presented to the Senate of University Putra Malaysia in fulfilment of the requirement for the degree of Master of Science

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MOHD AMIRUL RAFIG BIN ABU RAHIM

May 2015

Chair: Associate Professor Mohd Bakri Adam, PhD.
Faculty/Institute: Institute for Mathematical Research

There are few numbers of empirical studies on happiness and most of the studies evaluate the level on happiness according to economic perspective. The existing body of knowledge on the predictors of happiness is limited to western perspective and cultures and with inclusive findings. The overall purposes of the thesis were to identify factors influencing to happiness as well as to examine the moderating effect of religiosity on the happiness predictors among local postgraduates in Malaysian public universities. Sample for this study was 525 postgraduates from four selected public university in Malaysia. Fieldwork survey has been conducted in 2013. A structured questionnaire were distributed to the selected sample. A Rasch rating scale model was utilized using Winstep software to each constructs which are life satisfaction, intrinsic and extrinsic religiosity, and happiness scale in order to investigate the measurement properties and to determine the equivalence of the item level across each construct. Person and item reliability for each construct for the study conform satisfactorily to the Rasch model. A Rasch model also been used in order to identify the status of happiness, life satisfaction, as well as religiosity among postgraduates. The analysis revealed that postgraduates are generally having low happiness, moderate to high life satisfaction, high intrinsic religiosity and but low extrinsic religiosity. The summated logit score of Rasch were used in order to identify the difference of happiness status among postgraduates across gender, ethnicity, level of study and religion. One-way ANOVA and independent sample t-test was utilized to investigate those difference among postgraduates happiness. Results suggest that there is no difference in each group level at all tested variables. It shows that the level of happiness among local postgraduates in Malaysian public universities are similar. A multiple regression analysis and the moderated hierarchical regression analysis were used to test hypothesis of influencing predictors in postgraduates happiness. Using the multiple regression analysis, a significant model emerged, and variables of life satisfaction were found to not significantly influencing postgraduates happiness. The other demographic factors which are gender, ethnicity, religion and level of study were significantly influence the postgraduates’ happiness. Besides, intrinsic religiosity was found to influence the postgraduates happiness while extrinsic religiosity are not. Lastly, a hierarchical regression analysis was conducted to examine the moderating effects of religiosity on the predictors of happiness. The analysis revealed that interaction of both intrinsic and extrinsic religiosity are significantly moderate
the relationship between the predictors of postgraduates happiness in Malaysian public universities. Based on these findings, the study recommended that future a broader context and scope of people happiness could be investigated. A qualitative study should also be undertaken in future research. Through a qualitative design, richer picture of other related variables that might influence peoples happiness could be identified.
KESAN MODERASI KEAGAMAAN KE ATAS PREDIKTOR KEBAHAGIAAN DALAM KALANGAN PELAJAR PASCASISWAZAH UNIVERSITI AWAM DI MALAYSIA

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I was fortunate to have the chance to work with Dr. Akbariah Mahadzir, who patiently answer my curiosity in Rasch Model method for solving the problems of psychometric instruments, in addition to a number of other techniques related to this model analysis I present in this thesis. She was an extremely reliable source of practical scientific knowledge, and I am grateful for this work.

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I certify that a Thesis Examination Committee has met on 8 May 2015 to conduct the final examination of Mohd Amirul Rafiq bin Abu Rahim on his thesis entitled "Moderating Effects of Religiosity on the Predictors of Happiness among Postgraduate Students in Malaysian Public Universities" in accordance with the Universities and University Colleges Act 1971 and the Constitution of the Universiti Putra Malaysia [P.U.(A) 106] 15 March 1998. The Committee recommends that the student be awarded the Master of Science.

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This is to confirm that:

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<td>ANOVA</td>
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<td>BARCS</td>
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<td>DIF</td>
<td>Differential Item Functioning</td>
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<td>IE/ER</td>
<td>Intrinsic Extrinsic Religiosity</td>
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<td>ISGE</td>
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<td>ROS</td>
<td>Religious Orientation Scale</td>
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<td>SPF</td>
<td>Social Production Function</td>
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<td>UN</td>
<td>United Nations</td>
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<td>USA</td>
<td>United States of America</td>
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<td>VIF</td>
<td>Variance Inflation Factor</td>
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CHAPTER 1
INTRODUCTION

1.1 Background of Study

Students in every societies are human sources that are responsible to shape their nation in future. Presence of mental issues among students have numerous genuine impacts, for example, low academic achievement and increasing, drop out and well-being among students (Bahrami et al., 2011). Examining taking into account some particular criteria can effect the development and improvement of personality indicators in people which thusly can bring impact on psychological well-being and treatment of numerous issue including wretchedness which is an essential well-being issue in the world.

