A correlational study of the relationship between University Students' spiritual

Well-being and their Academic Performance

by

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Statement of Originality

I, PONG Hok Ko, Joe, hereby declare that I am the sole author of the thesis and the material presented in this thesis is my original work except those indicated in the acknowledgement. I further declare that I have followed the Institute's policies and regulations on Academic Honesty, Copyright and Plagiarism in writing the thesis and no material in this thesis has been submitted for a degree in this or other universities.

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Abstract

Using both quantitative and qualitative methods, this study aims to examine the relationship between the personal, communal, environmental, and transcendental domains of spiritual well-being of university students in Hong Kong and their academic performance measured by Cumulative Grade Point Average (CGPA). The study is guided by two research questions.

Research Question One: What are the relationships between university students' spiritual well-being and their academic performance as measured by CGPA?

Research Question Two: If there are any relationships between university students' spiritual well-being and their academic performance, how are the background demographic variables, including major discipline, family socio-economic status and religious beliefs related to spiritual well-being and academic performance?

The quantitative part of the study consists of a survey that collects data from a random sample of 1,130 Year 2 and Year 3 students from three universities in Hong Kong. The questionnaire used is adapted from the Spiritual Health And Life-Orientation Measure (SHALOM) developed by John Fisher. The quantitative findings indicate a moderate positive relationship between the spiritual well-being of the respondents and their academic performance; the results also demonstrate that students' academic performance corresponds with their levels of spiritual well-being. The qualitative part of the study is comprised of 11 focus group discussions. The findings of this support the quantitative findings and contribute to the exploration of the background variables that mediate the abovementioned positive relationship. The study also involves data triangulation.

The findings suggest that the resulting positive relationship can be explained by three demographic features, namely, family social-economic status, major disciplines, and religious beliefs. Thus, these demographic features are used to delineate and analyze the positive relationship and the various patterns of the relationship between academic performance and

spiritual well-being. Students with high socioeconomic status have a high level of spiritual well-being, which is shown by their high levels of happiness and satisfaction, characteristics of politeness and respect for others, and a high level of critical thinking. Compared with students with high socioeconomic status, those with lower socioeconomic status tend to have a lower level of spiritual well-being, which is illustrated by their lack of knowledge of interests and strengths, feelings of inferiority, sense of resistance, and weaker sense of independent thinking. The study also found that social sciences students have a higher level of spiritual well-being in personal and communal domains in comparison with students from other majors. However, the findings suggest that social sciences students have a lower level of spiritual well-being in environmental domain, whereas students who major in business have a higher level of spiritual well-being in environmental domain. Lastly, the study suggests that Christian students have a higher level of spiritual well-being in all the four domains because they tend to be more thoughtful of the meaning and value of life, more respectful of others, affectionate towards nature and insistent on the pursuit of truth, because of their religious practices. In contrast, respondents with no religious beliefs tend to be less reflective on these issues.

The analysis of these demographic features suggests that they closely correlate to several spiritual characteristics and personalities, namely concentration, perseverance, self-confidence, self-discipline, and interpersonal relationship, which contribute to the pursuit of academic success.

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CHAPTER ONE

INTRODUCTION

In modern and business societies, spirituality is often ignored, because people are usually concerned with making more money and seeking material satisfaction. For students, their academic performance is often linked with their future success. Thus, their academic achievements and performance are overemphasized by their parents, teachers, peers, and themselves. Students are now forced to join different kinds of classes after school to learn musical instruments, play sports, learn art, and so on. Our students are trained compulsorily to develop well-rounded skills while their spiritual well-being are not properly promoted and highlighted. Maslow (1943) believes that once an individual's physical and basic needs are satisfied, people seek higher levels of needs, such as being respected, pursuing their dreams, overcoming challenges, and undergoing self-actualization. In 1968, he added one more need, the spiritual and transcendental aspect, as the highest essential to his model (Maslow, 1968). However, students nowadays are consumed by their studies and extra-curricular activities and are not encouraged to fulfill higher levels of needs, namely mental and spiritual development. Few people believe that a positive relationship between spiritual well-being and academic performance exists. In recent decades, most studies have only aimed at exploring the relationship between intelligence quotient and academic performance. However, a close and positive relationship between spiritual well-being and academic performance has been proven

by recent studies (Fahey, 2007; Flannery, 2012; Lindholm & Astin, 2008; Reyes, 2006; Walker & Dixon, 2002); though these studies are scarce. Students, especially university students, are the hope and future of a society. Thus, their spiritual development is an important concern to avoid a world without love and care and left only with well-established infrastructures and a flourishing economy.

1.1   Background of the research

Palmer (2003) emphasized that teachers educate the soul of students and do not just teach them knowledge. Two points out of Tisdell's (2003) seven assumptions emphasize spirituality in education. First, spirituality exists in students' learning environment. Palmer (2003) states that teachers' caring and enthusiastic attitudes had positive influence on the learning atmosphere. Most ill-disciplined students easily improve and mature because their teachers encourage, guide, and love them. A teacher is not only an architect of a student's soul but also a spiritual coach.

Second, students are inspired by spirituality in the learning process, especially through music, art, and drama, among others. Palmer (2003) believes that every child has their own talents and gifts. The teachers' tasks are not limited to teaching alone. They should nurture students' gifts; this nurturing is fundamental to the production of practices, hypothetical processes, and experiential searches for the soul through education (Palmer, 2003). For example, a paradox (such as freedom and discipline, two apparently opposite concepts), can

be used in education as a pedagogical tool, because it forces students to query knowledge and theories (Palmer, 2003). Spirituality and education are believed to be closely related, and spirituality has positive effects on learning and teaching.

Several medical and clinical studies (Ellison, 1983) have proven that spiritual well-being is essential to people's health. People with good spiritual well-being have good health, and vice versa (Wilding, 2007). Thus, a close relationship exists between the spiritual well-being and the health of human beings. Health is defined by the World Health Organization (WHO) as 'a state of complete physical, mental, and social well-being and not merely the absence of disease or infirmity.' Some scholars proposed one more important component be added to the definition: spiritual well-being/ spiritual health (Cottrell, Girvan & McKenzie, 1999). Thus, 'health' embraces physical, psychological, social, emotional, and spiritual factors.

The three features of spirituality and spiritual well-being are as follows: (1) transcendence, (2) connection, and (3) wholeness and holistic development. All of these features enable people to feel meaningful, happy, and content, because they are fundamental to life and health. These features are also people's sources of power and energy, especially during confusing and difficult moments (Miller, 2007; Purdy & Dupey, 2005). Spiritual well-being is also an expression of a person's quality of life in the spiritual dimension (Fehring, Miller & Shaw, 1997). Four domains have been defined by Fisher (1998) for spiritual well-being:

Personal domain – refers to the meaning, purpose, and values in life. Self-awareness is the dynamic or superior aspect of people's soul in its exploration of identity and self-worth.

Communal domain – refers to the quality and quantity of interpersonal connections between an individual and others about ethics, philosophy, belief, and religion. These connections are presented through love, care, mercy, trust, integrity, hope, honesty, reliability, and so on.

Environmental domain – refers to respecting and cherishing our living environments and surroundings.

Transcendental domain – refers to the Creator or God and involves religions and the source of the universe.

After the Industrial Revolution, specialization and division of labor became more popular throughout the world. Everyone seemed to care only about the results and outcome of their efforts. The internal meanings, significances, and the processes and implications of the subject matters were largely ignored. Therefore, discrepancies between the development of the world economy and the spiritual well-being of human beings increased (Miller, 2007). This discrepancy is not only a phenomenon in Hong Kong society, but also a trend in its schools (Berry, 2011; Cheung, 2011; Leung & To, 2009; Yan & Chow, 2002). Unsurprisingly, students' academic results and performance are overemphasized in modern cities, such as Hong Kong (Leung & To, 2009; Yan & Chow, 2002). The spiritual well-being of students is affected negatively by this overemphasis. Thus, the principles, meanings, and values of

education are ultimately violated (R. Miller, 2007; J. Miller, 2007). Students should be well-educated spiritually to have fuller, brighter, and wonderful lives (Noddings, 2003). However, the spirituality of students appears to be ignored, and their time and effort during their university years are focused mainly on their major studies, internships, extra-curricular activities, and so on. The subject of spirituality is seldom proposed as an element of their holistic development. However, strengthening human beings' spirituality is an urgent responsibility to promote a balanced development between spiritual and economic development.

The results of recent studies by Walker and Dixon (2002) and Reyes (2006) indicate the existence of a close and positive relationship between students' academic performance and their spirituality. Students with higher spiritual qualities have better academic results and achievements of students because their persistence, diligence, honesty, and humility, which can be cultivated through spiritual and religious activities, such as praying, reflection, sharing and Bible reading, among others. These characteristics are essential to students' successful academic performance (Walker and Dixon, 2002; Reyes, 2006).

1.2 Statement of the problem

Previous studies have only investigated the experiences of academic success and achievements of students in Hong Kong's universities (Ho & John, 1985; Yip & Chung, 2002; Yip & Chung, 2005; Zenobia et la., 2014). However, these studies did not examine the

relationship between the spirituality of Hong Kong's university students and their academic

performance. Studies that analyze this relationship are scarce because of two reasons. First,

spiritual well-being is a relatively new concept (Gomez and Fisher, 2003). Second, in the past

decades, a considerable number of studies have focused on the relationship between specific

intelligences and students' academic performance, such as the following:

Intelligence Quotient (I.Q.) and the students' academic performance (Farsides & Woodfield,

2003; Laidra et al., 2007; Naglieri & Bornstein, 2003; Rohde & Thompson, 2007; Watkins,

2007),

Emotional Quotient (E.Q.) and the students' academic performance (Brackett et al., 2004;

Bradley, 1998; Kapp, 2002; Lam & Kirby, 2002; Mehrabian, 2000; Parker et al., 2004; Swart,

1997) or

Adversity Quotient (A.Q.) and the students' academic performance (Mark,2003 ;Stoltz, 1997;

Stoltz, 2000).

These studies predicted that students with high I.Q. scores would have high cumulative

grade point average (CGPA), whereas students with low E.Q. scores would have low CGPA

(Farsides & Woodfield, 2003; Laidra et al., 2007; Naglieri & Bornstein, 2003; Rohde &

Thompson, 2007; Watkins, 2007). However, many students do not perform fully according to

their talents and potentials and still fail in their studies during their university years, despite

their high scores in the mentioned quotients (Brackett et al., 2004; Bradley, 1998; Kapp,

2002; Lam & Kirby, 2002; Laidra et al., 2007; Naglieri & Bornstein, 2003; Stoltz, 2000).

Some students with average quotient scores perform well in their academic studies (Bradley, 1998; Stoltz, 2000). Based on these inconsistencies in results, other factors should be taken into account, namely, spirituality. The present research aims to examine the relationship between the spiritual well-being of Hong Kong university students and their academic achievements.

1.3   Purpose of the research

The primary purpose of the present study is to explore the relationship between Hong Kong university students' spiritual well-being and their academic performance, because few studies have been conducted to examine the factors related to the academic success of students. The present study measures the spiritual well-being, academic performance (such as CGPA), and academic achievements (such as scholarships) of students. Demographic information is also collected for analysis. A questionnaire (Appendix 1) based on the Spiritual Well-Being Questionnaires (SWBQ) (Gomez and Fisher, 2003) with demographic sections is employed to measure the students' spirituality in the following areas: (1) Personal, (2) Communal, (3) Environmental, and (4) Transcendental.

The Spiritual Health And Life-Orientation Measure (SHALOM) developed by Fisher is used in the study with Fisher's approval. SHALOM is very user-friendly (Fisher, 2009); its questions are short and understandable should be the measure is an effective approach to

screen the large populations of students and to assess their spiritual well-being. SHALOM is also regarded as the most promising instrument to assess the spiritual well-being of people (Meezenbroek et al., 2012). SHALOM was used by Wong and Fisher in 2013 to evaluate the spiritual well-being of pre-service teachers in Hong Kong (Wong and Fisher, 2013). Thus, SHALOM is employed in the present study to explore new perspectives on the spiritual well-being of university students in Hong Kong. Over 200 measurements can be used to assess spirituality and spiritual well-being, but only four tools have been utilized to offer a balanced evaluation (Fisher, 2009).

In addition to the spiritual well-being of students in specific domains and their academic performance (CGPA), the other demographic characteristics, such as major disciplines, religious background, and social status would be collected for further discussion and assessment.

1.4   Research Questions

The present study explores the relationship between the spiritual well-being of Hong Kong university students and their academic achievements. This study aims to answer the following questions:

Question 1: What are the relationships between university students' spiritual well-being and their academic performance as measured by CGPA?

Question 2: If there are any relationships between university students' spiritual well-being

and their academic performance as measured by CGPA, how are the background

demographic variables, including major discipline, family socio-economic status and

religious beliefs related to spiritual well-being and academic performance?

1.5   Significance of this research

Very few studies have focused on spirituality in post-secondary schools, and

examinations regarding their relationship to Hong Kong university students' academic

achievements are also scarce. No studies have examined why such relationships exist

between them. Even though interest in the relationship between spirituality and academic

success has been growing recently, empirical research on the link between them remain

lacking.

This research uses a combination of quantitative and qualitative research by employing

questionnaires and focus group discussions, respectively. The present study also attempts to

explore further how background variables related to spiritual well-being and academic

performance. The research makes significant contributions by proposing new trends and

theories and expanding existing knowledge in the areas of spirituality and academic

achievement through further critical reviews of the literature on spirituality, spiritual well-

being, academic success, and pedagogies.

This research also explores the influence of Hong Kong students' spiritual well-being

based on the students' comments during the focus group discussions. The findings provide a

direction for new educational development in Hong Kong's universities. Educators in these universities can utilize the results of this study to help students strengthen their spirituality through additional tailor-made programs. This study can enhance the overall academic quality of students and the learning and teaching atmospheres in Hong Kong universities.

1.6   Organization of the thesis

This thesis is organized into six chapters.

Chapter 1: Introduction provides an overview of the study. The background of the research, statement of the problem, and purpose of the research are explained. The introduction raises the issue that spiritual well-being is neglected in the education of Hong Kong students and also introduces the importance and meaning of spiritual well-being of students, especially university students in Hong Kong. The research questions, significance of the research, and the organization of the thesis are presented clearly and in detail. The assumptions and limitations of the research are discussed, and finally the theoretical framework of the study is shown.

Chapter 2: Literature Review provides a review of the literature in the related areas. The chapter first presents an overview of the definitions of the key terms, such as spirituality, religions, and religiosity. Criticisms of the relationship between them are explained. Next, the phenomenon of spirituality in education is discussed. Then, spiritual health, the different scales of spiritual well-being, and assessments of spiritual well-being are introduced. The

relationship between students' demographics and their spirituality, as well as the relationship between spirituality and academic success are evaluated. Finally, this chapter examines the factors related to spirituality that contribute to academic success.

Chapter 3: Research Design and Methodology provides the rationale and justification of this study's mixed methodology design. The research design, research procedures, ethical considerations, instruments (including questionnaire and focus group interviews), data collection process, and data analysis are discussed in detail. This chapter also presents the steps to select the sample in the selected universities, such as the time arrangements, number of participants, and the compositions and criteria of the selection. A framework for the data analysis is also provided.

Chapter 4: Findings, Discussions, and Analysis contain the research's quantitative and qualitative findings. The statistics of the study and the analysis to determine the reliability and validity of the research instrument, SHALOM, are presented. The results of the quantitative method, which measure the students' spiritual well-beings, explore the link between well-being and academic achievement, and assess the significant differences among students' spiritual well-being according to their different CGPAs are provided. The chapter also presents the results of the qualitative method and triangulates the quantitative findings to enrich the understanding of the relationship between university students' spiritual well-being and their academic success. The chapter further discusses and analyzes the significant

differences among students' spiritual well-being according to their different CGPAs. This triangulation approach (combined with the quantitative and qualitative findings) with other relevant studies is used to answer the research questions.

Chapter 5: Conclusions provides a summary of the study, considerations on the significance of this study, and recommendations for further studies. Implications and insights of the present study's findings are highlighted. Conclusions are drawn from the quantitative and qualitative findings. Limitations of the study are discussed. Lastly, recommendations for further studies are made based on the findings and limitations of this study.

1.7   Assumptions and Limitations of the research

The aim of the study is to determine whether a positive relationship exists between the spiritual well-being and academic performance of Hong Kong university students. The study conducts a correlation research. The causal relationship between students' spiritual well-being and their academic performance is not the main concern and focus. Thus, independent and dependent variables are not defined for them in the study. If any relationship between the levels of spiritual well-being and academic performance of university students as measured by CGPA exist, the study further investigates how background variables are related to spiritual well-being and academic performance.

The following limitations of the study exist. Although the present study focuses on the effects of spirituality on academic performance, it recognizes that spirituality is not the only

factor affecting academic performance, because other factors influence students' academic performance. Thus, the study has this limitation.

Only three universities were selected for this study out of a total of eight local universities. The small sample size also limits the generalizability of the findings. Participants of the study were limited to Year 2 and Year 3 students, which might introduce some partiality in the study. The sample may not be a good representative of the whole population of students in Hong Kong's universities.

The concept of spiritual well-being is relatively new, and few related studies have been conducted on its relationship to students' academic performance. Thus, the study has limited references. Different definitions for many terminologies are used in the study. Many different definitions of spirituality exist in terms of religious and non-religious explanations, and thus, clearly and precisely defining the terms in the study is a challenge.

1.8 Theoretical framework of the study

Figure 1: **The theoretical framework of the study**
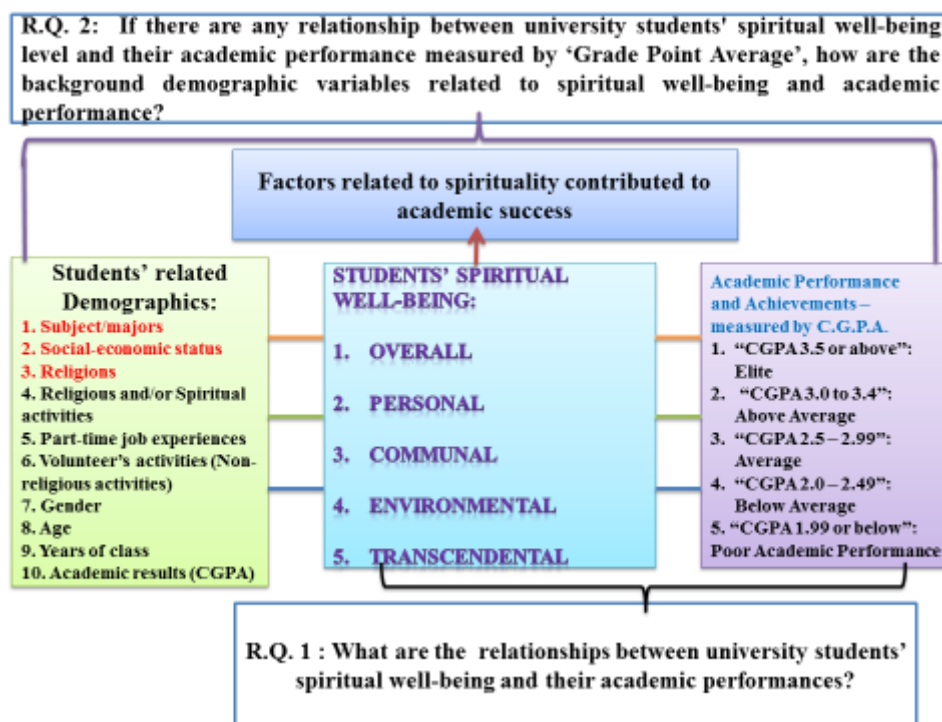
Figure 1 shows the link between the spiritual well-being and academic performance of

university students. The study uses a mix of quantitative and qualitative research methods; it

is a correlational research conducted to determine whether a relationship between spiritual

well-being and academic success of university students exists. Quantitative measures,

questionnaires in particular, are appropriate for a correlational research (Creswell, 2003). The

questionnaire used in this study has two components. The first component (Appendix 1) is

used to collect students' demographic and academic information whereas the second

component is used to measure their spiritual well-being by using SHALOM. Fisher (2003)

developed SHALOM to measure the quality of the relationship in four areas: (1) Personal, (2)

Communal, (3) Environmental, and (4) Transcendental. Each category has five questions,

with a total of 20 questions. Interviewees have to indicate what they feel in each question to

show whether they have good spiritual status in each category. SHALOM offers a

quantifiable measurement of an individual's level of spiritual well-being.

The aims of the study are to explore the relationship between the spiritual well-being

and academic achievements of university students and to examine the significant differences

in their spiritual well-being according to their different CGPAs. Figure 1 shows the link

between students' spiritual well-being and their academic success, and explores the

background variables related to spiritual well-being and academic performance. The study

attempts to answer the following research questions:

Question 1: What are the relationships between the spiritual well-being levels and academic

performance of university students as measured by CGPA?

Question 2: If there are any relationships between spiritual well-being levels and academic

performance of university students as measured by CGPA, how are the background

demographic variables related to spiritual well-being and academic performance?

Students' spiritual well-being and academic performance are the variables in this study.

A student's academic performance is measured by his/her CGPA. A student's spiritual well-

being is measured using Fisher's (2003) SHALOM, which evaluates a student's personal

level of spiritual well-being in different domains. Thus, in the study, SHALOM is used to

determine whether a relationship between the spiritual well-being and academic

achievements of university students exists.

The quantitative method is conducted through the questionnaires. The qualitative

method is then performed through focus group discussions. The quantitative findings are

incorporated into the qualitative findings to draw a relatively fuller picture with enriched

analysis. The qualitative study also helps to explore further the possible factors for the

relationship between students' spiritual well-being and academic performance to answer the

second research question. Quantitative data are used to support, supplement, and enrich the

findings of the qualitative research in the study.

CHAPTER TWO

LITERATURE REVIEW

The aim of the literature review is to explore essential research works in the area of spirituality, spiritual well-being and academic successes of university students. Therefore, in this chapter, the key terms used in this research, such as spirituality, spiritual well-beings and its assessment models will be critically reviewed in order to provide a framework of reference.

In the past decades, many books, articles, journals and researches about spirituality were published. However, there is still no generally accepted definition for the term – 'spirituality'. We are not going to redefine spirituality or list out the complete historical development of the topic in the literature review. The intention of the literature review is to provide a framework of reference in which the key terms, such as spirituality, spiritual well-beings and its assessment scales can be easily understood in this research.

2.1 Spirituality

'Spirituality' is always thought as a subjective, insubstantial, and difficult topic (Fisher 2009; Tisdell, 2003). Spirituality has its optimistic meanings in workplaces. Some of the scholars agree that spirituality enables people to be more innovative, more hardworking, more serious, more frank, stronger, more flexible, and more compassionate (Dent, Higgins & Wharff, 2005; Duignan & Bhindi, 1997; Hayman, 2007 et al.; Hernbeck, 2006; Howden,

1992). There seems to be a relationship between spirituality and students' academic

performances (Flannery, 2012; Hernbeck, 2006; Reyes, 2006; Vaughan, 2002; Walker &

Dixon, 2002).

Maslow (1968) agreed that the individualism caused excessive emphasis on one's self.

People will become more selfish, self-centered and self-seeking. Self-achievement is no

longer regarded as the final objectives. People would feel lonely, depressed, hostile and

isolated if they lack the highest standard – spiritual satisfaction and actualization. Thus, we

need a higher pursuit – spirituality. Frankl (2014) points out that the difference between

human beings and animals is the inherent spirituality of people. Banks et al., (1984) agrees

that only people can live in the both natural and spiritual surrounding. Hawley (1993) defines

spirituality in his book – "*Reawakening the spirit in work"*: as an internal part that goes

beyond the physical body and brain.

Spirituality is thought as the connection with the nonmaterial dimensions of life (Paley,

2008). Maslow (1969) believes that spiritual well-being and spiritual health are essential and

necessary components. Thus, he revised his hierarchy of needs in 1969 by adding the spiritual

pursuit as the highest level.

2.1.1   The Definitions and meanings of spirituality

What is spirituality? Tisdell comments 'Spirituality is an elusive topic' (2003, p. 28).

The Term 'Spirituality' is very abstract and it is difficult to define but it will be adopted

throughout this study. There are various different definitions for the term – spirituality based on the different fields of study and different scholars. Nevertheless, there are some commonly important and indivisible themes all through the definitions. Spirituality is something quite personal and subjective. It is generally used to emphasize on personal involvements and subjective experiences for the conceptualization of spirituality (Saucier & Skrzypinska, 2006). Spirituality is very unique and personal (Freshman, 1999). It is always linked with learning, work, community, inspiration, and the transcendence.

- *Spirituality is about the meaning of life*

Some scholars think spirituality is related to values and meaning of life. Palmer (2003) thought Spirituality was something about thoughts, dreams, visions, meaning, principles, and beliefs. It also helps people to deal with the difficulties and failures with confidences and values. Park (2005) has pointed out that Spirituality has been essential to the most of human being's meaning systems, which can be comprehensive and universally informing one's beliefs and goals. Once human beings understand the meaning of life, they would realize that death is not fearful because it is not our final conclusion and ending. Noam and Wolf (1993) described spirituality as the exploration and examination for implication of death. More detailed and generally accepted descriptions for the definition are meaning of life, the holistic people and self-actualization (Frankl, 2014; Maslow, 1954).

- *Spirituality is about the holy, God and Creator*

Spirituality is also viewed as something about the connections with the supernatural in reality (Engebretson, 2002). However, the supernatural will not be specifically emphasized and discussed in this thesis. A more classical explanation was given by Miller and Martin (1988) as the internal experience of recognizing a supreme existence, authority or representativeness superior than ourselves. Canda and Furman (2009) described spirituality as a direction of a people or the public managing a hunt for implication, ethical agenda, and interactions with others, such as the Creator from the perspectives of sociology.

Shafranske & Gorsuch (1984) defined spirituality as a superior exhibition in human understanding where the people queries the implication of individual survival and tries to place the self in an extensive ontological setting. Spirituality is regarded as an exclusively particular and individual experience of God by Kahle and Robbins (2004). Spirituality is regarded as a hunt for the holy (Pargament, 1999). Furthermore, spirituality is not only seen as the most essential function but also it is the mind, soul and heart of religions (Pargament, 1999). Vaughan (1991) explained spirituality precisely as "a subjective experience of the holy" (p. 105).

- *Spirituality is not necessarily linked with religions*

However, some people who claim themselves as spiritual may not have a religion. Therefore, some scholars do not agree that spirituality must be related with religion.

Spirituality is thought as an individual hunt for the aim, meaning or purpose of life and it may

be either linked or unrelated with any religious beliefs (Tanyi, 2002). It links to people's

principles, philosophies, and values that provide importance and implications to their daily

lives, thus it motivates people to recognize their ideal well-being. This linkage carries

optimism, trust, authorization, harmony and leads to consciousness of the holistic well-being.

The differences and the relationships between 'Religion', and 'Spirituality' will be discussed

in the section of 2.1.2.

Fisher (1998) has a broader view, and more or less covers most of the thoughts

mentioned above, he believes that spirituality is about human beings' internal feelings,

experiences, involvements and principles for the aims, direction and value in life. Spirituality

helps people to live with love, respect and care for themselves, their neighbors, the

environmental surroundings and God.

Ingersoll (2001) gave detailed lists for spirituality. It includes (1) spiritual autonomy, (2)

idea of the Creator, (3) experiences, (4) connotation, (5) compassion, (6) connectedness, (7)

optimism, (8) reality, (9) secret, (10) wisdoms and learning. Scholars in different fields have

different definitions regarding spirituality. The common features of their definitions and

descriptions are summarized in the following:

1. It is closely individualized or subjective and it is relevant to personal experience (Dent,

Higgins & Wharff, 2005; Fisher, 1998; Freshman, 1999; Stiernberg, 2003).

2. Spirituality is an innate element of human being. It is not only for religious believers to have spiritual needs (Park, 2005; Fisher, 1998; Paley, 2008).

3. Spirituality is a self-relationship. It can be regarded as the master of life, the inner driving force, the integration of force, self-contemplation and reflections (Fisher, 1998; Miller and Martin, 1988).

4. Spirituality is the relationship or interaction with others, such as: to love and to be loved, to forgive and to be forgiven, sharing and commitment (Canda and Furman, 2009; Dyson et al., 1997; Fisher, 1998).

5. Spirituality is the relationship with God or the supreme power or Religion (Dyson et al., 1997; Fisher, 1998; Kahle and Robbins, 2004; Miller and Martin, 1988; Vaughan, 1991).

6. Spirituality can be a positive psychological state, such as hope, peace, and courage (Dyson et al., 1997; Ross, 1994; Sumner, 1998).

7. Spirituality is regarded as a way of life, ethics, norms, values, principles and beliefs (Dyson et al., 1997; Frankl, 2014; Freshman, 1999; Ingersoll, 2001; Maslow, 1954; Ross, 1994).

8. Spirituality shows the positive attitude of life, such as optimism, determination, hardworking attitude and self-confidence (Frankl, 2014; Freshman, 1999; Ingersoll, 2001; Maslow, 1954).

The term – spirituality is employed throughout the study to represent the sacred

elements of life as Fisher (1998) mentioned but it is not to be referred to a specific religion, belief or faith. Based on the above common features and meanings of the definitions for spirituality, it is not difficult to see that spirituality is the deepest part of the core in human being (Park, 2005). I think that it is the intrapersonal, interpersonal, environmental and transpersonal relationship. For the intrapersonal perspective, the meaning, purpose and direction of life are emphasized for a successful life. Regarding the interpersonal perspective, a harmonious relationship can be developed through love, trust, selflessness, honesty and forgiveness. As far as the environmental perspective is concerned, people and the natural environment are closely related and mutually affected. Spirituality wellness and spiritual life means people don't only have the freedom of spirit, experience the meaning of life, enjoy life satisfactions and purse higher goals, but also we can further convert our short life into eternal values and live a meaningful life (Pargament, 1999).

2.1.2   The relationships between religion and spirituality

The term 'religion' is derived from the Latin root - religio and it means to bind together humanity and superhuman (Ingersoll, 1995). Alternatively, spirituality comes from the Latin root – spiritus and it means a breath of life, air, life, or courage (Ingersoll, 1995).   Tanyi (2002) stresses spirituality is an intrinsic component of being human and it is essential to all. Constantine et al., (2006) believe that spirituality is a part of a people's individuality and differs among people.

As there are various definitions of spirituality, the arguments for the differences between

spirituality and religion still exist. There are some certain underlying assumptions and

hypothesis from the different point of views:

- ***Spirituality is closely similar and related with religious***

Most people think that spirituality is closely similar and related with religious

ontological and epistemological meanings (Pargament, 1999). It is always termed as religio-

spirituality (Walker & McPhail, 2009). To some extent, it was partly explained by

socialization within religious organizations (Tisdell, 2003). Palmer (2003) agrees that

spirituality is an inquiry instead of reply, this question is driven the process of connection by

my soul and the Divine to determine a person's character.

It is suggested by some scholars to explain the relationship of spirituality and religion

with the word 'co-dependency'. Watson (1993) believes that 'co-dependency' exists for the

relationship between spirituality and religions. Spirituality can only be complete through

religious practices. Similarly, religious customs can only be rich and meaningful once

spirituality is connected (Watson, 1993). For example, people with spirituality, are more

likely to aim at achieving higher levels of objectives in life and to challenge the limitation of

human beings. Simultaneously, people would not only recognize and realize the limitation of

human beings but they also have a feeling of gratitude to the Creator (Stiernberg, 2003).

Walker and Dixon (2001) proposed a 'strong to weak' continuum in spirituality and spiritual

developments. He thinks that spirituality is an engine to religious understandings and subsequently 'religious spirituality' is more progressive and advanced than spirituality without religious elements.

- *Spirituality and religion as separate constructs*

Some scholars viewed religion and spirituality as separate constructs (Miller & Thoresen, 2003; Mitroff & Denton, 1999). Some scholars (Chandler, et al., 1992; Fahey, 2007; Zabriskie, 2005) thought that spirituality and religion can exist independently and individually. In other words, people can be very spiritual without any religious beliefs or people can be very religious without being spiritual. de Souza (2006) states that the description and explanation for the definition of 'spirituality' are no longer stuck to the scopes of religion and theology. Hyde (2006) thinks that spirituality is a common feature of human being and there is no absolute relationship between spirituality and traditional religions.

Shafranske and Malony (1990) distinguished between spirituality and religiosity in the practices: Religiosity focuses on the people's commitments and participants to the religious beliefs and to religious affiliation or institutions. However, spirituality focuses on individual philosophies and practice which may or may not come from religions.

Koeing et al., (2001) differentiated between religiosity and spirituality in the formation and landscape. Religiosity referred to strict, established, doctrinal, external, constraining,

ceremonial expression while spirituality referred to disorganized, personal, subjective, internal, freeing, passionate expression. Spirituality is always regarded as less bounding compared with the religious beliefs. For example, there are more well-established doctrines, recognized affiliation, and sacred worship in religions. Thus, people's spirituality is directed and influenced by their religious beliefs. However, it cannot be certainly concluded that people's religious beliefs are possibly directed and influenced by his or her spirituality if the two terms are regarded as the same (Fahey, 2007).

Tacey (2009) agrees that spirituality was the fundamental element of religion before but at the present it has already moved from religious belief to personal experiences. Tacey (2009) believes that spiritual pursuit is not only at particular times, such as worships in church or prayer in the morning, it can be at all times.   Thus, the attitudes – admiration, appreciation and sincerity to mystery, can be developed through personal experiences and involvements.

- *Spirituality and religion are related in some extents but they are not the same*

Some scholars think that spirituality and religion are related in some extents but they are not the same (McGee, 1998; Chang and Chen, 2008). It is because they believe that spirituality is beyond religions in scopes (McGee, 1998; Chang and Chen, 2008).

Spirituality is an inherent element of human being, such as human organs (Paley, 2008). It is intangible. It would be unfair to conclude that atheists have no spirituality (Paley, 2008).

Atheists can also have spirituality and spiritual development (Maslow, 1968; Desrosiers &

Miller, 2007). Hanegraaf (1999) points out that spirituality is roughly grouped into the category of religions. It is because it is possible to quest for spirituality without religion but we cannot pursue religion without spirituality.

Some scholars think that spirituality and religions are closely related, however, there are dissimilar and distinctive group of variables for each concept (Hernbeck, 2006). First of all, to some extents, spirituality exists and performs in different independent formats which are out of traditional religions (Desrosiers & Miller, 2007). For example, spirituality is merged and mixed with Chinese traditional cultures, such as Confucianism. Confucians experience and develop spirituality through doctrine, morals, etiquettes, values, attitudes, philosophy, and ethics. Secondly, based on the descriptions of the terms and definitions for "spirituality" and "religion", they are regarded as dissimilar ideologies (Tisdell, 2001).

Religions are regarded as systematized associations of belief which includes values, principles, regulations, performances, trust and laws (Tisdell, 2001). People will follow their principles and apply them in daily life. Spirituality is in nature more abstract and broader than religiosity (Mahoney and Graci, 1999).

Now, I would like to demonstrate the relationship of spirituality and religion by using an example of traditional Chinese culture. In Chinese traditional cultures, spirituality is always defined and explained in terms of our living wisdoms and philosophy (Hsiao, 2009), for example, "the golden mean" and "filial piety" in Confucianism and "respect the nature" in

Taoism. For over two thousand years, the spiritual pursuit and spirituality of Chinese are still rooted in the Chinese traditional cultures and philosophy (Hsiao, 2009).

There are some main ideas proposed in Confucianism about spirituality:

(1) "Honour the aged of other family as we honour our own; Care for the children of other family as we care for our own" (Mencius- *Liang Hui Wang I*). People are taught to love their neighbors as themselves.

(2) The theory of "self-cultivation, Family Harmony, State Governing and world Peace" (*the Great Learning*). People are directed to pursue "Pantisocracy" which refers to a Utopian vision of the world in which everyone and everything is at peace.

(3) "Oneness of heaven and humanity" or "the theory that man is an integral part of nature": it refers to our love, concerns and care to the nature and the environment surroundings because we are part of it.

According to Taoists' principles *(Tao Te Ching),* there are some key principles about spirituality:

(1) Respect the nature and other: It is better to strive for harmony and minimize potentially destructive interference with nature or in human affairs.

(2) Follow the nature: the nature is regarded as a way, path and principle to solve any problem. People can be exempted from evil and disasters if they follow the trends and the regular pattern.

(3) Longing primitively simple society: it refers to a return to the originally simple realm in which people are free from greediness and enmity. Thus, people can live without sorrow and anxiety.

Therefore, people should fully understand and respect the laws of nature, so that everything in the universe can perform its function. People and society are in a symbiotic relationship of mutual survival. The main theories and doctrines about spirituality proposed by Confucians and Taoists are not directly linked with any religious beliefs, the God, the Creator or the Divine. The followers of the above Chinese philosophical traditions and cultures believe that people's spirituality can be well developed and individual spiritual levels can be effectively enhanced by the efforts of human beings, including (1) oneself, (2) with other and (3) with the nature.