Happiness is a very important aspect in human life. It is due to happiness that a person who always has a good feeling about himself and others, rejects despair felling, accepts his weaknesses, never forgets learning, always being honest with himself and others, lives in the present time and stable against problems. Mental health of people in a society is an important and necessary factor for achieving a better life, social welfare and logical compatibility with life events. Therefore, some factors should be recognized in order to prevent occurrence of disorders. One unique property of human is thinking ability which creates and accelerates human action. Mental health is considered as one of the important factors for a healthy society. Having this divine gift (mental health) is very important for having a comfortable life and achieving great goals. Not having this divine grace (mental health) leads to different problems for people.

Many individuals accept that happiness is at last what makes life worth living and accordingly turns into the persuading drive behind their practices (Brulde, 2007). Happiness has been characterized as ”a mental state containing numerous ingredients including: the vicinity of charming positive states of mind or feelings, the non attendance of repulsive negative inclinations or feelings, and fulfillment, on reflection, with life all in all or with in any event some particular parts of life” (Ott, 2006). The last partition of the past definition is the thing that constitutes “life fulfillment.” Life fulfillment contrasts from satisfaction as happiness is established all the more in state and feeling where life fulfillment is a reflection that life has gone and/or is going in the course one trusts, as cited from Diener (1984) and Pavot and Diener (2003). Scientists for the most part operationalize subjective prosperity as both a pervasiveness of positive influence over negative influence and a worldwide fulfillment with life (Lu, 2006). Happiness is a central and essential piece of assessing one’s general personal satisfaction and is a term that is frequently utilized conversely with subjective prosperity (Keyes, 2006b).

Indeed thus, satisfaction is worth logical interest in light of the fact that it is a typical objective and yearning that numerous people offer. Individuals rate individual happiness as imperative in their lives (Diener et al., 1995). Happiness is additionally connected with achievement in diverse life spaces and is identified with positive mental wellbeing (Lyubomirsky et al., 2005). Since the mid 1980s many scholars such as Peterson et al. (2005), Ryan and Deci (2000), Diener et al. (1997) and Diener (1984) have tried to analyze how to describe happiness as well as how it is being accomplished, sought after, and the numerous variables impacted it.
Based on the studies by Keyes et al. (2002) and Peterson et al. (2005), three hypothetical points of view or introductions on happiness have been generally looked into and their vicinity has been exactly backed, that is hedonic, eudemonia, and stream or engagement. The hedonic theory is focused around the presumption that expanded delight and diminished agony prompts happiness. Numerous studies in the writing on happiness and well-being draw from this hedonic point of view and in the current Western culture. This methodology to happiness is broadly supported and acknowledged (Kahneman et al., 1999). Conversely, eudemonic prosperity is focused around the start that individuals feel great in the event that they encounter life reason, test and development. Ideal encounter or stream hypothesis has been investigated as a third point of view or introduction to satisfaction (Csikszentmihalyi and Hunter, 2003).

Ivensi (2007), Sacker and Cable (2005), and Mroczek and Kolarz (1998) has recommended that the age of an individual impacted individual happiness. Then again, almost no study has been carried out to look at happiness by age, especially among people inside the developing adulthood period (Arnett, 2000), particularly most of them are considered as a student.

More studies took part in determining what factors influencing happiness among university students. More current literature has been found to support some factors associated to students’ happiness included grades achieved, school facilities, lecturer quality, friendship developed and others (Chan et al., 2005). Some other studies that investigates the correlates that can influence postgraduates happiness indicated that religion and religiosity (Khalek, 2007; Lewis et al., 2005), religious orientation (Azmoudeh et al., 2007), mental health and physical health status (Easterlin et al., 2010; Khalek, 2007), personality aspects, such as introversion, extraversion and neuroticism (Ali, 2010; Nouri, 2006; McCrae and Costa, 1991), financial status, family life, physical health and employment (Easterlin et al., 2010), perceived inner world Kau et al. (2001), religious attendance (Sahraian et al., 2011; Khalek, 2007), satisfaction and the meaning of life (Howell et al., 2012; Martin et al., 2010; Maleki, 2008).

Studies have also shown that religious beliefs moderate the negative effects on happiness (Joshanloo and Weijers, 2013; Diener et al., 2011; Smith et al., 2003; Lazarus, 2013). One of recent research studies trying to measure students happiness by Abdullah (2011). In the context of important determinants of happiness among the local students was frequency of prayer that they have performed and frequency of getting ill and the quality of sleep. Besides that, a research done by Jaafar et al. (2009) in examining the happiness level among Malaysian and Indonesian students found that Malaysian students are happier than Indonesian students. They also found that the determinants of happiness among the students is due to economic factors (wealth), family relationship, health, personality, environment, and level of educations. However, religion was found to be not an important factor in determining students happiness. Thus, happiness is an important element for every university students. Parts of their routines are related to their happiness.

1.2 Problem Statement

According to Veenhoven (2008), happiness strongly predicts the likelihood of a person from becoming ill. This mean that happiness is believed to be able to prevent someone from being ill. Thereby, although happiness is an emotional state, it can further exert its influence on our physical body. Decrease in happiness might lead to, mental problems, and depression among
the university students (Dadkhah et al., 2006). Another study by Honkanen et al. (2003), they have discovered that the risk of committing suicide increase when level of happiness is decreasing. The factors influencing the university students happiness are multiple and vary between societies. According to Schiffrin and Nelson (2010), they have discovered that there are inverse relationship between happiness and perceived stress among undergraduates students. This shows that people who are happy are unlikely to feel stress and vice versa. Thus, a student who feel stress is unlikely to feel happy.

Many of previous studies discovered that variables leading to a people happiness differed across cultures. A considerable body of research has concluded that age (Bennett, 2005; Stacey and Gatz, 1991), economic status (Ryan and Willits, 2007), living arrangement (Zunzuneguia et al., 2001) and educational attainment (Kubzansky et al., 1998; Murrell et al., 1998) are significant factors related to university students happiness. Other studies revealed that economic status (Diener, 2009) and level of education (Kempen et al., 1988) are not substantial contributors of people happiness particularly among the students. This means that there is no agreement on the factors influencing the people happiness and that it is inextricably influenced by cultural values (Ingersoll et al., 2004). Moreover, it has been found that factors influencing people happiness are different between nations, and between ethnic groups within nations (Diener et al., 1999). This implies what is essential for happiness in one culture may be less essential in another, because individuals have different goals in different cultures (Diener et al., 2003, 1999).

In relation to the students happiness, specifically among the postgraduates, happiness can promote success across people life (Myers, 1992) and it offers positive psychology (Seligman and Csikszentmihalyi, 2000). Happy people are found to be more efficient and productive in their daily works, earn better income (Argyle, 2002) and more positive to other people (Seligman, 2002). They enjoy better physical and mental health, and can handle stress better than unhappy people (Vaillant, 2000). Based on studies by Isen (2003), positive affect (in this context is happiness) correlates with processes that contribute to students’ success through cognition and motivation. Students are better in problem solving and committed to pursue success rather than focusing on avoiding failure (Lyubomirsky et al., 2005). There has been a very limited research about the effects of happiness to a university students, specifically among postgraduates behaviors and attitudes (Borrello, 2005; Frisch et al., 2005), but the evidence from positive psychology suggests clearly that there is a significant relationship between university students happiness and behaviors.

Depression were found to be negatively related to student success, and depressed students have lower grade point averages and spend less time in doing assignments and homework (Field, 2001). Although negative and positive affect are related, they are nevertheless distinct dimensions (Keyes, 2003), and the absence of mental disorders does not guarantee the presence of mental health. In other words, positive and negative states are asymmetrical; that is, they are not inversely related in form and effect (Aspinwall and M., 2003). Noddings (2003) suggest that happiness may be a worthwhile aim of education, and that promoting prevention and psychological health are more important for student success than treating mental health problems and risky behaviors after problems have emerged (Flay, 2002).