There are many different definitions and perspectives about spirituality. Some scholars think spirituality is equivalent to religions (Pargament, 1999) and closely related to religious beliefs (Tisdell, 2003; Walker & McPhail, 2009). It is because they claim that that spirituality is deeply rooted in religions and it is also reached by religious practices, such as prayer.

They also insisted that spirituality and religions are not easily distinguished. Thus, they conclude that there is no spirituality without religious beliefs.

On the other hand, some researchers consider spirituality as goals, dreams and values. They believe that spirituality is inherent (Paley, 2008). Every people have spirituality (Paley, 2008).

Even an atheist also has spirituality (Desrosiers & Miller, 2007; Maslow, 1968; Paley, 2008). Spirituality and religions exist independently (Desrosiers & Miller, 2007). It is because people can reach spirituality through religious beliefs but people still believe they can also achieve spirituality through traditions, cultures and ethics. Thus, in this study, 'spirituality' can be reached through either religious beliefs or non-religious beliefs.

2.2   Spirituality and health

According to the World Health Organization, Health is referred to "a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity". Now "Health" is defined as a multi-dimensional concept which contains 6 aspects (Eberst, 1984 & Hettler, 1984). These aspects, which are (1) physical, (2) intellectual, (3) emotional, (4) social, (5) occupational and (6) spiritual dimensions, directly influence people. Cottrell, Girvan & McKenzie (1999) also thinks that a healthy person should have (1) physical, (2) psychological, (3) social, (4) emotional and (5) spiritual fitness. Ellsion (1983) points out that the spiritual dimension of health, which is necessary and essential in life, is regarded as an engine of potential personal growth and development. Also, it is the recognition of the purpose and the meaning of life (ibid). It forms the core values of life.

Spiritual health is referred to the relationship with one self, the community and God (Hateley, 1983). Young (1984) thinks it emphasizes on the integration of body, mind, and spirit contained by the environment of internal harmony, and in the light of connections with

others and with nature. Hood-Morris (1996) described spiritual health precisely that it comprised a person's relationships with the self, others and the Creator, and the interaction with the natural environment.

Ellison (1983) believes that spiritual well-being and spiritual health are not definitely equivalent, however, spiritual well-being shows the existing condition of spiritual health, just like how a person's appearance and breath indicates his or her health status. Other scholars (Fehring, et al., 1987; Cottrell, et al, 1999) also agree that a person's quality of life and spiritual health condition can be shown through his or her spiritual well-being. There is a close and positive relationship between religiosity/spirituality (R/S) and mental health in teenagers (Rew & Wong, 2006). The study conducted by Rew & Wong (2006) indicates that youngsters with higher levels of religiosity/spirituality (R/S) would have better mental health.

The complicated relationships between health, spiritual health and spiritual well-being can be shown in the figure 2.1. Ewles and Simnett (2003) proposed 5 components in their concept of health: (1) physical body, (2) psychology, (3) spiritual, (4) emotion and (5) social structure. The notion of health has been defined and explained in the multi-dimensional contexts (Ewles and Simnett, 2003). These different dimensions are closely interrelated. Thus, if there is a variation in one aspect, there may have effects on the other aspects. Likewise, spiritual health has been regarded as the vital dimension to the overall well-being. This relationship is shown in the figure 2.2.

Figure 2.1:   **The relationships between Health and Spiritual Health**
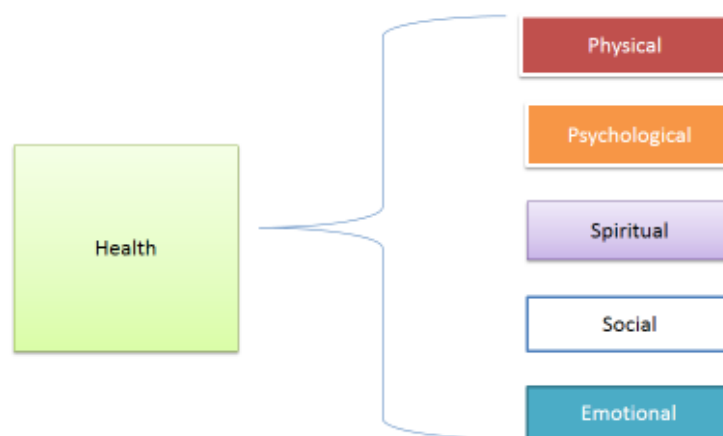
Figure 2.2:   **Spiritual health as the vital dimension to the overall well-being**
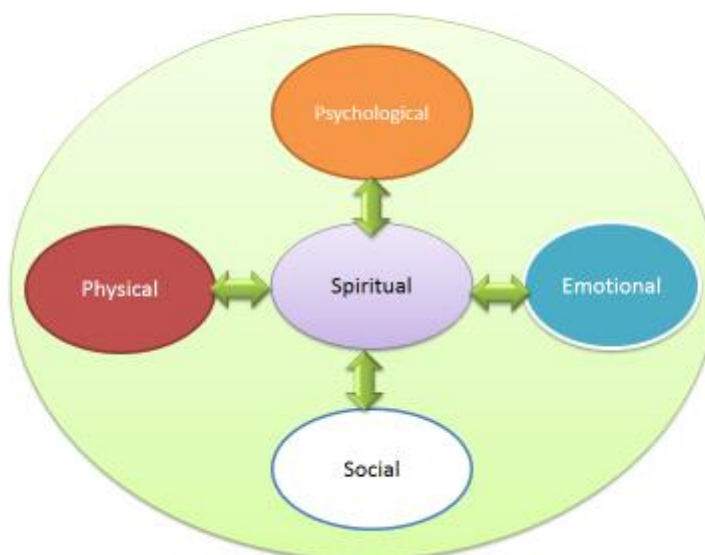
2.2.1   Health and spiritual health

Frankl (2014) thinks that there are three important components in human beings: (1)

physical body, (2) psychological health, and (3) spiritual well-being, which are the integration

of a healthy person. Dunn (1957) believes that all aspects of health are defined and described

in the social contents. In other words, people have to interact with family, community and

society. Dunn (1957) points out that people can reach their potentials by unifying their mind,

psychological, spiritual and physical health. He suggested 5 ways to have a wonderful and

spiritual life:

1) To have consistent thinking and beliefs

2) To have an open mind and accept different ideas

3) To have mutual trust

4) To have a positive relationship with others in the community and society

5) To have personal reliability and honesty

    Spiritual health is the core of health and it is also regarded as the potential of developing

spirituality, which can help people identify their meaning and purpose of life and enjoy love,

happiness, peace and the nature (Chang & Chen, 2008). They think that spiritual health is the

state of human being's integration with people's physical, psychological and mental aspects

of health.

    A person is a complexly combined being constructed with physical body, mind and

spiritual aspects (Dunn, 1961). These aspects are elementary descriptors of the interconnected

scopes of the person. "Spirituality" has already been regarded as an essential element of the

health of the human being (Nagai-Jacobson & Burkhardt, 1989). Some scholars with holistic

concepts in health believe that there should be coherence and harmony of mind, body and

spirit in a healthy person (Dunn, 1961; Ellison, 1983; Nagai-Jacobson & Burkhardt, 1989;

Young, 1984). It is not surprising that a spiritual combination has already been seen as vital

with all medical healing (Fontana, 2003).

Hill and Smith (1985) think that forgiveness, love, trust, honesty, humility have

spiritual features. Their specific descriptions were that spirituality is a part of fitness closely

associated to the core of people's life. Also, it refers to the important rule in people that gives

life to the physical aspects of living organisms in contrast to its pure materials and with

respect to the soul of the body "breath of life". It would be meaningless and imbalanced for

the complete evaluation of health if spiritual aspects are not taken into account.

2.2.2 Spiritual health and spiritual wellbeing

The term "spiritual health" is defined and further studied in many different perspectives,

such as psychology, medical science, religion and education (Fisher, Francis & Johnson,

2000). Spiritual health is closely linked with the one's self (Fisher, Francis & Johnson, 2000),

interpersonal relationship (Fisher, Francis & Johnson, 2000; Howden, 1992), satisfactions of

life (Carson, et al., 1990), emotional feelings (Carson, et al., 1990) and the natural

environments (Fisher, Francis & Johnson, 2000; McGee, 1998). Howden (1992) thinks that

spiritual health consists of purpose and meaning in life, innerness or inner resources, unifying

interconnectedness and transcendence. For instance, if people lose spirituality, they would lose direction and spiritual energy. As a result, they would fail to have a balance in health. Therefore, spiritual health refers to the status of balance for the integration of internal and external systems in health.

Lee (2005) thinks that the theoretically conceptual contents of spiritual health consist of overcoming difficulties, building up a good relationship with others, caring for the natural surroundings and spiritual quests. In other words, spiritual health is a mechanism of health for refreshing, balancing, combining the different systems for human beings so as to achieve consistent, healthy and harmonious living.

Miller (1997) also agreed that spiritual well-being is a signal of people's quality of life in the spiritual aspect. A person's spiritual health can be demonstrated by his participation in pursuit for the meaning, purpose, and direction of life in daily life (Insel & Roth, 2006; Kitko, 2001). Everyone would have their own different appearance of spirituality which highly depends on their principles, philosophies, values and experiences (Kitko, 2001).

The spiritual well-being of a person can be observed and evidenced in his or her love, care, mercy, performance, mindfulness, inspiration, and self-sacrifice (Insel & Roth, 2006). If one has a better spiritual well-being, thus one would be a person with better spiritual health, vice versa. Therefore, a person with better spiritual health would have harmony and consistence between their soul (the inner self) and the material reality (the forces from the

outside) (Kitko, 2001).

Spiritual well-being is also defined as the integration and combination of relationships in people with oneself, the public, the environment surroundings and the God (The National Interfaith Coalition on Aging, 1975). If a person is spiritually healthy, he or she will usually feel active, purposeful, and satisfied (Ellison, 1983). Spiritual well-being and spiritual health are different concepts but they are closely interrelated and interacted (Cottrell, et al, 1999; Ellison, 1983; Fehring, et al., 1997). For my own sake, spiritual health and spiritual well-being are interchangeable in this thesis.

2.2.3 The impacts of spirituality to health

There are some studies from different areas, such as psychology, biology, theology and medical science to explore the relationship between spirituality, the human body and the quality of life (Lawler & Younger, 2002; Rayburn, 2004). It is proved that "a higher spirituality, a better health" in some research findings (Hays et al., 2001; Bussema & Bussema, 2000; Cohen et al., 2005; Fontana, 2003; Levin & Chatters, 1998; Yoon, 2004). The researches regarding spiritual health indicated that most people who do not feel well with themselves, with others and with the existing situations, would feel lonely and isolated, they lack the meaning of life and live in depress (Dennis, Muller, Miller, & Banerjee, 2004; Fontana, 2003; Hays et al., 2001; Yoon, 2004). As a result, they would tend to have health related problems, such as depression, hypertension, and cardiovascular diseases (Fontana,

2003; Hays et al., 2001; Levin & Chatters, 1998a; Levin & Vanderpool, 1989; Yoon, 2004).

Some studies indicate that there are positive influences of spiritual health to mental,

psychological and physical aspects (Bussema & Bussema, 2000; Cohen et al., 2005; Ferriss,

2002; Fontana, 2003; Hays et al., 2001; Levin & Chatters, 1998a; Yoon, 2004). For example,

spiritual health is beneficial to the   balanced development of health (Lawler and Younger,

2002), healing (Fontana & Rosenheck, 2004; Pargament, 1997), recovery from depression

(Fontana & Rosenheck, 2004; Lawler and Younger's, 2002; Pargament, 1997), stress

management (Hayman et al., 2007) and quitting bad habits, such as drug abuse and smoking

(Astin et al., 2010; Hays et al., 2001).

The findings of the researches conducted by Ayele et al. (1999) and Hayman et al.

(2007) also indicate that people with better spiritual health would have healthy living habits

and attitudes. For example, they are able to have balanced diets, regular physical exercises,

sufficient sleeping hours, and use of preventive health services, such as compliance with

medical advice. Also, people with better spiritual health would easily get more social support

and regularly participate in religious and spiritual activities (e.g. prayer and meditation which

give positive emotional energies, including love, hope, satisfaction and forgiveness). Such

processes or experiences can effectively release pressures and lessen pessimistic emotions.

Thus, it promotes physical, mental and social health of a whole person. So, there is a

significant correlation between spiritual health, physical health, psychosocial health and

health-related behaviors (Larson et al., 1989; Yates, Chalmer, St. James, Follansbee, & McKegney, 1981). It is because there are impacts of religion or spirituality on health as they are regarded as protective resources for helping people to avoid illness and as coping resources for moderating the damages caused by the diseases.

2.3 Spiritual well-being

There are many different definitions and meanings about the spiritual well-being defined by scholars but there are some common features for the term – spiritual well-being (Ellison, 1983; Gomez and Fisher, 2003). Spiritual well-being can be always regarded as personal ideas and individual behaviors (Reed, 1992), lives with full of meanings and commitments (Woods, Yates & Primomo, 1989), expressions of the optimistic faith through religious, musical and art performance (Sulmasy, 2002) and self-worth (Park, 2005). For better understandings about the spiritual well-being and its related models, critical analysis and deeper discussions for the previously related studies would be conducted.

2.3.1 The definition, meaning and importance of spiritual well-being

The term – 'spiritual well-being' consists of two parts: 'spiritual' and 'well-being'. The term - 'Spiritual' is always defined as something about spirit, immateriality, and metaphysics (Gomez and Fisher, 2003). 'Well-being' is usually used to describe the status of wellness, peace, happiness and comfort (Ellison, 1983). Thus, spiritual well-being denotes the

harmonious status of a person.

Spiritual well-being is also regarded as a situation of expressing optimistic moods, performances, and thoughts of relationships with oneself, others, the transcendent and environment (Gomez and Fisher, 2003). Happiness, respect, contentment, forgiveness, mercy, humbleness, peace, beauty, honesty and harmony are the symptoms of a person with good spiritual well-being. Thus, a person with healthy spiritual well-being would have a clear meaning and purpose of life and he or she would always have self-reflections and introspection for further improvements. Ellison (1983) thought that spiritual well-being is an expression for the fundamental status of spiritual health. Fisher et al., (2000) defined spiritual health as an essential measurement of human being's total fitness and happiness.

The national interfaith Coalition on Aging (NICA) defined spiritual wellbeing in 1975 as the relationship with oneself, community, the nature environment and God with appreciation and gratitude (Ellison, 1983; Gomez & Fisher, 2003). Fisher also proposed similar concepts of spiritual wellbeing based on the definition of NICA. (Fisher et al., 2000; Gomez & Fisher, 2003). Fisher believed that there are four dimensions of spiritual wellbeing of a person: (1) personal, (2) communal (3) natural and (4) transcendental. For the personal dimension, it denotes the meaning, purpose and direction of life; for the communal dimension, it refers to interpersonal relationships and communications; for the natural dimension, it means the integration of the nature and the human being with obligation and thankfulness. For the

transcendental dimension, it is about the relationship and communication between human being and the transcendence (Gomez & Fisher, 2003). Ellison (1983) provided further explanation and detailed descriptions about spiritual wellbeing for the definition of NICA. Ellison (1983) thought there are two scopes of spiritual wellbeing: (1) religious and (2) social and psychological. For the religious scope, it is about the wellbeing for the relationship between human being and God. For the social and psychological scope, it refers to the purpose and meaning of life and satisfaction of life. Even though these two scopes are different, they are mutually and interactively affected.

Banks, 1980 and Banks et al., 1984 presented four features of spiritual wellbeing as well: (1) unified powers: offering a complete integration of physical, psychological and emotional and social aspects (2) meaning of life: giving energies for self-actualization (3) the combined powers among different individuals: sharing of love, care and support to each other and (4) the communication with the transcendence: building up a relationship with God. The above features imply the purpose, meaning and directions of life. Spiritual wellbeing is not only a feeling and status of mutually harmonious connections with oneself, others, the nature and the Creator but it also directs to the final destination of human and help people realize meanings of life through personal growths and developments (Hungelmann, Kenkel-Rossi, Klassen, Stollenwerk, 1996).

Moberg (1984) has initially conceptualized spiritual wellbeing as two different but

interrelated dimensions: the vertical perspective and the horizontal perspective. For the

vertical perspective (i.e. religious wellbeing), it denotes the status of wellbeing for the

relationship between human being and God. For the horizontal perspective (i.e. existential

wellbeing), it refers to the status of satisfaction for personal purpose of life and individual

existence. A person consists of three elements: (1) Body, (2) Mind and (3) Spirit (Fehring et

al., 1987). The first and the external part is the human body, including organs and limbs; the

second part refers to social and psychological aspects, including emotional feelings, ethical

values and interpersonal relationships; the third part is the deepest part of human beings – the

meaning and purpose of life.   A person's spiritual wellbeing can be fulfilled by the

combination of two dimensions (Ledbetter, et al, 1991). The transcendental session is

involved in both vertical and horizontal dimensions but there are no specific religions

mentioned. This complex relationship can be shown in figure 2.3 (from Su Shuk Fan, 2002,

p.21).

Figure 2.3:   **The conceptual structure of spiritual well-being**
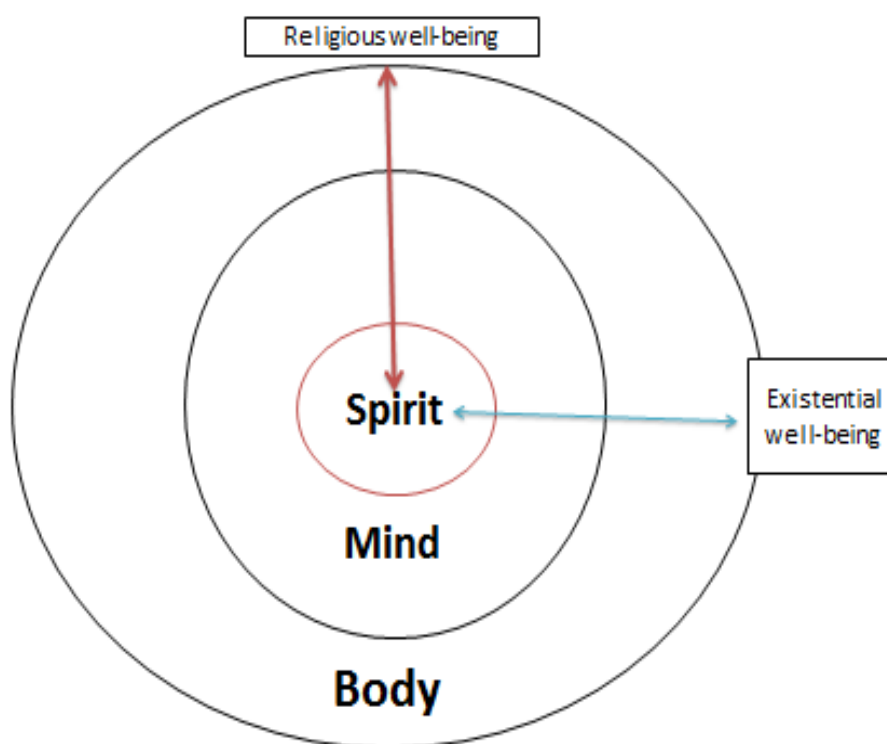
(Source: Su Shuk Fan, 2002, p.21)

In the past decades, some scholars tried to assess the spiritual well-being of people by using scales, such as Ellison's Spiritual Well-Being Scale (1983), Howden's Spirituality Assessment Scale (SAS) (1992) and Fisher's Spiritual Well-being Questionnaire (SWBQ) (2003). SWBQ is called the Spiritual Health and Life-Orientation Measure (SHALOM).

2.3.2   The analysis and discussions for the previously related scales and assessments of spiritual well-being and spirituality

There are many studies about spirituality as a dimension of wellness for the last decades (Dennis et al., 2004; Watson, 2001); Hernbeck, 2006; Strack, 2001). Spiritual well-being has

been developed into the same importance and significance as the other dimensions of

wellness (Watson, 2001). As a result of this, there are numerous instruments closely related to

the assessment of spirituality advanced in the literature. The following table (Table 1) shows

the summary of the key related studies to this topic in the last decades.

Table 2.1: The various related models about students' spirituality

Author	The Research Topic	Population	The participants involved (Sample)	Methodologies
Howden, 1992	Development and psychometric characteristics of the Spirituality Assessment Scale.	189 Adults aged 40-60	94 Male and Female university students aged 40-60.	Quantitative Methodological Psychometric Evaluation
Gomez and Fisher, 2003	Domains of spiritual well-being and development and validation of the Spiritual Well-Being Questionnaire	Secondary school teachers	98 secondary school teachers	Quantitative approach
Dennis, Muller, Miller, & Banerjee, 2004	Spirituality among a college student cohort: A quantitative assessment.	All undergraduate students registered in the health fitness course	524 Northeastern U.S. college students	Quantitative Correlational approach
Zabriskie, 2005	College students' definition of religiosity and spirituality.	College Undergraduate Students	2 large institutions and all undergraduate students	Descriptive Quantitative approach
Constantine et al., 2006	Religion, spirituality, and career development in African American college students: A qualitative inquiry.	12 African American college students	12 respondents	Consensual Qualitative approach

Hayman, et al., 2007	Spirituality among college freshmen: Relationships to self-esteem, body image, and stress.	College Freshman	204 college freshman	Quantitative Relational approach
Alexander W. Astin, Helen S. Astin & Jennifer A. Lindholm, 2010	Cultivating the Spirit: How College Can Enhance Students' Inner Lives	The freshmen and junior year students in private and public institutes (including religious and non-religious)	112,000 freshmen in 236 institutes in 2004 and then 14,527 of junior year students (in 136 institutes) followed up in 2007	Extensive quantitative and qualitative researches on students
David A. Flannery, 2012	A correlational study of the relationship of spirituality on college students' academic performance and demographic characteristics	800 college students in Virginia Beach, Virginia	372 college students	Quantitative Correlational approach

Owing to a systematic review of the literature, several instruments were selected for

further discussions. The various related models in table 2.1, such as Howden's (1992) model -

Spirituality Assessment Scale (SAS) and Fisher's (2003) model - the Spiritual Health and

Life-Orientation Measure (SHALOM) are regarded as representatives of scales of spiritual

well-being. In addition, there are some similarities in the components of the selected models.

For the Spirituality Assessment Scale (SAS), it is regarded as the one of classical and

pioneer models for assessing the spirituality of human beings and it is very popular among

the incipient models. It is because Spirituality Assessment Scale (SAS) was developed by

Howden in 1992. Afterwards, most of the related models about the evaluation of spirituality

are developed based on the assumptions, theories and frameworks of the SAS.

For the Fisher's (2003) model - the Spiritual Health and Life-Orientation Measure

(SHALOM), it is relatively objective and comprehensive. It is because there is no bias and no

preference for any specific religious category in the measurements. Furthermore, SHALOM

include 4 domains – (1) Personal, (2) Communal, (3) Environmental and (4) Transcendental

aspects.   It is to analyze each aspect of human and his or her related factors in order to

assess spirituality of human beings wholly.

- **Howden's (1992) model - Spirituality Assessment Scale (SAS)**

Spirituality is defined by Howden (1992) as the phenomena spiritually reached by

combining interconnection, aims and significance in life, internal deeply or innermost

properties and the Divine Existence. Howden's (1992) model - Spirituality Assessment Scale

(SAS) is applied to assess the spiritual well-being of university students. Howden (1992)

developed the SAS by literature reviews based on philosophical, psychological, sociological,

theological and nursing areas. There are 28 items on SAS and a 6-point scale is rated from

Strongly Disagree to Strongly Agree. The study done by Howden (1992) was to theorize,

refine, and psychometrically assess the Spirituality Assessment Scale (SAS), a device to

evaluate spirituality in the four areas: (1) Purpose and Meaning in Life, (2) Innerness or Inner

Resources, (3) Unifying Interconnectedness and (4) Transcendence.   There are four major

attributes in the Scale:

1.   Purpose and meaning in life: During the process of pursuit for or discovering events or

relationships, the meanings, significance, values, implications, can be realized.

2.   Innerness and inner resources: No matter where people are situated, such as in times of

disaster or peace in coping with uncertainties in life, their ability and attitude from the

deep inner part will be shown.

3.   Unifying interconnectedness: it refers to the harmonious feeling of affiliation or

attachment to others, environment, and the universe.

4.   Transcendence: it refers to the capacity to reach or go beyond the limits; the ability,

enthusiasm, or experience of overcoming physical or spiritual conditions; or the aptitude

for achieving wellness (Howden, 1992).

There is satisfactory internal consistency of these four scales. The study was conducted

to 189 adults aged from 40 to 60. The findings show positive relationships between

spirituality and health related concerns for individuals and nursing practice. The Spirituality

Assessment Scale (SAS) (Howden, 1992) provides a general mark for evaluating the

standards of students' spirituality based on the above features. The score is then assessed with

explanations for high spirituality with marks of 113-168, moderate spirituality 57-112, and

low mark of spirituality 28-56. However, there are uncertainties regarding the rationality of the outcomes in some studies using SAS (Howden, 1992).

The study found that there was no significant relationship between total SAS scores and the latest experience of a disastrous accident. In the study, Howden (1992) disagreed with the conclusion –, a relationship between the experience of crisis and the experience of spirituality, drawn by Burns & Grove (2001) and Fehring, et al (1987). Howden (1992) explained the difference in the findings: The tendency of the variable distribution had not been effectively modified and a nonlinear correlation between the variables had not been satisfactorily amended with data conversions.

Also, the findings indicated that there was a weakly positive relationship between total SAS scores and religiosity. Furthermore, it showed that there was no substantial relationship between total SAS scores and frequency of participation at religious activities, such as worship, prayer and Bible reading. Howden (1992) agreed with the findings of the similar studies (Banks et al., 1984; Burkhardt, 1991; Carson, et al., 1986) that people may or may not display their spirituality in form of religions.

- **Fisher's model – Spiritual Health and Life-Orientation Measure (SHALOM)**

In accordance with Fisher's model, there are four domains: (1) personal, (2) communal, (3) environmental and (4) transcendental domain. Gomez and Fisher (2003) advanced the Spiritual Well-being Questionnaire (SWBQ) by taking references from some models about

spirituality, spiritual well-being and spiritual health. This is called the Spiritual Health and

Life-Orientation Measure (SHALOM). There are 5 questions in each domain and there are 20

questions in total. The interviewees have to answer the questions in the two statuses: ideal

and feel. Through the comparison of the two statuses, they could find out whether they are

situated in harmony or not.

Fisher initially developed a concept of spiritual wellbeing in his doctoral paper in 1998

based on the domains of spiritual well-being defined by the National Interfaith Coalition on

Aging (NICA) (Fisher et al., 2000; Gomez & Fisher, 2003). NICA defined the term – spiritual

well-being in 1975 as a connection with the self, the other people, the natural environment

and God (Ellison, 1983; Gomez & Fisher, 2003). They are similar with Fisher's four

domains.

Fisher in 1998 conducted interviews with 98 secondary school teachers about their

feelings and thoughts for the main measures of spiritual well-being among their pupils. The

questions employed in the interviews consisted of 6 measurements to assess the students'

spiritual well-being. They included:

(1) Spiritual Well-Being Scale (Ellison, 1983),

(2) The Spiritual Orientation Inventory (Elkins et al., 1988),

(3) The Mental, Physical and Spiritual Well-Being Scale (Vella-Brodrick & Allen, 1995),

(4) The Spiritual Assessment Inventory (Hall & Edwards, 1996),

(5) The Perceived Wellness Survey (Adams, Bezner & Steinhardt, 1997), and

(6) The JAREL Spiritual Well-Being Scale (Hungelmann, Kenkel-Rossi, Klassen & Stollenwerk, 1996).

Consistent conclusions are made by Fisher's numerical investigation in 1998 and the NICA (1975) model. They both agreed that spiritual health existed vigorously. It also showed that to some extents, people live in harmonious environments in the following: relationships with oneself (personal), others (communal), nature (environment), and God (transcendent). A person's spiritual well-being can be measured and evaluated by the total scores of the four domains or the scores in each domain. The score of the relationship in each of the four areas reveals a persons' spiritual well-being in that area. Analysis of progressive synergism was applied to describe the relationships of the four domains because each domain constructs on each other. They are closely interrelated (Fisher et al., 2000). The progressive synergistic relationships can be explained in the figure 2.4.

Figure 2.4:   **Four domains model of spiritual health & well-being**
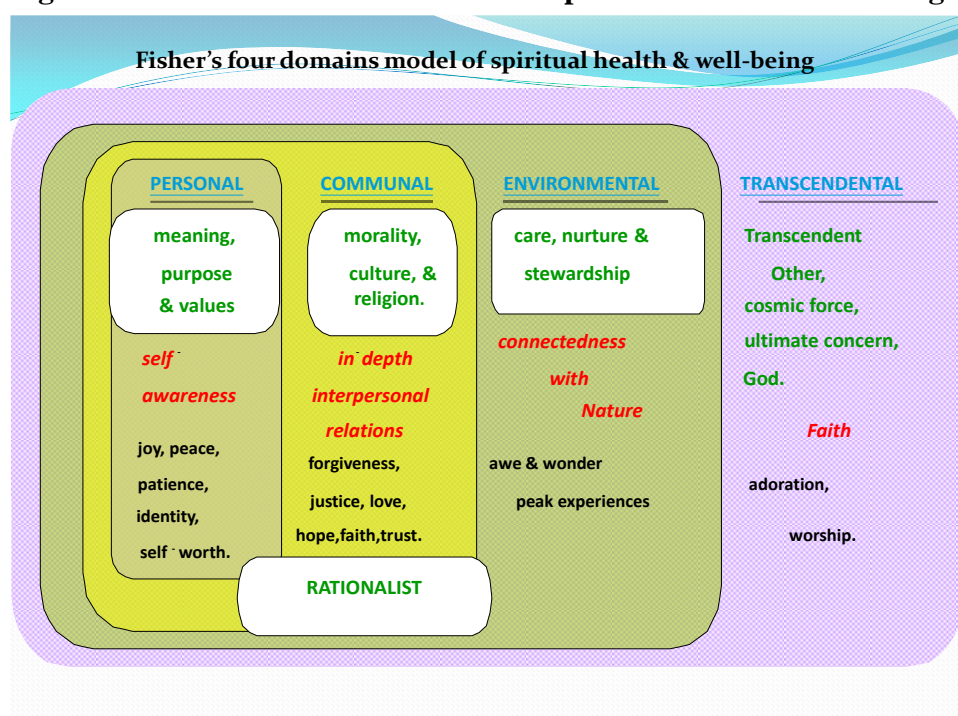
The concept of progressive synergism is used to describe the correlations between the four different dimensions of spiritual well-being. If the standards of spiritual wellbeing in the four dimensions are joined together, the effects of the outcomes would be greater than the total of the value in one individual dimension (Fisher, 1998). People would feel uncomfortable, unharmonious and unhealthy if these relationships (match and combination of 4 different dimensions) are mismatched or imbalanced.   The quality of life (i.e. the quality of relationships) for human beings would always change because of their varying situations, capricious personal ideas and philosophies.

In the personal aspect, it refers to the meaning, purpose, values in life. They are inner spirits, such as self-respect and distinctiveness. The communal aspect refers to the wisdom of social relationships. Ethics, values and beliefs are contained within the communal aspect. It

also contains love, fairness, respect, humble and trust. The environmental aspect is to cultivate and nurture for the plants and animals, as well as develop concepts of harmony and association with the surroundings. The transcendental aspect is to the relationship with the Creator. It focuses on the worship and adoration of the religions and the mystery of the universe.

Fisher et al. (2000) criticized the defects about some other spiritual health measures: For the spiritual wellbeing scale (SWBS) developed by Ellison in 1983, there are two scopes − (1) Existential Well-Being (EWB) and (2) Religious Well-Being (RWB). There are ten questions to be answered in each scope. However, there are differences in the two scopes but they have mutual influences among them. Therefore, some numerical reduplication would be caused for the analysis of the two scopes.

For the two subgroups [(a) life direction and (b) life satisfaction] in EWB, they are appraisals of people's connotation, aims and values in life. These considerations only correspond with the personal dimension of Fisher's model. The relationships with the nature and others are not taken into account in Ellison' SWBS. For the items of RSW measures, the rule was limited to theocentric religious conviction. It is not consistent with the transcendental dimension of Fisher's model. It is because the fisher's model doesn't stick to any specific religions and religious convictions. It would be more objective and less biased.

In the Spiritual Orientation Inventory developed by Elkins et al. in 1988, there are 85

questions in 9 subdivisions consisting of two variables (experiential dimension and the value dimension). However, these questions are fundamentally relevant to personal, communal and environmental aspects of spiritual wellbeing but there are no considerations of religions and the Transcendence.

In the Mental, Physical and Spiritual Well-being (MPS) Scale proposed by Vella-Brodrick and Allen in 1995, there are 10 questions consisting of two domains − (1) the existential and (2) the religious. For the MPS scale, 5 questions are about existential aspects, only 1 question is religious and 4 questions are either religious or existential areas. These questions are not very comprehensive and they are imbalanced. They seem to focus on the personal, communal and religious aspects. However, there are no considerations of environmental aspects.

In 1996, Hall and Edwards proposed the Spiritual Assessment Inventory (SAI) to measure the spirituality of people. It emphasizes the relationship with the Creator in quantity and quality. However, it ignores various areas of the relationships in people. For example, the relationship with themselves, the relationship with others and relationship with the natural environment are not concerned in the measure.

In the spiritual wellness domain of the Perceived Wellness Survey developed by Adams et al. in 1997, there are 6 scales. These scales, (3 scales are highly linked to meaning and another 3 scales are closely related to purpose in life) are restricted to the personal domain. In

the study, there are no concerns of communal, environmental and transcendental dimensions proposed by Fisher's model.

In the JAREL spiritual wellbeing scale developed by Hungelmann et al. in 1996, there are 21 questions for assessing the spirituality in older adults. There are 11 questions on the self, 4 questions on the others, 5 questions on the Transcendent and 1 irrelevant question. Certainty, the questions are relevant to the personal, communal and transcendental domains developed by Fisher's model. However, there is no attention for the natural environments.

The key study instrument administered here is Fisher's model - the Spiritual Health and Life-Orientation Measure (SHALOM). This instrument is chosen based on its recognized reliability and validity accompanied by its relatively short time promise for the interviewees. SHALOM is very user-friendly (Fisher, 2009). It is relatively updated compared with other models. Its questions are short and understandable. It is an effective approach to screen a large population of students for assessing their spiritual well-being. SHALOM is also regarded as the most promising instruments for assessing spiritual well-being (Meezenbroek et al., 2012). It also doesn't involve any specific religious bias in the scale. Thus, the analysis of the outcomes generated from the measurement would be more objective and reliable. Furthermore, SHALOM has been used by Wong and Fisher in 2010 to evaluate the spiritual well-being of pre-service teachers in Hong Kong.

Based on the above brief reviews of the measures for the spiritual wellbeing of people, it

explains why SHALOM is used in the study. SHALOM is widely used to assess the spiritual

wellbeing of students, teachers, nurses and businessman (Fisher, 2010). It is reported that

SHALOM has been tested by accurate scientific and statistically provable approaches in 6

various languages (Fisher, 2010). There is a high reliability for SHALOM (Gomez, & Fisher,

2003). SHALOM is regarded as more valid and reliable measure of spiritual wellbeing for

most people although it is impossible to completely evaluate everyone's wellbeing (Fisher,

2010).

2.4 Relationship of students' Demographics to their spirituality and Relationship of Spirituality to Academic Success

Besides, the spiritual wellbeing in the specific domains of students and their academic

performances (CGPA), their demographic characteristics, such as age, gender, religious

background and social status would be collected for further discussion and assessment. The

relationships will be explored based on the framework of this study (in figure 2.5). Based on

the literature review, this section gives the details of the demographic items and each of the

items is to be used as an analyst of students' spiritual wellbeing and as an explanation for

their relationships between their spiritual wellbeing and academic performance. The

demographic variables used are typical and popular in most of the related researches and the

current literatures (Astin et al., 2010; Flannery, 2012; Dennis, Muller, Miller, & Banerjee,

2004; Gomez and Fisher 2003; Hayman, et al. 2007; Howden, 1992; Zabriskie, 2005).