A second shortcoming in previous studies which require further studies was related to religiosity as a moderating factor influencing happiness in postgraduates. Although a growing body of literature in happiness and well-being studies have recognized the importance of religiosity on the happiness, we cannot claim that religiosity is always positive and has
protective effects on happiness and well-being (Kawachi and Berkman, 2001) because religiosity may operate like a double-edged sword (Revenson et al., 2001). Previous studies that focused on religious beliefs seem to find that religion and/or spiritual beliefs do in fact influence if not overall, some of the aspect in human lives (Carmella et al., 2012; Post, 2000). For instance, Carmella et al. (2012) and Krucoff et al. (2005) also identified that prayers of others can significantly influence the course of illness. This is to show that religion/spiritual do have a place in human being as a catalyst or life savers in them, be it negative or positive. Religion do play a role in human lives but in what extent it influences gender on every aspect of human life, such as stress and happiness. Studies in western culture did show that there were relationships between religion and happiness as documented by Francis et al. (2000), however, in Malaysian context, not many studies have been conducted in relation to this issue.

According to Seligman (2002), another factor that can lead to a people happiness is life satisfaction. More specifically, Lyubomirsky et al. (2005), defined the term of happiness as a feeling of subjective well-being characterized by higher degree of positive feelings, and a low degree of negative feelings and elevated life satisfaction and to address a more global cognitive evaluation of one’s life (Comptom, 2005). In related to the university students happiness, the existing research in measuring students life satisfaction towards their happiness is limited and has usually been viewed as an outcome and not as an antecedent or predictor of other important variables (Martin et al., 2010). In some research, the term life satisfaction has been treated by dependent variable. Studies by Chan et al. (2005) indicated that life satisfaction and satisfaction with academic work were one of the indicators can influenced the happiness among University of Western Australia.

In Malaysia, where the postgraduate’s happiness and well-being has not been adequately researched, a perusal of the national and local studies addressing significant relationship between happiness feeling, life satisfaction and religion aspects (Abdullah, 2011; Bitsika et al., 2010; Jaafar et al., 2009; Khosh Konesh and Keshavrz Afshar, 2008; Abedini et al., 2007; Post, 2000). There are many studies on happiness. As it can be concluded from the previous studies, in spite of several studies conducted to discover the role of religiosity in determining individual happiness, several issues are still required attention of researchers. Most of research field in happiness have been conducted in the Western world and perspective, while happiness study which consider the eastern perspectives without omitting the values of religiosity among individuals has been ignored in research. Even though, some findings discovered that there is a positive relationship between religiosity and happiness, there is also some evidence that showed a negative relationship between both. Besides that, there is no specific studies in Eastern or in Malaysia that measures the moderating effects of religiosity between the predictors of happiness. With regards to the above-mentioned issues, the goal of this study is to identify factors contributing to happiness, as well as to examine the moderating effect of religiosity on predictors of happiness among postgraduate university students.
1.3 Research Objectives

The objectives of the present study are as follows:

1. To assess the status of happiness among local postgraduates in Malaysian public universities.
2. To assess the status of life satisfaction among local postgraduates in Malaysian public universities.
3. To assess the status of religiosity among local postgraduates in Malaysian public universities.
4. To examine the state of happiness among local postgraduates in Malaysian public universities according to gender, ethnicity, religion and level of study.
5. To examine the influence of life satisfaction, gender, ethnicity, religion and level of study, on the happiness among local postgraduates in Malaysian public universities.
6. To measure the influence of religiosity, life satisfaction, gender, ethnicity, religion and level of study, on the happiness among local postgraduates in Malaysian public universities.
7. To examine the moderating effect of religiosity on the life satisfaction, gender, ethnicity, religion and level of study as a predictors of happiness among local postgraduates in Malaysian public universities.

1.4 Research Questions

1. What is the status of happiness among local postgraduates in Malaysian public universities?
2. What is the status of life satisfaction and religiosity among local postgraduates in Malaysian public universities?
3. What is the status of religiosity among local postgraduates in Malaysian public universities?
4. What is the level of happiness among local postgraduates in Malaysian public universities according to gender, ethnicity, religion and level of study?
5. Does life satisfaction, gender, ethnicity, religion and level of study influence the happiness among local postgraduates in Malaysian public universities?
6. Does religiosity, life satisfaction, gender, ethnicity, religion and level of study influence the happiness among local postgraduates in Malaysian public universities?
7. Does religiosity moderate the relationship between life satisfaction, gender, ethnicity, religion and level of study on the happiness among local postgraduates in Malaysian public universities?
1.5 Alternative Hypotheses

1. **Ha1:** There is a significant difference on happiness status among local postgraduates in Malaysian public universities according to gender.

2. **Ha2:** There is a significant difference on happiness status among local postgraduates in Malaysian public universities according to ethnicity.

3. **Ha3:** There is a significant difference on happiness status among local postgraduates in Malaysian public universities according to religion.

4. **Ha4:** There is a significant difference on happiness status among local postgraduates in Malaysian public universities according to level of study.

5. **Ha5:** Religiosity, life satisfaction, gender, ethnicity, religion and level of study influence the happiness among local postgraduates in Malaysian public universities.

6. **Ha6:** Religiosity moderate the relationship between life satisfaction, gender, ethnicity, religion and level of study on the happiness among local postgraduates in Malaysian public universities.

1.6 Assumptions of the Study

There are certain assumptions followed in this study. Firstly, an improved and tested version of the questionnaire and variables used for this study which are gender, ethnicity, religion and level of study status, life satisfaction and religiosity accurately measures the concept of happiness among the Malaysian postgraduates.

Secondly, a survey of measuring happiness is accurately measured by the independent variables (gender, ethnicity, religion and level of study status, life satisfaction and religiosity) of the study.

Thirdly, respondents answer the questionnaires without biased and no influence by the interviewer and they answered with honestly and accurately. Lastly, the measurement of respondents happiness were based on their overall happiness and not being influenced by their current happiness only.

1.7 Significance of the Study

Happiness is a nice feeling and is a great emotion. Happiness is a feeling and state of mind when an individual feels goods. The feeling of happiness happens only at assuring times. This feeling of happiness is the result of accomplishment of a desire. The desire, fulfillment and expectation are indispensable to experience the emotion or feeling of happiness. Also happiness could not be earned or own with anyone. So the study of happiness is very important. It is true that some people might be happier than others. Together with some of the reasons that are based on the marital status, leisure, lifestyle, individual growth, age, social networks, political security and lifestyle, there were decisive proofs that show that individual modifications on the magnitude of unhappiness and happiness could be utilized as justifiable inner indicators to forecast. There are numerous studies indicate that most of
the people are happier and most satisfied compared to that of others irrespective of their life conditions (Rammstedt, 2007). This truth about some people is happier and satisfied compared to that of others shows that temperament features guarantees the experience of happiness (Kuroki, 2011). Hence it is very important to analyze the factors contribute to the happiness of people and this study mainly focusing on the happiness of postgraduate students in Malaysia.

With limited knowledge on the Malaysian happiness as well as its predictors that may influence people happiness, this study aimed to identify the effects of life satisfaction and religiosity on happiness among postgraduates. This study therefore will provide information on happiness status among postgraduates in Malaysia. The findings from this study will add to the emerging literature on happiness research regarding to the effects of religiosity among postgraduates. Based on the findings, it may also be useful as a guidance for a large scale future study. Findings of the study can contribute to a happiness study in Eastern as well as in Malaysian perspective with regard to the factors contributing to their happiness. In addition, the study discovered how people may sustain their happiness. The study is perhaps could provide fundamental knowledge regarding the effect of life satisfaction and religiosity factor to happiness. The scientific information concerning to the significant effect of predictors on people happiness may impel on social, and health practitioners to develop programs to maintain and enhance our people happiness. It is also expected that knowledge obtained from this study help policy makers to pay more attention on religiosity aspects in measuring Malaysian happiness. This results may also promote a greater awareness of the importance of religiosity in measuring people happiness.