Figure 2.5: **The relationship of students' Demographics to their spirituality and relationship of Spirituality to Academic Success**
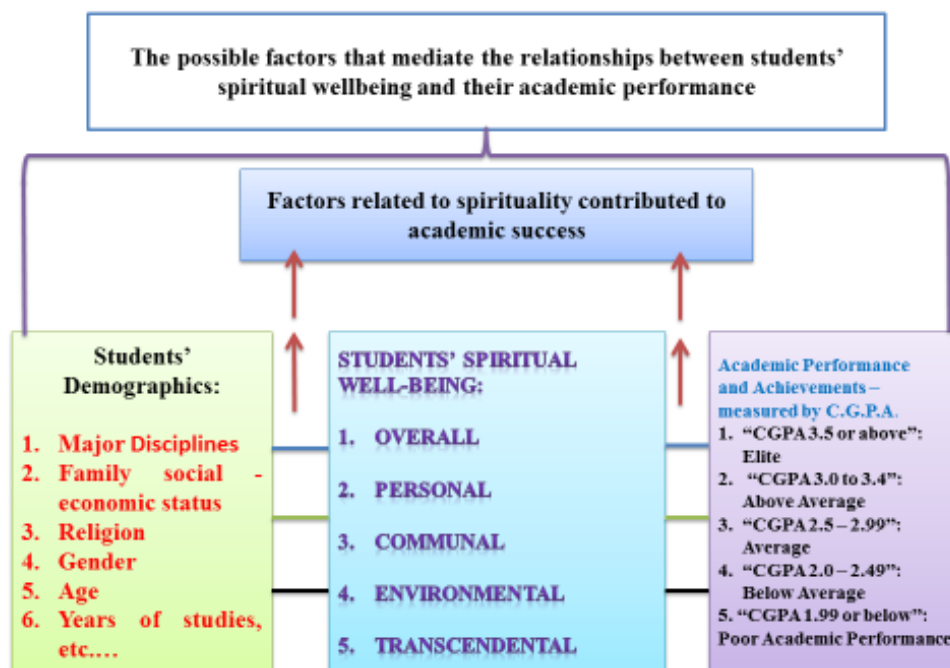
1. Subject/majors

There are inconsistent findings for the correlation between students' spirituality and their undergraduate major studies. The study conducted by Constantine et al. (2006) finds that students' spirituality is directly influenced by their major subjects in university. For example, in their academic trainings, science students would be more rational, they focus on quantitative analysis, insist on logical thinking and request evidences. Therefore, they would always consider and pay attention to the outcomes of a matter. It is not surprising for medical and biological researchers to actively propose and study "euthanasia" and "human cloning". Conversely, social science and language students would be more perceptual, emphasizing on qualitative analysis and demand critical thinking. Thus, the feeling, processes and

experiences of a matter would be always their concerns, views and devotions. They would

tend to criticize and argue about "euthanasia" and "human cloning". It is because they believe

that lives and death are given by God or the Creator, not by hands of human. Obviously, they

can easily show compassion, empathy and enthusiasm to others and the nature environment.

As a result, non-science students would have a higher spirituality than science students.

However, the study done by Fehring et al. (1987) and Howden (1992) indicated that

students' spirituality is not directly affected by their undergraduate major studies but affected

by other factors, such as psychological elements. They believed that undergraduate major

subjects would only increase students' specific knowledge and professional sense, but not

spirituality. Also, students' spirituality is cultivated out of academic professional trainings,

such as moral education, life education and value education (Hung, 2009 and S.M. Chang,

1999). It is because "Life education" and "Values Education" is used to develop students'

positive values and attitudes towards life, and know how to cope with their feelings in

different situations (Education Bureau, Hong Kong).

2. Social-economic status (including education level of parents, occupation of parents and

    their annual family income)

There are close relationships between students' spiritual pursuits and their parents'

education and occupation (Constantine et al., 2006; Flannery. 2012). The study conducted by

Constantine et al. (2006) in African American undergraduate students found a close

relationship between students' religious and spiritual lives and their parental influences. It is because those parents, who are well educated and have higher social status, would always inspire their children and carry out their religious and spiritual beliefs and behaviors to their African American children. Such religious and spiritual inspirations from their Dad and Mum establish the core values - golden rule for the children (Constantine et al., 2006). Therefore, their children would have a higher spiritual requirement and greater spiritual development than others.

Moreover, the parents' academic backgrounds, such as education level and their occupations, directly affect children's spiritual development (Flannery, 2012). He noted that children, whose parents have higher academic achievements, tend to cultivate children's personality, moral and character development. These parents expect their children to be a responsible and benevolent person rather than rich and successful men in the future.

Also, the study conducted by Zabriskie (2005) through a web-based survey at 4 higher education institutes finds that there are close positive relationships between the two variables:

(1) Students' self-ratings of religiosity and spirituality and

(2) Their parents' religiosity and spirituality.

Zabriskie (2005) believes that college students will be greatly influenced by their parental religious beliefs and spiritual upbringing. Moreover, the findings indicated that the impacts of maternal religiosity and spirituality are greater than the paternal religiosity and

spirituality about 3 times.

3. Religions

There are inconsistent findings regarding the relationship between religions and

spirituality in different studies (Flannery, 2012). In the categories of religious beliefs, there is

an inclination for the students with Catholic and other religious beliefs to have higher

spirituality than those without any religious affiliation (Flannery, 2012). However, religious

belief was the only demographic variable in Flannery's study (2012) that did not have a

substantial impact on a student's expectation about their academic success.

However, the findings of the study carried out by Howden (1992) indicated that there

was a weak positive relationship between total SAS (Spirituality Assessment Scale) scores

and religiosity. Furthermore, it showed that there was no substantial relationship between

total SAS scores and frequency of participation at religious activities, such as worship, prayer

and Bible reading. Howden (1992) agreed with the findings of the similar studies (Banks et

al., 1984; Burkhardt, 1991; Carson, et al., 1986) that people may or may not display their

spirituality in form of religions.

In the study of Zabriskie (2005) at higher educations, students generally assessed

themselves more religious and more spiritual than their peers in their college. It is

inconsistent with findings of Cook et al. (2000) that students graded themselves less religious

and spiritual than their peers. The findings indicated that the largest percentage (over 40%) of

participants recognized as both religious and spiritual. About 33% of the participants

identified inclined spiritual but not religious. However, a little number (14%) of participants

claimed that they are not either religious or spiritual. Also, less than 5% said that they are

religious but not spiritual. In the study, participants described religiosity and spirituality as

dissimilar concepts (Zabriskie, 2005). They depicted religiosity as a set of meaningful

exercises, with trust in the Creator or God, carried out in religious institutions. From the

perspectives of participants, spirituality is thought as a connection with a super being, a close

relationship with the Creator and recognition of the great authority in the universe. The

models were theorized to examine the linkages between spiritual and religious identities and

perceptions of participants.

4. Religious &/or Spiritual activities

There are inconsistent findings for the relationship between students' spiritual wellbeing

and their participation for religious and/or spiritual activities. Some studies indicated a close

relationship between students' spiritual wellbeing and their participation for religious and/or

spiritual activities (Astin et al., 2010; Constantine et al., 2006; Lips-Wiersma, 2002).

However, Howden (1992) and Wong (2002) both found no relationship between spirituality

and frequency of participation on religious and/ or spiritual activities in their studies.

For the studies that prove a close relationship between students' spiritual wellbeing and

their participation for religious and/or spiritual activities (Astin et al., 2010; Constantine et

al., 2006), they think that students who regularly take part in charitable activities or religious activities, normally have higher scores in spiritual quest (Astin et al., 2010). It is because students can easily understand others and they can learn how to take care of and to love others. Students can develop the inner quality of life through these activities. The study conducted by Constantine et al. (2006) found that spiritual and religious activities, such as prayer, meditation, Bible reading and worship, provided positive thinking and spiritual powers. It also relieved academic and career-related pressures. It explained why college students with religious/spiritual beliefs in America would perform better in both academic and career fields. The finding is consistent with the conclusion made by Lips-Wiersma (2002) that an essential element of spirituality, the route of connotation constructing, is meaningfully analytical of career activities, such as career planning, career selection and career transition.

Constantine et al, (2006) found that college students always used prayer, worship, and Bible reading to cope with the difficulties and challenges from their jobs. Their works are thought as an implementation of their spiritual values in their studies and career. For instance, they serve clients and treat colleagues with love and care. It is because they believe they are following their calls and orders from God in order to fulfill their mission assigned.

5. Part time job experiences

There are positive effects of job experiences on the holistic development of students (Astin et al., 2010). The study was conducted in 2003 by Astin et al. (2010) shows that

students with internships will have higher scores on Spiritual Quest than students without internship. Internships are provided to undergraduate students in some programmes, such as social work, hotel and tourism, accounting, law and medical science. It is because students can learn how to cooperate with others and deal with difficulties. They can think about the value of their job, the meaning of their studies and the purpose of life. It can also give students opportunities for self-reflection. Job experiences bring growth to students.

6. Volunteer's activities (Non-religious activities)

There are closely positive associations between spirituality and participation for volunteer's activities but negative relationship between spirituality and their involvement in worthless entertainments (Arafat, 1974; Astin et al., 2010). These meaningful activities (Hospital visits, elder home visits and charitable events, such as money donations), would greatly enhance and promote students' spiritual developments. The intellectual self-confidence of students will be largely increased since students can learn how to care and love others as well as understand the meaning of "it is more blessed to give than to receive". The holistic development can be promoted on campuses through the series of volunteer activities and charitable events. There are direct positive impacts on self-confidence from self-reflection to further develop the methods of educating in students to have a greater understanding about him or her and the world.

Conversely, some of activities, such as organizing student unions or student associations,

watching many television programmes and playing electronic games for a long time, would

have adverse impacts on students' academic performances. The findings are consistent with

the study done by Arafat (1974). For the activities of student unions, students would be very

busy and stressed. It is because they have to get votes for the elections and they have to

organize activities for members of their clubs or societies. It is difficult for them to enjoy

learning for their personal growth, and it is easy for them to distort their friendship at the

university campus. In addition, some terrible disasters, such as school shootings in the United

State of America and Metro killing spree in Taipei, are closely caused by distorted personality

and unhealthy spiritual wellbeing. To some extent, these disasters are closely linked with

these worthless TV programmes and violent electronic games.

7. Gender

There is a close correlation between gender and spirituality (Astin et al., 2010; Dennis et

al., 2004; Ferraro and Kelley-Moore, 2000; Hayman and his colleagues, 2007; Jacobs-

Pilipski et al., 2005; Levin et al. 1994). The study conducted in 2003 by Astin et al. (2010)

finds that female respondents are almost certainly to rank higher ratings on Spiritual Quest

than male respondents, both at the time they just enter universities and three years later. The

student respondents, who place higher priorities for wisdom and friendship, would be

inclined to search for the mysteries of life and death.

Also, the study conducted by Dennis et al. (2004) to examine the spirituality of college

students in 524 Northeastern U.S. Colleges finds that female participants got higher scores in

spirituality than male participants although there was generally a middle level of spirituality

among the participants. In addition, female participants were reported to have a clearer

meaning of life and a stronger desire for their future lives compared with male participants.

Also, female were more satisfied with the existing life. Therefore, female students are more

spiritual. Conversely, in the study it shows that male students have less individual goals,

uncertain meaning of life and ambiguous personal identities. Obviously, male participants

lack of spirituality.

For the study conducted by Dennis et al. (2004), there is a 7-point Likert-type scales for

each of the 48 questionnaire items. The ranges are from "strongly agree" (7) to "strong

disagree" (1). The LAP-R, which was developed by Reker (1999) as the Life Attitude Profile,

is employed in this study. The LAP-R is counted and summarized in terms of 6 subscales and

two composite scales:

1) Purpose [PU]

2) Coherence [CO]

3) Choice/Responsibleness [CR]

4) Death Acceptance [DA]

5) Existential Vacuum [EV]

6)   Goal Seeking [GS]

Two composite scales include: (Personal Meaning Index [PMI] and Existential

Transcendence [ET].

The findings show that there are substantial differences about the PU, CO and EV

dimension between male and female students. Female participants had higher scores than

men for Questions in the PU subscale. It indicated that the female students alleged that they

had a better sense of lives and are satisfied with their current quality of life compared with

male students. Also, there are higher scores in most of items on the CO for women compared

with men. It is because female participants are willing to accept the reality and realize the

limitations of human beings. In addition, male participants have significantly higher scores

than that of female counterparts in EV. It means that male, who are commonly graded for

higher scores in EV, would mostly have lower identity consciousness and focus. It is

consistent with the below findings in this study. For example, people without a clear direction

and meaning in life, would always easily get lost in life. Certainly, they would tend to have

less self-direction, self-actualization and a lower self-image. On the other hand, female

respondents have a higher tendency to think positively and work actively.

Hayman and his colleagues, who investigated the relationships between spirituality,

body image, self-respect, and pressure interviewing 204 college freshmen in 2007, found that

females are more religious/spiritual than males because the impacts of spirituality to the

feelings and emotions of women are greater than men. The revised 20-item scale was used in

study. There is a range from 20 points to 120 points. The higher the scores, the higher their

spirituality. It showed a positive relationship between spirituality and self-respect. However,

it indicated a negative relationship between self-respect and pressure. It is because spirituality

can be used as buffer for tension. Also, it showed a negative relationship between spirituality

and body image. For instance, a person has a greater spirituality, thus they would have lower

body surveillance and body shame. However, female freshmen experienced greater body

image dissatisfaction compared with male freshmen.

The findings are consistent with the conclusion, a positive relationship between

spirituality and self-respect, drawn by Reinert and Bloomingdale (1999). Students, who are

more spiritual/religious, have higher self-respect (Pederson, 1998). It is because spirituality

guides to develop self-worth. The similar findings with the study done by Levin et al. in 1994

indicate that there are obvious differences between males and females about the relationship

between self-respect and spirituality. Although a close and positive relationship between

spirituality and self-respect is also found by the study (Levin et al. 1994), spirituality is

highly linked with the self-respect of females rather than males.

Ferraro and Kelley-Moore (2000) also points out that females' pursuit for spiritual well-

being more than males, especially when coping with illnesses. Jacobs-Pilipski et al. (2005)

agreed that females, who tend to actively participate religious activities, such as prayer, Bible

reading, meditation, easily recover.

8. Age and years of class

There is a close relationship between students' age and their spirituality. The study conducted in 2003 by Astin et al. (2010) finds that final year students have a higher score of spiritual quest than freshmen. It is not surprising that Year 4 students or mature students would relatively be more eager to seek for the meaning, purpose and direction of life. They would discuss the final destination, eternal life, death and mystery of the universe. It is concluded that the elder the age, the higher the spiritual quest.

9. CGPA (the relationships of students' demographics on spirituality to GPA)

The demographic variables for students' spirituality are discussed above. The relationships of students' demographics on spirituality to GPA are to be explored in the following.

There are inconsistent findings for the relationship between students' spirituality and their academic performance. Some findings show a close relationship between students' academic performance and equanimity – one of the spiritual qualities (Astin et al., 2010). In the study of Astin et al. (2010), it shows that students perform substantial developments in equanimity, thus their GPAs are inclined to get better. It is because there are direct positive impacts on the students' intellectual self-confidence from the growth in equanimity. As it is proved that this is the only spiritual/religious quality that has positive and direct impacts on

academic performance in higher education institutions. Astin et al. (2010) defined Equanimity as the emotional and psychological status of being peace and feeling comfortable. It is not surprising to note that students, who lack of equanimity, feel nervous and worried about their studies. Most likely these students have lower confidence and passion for their studies.

However, Zabriskie (2005) agreed with the studies done by Helminiak (1987) and S. D. Parks (2011) that there is a negative relationship between students' academic performance in high schools and colleges as well as their spirituality. Thus, students with higher self-rating scores of religiosity and spirituality would have lower GPA.

For the parents' education background and occupations, there are positive effects on their children academic performance (Constantine et al., 2006; Flannery 2012). Flannery (2012) noted that students whose parents have higher academic achievements, such as professional recognition (Lawyer, Doctor, Engineer) and higher degrees (Master degree and PHD degree -Doctor of Philosophy), tend to pursue spiritual satisfaction and have higher GPA. It is because parents with higher academic qualifications would easily and directly nurture their children's talents and potentials at their early ages. These parents would always encourage their children to discover the nature, explore the surroundings and understand the world, for example, joining Playgroups and playing music. Nurturing music talents in early childhood can carry richness for them to appreciate life. The study of Constantine et al.,

(2006) also found that students' academic achievements are largely contributed by their parents' academic backgrounds. For example, parents who have higher academic qualifications and professional occupations, would probably have more informative resources and financial resources for nurturing their children academically. These parents are more willing and able to employ qualified experienced private tutors for their children.

Although there are inconsistent findings for the relationship between a persons' spirituality and his or her participation on religious activities, the results of Flannery's (2012) study indicated the positive effects of religious activities to university students. It is consistent with the findings of other scholars (Zern, 1989; Walker and Dixon, 2002). He noted that university students who are committed to religious activities during their college life rather than ever before studying undergraduate studies, had got higher GPA and above average results. It is consistent with the findings done by Walker and Dixon (2002) that indicated a positive connection between spirituality, religious involvement, and the students' academic performances. There is a significant positive correlation between students' spirituality and their academic performance (measured by GPA). It means that students, who actively participate in these religious and/or spiritual activities, would probably have higher scores in spirituality and tend to have a higher GPA (good academic performance).

For part time job experiences, it indicated that students' academic performances improved as more working experience accumulated (Flannery, 2012). Students are given

more chances to practice what they have learnt -- the concepts and models in lessons through

placements, internships or part time jobs. It is an enhancement of personal growth,

establishment of team spirit and development of a whole person. It means that students with

more working experience are more spiritual and mature, and they are tended to have higher

GPA. Likewise, the findings showed that college participants, who have higher salaries in

their part-time jobs (Because they are more experienced, they can earn higher salaries) would

relatively have higher GPA.

Similarly, the findings indicate that the students with part-time jobs would tend to get

better results than students without part time jobs (Astin et al., 2003). It is consistent with the

above findings about the internships. They would become mature and independent after they

start their part time jobs. They don't only have to manage their time for studies and part time

jobs but also handle personnel matters in their part time jobs. These students would really

value their studies and concern for their future.

Regarding the participants' gender, the study conducted by Flannery (2012) showed that

males, who are typically identified as having lower spirituality, had lower level of academic

performance than females. Female students normally get higher GPA than male students

because female normally had a higher spirituality.

For the age, the findings of the study conducted by Flannery (2012) indicate that Elder

college students, who would be more eager to seek the meaning, purpose and direction of life,

have a tendency of getting higher GPAs than younger students.

2.5   Factors related to spirituality contributed to academic success

Some researches indicate the positive relationships between spirituality and education, especially students' academic performances (Astin et al., 2010; David, 2012; Walker and Dixon, 2002; Zern, 1989). Scholars think that the main components of effective learning and academic success include (1) attention/concentration (Bernt & Bugbee Jr, 1993; Grimes, 1997), (2) perseverance (Almlund et al., 2011; Farrington et al, 2012), (3) self-confidence/self-efficacy (Pajares, 1996; Zimmerman, 1995), (4) self-discipline (Duckworth, A. L.,2005; Zimmerman, B. J., 2002) and (5)interpersonal relationships (Allen, 1985; Graziano, 2007). How can students develop these qualities? Students can cultivate these good qualities and develop their potential talents through the development of spirituality.

Figure 2.6:   The background variables related to spirituality and academic success
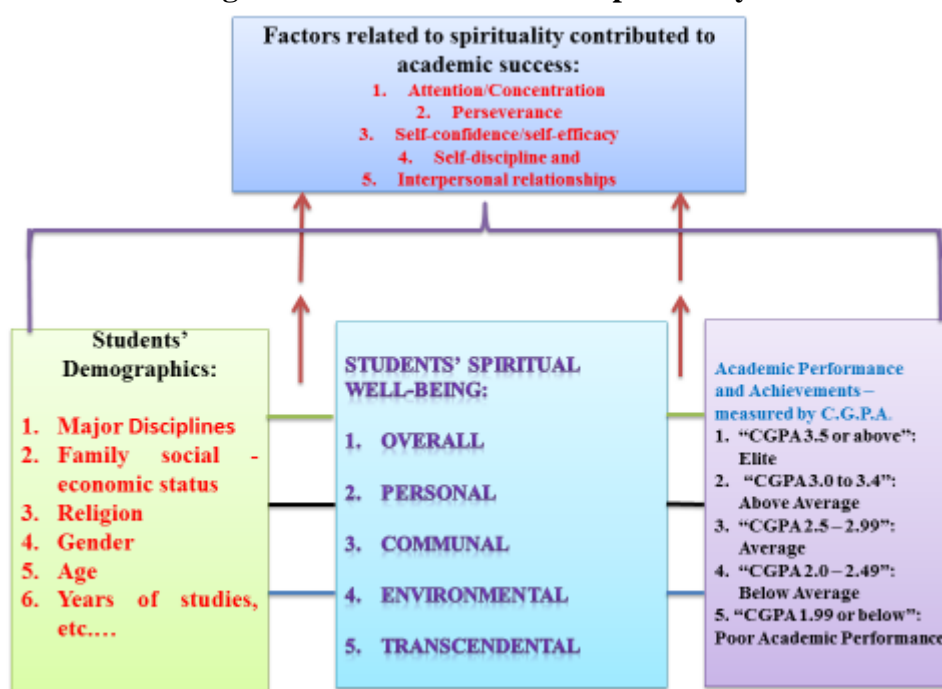
(1) attention/concentration

First of all, concentration is the necessary element of effective learning and academic

success (Bernt & Bugbee Jr, 1993; Grimes, 1997). It is essential and important to pay

attention and concentrate when people learn new concepts, theories and knowledge.   In

quiet and harmonious environments, students would easily focus on what they learn.

However, apart from the physically quiet learning atmosphere, the quietness of inner lives are

equally important for effective learning. Students learn best when there are no noises and

disturbances around them physically and spiritually. Astin et al. (2010) defined "Equanimity"

as the emotional and psychological status of being peaceful and feeling comfortable. They

point out that students, who lack of equanimity, feel nervous and worried about their studies.

The psychologist, Barkley (2005) pointed out that the numbers of patients, who got attention-deficit disorder, are largely increasing. In modern societies, such as Hong Kong, people are surrounded by busy schedules, overloaded information, over-time jobs and great pressures from work or studies, thus people, especially teenagers would tend to have serious depression problems and anxieties. Apparently, these conditions are not ideal for learning and working. Neurologists believes that negative emotional feelings, such as depression, fear and worries would adversely affect the development of children's brain and their learning (Compare et al., 2014). These students probably have lower confidence and passion for their studies. Students can easily focus on what they are learning through spirituality. Prayer, meditation, contemplation and self-reflection are useful for cultivating students' attention.

Fontana (2007) believes that meditation (including ideational and non-ideational) aims to train people's concentration, tranquility and insight.   For example, Christians would connect with God through their prayer and Bible reading, so that they can easily reach a peaceful status of their inner lives. Others can develop their concentration and reach tranquility through silent contemplation and mindfulness.

Mindfulness is the purposeful, patient and open-minded emphasis of a person's attention on the feelings, beliefs and perceptions happening in the present moment through meditational exercises (Brown, & Ryan, 2003; Langer, 1989; Segal, Williams, & Teasdale, 2012). Moment-to-moment awareness and mindfulness are usually used for spiritual

development and holistic learning (Fontana & Slack, 1997; Segal, Williams, & Teasdale, 2012; Wallace, 2007). It is because it can cultivate the harmonious integration of body and spirit and communication between the individual and the world (inside and outside) with appreciation and thanksgiving. A neurologist, Davidson et al. (2003) finds that meditation is useful for the development of the functions in brain. He finds that meditation will enhance the frequency of 'gamma wave' and also activate brain synchrony. This would really help children learning.

Students, who always have prayer, meditation, or self-reflection, would feel peaceful and tend to have better results (Astin, 2010; Flannery, 2012). Silence and quiet are the key elements of spiritual development and creative learning (Astin et al., 2010).

(2) perseverance

In addition, persistence and determination are good qualities for students to succeed in academic fields and careers (Almlund et al., 2011; Farrington et al, 2012; Oliver et al., 2007). No matter what they are going to do and what they are going to study, failures and obstacles are inevitable in our life. Persistence and determination are the chemical components for success. Persistence is always regarded as "consistency of action resulting from deliberate volition or will" (Webb, 1915, p. 60) and it is distinct from the intelligence Quotient (I.Q.) Scores. The study about young students' persistence conducted by Oliver, Guerin, and Gottfried (2007) found that students who have lower persistence, would have lower

distractibility and lower potential actions. As a result, these students are predicted to have

lower GPA because there is a close association between conscientious classroom and

academic performance.

Persistence and determination can be nurtured and fostered through the developments of

students' spirituality and their spiritual wellbeing (Walker & Dixon, 2002; Bryant & Astin,

2008). It is because persistence and determination are the common features of a spiritual

human being (ibid). People's persistence and determination can be enhanced by religious

practices or spiritual exercise. For example, Christians would pray with abstinence for a day

or a week (Fasting and prayer). 'Fasting and prayer' takes place seriously in a quiet place.

The prayers have to experience assiduous and hard feelings so as to reach to the peaceful

status and connect with God. It is absolutely not an easy task.

The practices of yoga are thought for training their persistence and determination

(Boudreau, 1972; Smith, 1975; Stueck & Gloeckner, 2005). It is because learners are asked to

have a combination of mind, spirit and body with persistence during the yoga exercises. The

posing and movement of the yoga exercises requires a lot of limb extensions and

concentration. People who are nurtured for persistence and determination through

development of spirituality, would have strong beliefs and powerful energies (Walker &

Dixon, 2002; Bryant & Astin, 2008). They would not easily give up. They would have a clear

meaning, purpose and direction of life. They believe that failures and obstacles force them to

improve, update and amend themselves to the standards of success. For example, Christian and Catholics would not worry about the difficulties and they would not fear failure because they understand what they rely on and who guides them to the way to succeed.

(3) self- confidence/self-efficacy

Furthermore, students' intellectual self-confidence and their academic performances are closely and positively linked (Abel, 1996; Abouserie, 1994; Brown & Dutton, 1995). Self-confidence in learning is defined as how sure you can successfully perform and finish the specific tasks within the required time (Chase, 2001). It is in a person's ability to enhance motivation and help himself or herself undertake more ambitious goals and persist in the face of adversity (Bénabou, & Tirole, 2005). Self-confidence is the stepping-stone of success. People with self-confidence may not certainly succeed in their studies and career, but people without confidence certainly fail in both studies and career. The studies done by Hayman and his colleagues in 2007 have shown a negative relationship between self-respect and pressure. In other words, students who have lower self-confidence, would have a greater pressure from their studies. Therefore, students would not well-perform themselves in academic studies under such great pressure.

Self-confidence is a vigorous expression of spiritual features in a spiritual person (Willard, 1996). Positive thinking, an active attitude, brave intention and an energetic spirit are the characters of a person with self-confidence (Chase, 2001). For example, Christians are

always regarded as optimists and activists. Self-confidence is closely linked with meaning, purpose and direction of life (Bryant et al., 2008; Emmons, 2003; Ryff, 1989). It is because religions always encourage people to think about life, value and death (Bryant et al., 2008; Ryff, 1989). Evangelistic meeting, testimony sharing, retreat camp are useful for helping people to think about the questions in life and find the meaning of life (Willard, 1996). For example, they would think about where we come from and where we will go at the end of the world, why we are alive here and what we have to do in our life. People who have a clear meaning, goal, purpose and direction of life, would be more confident.

Spirituality guides one to develop his or her self-worth which establishes the real self-confidence (Astin, et al., 2010). It is because spirituality helps to release pressure, develop positive thinking and active attitude, as well as cultivate intentions of thanksgiving through prayer, Bible reading and meditation. Also, religious believers would feel a greater support and power from God during facing pressure. "Be careful for nothing; but in everything by prayer and supplication with supplication with thanksgiving let your requests be made known unto God" (Philippians 4:6). Also, Constantine et al. (2006) and Mattis (2002) in their studies both agree that religion and spirituality can help people to recognize the meaning and purpose of life and their destiny. Dennis et al. (2004) believe that people without a clear direction and meaning in life would always get lost easily in life. Certainly, they would tend to have less self-direction, self-actualization and a lower self-image. On the other hand, students with

strong spiritual wellbeing have a higher tendency to think positively and work actively. As a result, they will perform well in their academic areas.

(4) self-discipline

Moreover, self-discipline is certainly an important component of academic success (Duckworth, 2005; Zimmerman, 2002). It is because learning is an ongoing process. Olympic game winners always said "self-discipline" is the core of their success. It is because they are trained for a long time, they often have to go on a diet and they always need to sleep on time. Certainly, Olympic game players without self-discipline will not perform well. Similarly, students without self-discipline cannot effectively learn knowledge and they cannot accumulate wisdom. Self-discipline is part of a healthy life and a good quality of life (Hayman et al., 2007). It is also a feature of people with good spiritual well-being (Willard, 1996). Self-discipline can be developed through spiritual exercises (Willard, 1996).

Religious believers would respect and follow religious rules, doctrines and principles. For instance, they would regularly and piously pray, worship, mediate and study. Willard (1996) in his book - *The spirit of the disciplines* thinks that there is a way of living for enabling people to connect with God and realize their highest aspirations of well-being. This way of living includes abstinence, frugality, chastity, confidentiality, tithing, Bible reading, adoration, celebration, meditation upon God's word and ways, service to others, prayer, fellowship (Christian association), acknowledgement of guilt and obedience. Through such

practices of spiritual discipline, people will not only reach the spiritual highest level, but simultaneously, their self-discipline also will be enhanced physically and spiritually. It is because the above exercises require people's regularity and tenacity. For example, "service to others" requires that Christians always have to help people in need. It is not for one or two times only. Also, Christians have to follow 'tithing' which is a one-tenth part of income, voluntarily paid as a contribution to churches. It is not for one or two months only.

Moreover, from the non-religious perspectives, people's self-discipline can be developed through the development of their spirituality, such as by practicing 'Tai Chi' (Taijiquan). 'Tai Chi' is not only a physical exercise but also a spiritual exercise (Jin, 1992; Liu, et al., 2003; Wolf et al., 1996). The Chinese ancients believed that everything in the world is composited from 'Yin' and 'Yang' states, and all things move between 'Yin' and 'Yang' (Wolf et al., 1996). This mutual transformation process between the two is Tai Chi (Wolf et al., 1996). 'Tai Chi' is a Chinese traditional philosophy which emphasizes the integration of the human being and the natural environment (Liu, et al., 2003; Wolf et al., 1996). For practices of Taijiquan, learners are asked to control their wills and beliefs, adjust their breathing and match limb movements to achieve balanced, coordinated and harmonious status in body, mind and spirit. Learners are also asked to coordinate with 'Yin and Yang' and the Wu Xing (The five elements: i.e. Gold, wood, water, fire, earth) for their practices (Liu, et al., 2003; Wolf et al., 1996). For example, in the early morning (dawn), there is a 'Yang' state, in which there is full

of fresh oxygen, warming sunlight, fragrant flowers and sounds of bird singing. It is why so

many elderly practise 'Taijiquan' in the early morning (at around 5:00 a.m. to 6:00 a.m.).

Therefore, people can easily develop their self-discipline through this exercise.

The research of Hayman et al. (2007) showed that students' low levels of spirituality

were highly linked with their poor quality of life, such as rare physical exercise, poor health

(consisting of mental and physical problems), low self-esteem, alcohol and drug abuse and

depression. Students with strong spiritual wellbeing and spirituality would have a good self-

discipline. For example, people with religious beliefs or spiritual quest, would be punctual for

their lessons, responsible for their duties and diligent for their studies. They would rarely

abuse drugs and alcohol. They don't only emphasize on the development of their physical

wellbeing but also spiritual wellbeing. Therefore, they would have good quality of life, such

as regular physical exercises, healthy diet habits and sufficient sleeping time. The majority

(over 70%) of students who are accompanied with spiritual quest, would not always be absent

for lessons (Astin et al., 2010). It is because these students really know and understand what

they are doing. They don't want to waste their valuable time.

(5) interpersonal relationships

Besides, interpersonal relationships are important and necessary for academic success

(Graziano, 2007). It is because there are many group projects and group presentations in

tertiary educations, such as colleges and universities. The performance in the above group

assignments and students' academic performances are closely related. Interpersonal skills, which are one of the social skills, are used to build up good and long-lasting interpersonal relationships (Gist, et al., 1991). They are the basic and essential techniques we always use to communicate and interact with other people (Gist, et al., 1991; Johnson, 1972). They generally include communication, expressions, responses and the way one treats people. Students with good interpersonal skills tend to have good team spirits and effective learning for their study groups and their group tasks (Allen, 1985). Thus, good interactive learning atmosphere can be well established.

There are close relationships between interpersonal relationships and spiritual quality (Willard, 1996). Students' interpersonal skills can be developed through meaningful activities, such as volunteer activities and charitable events. For example, famine participants have to go barefoot to experience what many hungry children suffer day by day. Famine participants will empathize with the hungry children.They would react to the needs of hungry children with love and action. For child sponsorship, a unique and great relationship between the sponsors and the sponsored children starts. We would not just give them money but we would also share our life and love with our sponsored children through mails and visits. It is a mutual relationship and interaction. Through such meaningful activities, people can develop noble spiritual qualities, such as compassion, sympathy, forgiveness, respect, gentleness, honesty, sharing and passion. All of these are the elements of developing good interpersonal

skills for people (Gist, et al., 1991; Johnson, 1972). People get to know how to care for others and love them - "Have love for your neighbor as for yourself" (Matthew 19:19) as well as experience the meaning of "it is more blessed to give than to receive" (Acts 20:35). Students with strong spiritual wellbeing or spirituality would probably treat others as for themselves. This would make our learning environments very warm and harmonious.   These positive and active learning atmospheres will bring academic success (Ramsden, 1979).

2.6   Conclusion

Over the past decades, there are still arguments whether spirituality is linked with religions or not. There is no one general acceptable definition for spirituality based on the reviews of the existing literature. In accordance with the related researches, spirituality is the most important to health and it can be regarded as the major engine for the purposes, dreams and meanings of life.

There are many different models and theories to assess people's spirituality. Thus, it is very challenging and difficult to select the most suitable model to measure one's spirituality but a better tool - Spiritual Health and Life-Orientation Measure (SHALOM), which developed by John Fisher, will be used for the assessing participants' spirituality in this study. It is because SHALOM is fit to the objective and situation of the study.

Under reviews of the related literature, a relationship exists between spirituality and students' academic performances in western countries. However, the literature review further indicated

a little bit of studies exists compared with the current study. It is necessary for additional

empirical research because of the limited number of related researches in this field.

The following chapter will provide discussions about the methodologies of the

researches conducted in the selected sites for the targeted samples. The aims and natures of

quantitative and qualitative research approaches used in this study will be further discussed.

Data collection process, ethical consideration data analysis and analytic procedures will be

also covered in details in the next chapter.

CHAPTER THREE

METHODOLOGY

In the previous two chapters, I have discussed the background of the research and provided a literature review that outlines key issues in the study of the importance of spiritual well-being and spirituality.   In this chapter, the research design and methods used in the study are going to be explained and described.

The quantitative research methods involve values, numbers or figures to identify the variables (Robson, 2002). Also, quantitative studies, which collect and process data, can illustrate a link between the variables (Creswell, 2009).   In contrast, qualitative research methods are usually used to examine each variable thoroughly and compare the outcomes with the findings of quantitative methods (Yin, 2009). Therefore, both advantages can be gained if mixed research approaches are used in the research because a fuller picture can be drawn with fuller and richer data (Creswell, 2009).

In this study, quantitative researches (a self-designed questionnaire and Fisher's SHALOM model) are conducted at the first stage to identify whether there is any relationship between students' spiritual well-being and academic performance and whether there is significant differences among students' spiritual wellbeing due to their different CGPAs. Then, the findings of these questionnaires would be incorporated with the qualitative researches (11 focus groups) in the second stage to supplement and enrich the analysis. This

triangulation draws a fuller picture with the different perspectives. Also, the qualitative study could help to answer the second research question – "how are the background variables related to spiritual well-being and academic performance?" Through the application of a mixed research approach (triangulation), it can offer comprehensive conclusions from different angles (Mason, 1996), the validation of the results (Seliger and Shohamy, 2000) and it leads to consistent comments (Johnson & Turner, 2003).

There are five main sections in this chapter:

1) The justification for selecting a mixed research approach;

2) The considerations for the key issues such as the aims of the study, and the chosen research paradigms, triangulation and ethical considerations;

3) The explanations of the research design used in the study;

4) The ways and techniques adopted for data collection; and

5) The steps and appliances involved in the data analysis.

3.1   Methods and justifications

There are two schools of thought about research methodology: Quantitative and Qualitative approaches. Quantitative research methods are used to answer normative questions, presented in numerical figures, where qualitative research methods are used to answer interpretive questions. It is important and necessary to select a research method that

fits the research questions especially in the stage of developing a research study.

Quantitative research methods conducted in educational research focus on specific and narrow questions, quantitative data collections and analysis as well as objective research approaches (Creswell, 2005). Quantitative research methods can be used to test a series of previously determined assumptions about the university students' academic performances and their spirituality. Qualitative research methods used in educational research focus on broad and general questions, qualitative data (such as words, text languages and voice conversations) and analysis as well as subjective research approaches (Creswell, 2005). Qualitative research methods can be used to explore the participants' in-depth understandings, knowledge, experiences and concerns of their studies, spirituality and learning and teaching effectiveness.