1.8 Definition of Terms

1.8.1 Happiness

Conceptual definition: Happiness is defined as a subjective, positive, and inner psychological state of mind (Veenhoven, 2010; Ott, 2006; Tsou and Liu, 2001; Lu et al., 1999; Diener, 1984). It has also associated with jubilation, pleasure and satisfaction (Seligman, 2002). Lyubomirsky et al. (2005) referred happiness as a feeling of subjective well-being characterized by a great number of positive feelings, a low number of negative feelings and elevated life satisfaction. According to Seligman and Csikszentmihalyi (2000), subjective well-being is the scientific term that people use to refer to happiness. Thus, these two words have the same meaning and can be used interchangeable.

Operational definition: Happiness is operationally defined as a current state of one’s well-being and positive mood which was measured by eleven items of an Oxford Happiness Scale. The scale measured happiness as a positive mood, being joy and elation, vitality (of being active from surroundings), being interested in things, being happy of current state of life and being satisfied about everything in life. A higher score indicates a higher level of psychological well-being.
1.8.2 Life Satisfaction

**Conceptual definition:** Life satisfaction is defined as a cognitive and judgmental process (Diener et al., 1985b), towards a global assessment of a person’s quality of life (Shin and Johnson., 1987). It is measured by how people satisfied with their current state of life.

**Operational definition:** Life satisfaction is operationally defined as people’s satisfaction with their life conditions as a whole. It is measured in a cognitive way that is perception, memory, judgment, and reasoning, as contrasted with emotional and volitional processes. The life satisfaction was measured using the life satisfaction Scale (Diener, 1993) which was originally developed in 1985 and consisting of five items. A higher score indicates a higher level of life satisfaction.

1.8.3 Religiosity

**Conceptual definition:** The conceptual definition of religiosity is to what extent people believes and involved in religion (Chaaya et al., 2007). According to Rusnah et al. (2006), religiosity is the value that is very important to one’s life that may affect their behavior and thinking. There are two dimensions that related to the concept of religiosity that is intrinsic (or personal religiosity) and extrinsic religiosity (or social religiosity) (Gorsuch and McPherson, 1989). The intrinsic religiosity is considered as to what extent one shows their religious belief and how important religion to their life (Huang, 2004) whereas the extrinsic religiosity is considered as how people spend their time to a religion related matter such as attending religious services and activities (Okulicz, 2010).

**Operational definition:** Religiosity was operationally defined as two primary concept of religiosity that it intrinsic religiosity which measured by ones religious belief and extrinsic religiosity which measured by the time spending with religion activities in ones daily life. In this study, the instrument used to measure the religiosity among the Malaysian postgraduates was the quantitative scores obtained from the Intrinsic Extrinsic Religiosity Scale (IR/ER), which widely use to measure religiosity among religious people including muslims (Gorsuch and McPherson (1989); Vitell et al. (2007); Khan and Watson (2004)). The scale has 14 items with three negative items. A higher score indicates a higher level of religiosity.

1.9 Research Framework

Figure 1.2 depicts the research framework for the study. The framework illustrates two main predictors that is socio demographic factors and life satisfaction influence the happiness. The framework will examine the effects of religiosity to moderate the happiness among Malaysian postgraduates. This framework has been developed and adopted based on the social production-function theory (Johan et al., 1999) as well as existing research focusing on the overall happiness, or well-being. This framework illustrates how happiness may rise, fall, or remain stable among people. According to this framework, two predictors, namely life satisfaction and religiosity, influence the Malaysian postgraduates happiness. This framework will test the moderating effects of social and personal (extrinsic and intrinsic) religiosity among the Malaysian postgraduates. This conceptual framework illustrates how
happiness is produced and may be remain stable among the Malaysian postgraduates.

![Figure 1.1: Conceptual Framework of the Study](image)

### 1.10 Limitations of the Study

The present study is restricted by several limitations. Firstly, the study was not funded by any funds and due to the time constraints, the study has been restricted in Malaysia and the participants has been restricted to only local Malaysian postgraduates in Malaysian public universities. Therefore, the results of the study may not relevant for different age groups, ethnics, religion and other private education institutions. Secondly, in measuring the religiosity, although the respondents were informed that all the response will be kept confidential and only being used for academic purposes, the items were personal in nature and may affect the responses as religiosity is not usually solicited and discussed openly. Another problem is in measuring the religious practice of individuals. A person may attend in social religious practices for several reasons. Therefore, one cannot claim that those who practice religiously are high in religiosity, because this practice could be more routine than devotional (Khraim, 2010).
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