Quantitative studies are also used in recent researches for the assessment of the relationship between students' academic successes and their spiritual well-being (Flannery, 2012). Based on the literature reviews of the recent and related researches, the questionnaire was designed and developed to collect a sample. However, quantitative tools, such as the questionnaires, would limit the answers to a fixed number of given statements. On the other hand, qualitative tools, including focus groups, document analysis, individual interviews and classroom observations, can supplement the current research by narrative and informative data.

The mixed approach was selected in this study because the different research questions, such as "What", "Why" and "How" would be asked. Therefore, the analysis of the different perspectives can be conducted for the research (Deng, 2003). A large number of university students in Hong Kong were selected as targeted interviewees, therefore, a comprehensive and generalized conclusion would be found, and such findings are valuable in terms of explaining the current phenomena. One of the features in the mixed methodology is to focus on the progress, explanation and expansion of the results from one approach to another approach (Greene et al., 1989). This study would also like to enrich its findings by using both approaches. This study plans to the first gained some generalized results from the quantitative research method, and then used qualitative methods, such as the "follow-up interviews" and "focus groups" studies, to provide a full picture with more descriptions and explanations. A generalized finding and rich information for the research questions would be given by the mixed approach. A research about life and religious education in United Kingdom from 1988 to 1997 has been conducted by a mixed approach (Johnson & Christensen, 2010). The mixed approach used in this study was to be reviewed and discussed in the following.

3.1.1   What is research?

There are some basic terms to be defined first, such as research, methodology, research methods, and research instruments. In this research, methodology is defined as the theoretical assumptions and logical directions which directly guide for the ways of the research (Wisker,

2008). Research methods refer to the useful means to gather data, whereas research

instruments mean specific strategies or techniques, such as questionnaires, case studies, focus

groups, interviews, observations, etc.… (McKenzie, 2001) The key guideline for the selection

of research methods is its appropriateness for the topic.

What is research? There are many different definitions for the term – research, and its

descriptions and classification have varied over the years. Boomer (1987) defined research as

a process of systematically pursuing the matter and rationally thinking answers. Nunan

(1992) believes that research is an efficient progress of investigation with three elements (1)

identifying the questions with the hypothesis, (2) collection of raw data, (3) examination of

data and turning data into information. Research is usually theorized as the organized,

objective, effective and consistent collection and analysis of data for problem solving,

construction of theories and contribution to the current knowledge foundations (Farmer &

Rojewski, 2001).

3.1.2   Quantitative and qualitative research approaches

The relationship between the two variables (such as the spiritual well-being and

academic performance), can be assessed by quantitative researches (Creswell, 2003). There is

a positive relationship between spirituality and students' learning and experiences by the

quantitative research conducted by Fahy (1992) and Flynn (2002). It is common and popular

to use questionnaires to investigate the interviewees' feelings, perceptions and how things

impact them (Bruns & Mogharreban, 2007). For example, quantitative research methods and

the numerical data analysis would be used to deduce answers and assist to reject assumptions

of the research questions from the view of the empiricists. Numerical inferences can be

obtained from the participants' propensity of answers through set questionnaires. It is quite

common for social studies.

There are some advantages for using questionnaires in the studies. It is easy and

effective for the researchers to conduct a survey for a large and representative sample

(Creswell, 2005). The scholars in social science, especially those in the education field, tend

to design questionnaires because of its efficiency to examine more than one thought at once

in the research. Nevertheless, the design is not always capable and fit to offer detailed

description and explanation of the collected data. Thus, additional effort is required to

interpret the findings and further investigation is needed because it lacks the estimation from

the real situations.

It is argued that qualitative researchers play important roles in the positivist model of

research, especially for natural sciences (Marshall & Rossman, 1995). The qualitative

researchers can have deeper insights into the research topic, especially for social phenomena

such as human behaviors. These insight and thoughtful understandings cannot be gained by

only quantitative instruments, such as numbers, data, statistics, etc.… (Woods, 1999).

Qualitative researches provide rich description by inductive processes. However, there are

some disadvantages of these methods, such as the intrinsic subjectivity in it. There will be

biases for the validity and reliability of the findings (Eisner, 2001). It is flexible and

diversified in design and ways such as video analysis, ethnographic interviews, case study,

documentation analysis, focus groups, interviews and classroom observations. Combination

of the ways above is also possible. Unlike quantitative data collection, data collected by

document analysis, informal observations, school visits - classroom observations, focus

groups and face-to-face interviews offer sufficient descriptions and explanations to the

circumstances (Mertens, 2005).

There is still no absolute answer for the selection between qualitative and quantitative

research methods; and the accuracy and the appropriateness of the research method are the

main concerns of the researchers (Merton and Kendall, 1953). The correlations between the

variables can be shown by the findings of the quantitative research and the results from the

quantitative research can be supported, enriched and supplemented by the qualitative

research. Therefore, a mixture of quantitative and qualitative approaches is suitable for this

study.

3.1.3   Aims of the study and triangulation

This study was to explore the relationship between the academic success and spiritual

well-being of students in Hong Kong Universities. There are a number of researches which

focus on students' academic performance in the United States using quantitative methods

(Carson et al., 1986; Rice, 2006; Bell, 2006). On the other hand, the students' spirituality was evaluated through qualitative studies. It is difficult to have a clear assessment exclusively by either quantitative or qualitative research approach. Therefore, it was why the mixed research method was selected. It would be very dangerous and the results would be uncertain if only either a quantitative or qualitative approach is used, because it is high possible that there is a loss of useful information. Also, the study was to explore what background variables related to spiritual well-being and academic performance, it would be better to focus on qualitative researches and make use of quantitative data for supplementing, supporting and enriching the findings from qualitative study.

3.1.4   Aims of the study in relation to the chosen research paradigms

The aim of the study was to study the relationship between university students' spiritual well-being and their academic success in Hong Kong. All of the participants of the study were full-time (4 Year Curriculum) undergraduate Year 2 and Year 3 students from all disciplines at Hong Kong's higher education institutions funded by the University Grants Committee (U.G.C.). They are public institutions funded (Public Funds) by the Government of Hong Kong Special Administrative Region (HKSAR) (Education Bureau, HKSAR).

Year 1 and Year 4 undergraduates were excluded from this study because the surveys were conducted in the first semester (from September 2014 to December 2014) of a new academic year. Therefore, Year 1 students did not have their academic results yet since they

were freshmen. For Year 4 students, some of them got placements or internships and they

were very busy with their interviews for their future career during the periods of our

interviews and surveys. The response rates would be adversely affected. Postgraduate

students were also excluded because of their diverse backgrounds and different experiences,

thus this was to avoid a great number of variables which easily confuse our data analysis.

There are 8 higher education institutions in Hong Kong:

1.   The University of Hong Kong,

2.   the Chinese University of Hong Kong,

3.   the Hong Kong University of Science and Technology,

4.   City University of Hong Kong,

5.   the Hong Kong Polytechnic University,

6.   Hong Kong Baptist University,

7.   Lingnan University and

8.   The Hong Kong Institute of Education.

Three universities in Hong Kong were selected for the study since the 3 selected

universities were common and typical representatives. First, they are all universities as higher

educations in Hong Kong which offer the same level of Bachelor degree programs in

different disciplines. Secondly, students in these three universities experienced certain

impacts of spirituality in their studies. Furthermore, according to the admission grades (public

exam results) of their students (appendix 2) and the university ranking done by Public

Opinion Programme (POP), The University of Hong Kong (appendix 3), they belonged to the

upper quartile, median and lower quartile respectively in the statistics. X, Y and Z would be

used as the names for the 3 selected universities. The findings of the study from the 3 selected

universities could generalize the outcomes and analysis. 400 sets of questionnaires, including

(1) demographic and (2) Fisher's SHALOM would be required for each targeted university.

All of the participants were volunteers and recruitment would be done through particular

networks, such as Students' Unions, Student Affairs Office, colleagues, friends, classmates,

teachers, different departments and different students' societies of the 3 selected universities.

The questionnaires were prepared in paper form. Referral by the participants would be

recommended. Thus, in the study, convenience sampling and snowball sampling were

applied.   Due to the limited resources, scientific sampling approaches, such as random

sampling, would not be used. However, the qualitative research methods would be used later

to supplement, enrich and support the findings of the quantitative research methods.

In my study, snowball sampling was used, it made use of the personal connections of the

author to invite participants from other institutions, and through invitations in social

networks, the size of the snowball increased as it rolled downhill. This was because I was

working in the higher education sector in Hong Kong and also in one of the 3 selected

universities. I could easily access to the targeted participants in my university and I have personal social networks in the two selected universities as I had worked in this sector for ten years. Therefore, snowball sampling was suitable for identifying respondents in this study. With this sampling method, it assumed that the phenomena to be studied was randomly distributed in the selected population (UGC Funded degree sector).

Even though this study may not easily generalize the picture, it could provide an exploration in the 3 different Universities for the phenomena. Despite this limitation, the research is still necessary. It is because it can portray the relationship of students' spiritual wellbeing and their academic performance in typical cases – the 3 selected universities. The specific features of the relationship of students' spiritual wellbeing and their academic performance can be explored. The 3 selected universities are common and typical representatives because they belong to the upper quartile, median and lower quartile respectively in the statistics. Also, this is the pioneer research in the research area in Hong Kong, and this research allows people to examine the role and effect of a students' characteristic (spiritual well-being) on academic performance.

There were some instruments used in this study, such as the questionnaire and focus group interviews. The study was bound by the following rules and principles:

1. The participants' anonymity would be preserved in every step of the study in order to ensure that their answers were responded honestly and accurately.

2. All of the participants in the study were volunteers and they were willing to join in. There would not be pressure or stress added to the participants during the interviews.

3. The participants fully understood the questions of the research and they were able to answer the questions correctly. There were no misleading questions or misunderstandings in the study.

4. There was no bias in the study.

There are some frameworks for the mixed approach applied in this study. The applications of the mixed approach would have both of the advantages and reduce both methods' disadvantages (Johnson & Turner, 2003), particularly in social studies. The mixed approach can justify the findings and clarify the different areas of a phenomenon (Johnson and Turner, 2003). However, there are some criticisms about the mixed approach, such as confusion of another school of thoughts about the practices of the combined method. The mixed approach was applied in this study for all stages, such as data collection, coding, data analysis, etc.… It is because it is getting more and more popular to use the mixed approach (McMillan, 2004).

3.1.5 Ethical consideration

It is necessary and significant to have ethical considerations in any study (Merriam, 1998). The interviewees' privacy cannot be invaded by any academic intentions (Stake,

2000).   In this study, there were factual and estimated data about the university students' spiritual well-being and their academic records, therefore the theme was very sensitive and personal.   In order to ensure that the process and findings in the study are reliable and effective, ethical guidelines and standards must be strictly followed (Hesse-Biber & Leavy, 2006).

For the first part of the study, the questionnaire study was conducted from September 2014 to December 2014 for Year 2 and 3 students of the Four Years Undergraduate degree Programme in the selected universities. The participants of the questionnaires would be kept anonymous because there were no requirements for the names of the candidates and there was no way for the researcher to trace a specific form from the participants.

For the second part of the study, focus groups discussions was conducted from January 2015 to March 2015. There were requirements for written consent with detailed explanations of the purpose and procedure of the study for the individual students' participation from the 3 selected universities in Hong Kong. The student participants would know there was no harm and invasion to their privacy. The participants of the focus groups would be recognized only by a reference code to maintain privacy and confidentiality. The process of their discussions would be recorded by a recorder and there would be simplified transcription of the discussions. Permission for voice recording was sought before the focus group discussion started.

Each participant would be guaranteed that the participation was completely voluntary and they were allowed to withdraw from the research whenever they like. They would be given a chance to ask questions about the research and think carefully before they really joined the research.

So as to protect the data of the questionnaires and focus group discussions in the study, only the researcher was authorized to access the hardcopies and softcopies of data. I was the only researcher in the study. Nobody else was allowed to access to the data. The data collected would not be shared to any other person. The physical copies of these questionnaires and focus group discussion (transcriptions) would be filed and kept safely in the private data cabinet at my home. The analysis of the data would be also electronically saved as softcopies in my computer at home. A second copy would be created for backup. Once again, only the researcher was authorized to access the softcopy of the data.

3.2   The research design

A successful research highly depends on the research design no matter what topics the researchers are going to study. It is because a good research design can guide the direction and help to find out the answers of the research questions for the study (Creswell, 2005). As discussed in the previous section, the most suitable research design in this study was the mixture of quantitative (Questionnaires) and qualitative approach (Focus Group Discussions). The main focus of the research questions in this study was: explore the relationship between

Hong Kong University students' spiritual well-being and their academic achievement. The research questions that derived from the main focus of the research:

Question 1: What is the relationship between university students' spiritual well-being level and their academic performance measured by 'Grade Point Average'?

<A> what is the relationship between university students' spiritual well-being level (overall level) and their academic performance measured by 'Grade Point Average'?

<B> what is the relationship between university students' spiritual well-being level (specific domain) and their academic performance measured by 'Grade Point Average'?

Students' spiritual well-being in the personal domain and their GPA,

Students' spiritual well-being in the communal domain and their GPA,

Students' spiritual well-being in the environmental domain and their GPA, and

Students' spiritual well-being in the transcendental domain and their GPA?

Question 2: If there are any relationship between university students' spiritual well-being level and their academic performance measured by 'Grade Point Average', how are the background demographic variables, including major discipline, family socio-economic status, and religious beliefs related to spiritual well-being and academic performance measured by 'Grade Point Average'?

<A> how are the background demographic variables, including major discipline, related to

spiritual well-being (overall levels) and academic performance measured by 'Grade Point Average'?

<B> how are the background demographic variables, including major discipline, related to spiritual well-being (specific domains) and academic performance measured by 'Grade Point Average'?

Students' spiritual well-being in the personal domain and their GPA,

Students' spiritual well-being in the communal domain and their GPA,

Students' spiritual well-being in the environmental domain and their GPA, and

Students' spiritual well-being in the transcendental domain and their GPA?

Data would be collected to answer the above questions, two types of data would be collected: questionnaires, and focus group discussion. In the following, each type of data collection would be discussed in details.

3.2.1   The questionnaire

Questionnaires are one of the common tools in educational research studies (Creswell, 2005). It is because there are some advantages:

Firstly, questionnaires can be conducted in a huge population and a general picture of the different views of the interviewees can be easily generated.

Secondly, the candidates in the questionnaires remain anonymous. Thus, the answers and responses are relatively precise and reliable.

Thirdly, the questionnaires would be distributed by email, online format (the participants can do in website) and on the research sites (university classrooms). These ways of information gathering are very efficient and economical.

Using questionnaires for survey is one of the quickest ways to collect data and it is easy to have a comparative figure (Johnson & Turner, 2003). Questionnaires can generate a general picture of the data gathered (Creswell, 2009), offer truthful and precise answers (because participants are kept anonymous) (Hoe, 2008), collects data in a quick and fairly low-cost way (because the questionnaires can be sent to a large group of targeted participants at a time) (Mertens, 2005) and provide effective data analysis (because of the computerized data summary programs, i.e. SPSS) (Bryman & Cramer, 1997) Therefore, questionnaires were used in this study for the selected university students in Hong Kong.

There are some guidelines and steps for developing a valuable questionnaire (Malhotra, 1996):

• propose, develop and assess the draft of the questionnaire,

• prepare and structure evaluation measures of the draft,

• pretest, review and formulate final draft, and

• deal with questionnaire management.

Questionnaires are to be tested, modified and finalized for the validity of the instruments

(Creswell, 2009) before an actual study is really implemented. A pilot study is important for the process of a study (Neumann, 2000). There were two main objectives of the pilot study in the study. First, the pilot study was aimed to gather comments from participants about the problems and clearness of the questionnaire. Second, the pilot study was aimed to conduct an introductory consistency experiment and associated numerical assessment.

There are different types of questions used in questionnaires: open-ended, semi-ended and closed-ended questions. In this research, structured questions were used instead of open-ended questions in the questionnaire (Peterson et al., 1982). There were two parts for the questionnaire in this research: (1) the questionnaire on personal and demographic information and (2) Spiritual Health and Life-Orientation Measure (SHALOM) developed by Fisher (2003). Structured questions are very easy for quantitative analysis and statistical comparison (Bryman & Cramer, 1997). Conversely, it is very difficult and complicated to analyze and explain the findings by using open-ended response format (Ticehurst and Veal, 2000).

The wordings, sentences, keywords and phrases used in the questionnaires should be clear and short (Neumann, 2000). Long and intricate questions could only lead to misunderstanding and confusion. The questionnaires are designed and presented in a simple format so as to lessen the time used by the participants and increase the respond rates. It was proposed that each questionnaire, including 2 parts, would have to be completed within 30 minutes. The questionnaires would be given to the participants with the invitation letter. The

invitation letter was used to (1) seek permission, (2) explain clearly the purposes and procedures of the study and (3) guarantee all data given from the participant would be kept confidential (Neumann, 2000). It is highly recommended that an expert panel, consisted of experienced and professional relevant consultants, such as educational psychologists, senior teachers, scholars would review, revise and edit the questions, focus, formats and contents of the questionnaire. The questions of the questionnaire are always misunderstood by the participants (Creswell, 2009). The questionnaire should be reviewed by the experts in order to ensure the questions are as understandable, suitable and clear as possible. The respond rates of the questionnaires are usually low (Gall et al., 2003).

The Design framework of this study: Initially, questionnaire designs (demographic part) and the pilot study were conducted, the design of the questionnaire was conducted based on the literature review. For each question, the validity would be tested and verified by different specialists, such as principals, teachers, educational experts and religious educators. Then, 5 university students was invited to join the pilot study. The interview protocol was designed in this stage. The focus of the pilot study was the design of the questionnaire.

Based on the feedbacks and comments of the pilot study, the finalized questionnaire consisted of three areas:

1.   The students' demographics (age, gender, experiences, academic backgrounds and

     qualifications)

2.   Students' religion and spirituality

3.   Schooling and learning

Procedures and samples: The draft of the questionnaire (demographic) was sent to experts for review and then the questionnaire was modified and confirmed finally. The instruction was to be set up with the finalized questionnaire for data collection of the pilot study. The pilot study got an ethics approval and consent for the proposal research to ensure that no harm or damage was caused to participants. It was proposed to have an equal and balanced number of different students with different backgrounds in the sample. In order to have an objective analysis and a deeper investigation in this study, students from different departments and from the 3 selected universities would be equally and proportionally invited for the questionnaire. For example, questionnaires would be conducted to 400 students (200 students in Year 2 and 200 students in Year 3) from different departments in each university. Then, the total sample size of the questionnaire was 1,200 students. Finally there were 1,130 questionnaires collected from 1,800 questionnaires distributed for the different departments of the 3 selected universities. There is a contingency plan if the questionnaires collected are less than the minimum requirement. As I was going to employ the statistical tests such as chi-square test, test of mean(s) (t-test, One-way ANOVA or MANOVA); therefore, the sample size used in this study was determined basing on the expense of data collection, and the need to have sufficient statistical power. According to Kenny (1987), if I would like to have strong

support for my study, and to attain a power value of 0.95 with moderate effect size (0.5),

Kenny suggested to have a sample range from 105 to 651. In this light, if I failed to recruit

1,200 participants in total or 400 participants in each selected university for my study, I had

to have at least the range from 200-400 participants. Finally, 400 would be the minimum

sample size for my study.

Limitations and implications: The questionnaire was chosen for the research questions as it

would take less time to collect a lot of data for reasoning and additional inferences. The

questionnaire in this study was bilingual: in English and Chinese. The draft of the

questionnaire was given to experts' assessment for justifications, validations and reliability of

the contents. For the reliability and validity of the research instrument – SHALOM,

Cronbach's coefficient alpha and Principal Component Analysis were conducted. Even the

Chinese version of SHALOM were used for the study of pre-service teachers in Hong Kong

(Wong and Fisher, 2013). However, both Chinese and English versions of SHALOM used

simultaneously in Hong Kong in a study never conduct before.

Another part of the questionnaire is Fisher's SHALOM which is used commonly in

many schools in a considerable number of countries. SHALOM is very manageable (Fisher,

2009). Its questions are clear and comprehensible. SHALOM is also regarded as the most

favorable instrument for assessing the spiritual well beings of participants (Meezenbroek et

al., 2012).

3.2.2   Focus group

Focus group is a kind of data collection in forms of group interviews and group discussions in which a mediator guides a discussion with a number of people to share deeply and interact with others about the same topic (Krueger & Casey, 2000). It is very efficient and fast to get the relevant data from different persons simultaneously (Kitzinger, 1995). The mediators always play a role as a facilitator for the focus group discussions (Krueger & Casey, 2000). Domination in focus group discussions by one or two members was not allowed. Also, not responding in the discussion was not accepted. The researcher acted as a moderator to run the focus group discussion efficiently.

Through focus group discussions, the researcher can easily explore the targeted interviewees' understanding, feelings, experiences and perceptions about the topic. It is because the participants are willing to share their opinions and give their own comments in the relaxing and comfortable environments (Kitzinger, 1995). For example, the participants would be arranged to sit in a circle and they will be provided with drinks, such as coffee, water and juice.

It is recommended that the careful selection for the participants in the focus groups for the specific topic is a must (Marshall & Rossman, 1999). With a suitable combination of participants of the focus groups, such as varying gender, age and family background, is a key component of accurate findings in the study (Walvis, 2003). For instance, if all of the

participants are male students or if all students come from the same university in the focus group, they would not provide meaningful and comprehensive comments to the study.

A selection of the number of participants in focus groups is very important and essential in any research (Cavana, Delahaye & Sekaran 2001). For example, in this study, the members of a focus group would be composited from the three selected Universities and from different classes evenly. It is because the diversity will lead to a general picture (Marshall & Rossman, 1999), objective results (Krueger & Casey, 2000) and divergent opinions (Kitzinger, 1995). The best range is 6 to 9 participants in a focus group (Kitzinger, 1995). In this study, there were 6 proposed members who were invited from the 3 selected universities in Hong Kong. 66 students were cautiously and seriously selected for 11 focus groups, consisting of 6 students in each, to offer maximum variation and rich data. For example,

They are:

- Two representatives from University X

  (One from Year 2 and another one from Year 3)

- Two representatives from University Y

  (One from Year 2 and another one from Year 3)

- Two representatives from University Z

  (One from Year 2 and another one from Year 3)

The selected participants of various backgrounds, gender, year level (Year 2 and Year 3), and academic performance would be selected to give the best overall picture about the relationship between students' spiritual well-beings and their academic success in Hong Kong Universities. The responses, feedbacks and answers of the 66 participants in the focus group gave another layer of triangulation. A selection of questions in focus group discussion is also very significant and useful for the data collection and data analysis (Krueger and Casey, 2000). It is because the questions in the focus group discussion will be more consistent and meaningful to the research topic when the "questioning route" is applied. The researcher should think and plan in advance for the discussion questions (Krueger and Casey, 2000). As a result, the focus group discussions can be guided in a consistent and efficient manner.

The invitation letter with the Informed Consent Form were sent for (1) seeking permissions, (2) explaining the purposes and procedures of the study and (3) data confidential guarantee (Neumann, 2000).   Before the focus group discussions start, the researcher had to send emails and give phone calls to the selected participants for re-confirmation. Focus groups are usually used to gather qualitative data from a focused discussion (Krueger and Casey, 2000). The participants' perceptions, feelings, experiences and understandings about the relationship between their spiritual well-beings and academic results would be explored deeply in the focus group discussions. In addition, focus group can be used as a vehicle to gain deep comments on a new thing, conduct statistics of the trends and encourage

discussion (Walvis, 2003). The researcher will have the chance to clarify any

misunderstandings and misconceptions. Also, the researcher can ask students further

questions based on their responses (Walvis, 2003).

The Design framework of this study: The questions designed for the focus group discussion

and interviews as well as the pilot study would be initially conducted. The questions

(Appendix 4) of the focus group discussions would be developed based on the literature

review and the findings of the quantitative research – questionnaires. Also, attentions would

be paid to the variables if there are significant differences in the quantitative findings.   For

each question, the validity would be also tested and confirmed by different specialists. Then,

6 students from the 3 selected universities would be invited to join the pilot study for the

focus group discussion. The discussion protocol would be developed in this stage. The main

objective of the pilot study of the focus groups employed in this study was to design the

questions, test the usefulness, amend the errors and rehearse the practice. Based on the

feedbacks and comments of the pilot study, the questions of the focus group discussion would

be designed appropriately and clearly.

There were two main purposes of the focus groups used in this study: (1) data

supplement, (2) methodology supporting and (3) answering the research question 2 – 'How

are the background demographic variables related to spiritual well-being and academic

performance'. "Data supplement" was to enhance the reliability and validity of data generated from both quantitative and qualitative are accurate and I can relied on it for analysis. For quantitative design, "data proving" would be reliability and validity tests, and for qualitative design, data proving would be the triangulation of data from focus group, observation and in-depth interview.

"Methodology supporting" means I was using appropriate methods to obtain reliable and valid data for the analysis. First of all, there were structured questions in the questionnaires for the two sessions: (1) demographics & (2) SHOLAM. Therefore, standard answers would be generated, such as A, B, C, D or E. Alternatively, there were semi-structured questions in focus group discussions. The participants could share and give comments to the questions. Based on the different sources of data, the validity and reliability of the findings would be greatly enhanced for the independent and objective analysis in this study. In addition, questionnaire was a quantitative measure and could provide statistics, figures and trends. However, it did not provide explanations for the data. On the other hand, focus group discussion was a qualitative method, it offered deeper understandings and further exploration, and they were also employed for methodology supporting in this study.

Moreover, qualitative method is better for answering 'why' and 'how' questions and it is fit to the existing research question 2. Some of the questions would be prepared for warming up before the discussion starts. Then, questions about the research question 1 and 2 would be

given to the participants. But the formats and structures would be different from that of the questionnaire. The questions in the focus group discussion would be raised by a progressive approach and step by step. For example, the terms – spirituality and spiritual well-being were be initially raised. Then, the impacts of spirituality and spiritual well-being and their relationships to academic success were raised. Finally, the deeper and specific questions could be discussed, for example, what other factors they think are important to academic success and how these factors influence their studies. The main objective of the focus group was to let all participants share their ideas and feelings about the research questions. The discussion of the focus groups would be recorded in audio form, and then it would be turned into transcriptions to ensure the reliability and validity.

Procedures and samples: The focus group discussions were semi-structured interviews with 40 guided questions in the 4 domains: personal, communal, environmental and transcendental. It would take 90 minutes for each group with 6 students. A volunteer student helper was employed to arrange the 11 focus group discussions. A form with several basic questions, such as CGPA and family backgrounds were given to the interested participants in the 3 selected universities. These data were used for screening and selecting the suitable and enough number of participants in the focus group discussions. I didn't know the participants before the focus group discussions even I got involved in the screening and selecting the

participants. The purpose and recruitment of screening and selecting the participants for the focus group discussions was to ensure the equal number of participants with different background. It was the main focus of the study.

A number of criteria would be used to choose the participants from each university in the sampling procedure. The criteria of each focus group were (1) participants had not joined the questionnaire because the findings could be analyzed objectively from different angles and; (2) there would be equal numbers of boys and girls; (3) equal numbers of participants who had higher (score higher than 3) and lower CGPA (score less than 2.5) by screening in the lists of focus groups with their basic information including their academic CGPA, religions, institutions, Year Class and gender; (4) participants who have different religious beliefs in the sample; and (5) equal numbers of participants who come from different universities.

Year 2 and Year 3 students of the 3 selected universities were invited to join focus groups. In each focus group, there would be equal numbers of boys and girls as well as equal numbers of students with higher and lower CGPA from different universities. Based on the above criteria of focus group discussions in the sample, the student helper would contact and arrange the suitable participants. Thus, there were 6 students with different backgrounds, such as different CGPA from the different universities in each focus group discussion.

During the focus group discussions, to be fair and objective, I would not be informed the background information (including CGPA and family background) of the participants during the focus group discussions until the focus group discussion finished and the new form with personal information were collected at the end. A, B, C, D, E and F would be assigned to the 6 students as title in each focus group discussion. After the focus group discussions, the findings were independently and critically analyzed based on the observation of the focus group discussions.

Limitations and implications: Researchers cannot perform independently in the focus group discussion as they unintentionally join in the discussion as one of the members (Walvis, 2003). Therefore, the findings would be adversely affected.   The participants in the focus groups discussion may keep silent or repeat the other participants' opinions (Walvis, 2003). It is very easy to have a bias in the findings. Also, under peer group pressure, the minority of participants would agree on ideas with the majority. There would be polarization in the outcomes (Marshall & Rossman, 1999).

3.2.3   Triangulation

Generally, triangulation is defined as the use of a mixture of approaches to search for one set of questions in studies (Mason, 1996). Triangulation is not only regarded as a device or a tactic of validation, but also an alternative to justification (Flick, 2002). It is because it

can make the findings of any study effective and valid through the triangulation of different

data sources. Triangulation is mostly used as "comparisons of various data collections for

determining the reliability and constancy of evidences in social and educational researches"

(Farmer & Rojewski, 2001). The application of triangulation in education studies has been

getting more and more popular. There are two different means for triangulation used in

research: 1) reciprocal justification of findings gathered from different approaches, and 2) the

combination of diverse angles.

The formal data in this research consisted written questionnaires and focus group

discussions. The questionnaire includes 2 sections: (1) students' demographics and their

academic results and (2) SHOLAM – spiritual well-beings. So as to triangulate the outcomes

from the two different forms of data collections, the questions in the group focus discussions

were designed based on the similar questions and format used in the questionnaires. The

focus group discussions were presented in semi-structure questions as it could allow more

flexibility and it would be designed for a loose protocol of questions. There were some

questions about students' academic performance, spiritual well-being, family background,

learning and so on.

The findings from the questionnaire offers a quantitative element, and gives a general

picture of the population. The focus group data offers extra understanding to the findings

from the questionnaires. Therefore, the outcomes from the questionnaires and the interviews

could be triangulated to offer a more detailed picture about the relationships between the

university students' spiritual well beings in Hong Kong and their academic performance.

Also, it could help to explore what background variables related to spiritual well-being and

academic performance.

The mixed method approach was used in this study because it could provide a

generalized picture of Hong Kong University Students' academic success and their spiritual

well-being. It was impossible to understand one's spirituality with the provision of

quantitative data only, thus, more detailed qualitative investigations would be used later.

First of all, the following relationships and differences would be measured through a large-

scale questionnaire search of a quantitative study:

Question 1: What are the relationships between university students' spiritual well-being level

(including overall level and specific domain) and their academic performance measured by

'Cumulative Grade Point Average'?

The next Question: Are there any significant differences among students' spiritual wellbeing

due to their different CGPAs?

Then, the findings of the above questions from quantitative researches would be

supplemented, supported and enriched through the analysis of the qualitative findings. The

research question 2 – 'how are the background demographic variables related to spiritual

well-being and academic performance' would be also explored by the qualitative researches.

Then, the relationship between school students' academic performances and their spiritual well-being would be construed from both studies. Triangulation is generally employed to assess the consistency and reliability of the data collected from different sources (Creswell, 2009). It is always taken place in the two means: 1) common justification of outcomes collected from diverse approaches and 2) the amalgamation of different angles (Creswell, 2009).

3.2.4   Ethical considerations

It is the researchers' obligation and duty to protect the benefits (Cohen et al., 2007), confidentiality, dignity and safety of participants (Seliger & Shohamy, 2000) in the data collection of the research studies. The participants' anonymity would be preserved in every step of the study.   Before the research was conducted, the consents of the participants needed to be obtained. In addition, the agreements and permissions from the HKIED were required. The confidentiality was guaranteed.

3.3   Data collection process

Data collection refers to the process of gathering files, statistics, facts, figures, and numbers with the aims to solve the pre-set problems (Creswell, 2005). The final outputs of the data collection will give numbers, (such as mean, standard deviation, and mode) or words (such as replies and comments). In this section, sampling, the stages of data collection, and

data collection methods for questionnaires and focus groups would be further discussed.

Sampling refers to the process of choosing small parts from the large population for fairly generalizing the results of the selected topics (Creswell, 2005). In fact, it is always impossible to test all or interview the whole population. Thus, sampling is popularly used as the effective tool in many researches. There are generally two types of sampling: probability sampling and non-probability sampling. In this manner, it would be best for the sample to match with the specific requirements in my study. However, since there is a large number of people, thus convenience sampling and snowball sampling will be employed for the questionnaire stage and focus groups of the data collection routes.

There were questionnaires and focus groups for data collection in the study. It was believed that interactions between participants in the focus groups, key characteristics of real situations, the implications of decision making, and the meanings and significance of the tasks involved in the notes were to be counted in. It would take 90 minutes for each group with 6 students. There were 11 groups. During the focus group discussion, semi-structured discussion topics were given to university students about their spirituality and the relationship with academic performance. It would take 90 minutes for data collection.

Even if there is a requirement for the methods of data collection that consists of both quantitative and qualitative information, it can be achieved by the cross-site reliability. Thus, the results will be qualitatively shown by the approach of coding and categorizing (Lieber

and colleagues, 1998). Pattern coding is an essential part in the process of qualitative studies as it develops an advanced and combined outline for understanding specific events and connections (Huberman and Miles, 1994).

3.3.1   Stages of data collecting

In this study, there were two stages of data collection. The survey done by questionnaire was conducted first. 1,130 questionnaires were collected from 1,800 questionnaires sent to the targeted respondents. The response rates (about 63%) were satisfactory and acceptable. There are 335 (29.6%) participants from University X, 406 (35.9%) participants from University Y and 389 (34.4%) participants from University Z. After the questionnaires had been done and collected, 11 focus group discussions were conducted in the second stage. The data collection for the formal data method (questionnaires) started in September 2014 and finished in Dec 2014. The data collection for focus group discussions would begin in January 2015, and end in March 2015.

3.3.2   The questionnaire

Data Gathering: The questionnaires were proposed to be sent in week 1 and week 2 of the academic year 2014 to tutors, lecturers and student helpers who were willing to help. They were responsible for distributing and collecting the questionnaires. If there are any enquiries about the questionnaires, they could explain and describe the questions in the questionnaire.

3.3.3 Focus group

Data Gathering: The focus group was proposed to be conducted after the data of

questionnaires had been collected and analyzed. It was because the focus groups in this study

were used to support, supplement and enrich the outcomes and conclusions made by the

analysis of the questionnaire and explore why such a relationship exists. The focus groups

were conducted in January 2015 (after the first academic year and exam).

3.4 Data analysis and analytic procedures

There are multiple perspective approaches in qualitative methods for data analysis.

Quantitative studies give numerical results for statistical inferences but qualitative studies

give in-depth explanations and discussion to the phenomena and offer further investigation.

However, it tends to make bias to the discussion. It is better to have an understanding of the

different studies in natures and their assumptions before qualitative study is to be used. There

are two concerns in qualitative study for researchers: (1) consider case by case because their

backgrounds and natures are different; (2) eliminate the generalization of the finding results.

Even though there is sufficient information from the data collection of the quantitative

approach, there are more angles from the qualitative data to give valid information and avoid

bias through the triangulated sources, such as consultation from experts and meeting the

stakeholders.

3.4.1   Quantitative analysis: Questionnaires

There were some procedures for data analysis of the questionnaires in this study:

First, the data gathered of the questionnaires were systematically organized for review. In this stage, the data would be scored based on the category of the research questions and answers. The codebook was required. Second, a professional quantitative computerized software program (SPSS) would be used for data analysis. Then, the data converted into the excel table would be reviewed carefully to ensure that there are no errors and omission for the data analysis. Descriptive analysis would be used for the general tendencies of the data (such as mean, mode, media, standard deviation).

There were two methodologies for the study: Quantitative and Qualitative approaches. For the quantitative approach, a self-made questionnaire (Appendix 1) for demographic information would be given to students and Fisher's Spiritual Health and Life-Orientation Measure (SHALOM) questions in Chinese and English Versions –would be provided in the first stage. The main purpose of the study was to assess the selected students' spiritual well-being and its relationship to their academic achievement. Based on the Fisher's model, the collected data would be categorized into four dimensions: (1) Personal, (2) Communal, (3) Environmental, and (4) Transcendental.

There were three major analyses. Firstly, the candidates' score in each dimension would

be analyzed to see whether there was a link between the score in each dimension to their

CGPA. The findings of the data could be used to answer the research question 1 and

supplement research question 2 in the study. For instance, was there any tendency for

candidates with higher scores in (1) Personal dimension of the Fisher's model among

students with higher CGPA? By a comparison between students' CGPA and their scores in

each category, the tendency could be obviously confirmed. Also the students' total marks in

four dimensions would be counted for the relationships to their CGPA. For example, was

there any propensity for students with lower total scores in SHALOM questions among

students with lower CGPA? Through critical analysis of the total scores in four dimensions,

the propensity would be easily identified.

Secondly, the significant differences among students' spiritual wellbeing in each

dimension due to their different CGPAs would be identified and analyzed by a comparison of

findings of the questionnaire. Thirdly, the demographic variables related to spiritual

wellbeing of students would be measured to explore for the relationship identified above. The

qualitative data offered a deep understanding why and how such a relationship existed. The

quantitative data could be used to enrich, support and supplement the finding from qualitative

study.   By a comparison between students' demographic information and their scores in each

category, the features of students with high and low spirituality could be found respectively.

Also the students' total marks in four dimensions would be calculated for comparison and

analysis. For example, were spiritual well-being of students with higher family social-economic status higher than that of students with lower family social-economic status? were students' spiritual well-being with religion higher than students without religion?

In order to have a better presentation, deep analysis and comprehensive discussion, data collected would be slightly regrouped. For example, for the students' academic performance, data was quantitatively collected in the 6 categories: from GPA less than 1.5 to GPA 3.5 or above (Appendix 1). 0.5 statistically differences in the interval of CGPA collected in the questionnaire, such as "CGPA 3.5 or above" and "CGPA 3.0 to 3.49" are adopted by majority of universities in Hong Kong to distinguish their students' academic performance (Table 3.1). In order to have a deep analysis and better discussion, based on the assessments (Table 3.1 and Table3.2) in the three selected universities, the students' academic performance was regrouped into the following categories:

"CGPA 3.5 or above"

"CGPA 3.0 to 3.49"

"CGPA 2.5-2.99"

"CGPA 2.0 to 2.49"

"CGPA 1.99 or below"

Although, there were little differences for the Honor classification of their students in

the three selected universities (Table 3.1). Also, there were different major and overall GPA in

the honor classification for the students in University Y. It would increase the difficulties of

comparing the students' academic performance in the three different universities. Therefore,

Honor classification for the students' academic performance in the three selected universities

would be only taken for reference in the study.

Table 3.1: Honour classification for the three selected universities:

	University X	University Y		University Z
		Major GPA	Overall GPA	
First Class Honors	3.5 or above	3.5 or above	3.3 or above	3.5 or above
Upper Second Class Honors	3.0 - 3.49	3.1 -3.49	2.8-3.29	3.0 - 3.49
Lower Second Class Honors	2.5 - 2.99	2.5-3.09	2-2.79	2.5 - 2.99
Third Class Honors	2.0 - 2.49	1.5 - 2.49	1.5 - 2.49	2.0 - 2.49
Pass	1.7 - 1.99	no data provided	no data provided	1.67 - 1.99

Table 3.2: Course grades, their standards and converted points used in reporting in the three selected universities

Grade and Standard		Sub-divisions (if needed)	Converted Points University X	Converted Points University Y	Converted Points University Z
A	Excellent	A	4.0	4.0	4.0
		A–	3.7	3.67	3.7
B	Good	B+	3.3	3.33	3.3
		B	3.0	3.00	3.0
		B-	2.7	2.67	2.7
C	Fair	C+	2.3	2.33	2.3
		C	2.0	2.00	2.0
		C-	1.7	1.67	1.7
D	Pass	D+	Not applicable	1.33	1.3
		D	1.0	1.0	1.0
F	Failure	F	0	0.0	0.0

The course grades, standards and converted points used in reporting in the three selected

universities were close to the same (Table 3.1). In accordance with the above assessments of

the three selected universities, students with "CGPA 3.5 or above" in the three selected

universities are elites in academic capabilities. Students with "CGPA 3.0 to 3.49" are above

average, students with "CGPA 2.5-2.99" are average and students with "CGPA 2.0 to 2.49"

are below average in academic capabilities. Students with "CGPA 1.99 or below" are poor

academic performance.

For one of the factors in the students' family social-economic status – students' family

annual income, data was collected in the 9 categories: from less than $120,000 to above

$960,000 (appendix 1). In order to have a deep analysis and better discussion, based on the

public resources allocation from the perspectives of sociology, the students' family annual

income was regrouped into the following categories:

- Less than $120,000

- From $120,001 to $240,000

- From $240,001 to $480,000

- $480,001 and above

There were assumptions for the above four categories of the students' family annual

income:

In accordance with the information in 2013 given by the Census and Statistics Department,

Hong Kong Government, the monthly median of household income (by household size), for

the poverty lines are shown in the table 3.3. Therefore, if students' annual family income less

than $120, 000, they could be eligible to apply Comprehensive Social Security Assistance

Scheme (CSSA).

Table 3.3: The monthly median of the household income (by household size) from the Census and Statistics Department, in 2013:

Household size	2013 poverty line
1	$3,800
2	$8,500
3	$12,700
4	$15,550
5	$16,500

Source: from the Census and Statistics Department

**Table 3.4: Maximum Income Limits for application of public housing
(By the different household size)** (Effective from 1 April 2015)

Family Size	Maximum Income Limit (per month)	Maximum Income Limit (Annually)
1 Person	HK$ 10,100.00	HK$ 121,200.00
2 Persons	HK$ 16,140.00	HK$ 193,680.00
3 Persons	HK$ 21,050.00	HK$ 252,600.00
4 Persons	HK$ 25,250.00	HK$ 303,000.00
5 Persons	HK$ 29,050.00	HK$ 348,600.00
6 Persons	HK$ 32,540.00	HK$ 390,480.00
7 Persons	HK$ 36,130.00	HK$ 433,560.00
8 Persons	HK$ 38,580.00	HK$ 462,960.00
9 Persons	HK$ 43,330.00	HK$ 519,960.00
10 or more Persons	HK$ 45,450.00	HK$ 545,400.00

Source: from the Housing Department, HKSAR

Accordance with the information given (Table 3.4) by the Housing Department, HKSAR

for the maximum income limit in application of the public housing, students' annual family

income is below $240,000 (for example, 3 person or above family size), they are eligible to

apply for the public housing in Hong Kong.

**Table 3.5: Maximum Income Limits for application of Home Ownership Scheme (HOS)
flats**

Household Size	Income Limit (monthly)	Income Limit (Annually)
Two persons or above	$40,000	$480,000

Source: from the Housing Department, HKSAR

Accordance with the information given (Table 3.5) by the Housing Department, HKSAR for the maximum income limit in application of Home Ownership Scheme (HOS) flats, students' annual family income is below $480,000, they are eligible to apply for the (HOS) flats.

3.4.2 Qualitative analysis: Focus Groups

There were 11 groups for the focus group discussions, in total there were 66 students. First, the audio recordings of group discussions would be transcribed into script for further analysis. There were in total 11 transcripts for 11 groups (66 students). Each of the transcripts would be carefully reviewed by listening to the recordings repeatedly to ensure the accuracy and truthfulness. Then, an introductory empirical analysis would be used for a general sense of the data. The process of analyzing and reviewing the transcripts is very time-consuming and boring. It is expected to take several months. Based on the data, the systematic and thorough descriptions would be transcribed to describe the people, locations and environment surroundings. These descriptions are very useful and informative to answer the research questions.

For the second part of methodology - qualitative approach, focus groups would be used for confirming the validity of the findings in the quantitative research. 6 students were invited for a group and 11 groups would be held. They would be given questions about the relationship between spiritual well-being and their academic performance. The analytical

analysis for this section would be conducted based on the 2 research questions and the findings in the quantitative analysis.

There are two variables. One is students' spiritual well-being and another one is their demographics, including CGPA, religions and family social economic status. These two variables: (1) spiritual well-being and (2) demographics have been independently and separately measured and collected.

For example, the first variable – students' spiritual well-being are interpreted based on the responses of the respondents in the focus group discussions. I don't recognize their demographics in the focus group discussions.

Another variable – students' demographics, such as CGPA are based on the hard facts and these demographics are provided by students in a form. After focus group discussions, the forms with students' demographics are collected and input in a excel file by the student helper. At this stage, I don't acknowledge the students' demographics. When will I know their demographics?

After I have analyzed the responses to each question for their spiritual well-being in the transcripts in a word file and then I selected the relevant and significant sentences. After I finished analyzing and selecting the quotation, I will recognize the demographics because I have to match the quotations and sentences with the different respondents. At this stage, I have to check their demographics such as CGPA, major disciplines and religious beliefs for each of

the high and low spiritual well-being responses.

For example, the findings for the link between the score in each dimension to their CGPA from the above quantitative approaches could be supported and supplemented in the discussions and sharing of the focus groups. From the perspectives of the qualitative approaches, the new discoveries from the data to answer the research question 1 (A) (whether there is any relationship between their spiritual well-being and academic performance) and research question 1 (B) (whether there is any relationship between their spiritual well-being in each dimension and academic performance) from the above quantitative research methods, could be supported again and again. For example, the inclination, for candidates without belief or religion and with lower scores in the (4) Transcendental aspect, was to be assessed carefully through the focus groups.

In addition, regarding the research question 2, the related factors, such as major disciplines, family social-economic status and religious beliefs for the relationship between the students' spiritual well-being and their academic performances would be explored and discussed. Furthermore, the consequences for answering research question 2 from the qualitative study could be supplemented, supported and enriched quantitatively and critically. For example, through a qualitative analysis of the findings from a comparison between students' demographic information and their scores in each category in the quantitative research methods, the following relationship could be explored in details and supported

obviously: The relationships between (1) students' spiritual well-being in each dimension and their demographic backgrounds as well as; (2) students' spiritual well-being as a whole and their demographic backgrounds.

For the processes of the focus group discussion would be recorded by audio recorder, their responses would be written down and then translated into English. The participants' body language would also be observed. There are some guidance for the interviewer to observe the signal for their body language, such as gestures, posture, mental reactions, emotional responses and attitudes, etc... For example, respondent didn't take the initiative to answer the questions; they were invited to answer for many times; they sat in a very lazy posture, they kept yawning and shaking legs; they had a pessimistic attitude, etc.….

The classification, processing and analysis of the scripts for the focus group discussion would be conducted, based on the 4 specific domains (Personal, Communal, Environmental and Transcendental) of the Part 1 (Questionnaire – SHALOM). It would give a clear guidance and framework. For example:

In the personal domain, there are 5 items of the instruments (Q5: a sense of identity, Q9: self-awareness, Q14: joy in life, Q16: inner peace and Q18: meaning in life).

In the communal domain, there are 5 items of the instruments (Q1: a love of other people, Q3: forgiveness toward others, Q8: trust between individuals, Q17: respect for others and Q19: kindness towards other people).

In the environmental domain, there are 5 items of the instruments (Q4: connection with nature, Q7: awe at a breathtaking view, Q10: oneness with nature, Q12: harmony with the environment and Q20: a sense of 'magic' in the environment).

In the transcendental domain, there are 5 items of the instruments (Q15: prayer in life, Q6: worship of the Creator, Q11: oneness with God, Q13: peace with God and Q2: personal relationship with the Divine/God).

3.5   Conclusion

This chapter has outlined the research methodology – a mixed approach to my study. I have explained the rationale, assumptions and principles for the instruments used, research design, data collection, data analysis and analytical framework for the research.   In this research, a mixed research approach, including questionnaire (quantitative measure) – Fisher's SHALOM with demographic information, and focus group discussions (qualitative method) were employed. There were two stages for data collection in this study. First, questionnaires were conducted and then focus group discussions would be held. The analysis and evaluation of the data would be further discussed in the next chapter.

CHAPTER FOUR

DISCUSSIONS AND ANALYSIS OF THE FINDINGS

There are three sessions in this chapter. First, a summary of the descriptive statistics for the demographic variables and the internal scale reliability and construct validity of the SHALOM are shown. Then we are going to discuss and analyze the quantitative findings with qualitative findings and other related researches for the research question 1 – whether a relationship exists, in each domain to give a fuller picture and a deeper understanding. Next, discussions and analysis are made based on the findings of the quantitative, qualitative methods and other related studies to generate a triangulation in each domain for the research question 2 – 'how are the background demographic variables related to spiritual well-being and academic performance'.

4.1   A summary of the descriptive statistics for the demographic variables

The target population for this study was students in Hong Kong universities. Three UGC Funded universities were selected. Convenience sampling was used to select the universities. Year 2 and Year 3 students of the three selected universities were surveyed in this study. It was difficult to invite candidates in doing the research since students are not interested in the research topic and the terminologies used in the questionnaires are abstract to them.

Therefore, it really took time and efforts to seek out the candidates and explain to them for the study.

The study explored the relationship between Hong Kong's university students' spiritual well-being and their academic achievements. The participants responded to SHALOM questionnaires with demographic information that measured their spiritual well-being and demographic details. The information about the participants' features is shown in Table 4.1.

Table 4.1: Summary of Participants

Universities				Year 2	Year 3	Total
				Year of study		
University X	Gender	Male	Count	59	92	151
			% within Year of study	34.3%	56.4%	45.1%
		Female	Count	113	71	184
			% within Year of study	65.7%	43.6%	54.9%
	Total		Count	172	163	335
			% within Year of study	100.0%	100.0%	100.0%
University Y	Gender	Male	Count	89	89	178
			% within Year of study	43.6%	44.1%	43.8%
		Female	Count	115	113	228
			% within Year of study	56.4%	55.9%	56.2%
	Total		Count	204	202	406
			% within Year of study	100.0%	100.0%	100.0%
University Z	Gender	Male	Count	78	91	169
			% within Year of study	39.4%	47.6%	43.4%
		Female	Count	120	100	220
			% within Year of study	60.6%	52.4%	56.6%
	Total		Count	198	191	389
			% within Year of study	100.0%	100.0%	100.0%
Total	Gender	Male	Count	226	272	498
			% within Year of study	39.4%	48.9%	44.1%
		Female	Count	348	284	632
			% within Year of study	60.6%	51.1%	55.9%
	Total		Count	574	556	1130
			% within Year of study	100.0%	100.0%	100.0%

4.1.1 Data Screening Procedure

Data was collected from 1800 students but only that from 1130 students were valid. There are only invalid data about 5 % of total. There are different motives why some of this data seem to be inconsistent, with some requiring to be ignored. Some questionnaire returns were deleted because the candidates indicated no discrimination for the scores in their questionnaires. For example, they entered the same score rating right through SHALOM. Obviously, they show no attentions and motives to answer the questions.

4.1.2 Gender of students

There are 632 female participants (55.9%) and 498 male participants (44.1%). The numbers of female participants are little higher than those of male participants. It is also common phenomena in Hong Kong universities.

4.1.3 Age of students.

The participants' ages are from 18 years old to 25 years old. There are 1049 participants (92.8 %) aged from 19 to 21 years old. These ranges are of the right ages for the Year 2 and Year 3 students.

4.1.4 Nationality of students

All of the participants are Chinese.

4.1.5   Universities of students

There are 335 (29.6%) participants from University X, 406 (35.9%) participants from

University Y and 389 (34.4%) participants from University Z.

4.1.6   Major Subject of students

There are 4 categories for students' major subject: (1) Art and Language (A & L), (2)

Business (BUS), (3) Science (S) and (4) Social Science (SS). There are 314 (27.8%)

participants from Art and Language, 320 (28.3) participants from (2) Business, 192 (17%)

participants from (3) Science and 304 (26.9%) from Social Science participants.

4.1.7   Year of students

There are 574 participants (50.8%) from Year 2 and 556 participants (49.2 %) from Year

3. The proportion for the Year of students is quite even.

4.1.8   Students' family annual income levels

There are 914 participants (80.9 %) whose family annual income fall between the three

categories ranging from $120,000 to $480,000. Among all students,

129 participants' (11.4%) family annual income level is less than $120,000;

378 participants' (33.5%) family annual income level ranges from $120,000 to $240,000; and

536 participants' (47.4%) family annual income level ranges from $240,000 to $480,000.

There are only 87 participants (7.7%) whose family annual income level is above

$480,000.

4.1.9 Part-time job experiences of students

Students are grouped into the following 6 categories for their part-time job experiences. There are 178 participants (15.8%) without any part-time experiences. There are 292 participants (25.8%) with 1 to 3 months part-time experiences and 310 participants (27.4%) with 4 to 6 months part-time experiences. These two groups are over 50%. There are only 94 participants (8.3%) with 18 months or above part-time experiences.

4.1.10 Part-time job income (per month) of students

There are 391 participants (34.6%) without any part-time income. There are 547 participants (48.4%) with part-time job income from $1000 to $3000. It is the highest percentage of selection. There are only 19 participants (1.7%) with $9001 or above.

4.1.11 Students' number of siblings

There are majorities of participants (n=522, 46.2%) without siblings, 445 participants (39.4%) with one sibling and 111 participants (9.8) with 2 siblings. There are totally 95% for these 3 groups.

4.1.12 Students' Cumulative Grade Point Average (CGPA)

There are 123 participants (10.9%) with the range of 3.5 to 4.0 CGPA (Mostly A grades in subjects) which is the top of the class. There are majorities of participants (n=459, 40.6%)

with the range of 3.0 to 3.4 CGPA (Mostly B) grades in subjects. The next largest category

was the range of 2.5 to 2.9 CGPA (Mostly C) grades (n= 343, 30.4%) in subjects. There are

161 participants (14.2%) with the range of 2.0 to 2.49 CGPA (Mostly D). There are 44

participants (3.9%) with CGPA less than 1.9.

4.1.13   Religious belief of students

Students are required to show their religious beliefs into the following categories: (1)

Protestant, (2) Catholic, (3) Buddhist, (4) Taoism, (5) Muslim (6) No religion and (7) Other

religion.   Most of the participants don't have any religious beliefs (n= 900, 79.6%).   Except

for 'no religious affiliation', there are 174 Christian participants (15.4%) which are the largest

group. There are 37 Catholic participants (3.3%), 13 Buddhist participants (1.2%), 6 Daoist

participants (0.5%).

4.1.14   Students' frequencies of going to church/religious group

Most of participants (n= 355, 31.4%) go to church or religious group (apart from

weddings and funerals) once a year. There are 321 participants (28.4%) who never go. There

are 303 participants (26.8%) for 2-3 times a year.

4.1.15   Students' frequencies of going to join volunteer activities

Most of participants 508 (45%) joined volunteer activities or charitable activities for 1 to

2 times a year. There are 438 participants (38.8%) for once on rare occasion.   It is the second

place for this category. There are 66 participants (5.8%) who never join volunteer activities or charitable activities.

4.1.16 Students' frequencies of praying or meditating

Most of participants – 415 participants (36.7%) pray or meditate once in times of real need. The second place is the '1-2 times a year'. There are 287 participants (25.4%) for 1-2 times a year. There are 198 participants (17.5%) who never pray or meditate. There are 119 participants (10.5%) who pray or meditate daily.

4.1.17 The HIGHEST level of education attained by students' father

There are 103 participants (9.1%) whose fathers were educated at primary school level or below. Majorities of participants' fathers (n=806, 71.3%) were at least educated at secondary school levels (F.1 to F.7). There are 221 participants (19.6%) whose fathers were educated at post-secondary school level or above.

4.1.18 The HIGHEST level of education attained by students' mother

There are 181 participants (16%) whose mothers were educated at primary school level or below. Majorities of participants' mothers (n=832, 73.6%) were at least educated at secondary school levels (F.1 to F.7). There are117 participants (10.4%) whose mothers were educated at post-secondary school level or above.

4.1.19   The Participants' father present occupation

There are 11 job categories for the participants' parents (Father and Mother)

1) Unskilled Workers, Handlers, Cleaners, Helpers & Labourers (U.W.)

2) Plant & Machine Operators, Assemblers & Inspectors (P & M)

3) Precision Production, Craft and Repair Mechanics & Repairers (P.P.)

4) Skilled Agricultural & Fishery Workers (S.A.)

5) Service Occupations/ Sales Occupations (S.O.)

6) Administrative Support Occupations, including Clerical (A.S.O.)

7) Technicians & Related Support Occupations (T & S)

8) Professional Specialty Occupations/ Associate Professionals (P. S.O.)

9) Executives, Administrators, & Managers (E & M)

10) Capitalists, Businessmen, Proprietors, Directors (C & B)

11) Others (Housewife for mother; unemployed for Father)

Most of the participants' father – 273 (24.2%) engaged in Service and Sales occupations (S.O.). There are 143 participants (12.7%) in the category of 'Plant and machine operators, assemblers & inspectors' (P & M).   It is the second place. There are least participants – 5 participants (0.4%) in the category of 'Skilled agricultural & Fishery workers) (S.A.).

4.1.20 The Participants' mother present occupation

Most of the participants' mothers are housewife. There are 283 participants (25%) in this category. Except for this, Service and Sales occupations (S.O.) are the most engaged by participants' mother. There are 253 participants (22.4%) in this category.

There are 233 participants (20.6%) for the category of 'Unskilled Workers, Handlers, Cleaners, Helpers & Labourers' (U.W.). It is the second place except housewife. There are least participants – 4 participants (0.4%) in the category of 'Skilled agricultural & Fishery workers) (S.A.).

4.2 Instruments

4.2.1 Reliability of the research instruments

Cronbach's coefficient alpha is adopted to evaluate the internal scale reliabilities of the research instruments (SHALOM). It is because it is usually regarded as the most popular and appropriate approach to evaluate the reliabilities of scales (Beazley, 1998). Todman and Dugard (2007) think that alpha values over 0.7 are a must because it indicated a great internal stability, consistency and dependability for a scale (Beazley, 1998; Todman and Dugard, 2007).

The means, standard deviations, and Cronbach's alpha coefficients for the 4 domains of the spiritual well-being and students' academic performances measured by Cumulative Grade

Point Average (CGPA) are shown in the Table 4.2.

Table 4.2: Descriptive Statistics for students' CGPA and their SWB

	Mean	Std. Deviation	alpha (α)	N
Cumulative Grade Point Average (CGPA)	2.61	1.02		1130
SWB Personal	3.48	.61	.74	1130
SWB Communal	3.58	.59	.81	1130
SWB Environmental	3.04	.65	.83	1130
SWB Transcendental	2.74	.81	.92	1130

The 3 domains, including Communal, Environmental and Transcendental spiritual well-being, are over 0.8 alpha values. Nevertheless, for an exploratory research, a critical watershed value 0.7 is adequate (Bar-On, 2002). All of the scales indicated alpha coefficients more than the accepted 0.7 cutoff value for the exploratory research. Generally, alpha coefficients for SHALOM showed that the mean scores of students' spiritual well-being and their academic performances (CGPA) could be adopted in the following data analysis. Also it is very highly reliable based on the reliability statistics of the 20 items (variables) because Cronbach's Alpha is .93 shown.

Reliability Statistics

Cronbach's Alpha	N of Items
.93	20

Table 4.3: Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Q1: a love of other people	60.59	113.10	.49	.93
Q2: personal relationship with the Divine/God	61.41	108.60	.63	.92
Q3: forgiveness toward others	60.75	109.63	.61	.93
Q4: connection with nature	61.11	110.76	.55	.93
Q5: a sense of identity	60.85	111.37	.51	.93
Q6: worship of the Creator	61.46	107.01	.68	.92
Q7: awe at a breathtaking view	61.22	108.57	.62	.92
Q8: trust between individuals	60.65	110.16	.60	.93
Q9: self-awareness	60.79	110.63	.59	.93
Q10: oneness with nature	61.19	109.48	.61	.92
Q11: oneness with God	61.64	107.17	.68	.92
Q12: harmony with the environment	61.13	109.52	.62	.92
Q13: peace with God	61.45	107.14	.67	.92
Q14: joy in life	60.74	108.53	.64	.92
Q15: prayer in life	61.50	106.80	.63	.92
Q16: inner peace	60.67	109.64	.60	.93
Q17: respect for others	60.58	110.68	.58	.93
Q18: meaning in life	60.67	109.75	.60	.93
Q19: kindness towards other people	60.64	110.70	.58	.93
Q20: a sense of 'magic' in the environment	61.25	109.64	.56	.93

4.2.2   Validity of the study instrument - Spiritual Health and Life-Orientation

Measure (SHALOM)

We are going to discuss the assessment of the construct validity for the study instrument – SHALOM through Principal Component Analysis. There are 20 items and questions of SHALOM about the participants' lived experiences. Principal component analysis (PCA) with SPSS Version 22 is adopted to analyze the data. The Kaiser-Meyer-Okin value was .94, exceeding the recommended minimum value of .6 (Kaiser, 1970, 1974) and the Bartlett's Test of Sphericity (Bartlett, 1954) reached statistical significance ($\chi 2$ (190, N = 1130) = 12639.39, $p < 0.001$), supporting the factorability of the correlation matrix. The three components were revealed with eigenvalues exceeding 1.0, explaining 42.41 %, 11.39% and 6.24% of the variance respectively by using Principal components analysis in Table 4.4.

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.94
Bartlett's Test of Sphericity	Approx. Chi-Square	12639.39
	df	190
	Sig.	.00

Table 4.4: Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	8.48	42.41	42.41	8.48	42.41	42.41	4.68	23.38	23.38
2	2.28	11.39	53.80	2.28	11.39	53.80	4.36	21.82	45.20
3	1.25	6.23	60.03	1.25	6.24	60.03	2.97	14.83	60.03
4	0.88	4.39	64.42						
5	0.85	4.26	68.67						
6	0.73	3.63	72.30						
7	0.68	3.38	75.68						
8	0.58	2.91	78.59						
9	0.54	2.70	81.29						
10	0.46	2.43	83.71						
11	0.47	2.36	86.07						
12	0.43	2.14	88.20						
13	0.40	2.01	90.21						
14	0.37	1.85	92.06						
15	0.32	1.60	93.65						
16	0.31	1.55	95.21						
17	0.28	1.38	96.58						
18	0.25	1.25	97.83						
19	0.24	1.18	99.01						
20	0.20	0.99	100						

Extraction Method: Principal Component Analysis.

For SHALOM, there are four components: (1) Personal, (2) Communal, (3)

Environmental & (4) Transcendental domains. Interestingly, there are three components to be

found rather than four components defined and developed by Fisher (1998) through

exploratory factor analysis with adoption of SPSS.   The three components are (1) the

combined factor of Personal and Communal, (2) Environmental and (3) Transcendental

domains.

Table 4.5: Rotated Component Matrix[a]

	Component		
	1	2	3
Q1: a love of other people	.40	.38	.11
Q2: personal relationship with the Divine/God	.17	.83	.14
Q3: forgiveness toward others	.60	.24	.27
Q4: connection with nature	.26	.11	.75
Q5: a sense of identity	.61	.11	.21
Q6: worship of the Creator	.24	.77	.22
Q7: awe at a breathtaking view	.23	.43	.55
Q8: trust between individuals	.68	.17	.23
Q9: self-awareness	.69	.15	.22
Q10: oneness with nature	.21	.22	.80
Q11: oneness with God	.16	.84	.25
Q12: harmony with the environment	.24	.33	.66
Q13: peace with God	.14	.85	.25
Q14: joy in life	.53	.40	.22
Q15: prayer in life	.16	.84	.16
Q16: inner peace	.51	.32	.27
Q17: respect for others	.79	.10	.14
Q18: meaning in life	.74	.18	.15
Q19: kindness towards other people	.80	.06	.16
Q20: a sense of 'magic' in the environment	.31	.17	.63

Extraction Method: Principal Component Analysis.

These outcomes are consistent with the findings of the similar research done by Mok

(2013). There are close relationships between personal and communal areas in our Chinese

traditional culture. The individuality and the community are always and easily mixed up

(Hofstede, 1980). In Chinese community, people are cultivated for family and communal goals as personal goals (Mok, 2013). Compared with western cultures, there are independent elements between individualism and collectivism. Therefore, it explains why (1) personal and (2) communal domains are combined as one domain to be found through exploratory factor analysis. But 4 domains will be adopted for our analysis in the following because this practice of SHOLAM is common and popular in other Asian countries.

4.2.2.1 Factor analysis of items for Personal SWB (PER)

Based on the tables below (Table 4.6 and Table 4.7), the highest score in mean is in the communal domain and its average score is 3.58. The next highest score in mean is in the personal domain and its average score is 3.49. There are 3.04 average mean scores in the environmental domain. The lowest score in mean is in the transcendental domain.

Although the items grouped into to the Personal and Communal domains of SHALOM as a one single element in the above analysis, factor analyses indicate that there is still uniqueness for five items in each domain.

Table 4.6: Mean and Standard Deviation for the 4 specific domains

Spiritual domain	Mean	Std. Deviation
SWB Personal	3.49	0.64
SWB Communal	3.58	0.58
SWB Environmental	3.04	0.65
SWB Transcendental	2.74	0.81

Table 4.7: Mean and Standard Deviation for the 20 questions

Questions	Mean	Std. Deviation
Q1: a love of other people	3.63	0.70
Q2: personal relationship with the Divine/God	2.82	0.88
Q3: forgiveness toward others	3.48	0.83
Q4: connection with nature	3.12	0.81
Q5: a sense of identity	3.38	0.82
Q6: worship of the Creator	2.77	0.92
Q7: awe at a breathtaking view	3.00	0.88
Q8: trust between individuals	3.57	0.80
Q9: self-awareness	3.44	0.77
Q10: oneness with nature	3.03	0.83
Q11: oneness with God	2.58	0.91
Q12: harmony with the environment	3.10	0.82
Q13: peace with God	2.78	0.92
Q14: joy in life	3.48	0.87
Q15: prayer in life	2.72	1.01
Q16: inner peace	3.56	0.83
Q17: respect for others	3.65	0.78
Q18: meaning in life	3.55	0.82
Q19: kindness towards other people	3.59	0.78
Q20: a sense of 'magic' in the environment	2.98	0.88

There are 5 items of the instruments (Q5: a sense of identity, Q9: self-awareness, Q14:

joy in life, Q16: inner peace and Q18: meaning in life) for the personal domain. The ranges of

the scores for the 5 questions in the personal domain are from 3.38 to 3.56. The questions

of the highest and lowest scores in this domain are Q.16: inner peace and Q.5: a sense of

identity respectively.

Questions	Mean	Std. Deviation
Q5: a sense of identity	3.38	0.82
Q9: self-awareness	3.44	0.77
Q14: joy in life	3.48	0.87
Q16: inner peace	3.56	0.83
Q18: meaning in life	3.55	0.82

The Kaiser-Meyer-Okin value was .80, beyond the suggested minimum value of .6

(Kaiser, 1970, 1974). Also, there are statistical significances by the Barlett's Test of

Sphericity (Bartlett, 1954) for supporting factorability correlation matrix. Principal

components analysis showed the presence of one domain with an eigenvalue exceeding 1,

explaining 55.28 % of the variance. These five items are together regarded as one single

domain which is referred to as Personal spiritual well-being.

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.80
Bartlett's Test of Sphericity	Approx. Chi-Square	1635.71
	df	10
	Sig.	.00

4.2.2.2 Factor analysis of items for Communal SWB (COM).

There are 5 items of the instruments (Q1: a love of other people, Q3: forgiveness toward others, Q8: trust between individuals, Q17: respect for others and Q19: kindness towards other people) for the communal domain. The ranges of the scores for the 5 questions in the communal domain are from 3.48 to 3.65. The questions of the highest and lowest scores in this domain are Q.17: respect for others and Q3: forgiveness toward others respectively.

Questions	Mean	Std. Deviation
Q1: a love of other people	3.63	0.70
Q3: forgiveness toward others	3.48	0.83
Q8: trust between individuals	3.57	0.80
Q17: respect for others	3.65	0.78
Q19: kindness towards other people	3.59	0.78

The Kaiser-Meyer-Okin value was .78, beyond the suggested minimum value of .6 (Kaiser, 1970, 1974). Also, there are statistical significances by the Barlett's Test of Sphericity (Bartlett, 1954) for supporting factorability correlation matrix. Principal components analysis showed the presence of one domain with an eigenvalue exceeding 1, explaining 56.62 % of the variance. These five items are together regarded as one single domain which is referred to as Communal SWB.

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.78
Bartlett's Test of Sphericity	Approx. Chi-Square	1933.16
	df	10
	Sig.	.00

4.2.2.3 Factor analysis of items for Environmental domain (ENV)

There are 5 items of the instruments (Q4: connection with nature, Q7: awe at a breathtaking view, Q10: oneness with nature, Q12: harmony with the environment and Q20: a sense of 'magic' in the environment) for the environmental domain. The ranges of the scores for the 5 questions in the Environmental domain are from 2.98 to 3.12. The questions of the highest and lowest scores in this domain are Q4: connection with nature and Q20: a sense of 'magic' in the environment respectively.

Questions	Mean	Std. Deviation
Q4: connection with nature	3.12	0.81
Q7: awe at a breathtaking view	3.00	0.88
Q10: oneness with nature	3.03	0.83
Q12: harmony with the environment	3.10	0.82
Q20: a sense of 'magic' in the environment	2.98	0.88

The Kaiser-Meyer-Okin value was .83, beyond the suggested minimum value of .6 (Kaiser, 1970, 1974). Also, there are statistical significances by the Barlett's Test of

Sphericity (Bartlett, 1954) for supporting factorability correlation matrix. Principal

components analysis showed the presence of one domain with an Eigen value exceeding 1,

explaining 59.27 % of the variance. These five items are together regarded as one single

domain which is referred to as environmental.

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.83
Bartlett's Test of Sphericity	Approx. Chi-Square	1924.24
	df	10
	Sig.	.00

4.2.2.4 Factor analysis of items for transcendental domain (TRA)

There are 5 items of the instruments (Q2: personal relationship with the Divine/God, Q6:

worship of the Creator, Q11: oneness with God, Q13: peace with God and Q15: prayer in life)

for the transcendental domain. The ranges of the scores for the 5 questions in the

transcendental domain are from 2.58 to 2.82. The questions of the highest and lowest scores

in this domain are Q2: personal relationship with the Divine/God and Q11: oneness with God

respectively.

Questions	Mean	Std. Deviation
Q2: personal relationship with the Divine/God	2.82	0.88
Q6: worship of the Creator	2.77	0.92
Q11: oneness with God	2.58	0.91
Q13: peace with God	2.78	0.92
Q15: prayer in life	2.72	1.01

The Kaiser-Meyer-Okin value was .90, beyond the suggested minimum value of .6

(Kaiser, 1970, 1974). Also, there are statistical significances by the Barlett's Test of

Sphericity (Bartlett, 1954) for supporting factorability correlation matrix. Principal

components analysis showed the presence of one domain with an eigenvalue exceeding 1,

explaining 76.52 % of the variance. These five items are regarded together as one single

domain which is referred to as Transcendental SWB.

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.90
Bartlett's Test of Sphericity	Approx. Chi-Square	4107.74
	df	10
	Sig.	.00

4.3   Discussions and Analysis of the findings for the relationships

In this section, we are going to discuss and analyze the findings of the quantitative,

qualitative methods and other related studies for the research questions (R.Q. 1 and R.Q. 2) in

each domain (including overall level).

4.4   The Relationship between university students' spiritual well-being level (Overall) and their academic performance measured by 'Cumulative Grade Point Average' (CGPA)

In the following sections, I will first look at the relationship between students' overall spiritual well-being level and their CGPA. Then I will go into the relationship between students' specific domain (personal, communal, environmental and transcendental) of spiritual well-being and their CGPA. A deep analysis and detailed discussion will be made with the triangulation methodology (combined with the findings of my quantitative research - Questionnaires and qualitative research - Focus Group Discussions), and I will merge and incorporate the existing literature in the 4 specific domains to support, supplement and enrich my findings.

From the perspective of the quantitative research, there was a positively significant relationship between the students' overall spiritual well-being level and their CGPA (P<0.05) at the .01 level (two-tailed) shown in Table 4.8. Also, there are moderate effects for the positive relationships between them. Values of correlation coefficients between 0.30 and 0.60 indicate a moderate strength of association between two variables (Dancey & Reidy, 2004).

Table 4.8: Correlations for spiritual well-being (including overall and specific domain) and academic performance

		Cumulative Grade Point Average (CGPA)
SWB Overall	Pearson Correlation	.46**
	Sig. (2-tailed)	0
	N	1130
SWB Personal	Pearson Correlation	.44**
	Sig. (2-tailed)	0
	N	1130
SWB Communal	Pearson Correlation	.44**
	Sig. (2-tailed)	0
	N	1130
SWB Environmental	Pearson Correlation	.39**
	Sig. (2-tailed)	0
	N	1130
SWB Transcendental	Pearson Correlation	.28**
	Sig. (2-tailed)	0
	N	1130

Note: ** Correlation is significant at the 0.01 level (2-tailed).

Since the Honor Classifications used in the three selected universities are different, I have grouped the students into the following categories for clarity in analysis, discussion and research:

- Students, who have got "CGPA 3.5 or above", are classified as elite class;

- Students, who have got "CGPA 3.0 to 3.4", are classified as above average;

- Students, who have got "CGPA 2.5 – 2.99", are classified as average;

- Students, who got "CGPA 2.0 – 2.49", are classified as below average; and

- Students, who have got "CGPA 1.99 or below", are classified as poor academic performance.

Based on the above analysis of the One-way Anova for the students' CGPA, it shows that there are significant differences among students' spiritual well-being (including the overall scores and in the 4 specific domains) due to their different CGPA levels. According to LSD, there are significant results shown in Table 4.9 for the mean differences at .05 level in the spiritual well-being (overall score) between the different CGPA of students.

Table 4.9: Results of One-way Anova on Mean Difference of CGPA of Respondents (N=1130) – for the overall scores

Demographic Variables	Overall Scores
CGPA "CGPA 3.5 or above": Elite Class (N=123)	F= 89.09 Average < Elite Class **(3.08 < 3.43)*** Below Average < Elite Class (**2.81<3.43**)*
"CGPA 3.0 to 3.4": Above Average (N=459)	Poor Academic Performance < Elite Class (**2.59< 3.43**)* Average < Above Average **(3.08 <3.45**)*
"CGPA 2.5 – 2.99": Average (N=343)	Below Average < Above Average **(2.81 <3.45**)*
"CGPA 2.0 – 2.49": Below Average(N=161)	Poor Academic Performance < Above Average **(2.59 <3.45**)* Below Average < Average (**2.81<3.08**)*
"CGPA 1.99 or below": Poor Academic Performance (N=44)	Poor Academic Performance < Average (**2.59<3.08**)* Poor Academic Performance < Below Average (**2.59< 2.81**)*

Note: Mean ratings are bold; *the mean difference is significant at the 0.05 level.

Table 4.10 shows the significant differences in the spiritual well-being (overall score)

between:

(1) Students with "CGPA 3.5 or above" - Elite Class (and "CGPA 3.0 – 3.49" - Above

Average") and categories of lower CGPA, such as "CGPA 2.5 – 2.99" - (Average);

(2) Students with "CGPA 2.5 – 2.99" – Average and those in categories of lower CGPA; and

(3) Students with "CGPA 2.0 – 2.49" (Below Average) and "CGPA 1.99 or below" (Poor

Academic Performance).

Among the different CGPAs, in the overall level, students with CGPA 3.0 to 3.4 (Above

Average) got the highest scores of mean 3.45 and Students with CGPA 1.99 or below (Poor

Academic Performance) got the lowest scores of 2.59.

My qualitative data also shows that students' with high spirituality would have higher

CGPA. In addition, there are also significant differences between the different groups (CGPA

categories) within the selected samples. The qualitative analysis for the focus group

discussion would be discussed in detail in the part of the four specific domains.

Table 4.10: The significant differences in the spiritual well-being (overall level) between students with different CGPA

	CGPA 3.5 or above" (Elite Class) (mean=3.43)	"CGPA 3.0 – 3.49" Above Average" (mean=3.45)	"CGPA 2.5 – 2.99" (Average) (mean=3.08)	"CGPA 2.0 – 2.49" (Below Average) (mean=2.81)	"CGPA 1.9... (Poor Academi... (mean...
or above" (Class) (=3.43)			X	X	X
0 – 3.49" (Average) (=3.45)			X	X	X
5 – 2.99" (rage) (=3.08)	X	X		X	X
0 – 2.49" (Average) (=2.81)	X	X	X		X
9 or below" (c Performance) (=2.59)	X	X	X	X	

represents the mean differences at .05 level in the spiritual well-being (overall level) between the different CGPA of students

From the perspective of the relevant and recent researches

However, the existing literature indicates inconsistent results concerning the relationship between the students' spiritual well-being and their academic performance measured by CGPA. Some report that there is no statistically significant relationship between the students' spirituality and their academic performance, such as the studies conducted for university students (Hsiao, 2003; Reyes, 2006; Zern, 1987; Smartt, 2014) but others show that there are significant positive relationships between the students' spirituality and their academic performance (Astin et al., 2010; Flannery, 2012; Walker & Dixon, 2002; Zern, 1989; Gilbert, 2013; Fukofuka, 2014).

Although my findings are consistent with results of the latter past researches mentioned above for the relationship between the students' spirituality and their academic performance, similar studies have never been done in Hong Kong. Also, these past researches have never focused on the analysis of students' academic performance (different academic result classification and categories) with the students' spirituality in the specific domain. The past researches just simply discussed and concluded whether or not there is a linear relationship between the students' spirituality and their academic performance. There is no deep analysis for the students' spirituality in the specific domain between different students with different CGPA.

4.5   The Relationships between university students' specific spiritual well-being level (personal, communal, environmental, transcendental) and their academic performance measured by 'Cumulative Grade Point Average' (CGPA)

The quantitative data shows that there are statistically positive significant relationships in all domains: the Personal, Communal, environmental and transcendental domains ($P<0.05$) at the .01 level (two-tailed) according to the table 4.8. Also, there are moderate effects in the Personal, Communal and environmental domains (Pearson's r >0.3). For the transcendental domain, it effects are lower but it is close to the moderate effect. There are positive relationships between the four domains and CGPA.

4.6   The relationship between students' spiritual well-being in the personal domain and their CGPA

4.6.1   From the perspective of the quantitative research

There were statistically significant positive relationship (P<0.05) at the .01 level (two-tailed) between students' spiritual well-being in the personal domain and their CGPA according to the table 4.8. There are moderate effects (Pearson's r >0.3) for the positive relationship between them. It means "the higher the CGPA of students, the higher their spiritual well-being in the personal domain'.

Based on the analysis of the One-way Anova, Table 4.11 shows that there are significant differences among students' spiritual well-being in the personal domain due to their different CGPA levels. According to LSD, there are significant results for the mean differences at .05 level in the spiritual well-being (personal domain) between the different CGPA of students. Table 4.12 shows the significant differences in the spiritual well-being (personal domain) between:

(1) Students with "CGPA 3.5 or above" - Elite Class (and "CGPA 3.0 – 3.49" - Above Average") and categories of lower CGPA, such as "CGPA 2.5 – 2.99" (Average);

(2) Students with "CGPA 2.5 – 2.99" – Average and those in categories of lower CGPA; and

(3) Students with "CGPA 2.0 – 2.49" (Below Average) and "CGPA 1.99 or below" (Poor

Academic Performance).

Among the different CGPAs, in the personal domain, students with CGPA 3.5 to 4.0

(Elite Class) got the highest scores of mean 3.76 and Students with CGPA 1.99 or below

(Poor Academic Performance) got the lowest scores of 2.85.

Table 4.11: Results of One-way Anova on Mean Difference of CGPA of Respondents (N=1130) for the personal domain

Demographic Variables	Personal domain
CGPA "CGPA 3.5 or above": Elite Class (N=123)	F=74.142 Average < Elite Class **(3.33 <3.76)*** Below Average < Elite Class **(3.06 <3.76)***
"CGPA 3.0 to 3.4": Above Average (N=459)	Poor Academic Performance < Elite Class (**2.85<3.76**)* Average <Above Average **(3.33 <3.75)***
"CGPA 2.5 – 2.99": Average (N=343)	Below Average < Above Average **(3.06 <3.75)*** Poor Academic Performance < Above Average **(2.85 < 3.75)***
"CGPA 2.0 – 2.49": Below Average (N=161)	Below Average < Average **(3.06 < 3.33)*** Poor Academic Performance <Average (**2.85< 3.33)***
"CGPA 1.99 or below": Poor Academic Performance (N=44)	Poor Academic Performance<Below Average (**2.85< 3.06)***

Note: Mean ratings are bold; *the mean difference is significant at the 0.05 level.

ble 4.12: The significant differences in the spiritual well-being (personal domain) between students with different CG

	CGPA 3.5 or above" (Elite Class) (mean=3.76)	"CGPA 3.0 – 3.49" (Above Average) (mean=3.75)	"CGPA 2.5 – 2.99" (Average) (mean=3.33)	"CGPA 2.0 – 2.49" (Below Average) (mean=3.06)	"CGPA 1.9 (Poor Academi (mean=
5 or above" Class) =3.76)			X	X	X
.0 – 3.49" Average) =3.75)			X	X	X
.5 – 2.99" erage) =3.33)	X	X		X	X
.0 – 2.49" Average) =3.06)	X	X	X		X
99 or below" ic Performance) =2.85)	X	X	X	X	

represents the mean differences at .05 level in the spiritual well-being (personal domain) between the above different CGPA of students

4.6.2 The relationship between students' spiritual well-being in the personal domain and their CGPA: From the perspective of the qualitative research

66 students were cautiously and seriously selected for 11 focus groups, consisting of 6 students in each. The following summary show a summary of the participants in the focus group discussions. A closely balanced combination of the different participants for the focus group discussions was made to offer maximum variation and rich data. Even, there are dominating parties (students without religious beliefs) for the religious beliefs. It is also real phenomena in Hong Kong universities. But there are at least different participants with religious beliefs.

A summary of the participants in the focus group discussions

University	Numbers of students	Percentages (%)
University X students	24	36.36 %
University Y students	24	36.36 %
University Z students	18	27.28 %
Total	66	100 %
CGPA	Numbers of students	Percentages (%)
CGPA 3.5 or above	5	7.58 %
CGPA 3.0 – 3.49	17	25.76%
CGPA 2.5 – 2.99	22	33.33%
CGPA 2.0 – 2.49	22	33.33%
Total	66	100 %
Major Disciplines	Numbers of students	Percentages (%)
Social Science students	18	27.27%
Business students	18	27.27%
Art & Language students	18	27.27%
Science	12	18.19%
Total	66	100%
Family social-economic status	Numbers of students	Percentages (%)
A better family social-economic status	20	30.30%
An average family social-economic status	25	37.88
A relatively lower family social-economic status	21	31.82
Total	66	100%
Religious beliefs	Numbers of students	Percentages (%)
Christian students	13	19.70 %
Catholic students	6	9.09 %
Buddhist students	2	3.03 %
Taoist student	1	1.52 %
Students without any religious beliefs	44	66.66 %
Total	66	100%

<u>CGPA 3.5 or above (Elite Class) –</u>

The data collected in focus group sessions suggests that students whose CGPA is 3.5 or above have higher spirituality in personal domain. This is reflected by their views on their responsibilities to themselves and others. For example, a respondent said:

> *I wouldn't regret if I have tried my best and got bad results, but if I didn't*
>
> *give my best, I would feel that I owe my parents, wasted the effort of teachers*
>
> *and wasted my own time of youth.*

<div align="right">(University X /A&L/Year 3/G)</div>

This indicates that she feels strongly obligated to fulfil her duties as a daughter and student. Such a sense of obligation illustrates a high level of maturity. Her intention of effectively using her time also demonstrates a kind of self-responsibility. In addition, she maintained an upright posture throughout the focus group session and responded to the questions in a firm tone. The posture and manner somewhat reflect her sense of self-discipline.

Another respondent said,

> *It's already a blessings to study a discipline that I like (law) in university, so*
>
> *I would work hard until I achieve my goal (of being a lawyer), and I'm sure*
>
> *I will get there.*

(University Y/SS/Year 3/B)

This student has a very clear direction and goal of life (to become a lawyer), and he is working hard towards his goal. He also has self-confidence (saying that he's sure that he will achieve his goal). This respondent was the first to respond to the question, he took the initiative.

The other respondent said,

> *Every time I solve a complicated and difficult problem in studies, I would be very satisfied. I start to understand what the professors are teaching, that wisdom is gained from failures. As a student, we must be brave to face different challenges and tests.*

(University Y/BUS/Year 2/G)

This shows that the student has a clear sense of identity, knowing that a student should not fear facing challenges in studies, but to work hard and breakthrough in order to improve. Her satisfaction in solving problems has shown that she enjoys her studies. The respondent kept smiling while she was answering, even when she was talking about her difficulties and failures, she had a positive attitude and was willing to share.

Therefore, these 3 students have high spirituality in the personal domain. Their responses are sufficient to represent students' situation in this CGPA group. So, students

whose CGPA is 3.5 or above have the highest spirituality in the personal domain. During the

focus group discussion, most of them actively answered the questions, they sat straight, they

talked firmly, and they would sometimes ask other students to share.

These students with high spirituality in the personal domain have some characteristics within

their spirituality in the personal domain that positively affects their learning, for example,

optimistic, good discipline and being focused. These characteristics would directly increase

the efficiency and motive of students in learning. Self-confidence, self-disciples, self-

responsibility, self-discipline, optimism and persistence are not only the spiritual qualities but

also closely correlates to academic performance based on both the previous empirical

findings of the related studies and the results of this study. These spiritual qualities are found

on the elite class students, in pursuit of wisdom and knowledge, and they also facilitate their

outstanding performance and breakthrough. Therefore, students who have higher personal

spirituality would have higher CGPA.

CGPA 3.0 – 3.49 (Above Average) –

Among the 17 students whose CGPA is between 3.0 -3.49, the majority of them (13

students) have higher spirituality in the personal domain. These 13 students could have

feelings of inner peace, self-awareness and senses of personal identity. Also, they would have

joy in life and know the meaning of life. For example, one of these 13 respondents said,

University life is very exciting, so you get to meet people of different

nationalities, social status and major disciplines. You could also learn

many new things, for example dancing, thus I always wanted to learn that.

(University Y/SS/Year 2/G)

This shows that the respondent enjoys university life because she can meet different

kinds of people and learn different new things. She can develop many different interests, and

these things bring colors to her life. The respondent was almost jumping with joy when she

answered the questions, and she reflects the liveliness of a university student.

Another respondent said,

I joined activities of three different clubs this year, including the orientation

camp, promotion and performances. Though I am very busy but I am

satisfied and the activities are meaningful and worth my time spent. My

classmates envy me as I have good results and I'm active in university life.

(University X /BUS/Year 2/B)

This shows that the respondent thinks that being busy with different university activities

and his studies is challenging, meaningful and valuable. His peers (including the participants

in the focus group discussions) look up to him because he can have a balanced university life.

The participants actively ask for his contact number after the discussion to keep contacts with

him. He could manage his studies without missing the fun. The respondent sat straight while

he answered the questions and was smiling all the time, showing a sense of confidence and

happiness.

A respondent said,

> *It's very fortunate that I have the chance to be an exchange student in UK*
>
> *last year, and this year I could have my internship in Big 4. University life is*
>
> *colourful and my life is meaningful.*

(University X /BUS/Year 3/B)

This shows that the respondent finds her life meaningful because she can have different

exposures and experiences, such as joining in overseas exchange programs and having

internship in renowned international corporations in her university life. Even though she is

not one of the top students in terms of academic results but she treasures her special

experiences. During the focus group discussion, the respondent answered affirmatively and

looked firm in the eye, she was confident and active.

As for the other 10 students who have high spirituality in the personal domain, their

answers are more or less similar to the ones quoted above. All of them think that there is no

conflict in having high spirituality in the personal domain and pursuing academic results.

They give positive responses, such as "University life is what I treasure most, and it's the happiest time of my life", "We are clear about the identity and responsibility of being a university student", "I can't just focus on my studies, I should have a balanced life", "now I can pursue my other goals in life" etc.

During the focus group discussion, most of them actively answered the questions, they sat straight, talked firmly, and would sometimes ask other students to share. Also, these students with high spirituality in the personal domain have some characteristics within their spirituality in the personal domain that positively affects their learning, for example, optimistic, good discipline and being focused. These characteristics would directly increase the efficiency and motive of students in learning.

Therefore, these 13 students have high spirituality in the personal domain. They are the majority and are sufficient to represent students' situation in this CGPA group. *So,* students whose CGPA is between 3.0 to 3.49 have relatively high personal spirituality.

CGPA 2.5 – 2.99 (Average) –

For students whose CGPA is between 2.5 -2.99, they have lower spirituality in the personal domain compared with the previous two groups (CGPA 3.5 or above and CGPA 3.0 – 3.49). Among the 22 students whose CGPA is between 2.5 – 2.99, the majority of them (16 students), 5 students didn't answer the question, which reflects their pack of knowledge and

interest in questions of spirituality in the personal domain. The other 11 students have relatively low spirituality in the personal domain, they do not have clear concepts of meaning of life and they don't have joy or inner peace. For example, one of the respondents said,

> *Most of my time of these two years of university life was spent in the library, I stay there until the last-15-minutes-annoucement is played. My classmates ask me out to watch movies and sing karaoke, but I rejected them. I really wanted to go play with them, but I would feel guilty of not putting all my time on my studies!*

> (University Y/S/Year 3/G)

This shows that the respondent is really hardworking and serious towards his learning. However, he really went to the extremes. He would feel guilty to relax, such as watching a movie or singing karaoke, but this would lead to an imbalanced life. To him, the only thing in life is to study. He feels great pressure and does not know that studying isn't the sole meaning of life.

Another respondent said,

> *Seeing students from different activity societies working hard for election, I admire and envy them. I have always wanted to join the Student Union, but my studies have used up all my time.*

(University X /A&L/Year 2/G)

This shows that his whole university life is fully occupied by his study. His interests –

organizing a society have been given up. All his time and effort are spent on his studies only,

he has an imbalanced life and he has lost direction in life.

The other respondent said,

> *I suffer insomnia due to stress of exams and homework, I need to take*
>
> *sleeping pills regularly.*

(University Y/BUS/Year 2/B)

This shows that the student not only has poor results, but also suffers from the stress of

studying. He does not have inner peace and therefore has low spirituality in the personal

domain.

For the other 8 students who have low spirituality in the personal domain, their response

are more or less similar to the 3 quoted above. They show a positive relationship between

their spirituality in the personal domain and their CGPA, that is, the lower their spirituality in

the personal domain, the lower their CGPA. They would answer that they have "great

pressure in studies", "life is changing and they feel lost", "always feeling worried about my

studies" and "haven't found my direction of life yet". In summary of these 11 students and

the attitude of the 5 students who didn't answer the questions, it shows that their spirituality

in the personal domain is quite low.

These 16 students are the majority in this CGPA group, and their responses are

sufficient to represent student's situation in this CGPA group. So, students whose CGPA is

between 2.5 to 2.99 have relatively low spirituality in the personal domain.

CGPA 2.0 – 2.49 (Below Average) –

From the findings of the qualitative research (the focus group discussion), students from

this group have the lowest spirituality in the personal domain. Among the 22 students whose

CGPA is between 2.0 – 2.49, the majority (18 students), 5 of them didn't answer the question,

which reflects their pack of knowledge and interest in questions of spirituality in the personal

domain. The other 13 students have relatively low spirituality in the personal domain,

because they don't really understand the meaning of life and they have less joy in life, less

inner peace and less self-awareness based on the observation of focus group discussion. For

example, one of the respondents said,

> *Sometimes, I am very confused about the others' so called objectives and*
>
> *goals in life. There is no alternative and no choice in our life. These so-called*
>
> *meanings of life and values of life are meaningless and insignificant to me.*
>
> *It is because we are always passive and the environment is prescribed. For*
>
> *example, I really want to be a professional nurse and it is my dream.*

> *Unluckily, I got bad public exam results and I can only study another*
>
> *discipline which I don't have interest in. Therefore, how can I have a good*
>
> *performance in the discipline in which I don't have interest and aspiration?*

<div align="right">(University Y/A&L /Year 2 /B) – (CGPA 2.2)</div>

This shows that he feels very frustrated because he failed to make his dream come true. Then he gets lost in his life. Also, he could not find another way to go out from the dilemma, he could not stand back up from his failures.

The other respondent said,

> *From my current results, I won't be able to find a job when I graduate, how*
>
> *is any company going to give me a chance for an interview with these bad*
>
> *results? I have wasted my time to study, and I don't know how to face my*
>
> *parents. It is because I am still addicted to playing online games.*

<div align="right">(University Z/L&A/Year 3/B)</div>

This student had bad results, although he knows his identity of being a student and his parent's child, he couldn't fulfill his responsibility of being a good student and doesn't know how to face his parents. The respondent was leaning on the table and shaking his legs, he was not very focused during the discussion, the bad habit reflects that he is not a much disciplined person.

A respondent said,

I would laugh at them if they are taking these questions (dream, meaning of

life, direction of life and value) seriously.

(University X /A&L/Year 2/G)

The attitude of the above respondent shows that she does not understand why other

people would have dreams and direction in life, she doesn't care about the value of her life.

For the other 10 students who have low spirituality in the personal domain, their

responses are more or less similar to the 3 quoted above. They show a positive relationship

between their spirituality in the personal domain and their CGPA, that is, the lower their

spirituality in the personal domain, the lower their CGPA. They would answer that they "get

lost of their real identity while doing part time jobs and working", "get discouraged due to

bad results in university", "look down on myself" and "haven't found my direction of life

yet".

During the focus group discussion, most of them didn't take the initiative to answer the

questions, they were invited to answer for many times. Some of them sat in a very lazy

posture, some kept yawning and shaking legs, they had a pessimistic attitude.

These students with low spirituality in the personal domain have some characteristics

within their spirituality in the personal domain that negatively affects their learning, for

example, laziness, cannot concentrate, pessimistic values of life and lack of discipline, these characteristics would prevent students from learning well.

In summary of these 13 students and the attitude of the 5 students who didn't answer the questions, it shows that their spirituality in the personal domain is the lowest in the four CGPA groups. These 18 students are the majority in this CGPA group, and their responses are sufficient to represent student's situation in this CGPA group. So, students whose CGPA is between 2.0 to 2.49 have the lowest spirituality in the personal domain.

4.6.3   A brief summary for the positive relationship between students' spiritual wellbeing in the personal domain and their academic performance

Students with CGPA 3.5 or above are a minority of students who really excel in academic performance. And students with CGPA 3.0 – 3.49 are doing quite well in their studies. Both of them do not have great differences in their spirituality in the personal domain. They could find self-confidence, pursue their dreams and get praised as they learn in university. They are winners of the exam system, so most of them are confident, positive and have hope and goals in life. Their spirituality in the personal domain is high, so they could focus on their studies and enjoy it. In the focus group discussion, we can see that they can manage their time well, and have a balanced life (have time to develop other interests).

From the focus group discussion, we can see that the spirituality in the personal domain of students and their CGPA have positive and mutual relationships. Students with better

academic results, i.e. students with CGPA 3.5 or above and students with CGPA 3.0 – 3.49, would show higher spirituality in the personal domain. These students with high spirituality in the personal domain have some characteristics within their spirituality in the personal domain that positively affects their learning, for example, optimistic, good discipline and being focused. These characteristics would directly increase the efficiency and motive of students in learning. Therefore, students who have higher spirituality in the personal domain, would have higher CGPA.

In the past decades, there are many studies for the relationships between these characters of students and academic success.

For example, persistence and determination are good qualities for students to succeed in academic fields (Almlund, et al., 2011; Farrington et al, 2012; Oliver et al., 2007). Concentration is also the necessary element of effective learning and academic success (Bernt, & Bugbee Jr, 1993; Grimes, 1997).

Furthermore, students' intellectual self-confidence and their academic performances are closely and positively linked (Abel, 1996; Abouserie, 1994; Brown & Dutton, 1995). Positive thinking, an active attitude, brave intention and an energetic spirit are the characters of a person with self-confidence (Chase, 2001). Self-confidence is closely linked with meaning, purpose and direction of life (Bryant, 2008; Emmons, 2003; Ryff, 1989). Moreover, self-discipline is certainly an important component of academic success (Duckworth, A. L., 2005;

Zimmerman, 2002).

The above findings about students' characters related to their spirituality and their academic success, are consistent with the other related researches mentioned in the literature reviews of the study.

However, students with CGPA between 2.0 – 2.49 are the ones with worst academic results, they are labeled as losers in the university exam system. They would lose confidence in themselves, lose their direction in life, and have negative thoughts. They are reminded of their failure in university and so they have the lowest spirituality in the personal domain.

The spirituality in the personal domain of students and their CGPA have positive and mutual relationships. These students with low spirituality in the personal domain have some characteristics within their spirituality in the personal domain that negatively affects their learning, for example, laziness, cannot concentrate, pessimistic values of life and lack of discipline, these characteristics would prevent students from learning well. Therefore, these students would try to flee from their problem, they would be late, leave early and be absent, and this is part of the vicious cycle, and they could not leave their difficulty.

For students whose CGPA is between 2.5 -2.99, they have middle-ranged results, so that they could not find satisfactions and happiness in learning. Since they have lower spirituality in the personal domain, they would tend to show lower psychological qualities, and they would need to spend more time and effort on studies than others, so that they would have

greater pressure (for example being too nervous and suffering from insomnia). Therefore,

they spend less time thinking on the meaning of life, reflecting upon themselves or interests

in other activities. They would face many struggles while they try to lead a balance life of

their interests (for example sports, art or music) and academic studies, and they might lose

the happiness and interest in learning.

The findings of the positive relationship among student's CGPA and their spirituality

and the significant differences among students' spirituality due to their different CGPAs

shown from the quantitative research (Questionnaires) is supported by the evidence of this

qualitative study based on the above observation and analysis of the focus group discussions

for the students' spiritual well-being in the personal domain. Also, "the higher the CGPA of

students, the higher their spiritual well-being in the personal domain" is supplemented by the

evidences of the qualitative study.

From the perspective of the relevant and recent researches, the studies done in the past

several decades for the relationship between the students' personal spirituality and their

academic performance measured by CGPA have inconsistent results. Some of the studies

found that there are no statistically significant differences in the relationship between the

academic performance and their personal spirituality (Hsiao, 2003; Reyes, 2006; Zern, 1987;

Smartt, 2014).

On the other hand, some of the studies found that there are significant differences for the

relationship between them (Astin et al., 2010; Flannery, 2012; Walker, & Dixon, 2002). The findings of the studies indicated a significant positive relationship between students' personal spirituality and their academic performance as expressed in the CGPA. It showed that the higher the students' spirituality, the higher the CGPA of the students. It is consistent with the findings of our study.

4.6.4   Background variables related to spiritual well-being in the personal domain and academic performance

Based on the qualitative findings in the focus group discussions, the findings from the quantitative research in the questionnaires are not only used to support research question 1 – whether a relationship exist between them, it also helped to explore the research question 2 – how are the background demographic variables related to spiritual well-being and academic performance. The qualitative findings indicate that major disciplines, family social-economic status and religious beliefs are related to spiritual well-being in the personal domain and their academic performance. Simultaneously, the previously quantitative findings can be also used to support, supplement and enrich the findings for the research Question 2. Therefore, these three background variables are used to account for and explore the correlations in the specific domain.

4.6.4.1 "Major disciplines" related to spiritual well-being in the personal domain and academic performance

For the perspectives of the quantitative analysis, students from the faculty of social science have got higher spiritual well-being (Mean= 3.61) in the personal domain and students studying in the Science area have got lower spiritual well-being (Mean = 3.37). The order of the highest spirituality to the lowest is in the following:

1st: Social Science (Mean = 3.61)

2nd: Business (Mean = 3.52)

3rd: Art & Language (Mean = 3.41)

4th: Science (Mean = 3.37)

Table 4.13 shows that there are significant differences (P<0.05) among students' spiritual well-being in the personal domain due to their different major disciplines based on the analysis of One-way Anova. According to LSD, there are significant results for the mean differences in the spiritual well-being (personal domain) between the different major disciplines of students. Table 4.14 shows significant differences in the spiritual well-being (personal domain) between:

- 'students from Social Science' and 'students from Art & Language';

- 'students from Social Science' and 'students from Science';

- 'students from Business' and 'students from Art & Language'; and

- 'students from Business' and 'students from Science'

Table 4.13: Results of One-way Anova on Mean Difference of Major disciplines of Respondents (N=1130)

ic Variables	Overall Scores	Personal domain	Communal domain	Environmental domain	Transcendental d
plines	F=2.058	F=7.927	F=5.586	F=10.369	F=2.022
nce"	No significant difference	"Art & Language" < "Social Science" **(3.41<3.61)***	"Art & Language" < "Social Science" **(3.51<3.66)***	"Social Science" < "Business" **(2.87<3.13)***	No significant diff
uage"		"Science"< "Social Science" **(3.37 < 3.61)***	"Science"< "Social Science" **(3.50< 3.66)***	"Social Science" < "Art & Language" **(2.87<3.11)***	
		"Art & Language" < "Business" **(3.41< 3.52)***	"Art & Language" < "Business" **(3.51< 3.63)***	"Social Science" < "Science" **(2.87<3.07)***	
		"Science"< "Business" **(3.37< 3.52)***	"Science"< "Business" **(3.50< 3.63)***		

lean ratings are bold; *the mean difference is significant at the 0.05 level.

Table 4.14: The significant differences in the spiritual well-being (personal domain)
between the different major disciplines of students.

	Social Science (mean = 3.61)	Business (mean= 3.52)	Art & Language (mean = 3.41)	Science (mean = 3.37)
Social Science (mean = 3.61)			X	X
Business (mean= 3.52)			X	X
Art & Language (mean = 3.41)	X	X		
Science (mean = 3.37)	X	X		

Note: X represents the mean differences at .05 level in the spiritual well-being (personal domain) between
the above different major disciplines of students

Both the means of students' spiritual wellbeing in the personal domain of students from

Social Science (3.61) and Business (3.52) respectively are higher than the mean (3.41) of

students from Art & Language and the mean (3.37) of students from Science.

Among the different major disciplines of students, for the students' spiritual wellbeing in

the personal domain, students from Social Science got the highest scores of mean 3.61 and

students from Science got the lowest scores of 3.37.

From the perspectives of the qualitative study – focus group discussions, it found that:

1st: Social Science students –

Among the 18 students who studied social science, the majority (the 12 social science

students) think that there are positive impacts from their major disciplines to their spiritual

wellbeing in the personal domain, including feelings of inner peace, self-awareness and

senses of personal identity. Also, they would have joy in life and understand the meaning of

life during studying their major disciplines. For example, one of the respondents said,

> *There are some modules in my major about civic and social awareness,*
>
> *cultural and historical awareness and then explain their relationships with*
>
> *real world issues and myself.... I would clearly understand my identity in*
>
> *Hong Kong and I would also develop my civil -awareness well.*

> (University Y /SS /Year 2 /B)

This reflects that the respondent could find his own identity, value and direction of life

through learning in his major discipline. He believes that these modules of social sciences

studies aim at letting students to know themselves better, to accept themselves, reflect on and

find their meaning and direction in life.

Another respondent said,

> *My major subject (Psychology) trains me to understand how people*
>
> *(including myself) behave, think and feel.... It also cultivates my analytical*
>
> *and thinking skills, especially in the area of self-awareness and meaning of*
>
> *life. Therefore, I would not compare with others. It is because I understand*
>
> *that there are different paths and challenges for different people.... I am*

happy that I have already found my way and am on the road.

(University Y /SS/Year 3/B)

This reflects that the respondent learned logical analysis and independent critical thinking in his major disciplines. This would help him understand his own meaning and direction in life, he needs not to compare with others, and therefore he would be joyful all the time.

For the other 10 students, there are also positive impacts from their major disciplines to their spiritual wellbeing in the personal domain, their responses are more or less similar to the ones quoted above. They agree that there is a positive relationship between their major disciplines and spirituality in the personal domain. They would answer that their major disciplines "help me to understand myself more", "force me to think about life", "make me reflect on what is happiness" and "affirm my identity, value and responsibility in life" etc. In summary of these 12 students' responses, we can see that students whose major discipline is Social Science, their major discipline, which would have a great positive effect on students' spirituality in the personal domain, also greatly contributed to their pursuit of wisdom and academic excellences.

2nd: Business students –

Among the 18 students who studied business, the majority (the 10 students), think that

there are positive impacts from their major disciplines to their spirituality in the personal

domain, including feelings of inner peace, self-awareness and senses of personal identity.

Also, they would have joy in life and meaning of life during studying their major disciplines.

For example, one of the respondents said that,

> *I chose Accountancy (Business) because I would like to earn more money for improving my living standard…. My objectives and goals are very simple and clear. It is to get a place in university for Accountancy, get a job in Big 4 (The largest 4 auditing firms in the world) and get all passes in the public exam – HKICPA (Accounting professional body) to be a qualified professional accountant.*

> (University X /BUS/Year 3/B)

This reflects that the respondent is very practical, but he has a very clear target that is to

be successful, this is his goal and target in life. This is also related to his major discipline,

because business studies, for example, accountancy is about calculating benefits and pursuing

their goal. Therefore he must first have a sense of identity and self-awareness, for example,

he would need to gain working experience from Big 4 and pass the HKICPA in order to meet

his life target – to become a qualified professional accountant. Therefore, this major

discipline has made the student more mature.

For the other 8 students, there are also positive impacts from their major disciplines to their spiritual wellbeing in the personal domain, their response are more or less similar to the ones quoted above. They agree that there is a positive relationship between their major disciplines and spirituality in the personal domain. They would answer that their major disciplines "are useful and very practical in life", "teaches me the ethics of business: to take from society and contribute to society" and "make me understand that everyone has their value in society (no matter their strengths or weaknesses)" etc. In summary of these 10 students' responses, we can see that students whose major discipline is Business, their major discipline, which would have a great positive effect on students' spirituality in the personal domain and also contributed to their pursuit of wisdom and academic performance.

3rd: Art & Language students –

Among the 18 students who studied Art & Language, 6 of them thought that there was a positive relationship between their major disciplines and their spirituality in the personal domain. However, the majority (12 Art & Language students), 6 of them didn't answer the questions, showing that they lack knowledge and interest in the relationship; there are 6 students who hold different points of views in this area, for example, 3 students think that there is no positive relationship between the two, and another 3 students think that there are less impacts from their major disciples to their spirituality in the personal domain. For

example, one of the respondents said

My major (language) trains me to focus on the structure and cultural

contexts of modern Chinese literature and philosophy…. There are many

classic and useful writings. I have learnt a lot for my values and meaning of

life. But I think most of them are outdated and unsuitable nowadays.

(University Y/A&L/Year 3/G)

This reflects that although the respondent could learn some philosophy of life and

correct values of life from her major discipline, for example in some classics like the poetry

in Tang and Sung dynasty, she doubts that these values are suitable for our life, she thinks that

they are outdated and useless now.

For the other 3 students who think that there is no positive relationship between their

major discipline and their spirituality in the personal domain, they responded, "There is no

relationship between them", "my major discipline gives me no help in the development of my

spirituality in the personal domain" and "I doubt whether there is any relationship between

them" etc. In summary of these 12 students' responses (6 not answering, 3 think there are less

impacts and 3 don't think that there is a positive relationship), we can see that students whose

major discipline is Art and Language, their major discipline, which would have a relatively

small positive effect on students' spirituality in the personal domain, and also relatively

contributes less to their academic performance.

4th: Science students –

Among the 18 students who studied Science, the majority (14 science students), 6 of them didn't answer the questions, showing that they lack knowledge and interest in the relationship; 4 students think that there is no positive relationship between the two, and 4 students think that there is conflict between their major discipline and their spirituality in the personal domain.

For example, one of respondents, who think that the two are in conflict said,

> *To be honest, physics - science is not my favorite choice. I study this major*
>
> *because I did not get good public exam result…. All of the subjects in my*
>
> *major are very boring and meaningless to me. I still think that I really waste*
>
> *my time because all of the knowledge I learn cannot apply in the reality. I*
>
> *would not engage in this industry…. But in order to graduate with a bachelor*
>
> *degree for getting a job, I force myself to study it.*

(University X /S/Year 2/B)

This reflects that the respondent was forced to choose science as his major discipline due to his poor results in public exam, he feels that he is wasting his time when studying his

major. He complains that many of the theories are not practical, he doesn't understand the meaning of studying science. This major discipline makes him unhappy about his current situation.

The other respondent said,

> *I think that most of students from science would like to change their major to study professional and prospectus area such as business or law if we are given one more chance. It is because we all want to get a better job after we graduate.*

(University X /S/Year 3/G)

This reflects that the respondent is studying only for her future job, so she only cares whether her major discipline could help her find a better job instead of the interest in learning and the meaning in learning itself. When the respondent says that she would prefer studying business or law, it reflects that she regrets studying science. Therefore, it shows that the respondent did not reflect on the meaning of life through her studies in her major discipline.

In summary of these 14 students' responses (6 not answering, 4 think the two contradict and 4 don't think that there is a positive relationship), we can see that students whose major discipline is Science, their major discipline, which would have a relatively small positive effect on students' spirituality in the personal domain, relatively contributed least to their

academic performance.

4.6.4.1.1 A brief summary for students' major disciplines related to spiritual well-being in the personal domain and academic performance

The findings indicate that most students who are studying social science would have a clear target of life, and they understand their identity in society. They would take responsibility and have a sense of mission in society. The subjects they enroll and their practicum, e.g. to visit the elderly in elderly homes or to visit street sleepers, would help them to understand and develop their identity, and meaning of life. They would then be thankful and content, and can feel the happiness and peace within. Therefore, the significant effects from their major disciplines on their spiritual wellbeing in the personal domain directly and largely contributed their pursuit for wisdom and academic excellence. Comparing with students from other disciplines, their spirituality in the personal domain is best. And there is a significant difference in their spiritual wellbeing in the personal domain with Art & Language students and Science students.

However, most Science students are those whose public exam results are the worst (Except those who study Medicine), most of them had no other choice than their major discipline now. We could feel their helplessness in their sharing: to study a major that one is not interested in, is a waste of money and time. But they have to finish their studies in order

to graduate with a Bachelor's degree. But without understanding the real meaning of studying science, they are in misery. Some major disciplines, for example pure science are too theoretical and not practical, so they think that their major does not benefit in their spirituality in the personal domain. Therefore, their spirituality in the personal domain is the worst among students studying in other disciplines.

Second to Social Science students, Business students have the highest spirituality compared with students from other disciplines. Most of them had good results in public exams. Although they would concern more about their own benefits and their career path, but they have a clear target and direction in life. The subjects they take are not only about money, because most universities have already added subjects such as "Corporate responsibility" and "Business Ethics". Business studies would now consider social balance and the benefit of all citizens. They would say no to monopoly and insist in Enterprise Conscience.

Most students who study Art and Language are usually more sentimental. They would follow their instincts, and would not always think logically and rationally. The subjects they study, for example "Literature Appreciation" and "Post modernism Studies", would require them understand the meaning behind words and understand things that are abstract. So, the spirituality in the personal domain seems very vague to them. "The meaning of life" is just a phrase, and their "identity" would be interpreted in many ways. So the joy and peace in heart seems more like a spiritual state instead of something specific.

From the perspective of the relevant and recent researches, there are still inconsistent results of the past researches for the relationship between the students' spirituality in the personal domain and their major disciplines. The findings of the study conducted by (Liu Y., 2007) showed that there are no statistically significant differences in the relationship between them.

However, some of studies found that there are statistically significant differences in the relationship between the students' spirituality in the personal domain and their major disciplines (Cheng & Peng, 2006; Liu, 2011; Fu, 2012). The findings of these studies, for example, done by Liu (2009) and Fu (2012) indicated that the students' spirituality in the personal domain from art and language are higher than that of students from Sciences. It is consistent with the findings of our study.

4.6.4.2 "Family social-economic status" related to spiritual well-being in the personal domain and academic performance

There are different family backgrounds from the quantitative and qualitative researches, that is different family social-economic status (including education level of parents, occupation of parents and their annual family income) to their spirituality in the personal domain is summarized as "the better the family social-economic status of students, the higher

their spirituality in the personal domain".

For the perspectives of the quantitative researches, there were statistically significant positive relationship (P<0.05) at the .01 level (two-tailed) between students' spiritual well-being in the personal domain and their annual level of family income according to the table 4.15. In addition, there is a positive significant relationship (P<0.05) at the .01 level (two-tailed) between students' spiritual well-being in the personal domain and their parents' (including father and mother) education levels in accordance with table 4.17. Thus, it means "the higher the annual level of family income (and the higher parental education levels) of students, the higher their spiritual wellbeing in the personal domain'.

Table 4.15: Correlations for spiritual well-being and annual income level of family

		Annual income level of family
SWB Overall	Pearson Correlation	.12**
	Sig. (2-tailed)	0
	N	1130
SWB Personal	Pearson Correlation	.15**
	Sig. (2-tailed)	0
	N	1130
SWB Communal	Pearson Correlation	.10**
	Sig. (2-tailed)	0
	N	1130
SWB Environmental	Pearson Correlation	.05
	Sig. (2-tailed)	0
	N	1130
SWB Transcendental	Pearson Correlation	.11**
	Sig. (2-tailed)	0
	N	1130

Note: ** Correlation is significant at the 0.01 level (2-tailed).

Table 4.16: Results of One-way Anova on Mean Difference of Annual Income level of Family of Respondents (N=1130)

...ic Variables	Overall Scores	Personal domain	Communal domain	Environmental domain	Transcender...
...ome level of	F=5.43	F=6.62	F=7.43	F=0.90 No significant difference	F=4.22
...120,000" ...me	Lowest Income < Higher Income **(3.2<3.39)***	Lowest Income < Higher Income **(3.50<3.71)***	Lowest Income < Higher Income **(3.65<3.83)***		Lowest Incor... Higher Incom... **(2.64<2.90)***
...000 - ...N=378): ...me	Lower Income < Higher Income **(3.14<3.39)***	Lower Income < Higher Income **(3.39<3.71)***	Lower Income < Higher Income **(3.52<3.83)***		Lower Incom... Higher Incom... **(2.65<2.90)***
...001 - ...N=536): Middle	Middle Income < Higher Income **(3.23<3.39)***	Middle Income < Higher Income **(3.52<3.71)***	Middle Income < Higher Income **(3.58<3.83)***		Lower Incom... Middle Incom... **(2.65<2.79)***
...001 and ...7): ...me	Lower Income < Middle Income **(3.14<3.23)***	Lower Income < Middle Income **(3.39<3.52)***	Lower Income < Lowest Income **(3.52<3.65)***		

...ratings are bold; *the mean difference is significant at the 0.05 level.

Table 4.17: Correlations for spiritual well-being and the HIGHEST level of education attained by students' parents (Including father and mother)

		The HIGHEST level of education attained by students' Father	The HIGHEST level of education attained by students' Mother
SWB Overall	Pearson Correlation	.19**	.23**
	Sig. (2-tailed)	0	0
	N	1130	1130
SWB Personal	Pearson Correlation	.14**	.21**
	Sig. (2-tailed)	0	0
	N	1130	1130
SWB Communal	Pearson Correlation	.11**	.22**
	Sig. (2-tailed)	0	0
	N	1130	1130
SWB Environmental	Pearson Correlation	.11**	.14**
	Sig. (2-tailed)	0	0
	N	1130	1130
SWB Transcendental	Pearson Correlation	.23**	.21**
	Sig. (2-tailed)	0	0
	N	1130	1130

Note: ** Correlation is significant at the 0.01 level (2-tailed).

Based on the analysis of the One-way Anova, Table 4.16 shows that there are significant differences among students' spiritual well-being in the personal domain due to the difference of their annual family income. According to LSD, there are significant results for the mean differences at .05 level in the spiritual well-being (personal domain) between students with different annual family income. Table 4.18 shows the significant differences in the spiritual well-being (personal domain) between:

1. 'Students with annual family income more than $480,001' (Higher Income) and the following lower income categories, such as those with annual family income from $240,001 to $480,000 (Middle Income); and

2. 'Students with annual family income from $240,001 to $480,000 (Middle Income) and students with annual family income from $120,000 to $240,000 (Lower Income)".

Among the different annual family incomes of students, in the personal domain, students with annual family income of $480,001 and above (Higher Income) got the highest scores of mean 3.71 and Students with annual family income from $120,000 - $240,000 (Lower Income) got the lowest scores of 3.39.

...18: The significant differences in the spiritual well-being (personal domain) between students with the different annua...
incomes

	Annual family income more than $480,001 (Higher Income) (mean = 3.71)	Annual family income from $240,001 to $480,000 (Middle Income) (mean = 3.52)	Annual family income from $120,000 to $240,000 (Lower Income) (mean = 3.39)	Annual fan... less than... (Lowest... (mean...
...mily income more ...an $480,001 ...gher Income) ...ean = 3.71)		X	X	
...amily income from ...001 to $480,000 ...ddle Income) ...ean = 3.52)	X		X	
...amily income from ...000 to $240,000 ...wer Income) ...ean = 3.39)	X	X		
...ily income less than $120,000 ...west Income) ...ean = 3.50)	X			

...resents the mean differences at .05 level in the spiritual well-being (personal domain) between students with the different annual family incor...

From the perspectives of the qualitative study – focus group discussions, it found that:

A better family social-economic status –

Among the 20 students who have a relatively higher family social-economic status (whose parents have education of university level, better occupations and higher family income, for example: annual family income $480,001 or above), the majority of students (13 students), think there are positive relationship and positive impacts from their family background to their spiritual wellbeing in the personal domain, including feelings of inner peace, self-awareness and senses of personal identity. Also, they would have joy in life and meaning of life from their family.

For example, one of the respondents said,

> *When I was young, they (parents) encouraged me to play piano as it was my*
>
> *hobby. Now, I got level 8 from Royal Schools of Music. I am proud of this.*

(University Y /A&L/Year 3/G)

This reflects that the respondents' family was rich and could support her to develop her hobbies – to play the piano, and she had a good brought up so she is now proud of her talents. Another respondent said,

> *I would like to be a professional architect because my dad is also an*
>
> *architect…. When I was young, he bought me a lot of toy building blocks,*

such as Lego…. My interests and potentials are gradually cultivated…. My

dad took me to the sites for the construction…. I really think it is very great

to be an architect.

(University Y /S/Year 3/B)

This shows that the respondents' father's education level – university level and his occupation – architect has inspired him a lot. This also helped him to find his direction and goal for life.

The two respondents above had more resources for their personal development. Thus, they would have different exposures and experiences.

The other 11 students also agree that there are positive relationship and positive impacts from their family background (social-economic status) to their spiritual wellbeing in the personal domain. Their response is more or less the same with the 4 quoted above. They responded, "My father (he's a doctor) is my role model in my studies and life", "When I was form 3, my parents started to discussion and share about the goals of life and ways to achieve them" and "I'm grateful to be born in a well-off family, I don't need to worry about my daily life, and I feel that I have a peaceful heart".

From the answers of these 13 students who have relatively better family backgrounds, their family social-economic status, which would have a great positive effect on students' spirituality in the personal domain, directly and largely contributed pursuit of wisdom and

academic success.

An average family social-economic status –

Among the 25 students who have a relatively average family social-economic status (whose parents have education of secondary school level, average occupations and average family income, for example: annual family income $240,001 - $480,000), the majority of students (16 students), think there are positive relationship and positive impacts from their family background to their spiritual wellbeing in the personal domain. For example, one of the respondents said,

> *They (parents) want me to have a good learning environment, thus they would buy more different books, such as novels, literature, history books and etc. to me during my childhood…. It is because they think that education can change the world. In fact their behaviors really change my world.*

> (University X /A&L/Year 3/G)

This shows that the respondents' family tried their best to give her the best since she was young, so that she would have a better environment to learn, she understands this and appreciates it. She thinks that 'their behaviors really change my world', she treasures what she has.

The other 13 students also agree that there are positive relationship and positive impacts from their family background (social-economic status) to their spiritual wellbeing in the personal domain. Their response is more or less the same with the 3 quoted above. They responded, "My parents ate less and saved up money to provide a good learning environment for me, I appreciate that and I feel happy about it", "My parents work for long hours and are very hard working, I should also work hard on my studies to repay them" and "I hope that I can buy them a flat so they could have a better life." They all appreciate their parents, they understand the difficulties in life but they didn't complain about it, they treasure their life and look forward to having a better future.

From the answers of these 14 students who have relatively average family backgrounds, their family social-economic status, which would have a great positive effect on students' spirituality in the personal domain, contributed their search for knowledge and academic performance.

A relatively lower family social-economic status –

Among the 21 students who have a relatively lower family social-economic status (whose parents have education of primary school level, lower occupations and lower family income, for example: annual family income $240,000 or below), the 7 students, that is, 1/3 of students think there are positive relationship and positive impacts from their family

background to their spiritual wellbeing in the personal domain, that is, the worse their family background, the lower their spirituality in the personal domain.

For example, one of the respondents said,

> *My parents were only educated to primary school level…. They of course expect me to get a place in a university and then earn more money…. Therefore, I am instructed not to join meaningless activities, such as student unions and sport teams…. In fact I am still hardworking and serious in my study for earning more money in future.*

(University Y/S/Year 2/B)

Another respondent said,

> *I am always asked to work hard to get good results for earning more money.*
>
> *My parents always taught me – money is the king.*

(University Z/BUS/Year 2/B)

This shows that the two respondents' parents have not studied a lot and therefore put their expectation on their children and hope they can study hard and earn more money in the future to improve their life. The former respondent's parents have affect this thoughts, thinking that joining all extra-curriculum activities are useless and a waste of time. The latter respondent's parents have taught him that money is most important.

Another respondent said,

Just like the popular saying: Some chances don't belong to me.

(University X /BUS/Year 2/B)

The other respondent said,

There is a sayings that there is no dream for poor people, I would want to

pursue my dreams too, but when you have no money, there is no way to

achieve it.

(University Y/A&L/Year 2/B)

This shows that the above respondents would complain and feel sad because of their low

family status. They are getting lost on their direction in life.

The other students also agree that there are positive relationship and positive impacts

from their family background (social-economic status) to their spiritual wellbeing in the

personal domain. Their response is more or less the same with the 3 quoted above.

In summary of these 21 students whose family background is relatively poor (having a

lower social-economic status, including 6 not answering, 6 thinking that there is no

relationship between family background and spirituality in the personal domain, 2 thinking

that there are negative relationships among them, and 7 thinking that there is a positive

relationship), we can see that their social-economic status of their family has different

impacts on their spirituality in the personal domain. Comparing to students in the other two groups, these students have a relatively lower spirituality in the personal domain.

4.6.4.2.1 A brief summary for students' family social-economic status related to spiritual well-being in the personal domain and academic performance

The findings indicate that for parents with higher education level, they are not only willing to share more details on making choices, they are also more patient and care more about their children. Once their child feels such love and guidance from their parents, they would have joy in life and then the child's personality, character, way of life and future dreams are shaped directly.

It is very important and critical to develop the spiritual well-being of a child during their childhood. A child with less educated parents would easily be less cared and less cultivated for his or her personal development during their childhood. It is because parents' educational levels and their emphasis on educating their children for their personal development are closely and positively related. For example, a child with more educated parents would be cultivated to pursue their dream, to think about the value of life and to have a regular reflection. On contrast, a child with less educated parents would be only asked to study hard for earning more money because their parents never think about the meaning of their life, joy of life and their identity.

For students with higher family incomes, resources (including money and time) would be provided abundantly for students to develop their potentials and seek for their life direction. Thus, the significant effects from their family social-economic status on their spiritual wellbeing in the personal domain directly and largely contributed their pursuit for wisdom and academic excellence. However, students would easily get lost in their growth and development, especially during their puberty if the increase of the student's family income causes a decrease of quality and time spent on students by their parents. Therefore,

"For what is a man profited, if he shall gain the whole world, and lose his own soul? Or what shall a man give in exchange for his soul?" (Mattew, 16:26) The most important elements are time and love, not money spent, by parents on children. To some extents, time and love spent on children are closely and positively related with family income. Students would also find their meaning of life, develop their potentials, build up their identity and feel glad in their lives even if their parents have lower incomes. As long as a good relationship between children and parents is well-built, their personal development would go smooth. Thus, it is valuable for parents to spend money, put efforts and energies on children especially during childhood and puberty.

From the perspective of the relevant and recent researches, for the personal domain, most of researches found there are no statistically significant differences between the social-economic status and spirituality of university students (Liu, 2007; Liu, 2009; Lin, 2006;

Huang & Chiang, 2006). However, it is not consistent with the findings of our study.

4.6.4.3 "Religious beliefs" related to spiritual well-being the personal domain and academic performance

Based on the analysis of the One-way Anova, Table 4.20 shows that there are significant differences among students' spiritual well-being in the personal domain due to their different religious beliefs. According to LSD, there are significant results for the mean differences in the spiritual well-being (personal domain) between students with different religious beliefs. Table 4.19 shows the significant differences in the spiritual well-being (personal domain) between students without religious beliefs and the following categories:

1. Students who are Christians

2. Students who are Catholics

The mean (3.41) of students' spirituality in the personal domain of those without religious beliefs are lower than the mean (3.81) of Students who are Christians, and the mean (3.76) of Students who are Catholics. Among the different religious beliefs of students, for the students' spiritual wellbeing in the Personal domain, students, who are Christians got the highest scores of mean 3.82 and students without religious beliefs got the lowest scores of 3.41.

In addition, there were statistically significant relationship (P<0.05) at the .01 level (two-tailed) between students' spiritual well-being in the personal domain and their frequencies of going to Church/ Religious group according to the table 4.21. There is a positive relationship between them. It means "the more the frequencies of students going to church or religious group, the higher their spiritual well-being in the personal domain".

Table 4.19: The significant differences in the spiritual well-being (personal domain) between students with the different religious beliefs

	Students who are Christians (mean=3.81)	Students who are Catholics (mean=3.76)	Students who are Buddhists (mean=3.63)	Students who are Taoists (mean=3.47)	Students without religious beliefs (mean=3.41)
Students who are Christians (mean=3.81)					X
Students who are Catholics (mean=3.76)					X
Students who are Buddhists (mean=3.63)					
Students who are Taoists (mean=3.47)					
Students without religious beliefs (mean=3.41)	X	X			

Note: X represents the mean differences at .05 level in the spiritual well-being (personal domain) between students with the different religious beliefs

Table 4.20: Results of One-way Anova on Mean Difference of Religious Beliefs of Respondents (N=1130)

ic	Overall Scores	Personal domain	Communal domain	Environmental domain	Transcender
eliefs	F=51.55	F=17.38	F=19.47	F=15.43	F=100.24
thout eliefs" : Nil	"Nil"< "Christians" **(3.1<3.67)***	" Nil "< "Christians" **(3.41<3.82)***	" Nil "< "Christians" **(3.51<3.89)***	" Nil "< "Christians" **(2.97<3.34)***	" Nil "< "Christians" **(2.53<3.61)***
ho are Christians	" Nil "< "Catholics" **(3.1<3.61)***	" Nil "< "Catholics" **(3.41 <3.76)***	" Nil "< "Catholics" **(3.51 <3.84)***	" Nil "< "Catholics" **(2.97<3.32)***	"Buddhists"< "Christians" **(2.78 <3.61)***
ho are Catholics	" Nil "< "Buddhists" **(3.1<3.40)***		" Nil "< "Buddhists" **(3.51 <3.85)***	" Nil "< "Buddhists" **(2.97 <3.32)***	"Taoists"< "C **(2.77 <3.61)***
ho are Buddhists					" Nil "< "Cat **(2.53<3.52)***
ho are oists (N=6)					"Buddhists"< **(2.78 <3.52)*** "Taoists" < C **(2.78 <3.52)***

ratings are bold; *the mean difference is significant at the 0.05 level.

Table 4.21: Correlations for spiritual well-being and the frequencies of going to Church/ Religious group

		The frequencies of going to Church/ Religious group
SWB Overall	Pearson Correlation	.34**
	Sig. (2-tailed)	0
	N	1130
SWB Personal	Pearson Correlation	.19**
	Sig. (2-tailed)	0
	N	1130
SWB Communal	Pearson Correlation	.16**
	Sig. (2-tailed)	0
	N	1130
SWB Environmental	Pearson Correlation	.20**
	Sig. (2-tailed)	0
	N	1130
SWB Transcendental	Pearson Correlation	.50**
	Sig. (2-tailed)	0
	N	1130

Note: ** Correlation is significant at the 0.01 level (2-tailed).

From the perspectives of the qualitative study – focus group discussions, it found that:

<u>Christian students –</u>

Among the 13 Christian students, the majority of students (11 Christian students) think that there are positive impacts from their religious beliefs to their spiritual wellbeing in the personal domain, including feelings of inner peace, self-awareness and senses of personal identity. Also, they would have joy in life and understand the meaning of life during their pursuits of their religious beliefs.

For example, one of the respondents said,

> *I had some bad friends when I was young and went astray, and quitted school in form 3. But when I believed in Christ, I went to church and was baptized, and my life has changed.*

> (University X /BUS/Year 2/B)

This shows that the respondent has learned to be good after knowing Christ. Although he quitted school in form 3, he is now a university student and has found his direction and target in life, his life has changed.

Another respondent said,

> *I grew up in Church. I am very serious to what I believe. I actively participate in churchlife and the activities. I always join worship on Sunday and fellowship on Saturday. Also, I would join Christmas caroling, evangelistic rally and short term overseas missionary trips. I really feel happy and peaceful most of time. My life is full and meaningful. I can also accomplish the roles and missions as a Christian.*

> (University Y/SS/Year 3/B)

This reflects that the respondent is a devout Christian, he participates actively in church activities. He also would feel that his life is meaningful and happy, and that he is accomplishing roles and missions as a Christian.

Among the other 9 students who think that there are positive impacts from their religious beliefs to their spiritual wellbeing in the personal domain, their responses are more or less the same with the ones quoted above. They would answer that "every time after I pray, I would feel peaceful", "I love my fellowship life in church, it's meaningful", "whenever I get lost and confused, I would pray and read the Bible, then I would find my direction again" and "I have the habit of devotion (to read the Bible), and it reminds me of what is right everyday" etc.

In summary of these 11 students' responses, we can see that students whose religious belief is Christianity (including practicing prayer and going to church activities), their religious belief would have a great positive effect on students' spirituality in the personal domain and largely contributed to their academic success. It is obvious that Christians had the relatively highest spirituality in the personal domain.

Catholic students –

Among the 6 Catholic students, the majority of students (5 Catholics) think there are positive impacts from their religious beliefs to their spiritual wellbeing in the personal domain, including feelings of inner peace, self-awareness and senses of personal identity. Also, they would have joy in life and become clear about their meaning of life during their pursuits of their religious beliefs.

For example, one of the respondents said,

Religious beliefs are my core values…. It guides my ways and directions….

I would not easily get lost in my life…. I really understand what I need and

the meaning of my life.

(University X /SS/Year 3/G)

This shows that the respondent has a clear goal and direction of life, she also knows the meaning of life because her religious belief gives her direction. From her response, we can see that her religion has great relationship to her spiritual wellbeing in the personal domain.

Morning and night prayers, and going to church for Mass would increase

my knowledge about my faith, and it helps me to reflect upon my life and

reminds me of my mission in life.

(University Y/A&L/Year 3/B)

This shows that the respondent could find her direction and meaning of life through church activities and prayers.

Among the other 3 students who think that there are positive impacts from their religious beliefs to their spiritual wellbeing in the personal domain, their responses are more or less the same with the ones quoted above. They would answer that "I am joyful because of God" and "I know why I am living".   In summary of these 5 students' responses, we can see that students whose religious belief is Catholic (including practicing prayer and going to church activities), their religious belief would have a great positive effect on students' spirituality in the personal domain and largely contributed to their academic success. Catholic was second to Christianity as having the second highest spirituality in the personal domain among other religious beliefs.

<u>Buddhist students –</u>

There were only 2 Buddhist students, and they both think there are positive impacts from their religious beliefs to their spiritual wellbeing in the personal domain, including feelings of inner peace, self-awareness and senses of personal identity. Also, they would have joy in life and meaning of life during their pursuits of their religious beliefs.

For example, one of the respondents said,

> *I think that my destiny and fortune have already been determined and arranged…. From the meaning of life in Buddhists, all of the good things or charitable things are done for the next life.*

(University X /SS/Year 2/B)

This shows that the respondent has a life of Buddhists thoughts. His goal and meaning for this life is to prepare for his next life, therefore he needs to do more good and charitable things; and things of this life are already determined, so he can only accept it.

Another respondent said,

> *I would burn incense and worship every morning and night, I would also read the Buddhist Scripture…. I would need to do good and accumulate merits, and also practice Buddhism.*

(University X /A&L/Year 3/G)

This reflects that the respondent would need to burn incense and worship every day and night in order to accumulate merits, then she would be closer to the level she pursues and she would be happier.

In summary of these 2 students' responses, we can see that students whose religious

belief is Buddhist (including meditation and practising religious activities), their religious belief would have a positive effect on students' spirituality in the personal domain and contributed some to their academic performance.

<u>Taoist student –</u>

There is only 1 Taoist, he thinks that there are positive impacts from their religious beliefs to their spiritual wellbeing in the personal domain, including feelings of inner peace, self-awareness and senses of personal identity. Also, he would have joy in life and understands the meaning of life during their pursuits of their religious beliefs.

> *Now I learn how to go with the flow, I would let everything happen naturally (including my results and relationships), I would not be too stubborn, but this does not mean that I'm not trying my best and being serious.*

> (University X /S/Year 3/B)

This shows that the respondent is affected by his Taoist thoughts – things will happen naturally, he lets go and does not give himself too much pressure, but he is also working hard at the same time and not being lazy. His religion gives him inner peace.

From this Taoist students' answer, we can see that his religious belief has a positive effect on students' spirituality in the personal domain.

<u>Students without any religious beliefs –</u>

Among the 44 students who didn't have any religious belief, 14 of them didn't answer the question, showing that they lack knowledge and interest in the relationship between their religious beliefs and their spirituality in the personal domain.

Among the 30 students who have responded, the majority of them (25 students) think

that there is no relationship between their religious beliefs and their spirituality in the personal domain. Some of them (10 students) have a lower spirituality in the personal domain and they responded as follows:

For example, one of the respondents said,

> *I would really appreciate and admire others who understand and know what they live for and work for…. Without any religious beliefs, life sometimes seems to be meaningless to me.*

> (University Y/BUS/Year 2/G)

This shows that the respondent has not religious belief and no idea on her meaning and direction of life, life is meaningless to her. She lacks the direction and goal for life. Another respondent said

> *Sometimes I question myself: why do I work so hard? What else is there besides of results, career and money?*

> (University X /A&L/Year 3/B)

This reflects that the respondent does not know what there is in life besides of results, career and money, he lacks direction and goal in life.

From the response of these 44 students (including 14 students not answering, 5 who think that there is conflict between the two aspects, and 25 who think that there is no relationship among them – with 10 students who had relatively low spirituality in the personal domain), we can see that there are a relatively low positive effect from religious beliefs on those students who have no religious belief and their spiritual wellbeing in the personal domain.

4.6.4.3.1 A brief summary for students' religious beliefs related to spiritual well-being in the personal domain and academic performance

The findings indicate that there is a significant difference among the spirituality in the personal domain of Christians (and Catholics) and students without religious beliefs. Students with religious beliefs would always have stronger senses, deeper feelings and clearer thoughts in the personal domain compared with students without religious beliefs. For instance, they would clearly understand their identities and meaning in life. Also, they would always feel happy and peaceful in their minds and hearts. It is because they have strong faiths on what they believe and what they do. Conversely, students without religious beliefs would easily get lost in life because there are no principles and rules that they can follow.

There are differences between Christians and students without any religious belief. Also, there are differences between Catholics and students without any religious belief. It is because the religious doctrines of Christianity and Catholics are quite similar. Christians and Catholics strictly follow the rules in Bible and they also listen to the clergy and priest respectively. They would regularly join worship on Sunday. Therefore, Christians and Catholics would clearly understand their missions, duties and meaning in their life. They would always feel happy and peaceful no matter whether they are in a good and comfortable situation or not. It is because they surely know that they would be with God no matter what situations they are in. Conversely, students without religious beliefs would worry and feel

helpless for the uncertainties, especially in the unfavorable and difficult situations. Also, they would feel confused about the meaning of life because they will face identity crisis. Thus, the significant effects from their religious beliefs (for example, Christianity and Catholics) on their spiritual wellbeing in the personal domain directly and largely contributed their pursuit for wisdom and academic excellence.

However, there is no significant difference for the students' spiritual wellbeing in the personal domain among students with different religious beliefs, except those students who have no religious beliefs. For examples, there are no significant differences between students who are Christian and students who are Buddhist. However, since there are only 2 Buddhist students and 1 Taoist, therefore we cannot make detailed analysis and have an all-rounded discussion on these two religions, this is the limitation of our study.

From the perspectives of relevant and recent researches, there are inconsistent results of the studies done in the past several decades for the relationship between the students' spirituality in the personal domain and their religious beliefs. Some of the studies found that there are no statistically significant differences in the relationship between them (Fu, 2012).

However, other researches showed that there are statistically significant differences between the students' spirituality in the personal domain and their religious beliefs (Liu, 2007; Huang, 2011). For example, the study conducted by Huang (2011) found that people believing in Christianity would have higher spirituality in the personal domain than those

without religious beliefs and people with Buddhist belief would have higher spirituality than those without religious belief. It is consistent with the findings of our study.

4.6.5 A summary for the discussion and analysis in the personal domain

Regarding the research question 1, the study quantitatively and qualitatively find that there are significant positively relationships between the students' spiritual wellbeing in the personal domain and their academic performance. Also, there are significant difference among students' spiritual well-being in the personal domain due to their different CGPA levels.

The findings of the quantitative research are used to establish the relationship, then the qualitative findings are employed to enrich the research data and add insights by hearing what students perceive and think when prompted. Students' family social economic background, major disciplines and their religious beliefs are regarded as related to spiritual well-being and academic performance.

There are positive relationships between the following:

1.   students' socioeconomic background (including their family income and education level of parents),

2.   their spiritual well-being and

3.   their academic performance.

For students with a higher socioeconomic status, they would have more happiness and be more satisfied, more exposures in different aspects as well as all-rounded learning experiences. Therefore they would have better adaptation and learning skills in their academic learning as well. Conversely, students from families with lower socioeconomic status lack chances and resources, it would slow down their development in learning.

It finds that there are higher effects from the major discipline – social science to the students' spiritual wellbeing in the personal domain for their pursuit of academic performance. It is because social science as major would imperceptibly give them more determination and interest in their own major, they would enjoy it. To enjoy one's work is the way to success.

The religious beliefs (including prayer, worship, fellowship, reading the Bible, etc...) would give students peace and joy at heart, more chances to reflect on their meaning and value of life and understand their responsibilities in these identities. Therefore, these enhancement would also improve their ability in pursuing better academic results.

4.7   The relationship between students' spiritual well-being in the communal domain and their CGPA

4.7.1   From the perspective of the quantitative research

Based on the findings of the quantitative study, there were statistically significant positive relationship ($P<0.05$) at the .01 level (two-tailed) between students' spiritual well-being in the communal domain and their academic performance according to the table 4.22. There are moderate effects (Pearson's r >0.3) for the positive relationships between them. It means "the higher the CGPA of students, the higher their spiritual well-being in the communal domain'.

Table 4.22: Correlations for spiritual well-being and academic performance

		Cumulative Grade Point Average (CGPA)
SWB Communal	Pearson Correlation	.44**
	Sig. (2-tailed)	0
	N	1130

Note: ** Correlation is significant at the 0.01 level (2-tailed).

Based on the analysis of the One-way Anova, Table 4.23 shows that there are significant differences among students' spiritual well-being in the communal domain due to their different CGPA levels. According to LSD, there are significant results for the mean

differences at .05 level in the spiritual well-being (communal domain) between the different

CGPA of students. Table 4.24 shows the significant differences in the spiritual well-being

(communal domain) between:

(1) Students with "CGPA 3.5 or above" - Elite Class (and "CGPA 3.0 – 3.49" - Above

Average") and categories of lower CGPA, such as "CGPA 2.5 – 2.99" (Average);

(2) Students with "CGPA 2.5 – 2.99" – (Average) and those in categories of lower CGPA; and

(3) Students with "CGPA 2.0 – 2.49" (Below Average) and "CGPA 1.99 or below" (Poor

Academic Performance).

　　Among the different CGPAs, in the communal domain, students with CGPA 3.5 to 4.0

(Elite Class) got the highest scores of mean 3.85 and Students with CGPA 1.99 or below

(Poor Academic Performance) got the lowest scores of 3.02.

Table 4.23: Results of One-way Anova on Mean Difference of CGPA of Respondents (N=1130) – for the communal domain

Demographic Variables	Communal domain
CGPA "CGPA 3.5 or above": Elite Class (N=123) "CGPA 3.0 to 3.4": Above Average (N=459) "CGPA 2.5 – 2.99": Average (N=343) "CGPA 2.0 – 2.49": Below Average (N=161) "CGPA 1.99 or below": Poor Academic Performance (N=44)	F=76.58 Average < Elite Class **(3.44 < 3.85)*** Below Average < Elite Class **(3.17< 3.85)*** Poor Academic Performance < Elite Class **(3.02 < 3.85)*** Average < Above Average **(3.44<3.82)*** Below Average < Above Average **(3.17 < 3.82)*** Poor Academic Performance <Above Average **(3.02 <3.82)*** Below Average < Average **(3.17 <3.44)*** Poor Academic Performance < Average **(3.02 <3.44)***

Note: Mean ratings are bold; *the mean difference is significant at the 0.05 level.

Table 4.24: The significant differences in the spiritual well-being (communal domain) between students with different CG...

	CGPA 3.5 or above" (Elite Class) (mean=3.85)	"CGPA 3.0 – 3.49" (Above Average) (mean=3.82)	"CGPA 2.5 – 2.99" (Average) (mean=3.44)	"CGPA 2.0 – 2.49" (Below Average) (mean=3.17)	"CGPA 1.99 o... (Poor Academic P... (mean=3...
...r above" (...ass) (...85)			X	X	X
...– 3.49" (...verage) (...82)			X	X	X
...– 2.99" (...ge) (...44)	X	X		X	X
...– 2.49" (...verage) (...17)	X	X	X		X
...or below" (...Performance) (...02)	X	X	X	X	

...resents the mean differences at .05 level in the spiritual well-being (communal domain) between the above different CGPA of students

4.7.2   The relationship between students' spiritual well-being in the communal

domain and their CGPA: From the perspective of the qualitative research

CGPA 3.5 or above students (Elite Class) –

Students with CGPA above 3.5 have the highest spirituality in the communal domain. Most of them (4 students) would always show love, respect, forgiveness and trust to others. For example, one of the respondents said that

To a certain extent, if classmates find you for help, it is because they appreciate you and respect you. Therefore I would patiently teach them and help them to solve their problems, this is how we should respect others.

(University Z /BUS/Year 2/B)

This shows that the student treats others well (to teach them patiently and help them to solve problems), he treats other with trust and respect. He is selfless, and thinks positively (that his classmates appreciate him and respect him).

Another respondent said,

I may be doing well in my studies, but others have other talents, we can help each other with what we are good at, then we can achieve a win-win situation.

(University Y /SS/Year 3/B)

This students' response shows that he understands the importance of a harmonious

relationship in the process of learning and handling other things. He knows the importance of

helping others with what he is good at, and letting others help him with what he isn't so good

at, this is the behaviour of trusting and loving others. The students' response was very polite,

and he smiled and responded as others were answering the question. This shows that the

respondent is willing to accept others and exchange opinions with others.

The other respondent said,

> *My best memories aren't when I received the scholarship, it is when I studied*
>
> *hard with my classmates and group mates in the library. The journey of*
>
> *learning is challenging, but it is very fortunate that I have met them.*

(University X /A&L/Year 3/G)

This student treasures her friendship more than her academic results, she gave honor to

her friends of solving the problems in the process of learning (being fortunate to have met

them). This shows that she appreciates and respects her friends.

Therefore, these 3 students have a high spirituality in the communal domain. These 3

students are sufficient to represent the situation of students of this CGPA group. So, students

who have CGPA over 3.5 have the highest spirituality in the communal domain.

<u>CGPA 3 and 3.49 (Above Average) –</u>

Based on the observation of the focus group discussion, students whose CGPA is between 3.00 and 3.49 had a relatively high spirituality in the communal domain. Among the 17 students whose CGPA is between 3.0 -3.49, the majority of students (12 students of 17 students) showed love, forgiveness and kindness to others. They always keep a harmonious relationship with others.

For example, one of these 12 respondents said,

> *Although there are many foreign students in university, not many classmates are willing to do group projects with them, because students are afraid of the language barrier, culture difference and the different learning attitudes etc. that may lead to conflicts so the whole group would get lower marks. But I don't mind being in the same group with them, they are unfamiliar with our country, I think we should show them hospitality. I keep contact with some foreign students after they return home.*

> (University Y /SS/Year 2/G)

This shows that the respondent would not mind helping others and shows kindness to others. Even though her academic marks may be adversely affected in exchange for helping others, she is happy and willing to do so. She puts communal interests (to show them

hospitality), such as love and harmonious relationships ahead of her personal interests –

academic results. The respondent encouraged other students to answer the questions, this

reflects that she is willing to accept other opinions and wants to foster discussion.

The other respondent said,

> *I don't know why some classmates who I'm not so familiar with would call*
>
> *me before exams to ask me to help them. Although they interfered my studies,*
>
> *I won't reject them at that critical moment!*

<div align="right">(University X /BUS/Year 2/G)</div>

This shows that the respondent would also give help to others at the critical moment –

exam period. He is willing to sacrifice himself for others. He would not put his academic

results ahead of harmonious relationships and mutual friendship.

For the other 10 students who also have high spirituality in the communal

domain, their responses are more or less similar with the ones quoted above. They

agree that spirituality in the communal domain and the pursuit of academic

performances do not contradict, but complement each other. They said that "to

respect others is the foundation of learning", "to forgive others is to open yourself to

better chances", "trust is the foundation to success" etc. Therefore, these 12 students

have a high spirituality in the communal domain. These 12 students are sufficient to

represent the situation of students of this CGPA group. So, students whose CGPA is between 3.0 and 3.49 have high spirituality in the communal domain. Most of the students were politely nodding and smiling in the focus group discussion, this reflects that they are caring, they have mutual trust and respect, and they are willing to accept different opinions.

CGPA - 2.5 to 2.99 (Average) –

Students whose CGPA is between 2.5 and 2.99 have a relatively low spirituality in the communal domain compared with the previous two groups. Among the 22 students whose CGPA is 2.5 – 2.99, the majority (16 students), 5 of them didn't respond to the question, this shows that they lack knowledge or interest in the topic of spirituality in the communal domain. The other 11 students had low spirituality in the communal domain. They did not have clear concepts of respect and kindness, their love and forgiveness for others are also very low. For example, one of the respondents said,

> *Some classmates are always absent, and they don't do their part in a group*
>
> *project. I will not tolerate them, I despise them, and I would report this to*
>
> *the professors, because they are free riders.*

(University Y /BUS/Year 2/B)

This shows that the respondent have less forgiveness and love to others. He would think that it is not fair for those who did nothing to have good mark. Thus, he would report them to teachers. It reflects that the respondent is obstinate and he cannot endure and understand the weakness and difficulties of the others. It is because he focuses more on personal interests – academic results than communal interests. The respondent sometimes interrupts the sharing of other students, this shows that he lacks patience and respect for others, he is a bit selfish. Another respondent said,

> *I hate those classmates who ask you about the subject a few days before exam,*
>
> *I would reject them. It won't do them any good since they start so late, and*
>
> *they affect my progress of revision.*

(University Y /S/Year 2/B)

This shows that the respondent would ignore others during critical moments – such as the examination period. He worries and concerns about his own interests – that his academic performance in exam would be adversely affected. He also finds an excuse for his pitiless conduct. The respondent interrupted other students and would argue if they had different opinions. This reflects that the respondent is not willing to exchange opinions, he lacks patience and respect for others, and he neglects the feeling of others.

The other respondent said,

Every time I ask those who have good results about homework, they always

scold me: didn't you pay attention in lesson? Why are you asking such basic

questions? It's hard to deal with them.

(University X /S/Year 2/B)

This shows that the respondent has narrow thoughts, he didn't reflect on

himself, so he doesn't understand the advice of his classmates. He does not know

how to maintain a harmonious relationship (he thinks that these classmates are hard

to deal with).

For the other 8 students who also have low spirituality in the communal domain, their

responses are more or less similar with the 3 quoted above. All 8 respondents show a positive

relationship between spirituality in the communal domain and their CGPA, that is, the lower

the spirituality in the communal domain, the lower their CGPA. They said that "I would argue

with my family over academic results", "I would hate those who rejected to help me with my

studies" and "treat classmates who have good results as my imaginary enemies" etc.

Therefore, these 11 students have a low spirituality in the communal domain. These 11

students are sufficient to represent the situation of students of this CGPA group. So, students

whose CGPA is between 2.5 and 2.99 have low spirituality in the communal domain.

In summary of these 11 students and the attitude of the 5 students who didn't answer the

questions, it shows that their spirituality in the communal domain is quite low. These 16

students are the majority in this CGPA group, and their responses are sufficient to represent

student's situation in this CGPA group. So, students whose CGPA is between 2.5 and 2.99

have relatively low spirituality in the communal domain. They showed some selfish

behaviours during the focus group discussion, the lack patience and respect for others.

CGPA: between 2.49 and 2.0 (Below Average) –

Students with CGPA under 2.49 have the lowest spirituality in the communal domain.

Among the 22 students whose CGPA is between 2.0 – 2.49, the majority (18 students), 5 of

them didn't answer the question, which reflects their lack of knowledge and interest in

questions of spirituality in the communal domain. The other 13 students have relatively low

spirituality in the communal domain, because they do not have clear concepts of respect and

kindness, their love and forgiveness for others are also very low. For example, one of these 13

respondents said,

> *They (family and friends) are very annoying, they always tell me to work*
>
> *harder. Do you think I don't want to? But my abilities and interest are not*
>
> *on my studies, to graduate from university is already the best I can do. They*
>
> *don't understand me, and we always argue because of my results.*

(University Z /A&L/Year 2/B)

This reflects that the respondent could not communicate well with his family and friends, he lacks respect and acceptance towards them. He should try to honestly share his difficulties and direction of life to them. He played with his smart phone when others were sharing, this showed that he lacks respect for others.

Another respondent said,

> *Those who have good results would look down on those who have poor results. Therefore, I seldom talk to those who have good results, I am used to being alone and doing what I what.*

(University X /A&L/Year 2/G)

This shows that the respondent feels inferior due to her poor results, and it has affected her interpersonal relationships, so that she becomes eccentric and unsociable (I am used to being alone and doing what I what.) She minds her results a lot, and thinks that it reflects her value. The respondent showed gestures of impatience during the discussion, this reflects that she lacks patience and respect for others.

Another respondent said,

> *I always think that others respect you and care about you because you are successful, or that you have a high social status or power. I never feel like*

being respected and cared for, so how can I love them? Some classmates

said that I was indifferent.

<div align="right">(University Z /SS/Year3/B)</div>

This shows that the respondent misunderstood the concepts of respect and care, thinking that one earns respect by being successful. He is a radical person, he treats others with the principle of "an eye for an eye", so he is indifferent. This reflects that he does not understand that love should be unconditional and not expecting return. When the respondent heard different opinions, he would cross his arms and looked quite arrogant, this reflects that he is self-centered and not willing to listen to others. These responses above show that the respondents could have bad relationships with others because they got poor academic results. They would easily feel inferior. Arguments and conflicts are caused by their poor academic performance.

For the other 10 students who also have low spirituality in the communal domain, their responses are more or less similar with the 3 quoted above. All these 13 respondents show a positive relationship between spirituality in the communal domain and their CGPA, that is, the lower the spirituality in the communal domain, the lower their CGPA. They said that "I do not trust my classmates", "I struggle as I compare with others", "I stay away from those classmates whose results are poorer than mine" and "I won't forgive those who have laughed about my poor results" etc.

In summary of these 13 students and the attitude of the 5 students who didn't answer the questions, it shows that their spirituality in the communal domain is lowest among the other CGPA groups. These 18 students are the majority in this CGPA group, and their responses are sufficient to represent student's situation in this CGPA group. So, students whose CGPA is between 2.0 and 2.49 have the lowest spirituality in the communal domain. Most of the respondents showed that they lack patience and respect for others as they joined the focus group discussion.

4.7.3   A brief summary for the positive relationship between students' spiritual wellbeing in the communal domain and their academic performance

Students whose CGPA is 3.5 or above and students whose CGPA is 3.0 – 3.49 do not have great differences in their spiritual well-being in the communal domain. They are the lucky ones in the exam system, their parents, teachers and classmates like them a lot, therefore they naturally have good interpersonal relationships, and it would be easier for them to have trust and respect in others, and to love and forgive others. Students with good results also have stronger analytical thinking, they are more sensible and reasonable, and therefore more considerate. They know the skills of pursuing knowledge, and they also have the skills of being all-rounded in interpersonal aspects.

From the focus group discussion, we can see that the spirituality in the communal

domain of students and their CGPA have positive and mutual relationships. Students with better academic results, i.e. students with CGPA 3.5 or above and students with CGPA 3.0 – 3.49, would tend to show higher spirituality in the communal domain. These students with high spirituality in the communal domain have some characteristics within their spirituality in the communal domain that positively affects their learning, for example, they are more willing to cooperate with others in learning (which is based on trust), to exchange opinions when learning (which is based on respect), to expand their thoughts (which is based on acceptance and forgiveness of others) and not afraid to sacrifice and walk one more mile while doing group projects (which is based on love). These characteristics would directly expand the boundary of learning and improve their way of learning. Therefore, students who have higher spirituality in the communal domain would have higher CGPA.

Besides, interpersonal relationships, including mutual respects and trusts, are important and necessary for academic success (Graziano, P. A., 2007). These positive and active learning atmospheres will bring academic success (Ramsden, P., 1979).

The above findings about students' characters, which related to their spirituality and their academic success, are consistent with the other related researches mentioned in the literature reviews of the study.

However, students with CGPA between 2.0 – 2.49 are the ones with worst academic results, they would easily feel inferior and might want to stay away from others. They would

also experience some hard moments, for example, always being scolded by parents and teachers, or being mocked by classmates, so that they would have worse interpersonal relationships. It is hard for them to trust and respect others, or love and forgive others. They have the lowest spiritual well-being in the communal domain.

The spirituality in the communal domain of students and their CGPA have positive and mutual relationships. These students with low spirituality in the communal domain have some characteristics within their spirituality in the communal domain that negatively affects their learning, for example, they lack the ability to forgive others (the hate would prevent them from asking for help humbly), they lack trust in others (so would like to be alone and would not find help when facing difficulties in learning) and they lack love and respect (they are cynical and find excuses for their problems in learning) etc. These characteristics would negatively affect the students' learning.

For students whose CGPA is between 2.5 -2.99, they have middle-ranged results, but their family, teachers and classmates would also compare them with others, the comparison would give them hard feelings. So, they would be more calculating and get jealous of others. Their characteristics for example, being selfish, non-forgiving and neglecting others, would negatively affect the students' learning's quality.

The findings of the positive relationship among student's CGPA and their spirituality and the significant differences among students' spirituality due to their different CGPAs

shown from the quantitative research (Questionnaires) is supported by the evidence of this

qualitative study based on the above observation and analysis of the focus group discussions

for the students' spiritual well-being in the communal domain. Also, "the higher the CGPA of

students, the higher their spiritual well-being in the communal domain" is supplemented by

the evidences of the qualitative study.

From the perspective of the relevant and recent researches, the studies done in the past

several decades for the relationship between the students' spirituality in the communal

domain and their academic performance measured by CGPA are inconsistent. Zern (1987)

reports that there are no statistically significant differences in the relationship between

students' spirituality in the communal domain and their academic performance. However,

Astin et al., (2010) indicates that there are statistically significant differences for the

relationship between the students' academic performance and their spirituality in the

communal domain. It is a positive relationship. It is consistent with the findings of our study.

4.7.4 Background variables related to spiritual well-being in the communal domain and academic performance

The qualitative findings indicate that major disciplines, family social-economic status

and religious beliefs are related to spiritual well-being in the communal domain and academic

performance. Simultaneously, the previously quantitative findings can be also used to

support, supplement and enrich the findings for the research Question 2.

4.7.4.1 "Major disciplines" related to spiritual well-being in the communal domain and academic performance

For the perspectives of the quantitative analysis, students from the faculty of social science have got higher spiritual well-being (Mean= 3.66) in the communal domain and students studying in the Science area have got lower spiritual well-being (Mean = 3.50). The order of the highest spirituality to the lowest is in the following:

1st: Social Science (Mean = 3.66)

2nd: Business (Mean = 3.63)

3rd: Art & Language (Mean = 3.51)

4th: Science (Mean = 3.50)

Table 4.25 shows that there are significant differences (P<0.05) among students' spiritual well-being in the communal domain due to their different major disciplines based on the analysis of One-way Anova.

Table 4.25: Results of One-way Anova on Mean Difference of Major disciplines of Respondents (N=1130) for the communal domain

Demographic Variables	Communal domain
Major Disciplines "Social Science" (N=304) "Business" (N=320) "Art & Language" (N=314) "Science" (N=192)	F=5.59 "Art & Language" <"Social Science" **(3.51<3.66)*** "Science"<"Social Science" **(3.50< 3.66)*** "Art & Language" <"Business" **(3.51< 3.63)*** "Science"<"Business" **(3.50< 3.63)***

Note: Mean ratings are bold; *the mean difference is significant at the 0.05 level.

According to LSD, there are significant results for the mean differences in the spiritual well-being (communal domain) between the different major disciplines of students. Table 4.26 shows the significant differences in the spiritual well-being (communal domain) between:

- 'students from Social Science' and 'students from Art & Language';

- 'students from Social Science' and 'students from Science';

- 'students from Business' and 'students from Art & Language'; and

- 'students from Business' and 'students from Science'

Table 4.26: The significant differences in the spiritual well-being (communal domain) between the different major disciplines of students.

	Social Science (mean= 3.66)	Business (mean= 3.63)	Art & Language (mean= 3.51)	Science (mean= 3.50)
Social Science (mean= 3.66)			X	X
Business (mean= 3.63)			X	X
Art & Language (mean= 3.51)	X	X		
Science (mean= 3.50)	X	X		

Note: X represents the mean differences at .05 level in the spiritual well-being (communal domain) between the above different major disciplines of students

Both the means of students' spirituality in the communal domain of students from Social Science (3.66) and Business (3.63) respectively are higher than the mean (3.51) of students from Art & Language and the mean (3.50) of students from Science.

Among the different major disciplines of students, for the students' spiritual wellbeing in the Communal domain, students from Social Science got the highest scores of mean 3.66 and students from Science got the lowest scores of 3.50.

From the perspectives of the qualitative study – focus group discussions, it found that:

Social Science Students –

Among the 18 students who studied social science, the majority (12 students) think that there are positive impacts from their major disciplines to their spiritual wellbeing in the

communal domain, including that it nurtures their love for others, and enhances their ability in forgiveness, mutual trust, respecting others and treating others well.

For example, one of the respondents said,

> *My major disciplines has cultivated my human touch, I used to think about the rights and wrongs of things, now I think deeper…. For example, I used to criticize the people who receive the CSSA from the Government, and still pick up card boards on the street, leading to social problems…. But now I have more empathy and can understand them more…. My practicum has allowed me to get in touch with people from different backgrounds, and after communicating with them, I understand that the CSSA is not enough for them….*

(University X /SS/Year 2/B)

This reflects that the respondent's major discipline and the practicums have trained up his multi-dimensional thinking, ability of analytical thinking and to balance his ration with his feelings. Therefore he would treat others with love, respect and trust. This shows that there is a great positive effect on the students' spirituality in the communal domain from his major discipline.

Another respondent said,

I would have the chance to have internship in different places for example schools, community centers and elderly homes, due to my major…. I could practise what I have learned in lesson there, for example, how to start a conversation, develop mutual trust and how to comfort them.

(University Y /SS/Year 2/B)

This reflects that the respondents' major discipline and the practicum has enhanced the students' soft skills and has provided many opportunities for him to meet other people, and therefore his interpersonal skills have improved and he could build mutual trust and keep a good relationship with others.

For the other 10 students, there are also positive impacts from their major disciplines to their spiritual wellbeing in the communal domain, their responses are more or less similar to the ones quoted above. They would answer that their major disciplines "helps me to try to think from other people's perspective", "enhances my interpersonal skills", "teaches me about acceptance to others" and "teaches me the importance of listening to others" etc. In summary of these 12 students' responses, we can see that students whose major discipline is Social Science, their major discipline, which would have a great positive effect on students' spirituality in the communal domain, greatly contributed to their pursuit of wisdom and academic excellence.

<u>Business Students –</u>

Among the 18 students who studied business, the majority (the 10 business students) think that there are positive impacts from their major disciplines to their spirituality in the communal domain, including nurture their love for others and enhance their ability in forgiveness, mutual trust and respect.

One of the respondents said,

> *In Business studies, many subjects would require group projects, so we would have a lot of chances to learn 'cooperation', 'division of labour', 'mutual trust', 'consideration' and 'to accept others'…. There would always be different opinions and conflicts during the discussion of our homework, but we learn to respect and forgive each other.*

> (University Y /BUS/Year 2/B)

This reflects that the respondent could learn the importance and condition of 'cooperation' in his major discipline, that is to have mutual trust, accept and respect each other, and this would lead to success. Another respondent said,

> *Many people misunderstand us business students as people who only concern about money, to deprive others to benefit themselves, and are greedy*

people.... But we are actually taught to create value for others and society,

and to contribute to society.

(University X /BUS/Year 2/B)

This shows that the respondent would reflect on his studies in business, he believe that business students should not only think of their own benefits, but to contribute to society. He understands that to live out yourself—to succeed in society, you must first create value for others. Therefore, he would know how to be considerate for others.

For the other 8 students, there are also positive impacts from their major disciplines to their spiritual wellbeing in the communal domain, their response are more or less similar to the ones quoted above. They would answer that their major disciplines "taught them a lot of business courtesy", "improves my communication skills", "widen my horizons" and "strengthens my acceptance for others" etc. In summary of these 10 students' responses, we can see that students whose major discipline is Business, their major discipline, which would have a great positive effect on students' spirituality in the communal domain, contributed to their pursuit of wisdom and academic success.

Art & Language Students –

Among the 18 students who studied Art & Language, the majority (12 Art & Language students), 5 of them didn't answer the questions, showing that they lack knowledge and

interest in the relationship between their major discipline and their spirituality in the communal domain; 4 students think that there is no positive relationship between the two, and 3 students think that there are less impacts from their major disciplines to their spirituality in the communal domain.

For example, one of the respondents said,

> *Our major seldom needs us to work as a team since literature writing is very personal and it emphasizes on our originality…. If we always compromise with others, then our work would lack creativity.*

> (University X /A & L/Year 2/B)

This reflects that the respondent's major discipline trains up their individual creativity and their ability to express the feelings, so these students would be more self-centered and subjective. These characteristics contradict to the elements of spirituality in the communal domain: mutual trust and respect.

Another respondent said,

> *My major Philosophy allows me to search for the Utopia of my life, so that I can stay away from the hypocrisy and evil of human.*

> (University Y /A & L/Year 3/G)

This shows that the respondent learns about the evilness of human beings from her

major discipline. She hopes that she could leave them behind and pursue her own Utopia.

This shows that she does not have trust and confidence in people, and is not willing to accept

or forgive others, she would only want to get away from all the evil.

For the other 4 students who think that there is no positive relationship between their

major discipline and their spirituality in the communal domain, they responded, "There is no

relationship between them", "why would they be related?", "I can't find any linkage between

them" and "I doubt whether there is any relationship between them" etc. In summary of these

12 students' responses (5 not answering, 3 think there are less impacts and 4 don't think that

there is a positive relationship), we can see that students' whose major discipline is Art and

Language, their major discipline, which would have a relatively small positive effect on

students' spirituality in the communal domain, relatively contributed less to their pursuit of

wisdom and academic success.

Science Students –

Among the 18 students who studied Science, the majority (14 science students), 5 of

them didn't answer the questions, showing that they lack knowledge and interest in the

relationship between their major discipline and their spirituality in the communal domain; 4

students think that there is no positive relationship between the two, and 5 students think that

there is conflict between their major discipline and their spirituality in the communal domain.

For example, one of the respondents said,

> *Majoring in science trains up my logical thinking…. I think like a straight*
>
> *line instead of a curve line…. For example I would think whether the*
>
> *matter is right or wrong, I would not think about whether it has a gray area.*

<div align="right">(University Y /S/Year 2/B)</div>

This reflects that the respondent would think that matters as black or white, however, interpersonal relationships are usually not that simple. His major does not seem to help him with any interpersonal skills and to think about the feelings of other people. Another respondent said,

> *Most of my university life was spent in the laboratory doing researches and*
>
> *experiments, for example to dissect animals or analyze cells or bacteria….*
>
> *I seldom contact other people.*

<div align="right">(University Y /S/Year 2/G)</div>

This reflects that the respondent spends most of his time in the laboratory with dead animals, cells and bacteria instead of people. This would affect his development of interpersonal skills. From the observation of the focus group discussion, she had some difficulties in expressing herself, for example she would always say, "I don't know how to explain it". She has difficulties in the most basic part of spirituality in the communal domain

– communication, therefore it would be difficult for her to build a relation of mutual respect and trust with others.

A respondent said,

> *I believe in 'evolution'- the survival of the fittest, weaker animals will be eliminated…. That's why I won't play with classmates who have bad results.*

> (University X / A & L /Year 2/B)

The respondent believes in the philosophy of science - survival of the fittest, and this would affect how he treats other people. When he says, 'I won't play with classmates who have bad results', it shows that he lacks of love, respect and trust for others.

In summary of these 14 students' responses (5 not answering, 4 think the two contradict and 5 don't think that there is a positive relationship), we can see that students whose major discipline is Science, their major discipline would have a relatively small positive effect on students' spirituality in the communal domain and relatively contributed least to their academic success.

4.7.4.1.1 A brief summary for students' major disciplines related to spiritual well-being in the communal domain and academic performance

The findings indicate that students who study Social Science would usually have empathy on others, would be passionate about meeting people and try to be helpful to others. The subjects they study would also emphasize on relationships and communication, and their practicum would allow students to care and comfort others. Social Science subjects would come across different domains and therefore students would have a broader horizon. For example, Social Work of Sociology would learn a bit of Economics in Business. So these students would have the best development in their spiritual wellbeing in the communal domain. The significant effects from their major disciplines on their spiritual wellbeing in the communal domain directly and largely contributed their pursuit for wisdom and academic excellence. There is a significant different in their spiritual wellbeing in the communal domain and those of Science or Art and Language students.

The Social Science discipline concerns greatly about human and society, for example Social Work and Psychology. Social Science would lose its original meaning and value without humanity. Science is about "proof", "facts" and "truth", and therefore does not talk about sentiments and humanity. Their answers are either black or white, there is no gray area. Most science students would pursue for the truth – the scientific spirit. Different subjects in the science discipline would require students to do experiments. For example, Chemistry and

Biology students would need to repeat their experiments in order to find the truth and prove it. They focus on matters, and neglect to care for others. They lack a human touch, and would not be considerate to others. Therefore, their development of the spirituality in the communal domain which is the worst among other disciplines, have less contributions to their academic performance.

Art and language subjects would emphasize on the expression of words and other means. Most of these students are talented in languages. When others express their emotions, they would think of it in a way of beautiful words instead of something practical. They seldom show their care to others like Social Science students would, and this has great relation to their major discipline. Literature and Language subjects would focus on the cultivation of student's personality, taste and independent critical thinking. These qualities are very personal (individual), and not communal. Therefore, they would have less communication with others.

If I were to use "truth, goodness and beauty" to describe the difference in students of difference majors, Science students pursue the Truth, Social Science students pursue goodness, and Literature students pursue beauty. For business students, they seem to pursue efficiency and values: business combines the logical thinking of Science and the care of humanity in Social Science. For business students to create values for others, it is quite important for them to do it at the right time, right place, and most important, with the right

people. Therefore, business courses in university would require their students to do group projects, so to train up their team spirit and their relationship with others. In their internships, business students would work in companies and learn how to respect others, and how to gain trust and support from others. Therefore, their spirituality in the communal domain is quite outstanding among other students and contributes their academic achievement.

From the perspective of the relevant and recent researches, there are still inconsistent results of the past researches for the relationship between the students' spirituality in the communal domain and their major disciplines. The findings of the study conducted by (Liang, 2006) show that there are no statistically significant differences in the relationship between them. However, some of studies found that there are statistically significant differences in the relationship between the students' spirituality in the communal domain and their major disciplines (Cheng & Peng, 2006; Fu, 2011). The findings of these studies, such as done by Fu (2011) indicated that the spirituality of students from art and language as well as social sciences in the communal domain are higher than that of students from Sciences. It is also consistent with the findings of our study.

4.7.4.2 "Family social-economic status" related to spiritual well-being in the communal domain and academic performance

There are impacts of different family backgrounds that are different family social-economic status (including education level of parents, occupation of parents and their annual family income) to their spirituality in the communal domain is summarized as "the better the family social-economic status of students, the higher their spiritual well-being in the communal domain".

There were statistically significant positive relationships (P<0.05) at the .01 level (two-tailed) between students' spiritual well-being in the communal domain and their annual level of family income according to the table 4.27. In addition, there is a positive significant relationship (P<0.05) at the .01 level (two-tailed) between students' spiritual well-being in the communal domain and their parents' (including father and mother) education levels in accordance with table 4.28. Thus, it means "the higher the annual level of family income (and the higher parental education levels) of students, the higher their spiritual wellbeing in the communal domain'.

Table 4.27: Correlations for spiritual well-being and annual income level of family – for the communal domain

		Annual income level of family
SWB Communal	Pearson Correlation	.10**
	Sig. (2-tailed)	0
	N	1130

Note: ** Correlation is significant at the 0.01 level (2-tailed).

Table 4.28: Correlations for spiritual well-being and the HIGHEST level of education attained by students' parents (including father and mother) for the communal domain

		The HIGHEST level of education attained by students' Father	The HIGHEST level of education attained by students' Mother
SWB Communal	Pearson Correlation	.11**	.22**
	Sig. (2-tailed)	0	0
	N	1130	1130

Note: ** Correlation is significant at the 0.01 level (2-tailed).

Table 4.29: Results of One-way Anova on Mean Difference of Annual Income level of Family of Respondents (N=1130) for the communal domain

Demographic Variables	Communal domain
Annual Income level of family "Less than $120,000" (N=129): Lowest Income	F=7.43 Lowest Income < Higher Income **(3.65<3.83)***
"From $120,000 - $240,000" (N=378): Lower Income	Lower Income < Higher Income **(3.52<3.83)***
"From $240,001 -$480,000" (N=536): Middle Income	Middle Income < Higher Income **(3.58<3.83)***
"From $480,001 and above" (N=87): Higher Income	Lower Income < Lowest Income **(3.52<3.65)***

Note: Mean ratings are bold; *the mean difference is significant at the 0.05 level.

Based on the analysis of the One-way Anova, Table 4.29 shows that there are significant differences among students' spiritual well-being in the communal domain due to the difference of their annual family income. According to LSD, there are significant results for the mean differences at .05 level in the spiritual well-being (communal domain) between students with different annual family income. Table 4.30 shows the significant differences in the spiritual well-being (communal domain) between:

'Students with annual family income more than $480,001' (Higher Income) and the following lower income categories, such as those with annual family income less than $120,000 (the Lowest Income).

Among the different annual family incomes of students, in the communal domain, students with annual family income of $480,001 and above got the highest scores of mean 3.83 and Students with annual family income from $120,000 - $240,000 got the lowest scores of 3.52.

0: The significant differences in the spiritual well-being (communal domain) between students with the different annu incomes

	Annual family income more than $480,001 (Higher Income) (mean =3.83)	Annual family income from $240,001 to $480,000 (Middle Income) (mean =3.58)	Annual family income from $120,000 to $240,000 (Lower Income) (mean =3.52)	Annual family i than $120 (Lowest In (mean =3
mily income more n $480,001 er Income) ean =3.83)		X	X	X
mily income from 01 to $480,000 dle Income) ean =3.58)	X			
mily income from 00 to $240,000 ver Income) ean =3.52)	X			
mily income less n $120,000 est Income) ean =3.65)	X			

X for the mean differences at .05 level in the spiritual well-being (communal domain) between the above different annual family incomes of s

From the perspectives of the qualitative study – focus group discussions, it found that:

A better family social-economic status –

Among the 20 students who have a relatively higher family social-economic status (whose parents have education of university level, better occupations and higher family income, for example: annual family income $480,001 or above), the majority of students (the 11 students) think there are positive relationship and positive impacts from their family background to their spiritual wellbeing in the communal domain, including that it nurtures their love for others, and enhances their ability in forgiveness, mutual trust, respecting others and treating others well.

For example, one of the respondents said,

> *My father is a Chinese teacher in a secondary school…. When I was young, I am taught to love neighbors as myself…. He always teaches me Confucianism, such as 'what you don't want done to you, don't do to others' and 'Honour the aged of other family as we honour our own; Care for the children of other family as we care for our own (Mencius- Liang Hui Wang I).*

(University Y /A&L/Year 2/G)

This shows that the respondent's father had high education level and occupation as a

Chinese teacher, so that she knows a lot about Confucius' thoughts and rituals, her spirituality in the communal domain is highly related to her father's background.

Another respondent said,

> *My dad is a professional and my mom is a housewife…. I was taught to be very generous and to share my toys, books and clothings with my friends…. Thus I would not concern more about money but I would care about my friends and family members…. Happily, I get a lot of good friends.*

> (University Y /S/Year 2/B)

This shows that the respondent's family is rich, his parents would teach him to forgive others and be considerate to understand other people's difficulties. He is willing to share, and thus he also has a lot of good friends.

The other 9 students also agree that there are positive relationship and positive impacts from their family background (social-economic status) to their spiritual wellbeing in the communal domain. Their response is more or less the same with the ones quoted above. They responded, "I would be generous to classmates and friends because I lacked nothing since I was a child", "my parents teach me that I should be polite, because my behaviours don't only represent myself but also my family (my parents)" and "my parents would use old sayings and proverbs to teach me that I should consider the whole picture and be patient to others."

From the answers of these 11 students who have relatively better family backgrounds, their family social-economic status would have a great positive effect on students' spirituality in the communal domain and largely and directly contributed to their academic success. It is obvious that families with better social-economic status have the relatively highest spirituality in the communal domain.

An average family social-economic status –

Among the 25 students who have a relatively average family social-economic status (whose parents have education of secondary school level, average occupations and average family income, for example: annual family income $240,001 - $480,000), the majority of students (15 students) think there are positive relationship and positive impacts from their family background to their spiritual wellbeing in the communal domain. For example, one of the respondents said,

> *My parents always tell me not to fear to sacrifice a bit, and think from other's perspective.*

<div align="right">(University Z /SS/Year 3/G)</div>

The other respondent said,

> *My parents always scold me that I'm not a responsible person, they would*
>
> *tell me to keep my promises.*

<div align="right">(University Y /BUS/Year 3/B)</div>

This shows that these two respondents would listen to their parents' advice, and would

respect, trust and treat others politely.

Another respondent said,

> *My parents taught me to love and care for others…. They always say: it is*
>
> *our good fortune and responsibility to donate money to and help people in*
>
> *need because we have good jobs and good health.*

<div align="right">(University Y /SS/Year 2/G)</div>

This shows that the respondent's family is content with their life and family, so that her

parents would teach her to love and help others.

The other students also agree that there are positive relationship and positive impacts

from their family background (social-economic status) to their spiritual wellbeing in the

communal domain. Their response is more or less the same with the 5 quoted above. They

responded, "We rely on our parents at home but rely on our friends outside, therefore we need

to treat our friends well", "it's most important to keep peace with others" and "nobody hates

people with manners". They understand that they should treat their friends and others with respect, trust and be considerate.

From the answers of these 13 students who have relatively average family backgrounds, their family social-economic status, which would have a great positive effect on students' spirituality in the communal domain, contributed to their pursuits of wisdom and academic performance.

A relatively lower family social-economic status –

Among the 21 students who have a relatively lower family social-economic status (whose parents have education of primary school level, lower occupations and lower family income, for example: annual family income $240,000 or below), the 7 students (1/3 of students), think that there are positive relationship and positive impacts from their family background to their spiritual wellbeing in the communal domain, that is, the worse their family background, the lower their spirituality in the communal domain. For example, one of the respondents said,

> *My parents were all less educated…. They are very stubborn…. They would*
>
> *easily argue with neighbors for a minor incident…. Also, my parents did not*
>
> *allow me to greet my neighbors by word or action…. Therefore, I have poor*
>
> *relationships with neighbors. Progressively, I have poor relationship with*

classmates.

<div align="right">(University Z /SS/Year 2/G)</div>

This shows that since the respondent's parents have low level of education, they would be stubborn and irrational. They would not live in peace with neighbours, and would not let the respondent be nice to them. It affects how the respondent communicates with other people, and therefore, the respondent does not know how to be nice to her classmates neither. The respondent said,

> *Since I was born in a poor family, I would easily have a sense of inferiority…. I would always reject my classmates and friends' invitation for gatherings…. I would easily feel shameful and unsociable….   It is difficult for me to get mutual trusts between me and my friends….   I know that it is a serious obstacle for social contact.*

<div align="right">(University X /S/Year 2/B)</div>

This shows that the respondent comes from a poor family and so he feel inferior to others, therefore he would reject other's invitation and has rejected these opportunities to build mutual trust and communication with others, which affected his interpersonal relationship and skills.

The other 5 students also agree that there are positive relationship and positive impacts

from their family background (social-economic status) to their spiritual wellbeing in the

communal domain. Their response is more or less the same with the 3 quoted above. They

responded, "My parents always fight over money, how I can be in peace with others!" and

"my parents would gossip about other people, but they tell me to respect others, it is very

contradicting", etc...

In summary of these 21 students whose family background is relatively poor (having a

lower social-economic status, including 7 not answering, 5 thinking that there is no

relationship between family background and spirituality in the communal domain, 2 thinking

that there are negative relationships among them, and 7 thinking that there is a positive

relationship), we can see that their social-economic status of their family has different

extends of impacts on their spirituality in the communal domain. Comparing to students in

the other two groups, these students have a relatively lower spirituality in the communal

domain.

4.7.4.2.1 A brief summary for students' family social-economic status related to spiritual

well-being in the communal domain and academic performance

The findings indicate that for the communal aspects, as students' parents' have higher

education levels, their parents would show good character and self-cultivation to students.

Parents are the models for their children to imitate in the periods of childhood. It is found that

if students' parents have better education backgrounds, they would have more advices, broader scopes of life and better self-discipline. Parents with higher education levels would emphasize more for their children on the ethical, moral and discipline aspects which are closely related to the communal aspects. Conversely, students whose parents have lower educational levels would not have been taught on moral and ethical aspects, so they wouldn't know how to be a person with virtues. Therefore, it is not difficult to see the personality of students whose parents have higher education levels. For example, these children easily show love, respect and kindness to others. Also they would have trust on people and they would forgive others' sins.

As family incomes of students increase, students' senses of well-being would go up as well. It is found that there are less disputes and conflicts in the families with a relatively higher family income. Then the family members can live together in peace. It would be a harmonious atmosphere with a close and good relationship in an abundant family. Based on the observation, there are positive relationships between family incomes and students' sense of well-being.

Students are willing to love, forgive, trust, respect and care for others if they would feel rich, full and abundant with higher family income. Since students would feel very fortunate to be without any shortage, they naturally don't mind sharing what they have with others. Even if other people owe them, they would not mind. It is also important and necessary for

parents to deliver a right system and philosophy of money usage to students during the early stage of their growth. Therefore, the significant effects from their family social-economic status on their spiritual wellbeing in the communal domain directly and largely contributed their pursuit for wisdom and academic excellence.

From the perspective of the relevant and recent researches, for the communal domain, there are no statistically significant differences between them (Liang, 2006; Fu, 2011). However, they are inconsistent with the findings of our study.

4.7.4.3 "Religious beliefs" related to spiritual well-being in the communal domain and academic performance

Based on the analysis of the One-way Anova, Table 4.31 shows that there are significant differences among students' spiritual well-being in the communal domain due to their different religious beliefs.

Table 4.31: Results of One-way Anova on Mean Difference of Religious Beliefs of Respondents (N=1130) for the communal domain

Demographic Variables	Communal domain
Religious beliefs	F=19.47
"Students without religious beliefs" : Nil (N= 900)	" Nil "< "Christians" **(3.51<3.89)***
"Students who are Christians": Christians (N=174)	" Nil "< "Catholics" **(3.51 <3.84)***
"Students who are Catholics": Catholics (N=37)	" Nil "< "Buddhists" **(3.51 <3.85)***
"Students who are Buddhists": Buddhists (N=13)	
"Students who are Taoists": Taoists (N=6)	

Note: Mean ratings are bold; *the mean difference is significant at the 0.05 level.

According to LSD, there are significant results for the mean differences in the spiritual well-being (communal domain) between students with different religious beliefs. Table 4.32 shows the significant differences in the spiritual well-being (communal domain) between students without religious beliefs and the following categories:

1.   Students who are Christians

2.   Students who are Catholics

3.   Students who are Buddhists

Table 4.32: The significant differences in the spiritual well-being (communal domain) between students with the different religious beliefs

	Students who are Christians (mean= 3.89)	Students who are Catholics (mean= 3.84)	Students who are Buddhists (mean= 3.85)	Students who are Taoists (mean=3.67)	Students without religious beliefs (mean=3.51)
Students who are Christians (mean= 3.89)					X
Students who are Catholics (mean= 3.84)					X
Students who are Buddhists (mean= 3.85)					X
Students who are Taoists (mean=3.67)					
Students without religious beliefs (mean=3.51)	X	X	X		

Note: X represents the mean differences at .05 level in the spiritual well-being (communal domain) between the above different religious beliefs of students

The mean (3.51) of students' spirituality in the communal domain of students without religious beliefs are lower than the mean (3.89) of Students who are Christians, the mean (3.84) of Students who are Catholics, and the mean (3.85) of Students who are Buddhists.

Among the different religious beliefs of students, for the students' spiritual wellbeing in the Communal domain, students, who are Christians got the highest scores of mean 3.89 and students without religious beliefs got the lowest scores of 3.51.

In addition, there were statistically significant differences ($P<0.05$) between students' spiritual well-being in the communal domain and their frequencies of going to Church/

Religious group and their frequencies of prayer or meditation according to the table 4.33 and

table 4.34 respectively. There are positive relationships between them. It means "the more the

frequencies of students going to church or religious group (and the more the frequencies of

students' prayer or meditation), the higher their spiritual wellbeing in the communal domain".

Table 4.33: Correlations for spiritual well-being and the frequencies of going to Church/ Religious group for the communal domain

		The frequencies of going to Church/ Religious group
SWB Communal	Pearson Correlation	.16**
	Sig. (2-tailed)	0
	N	1130

Note: Mean ratings are bold; *the mean difference is significant at the 0.05 level.

Table 4.34: Correlations for spiritual well-being and the frequencies of prayer or meditation for the communal domain

		The frequencies of prayer or meditation
SWB Communal	Pearson Correlation	.06*
	Sig. (2-tailed)	0
	N	1130

Note: Mean ratings are bold; *the mean difference is significant at the 0.05 level.

From the perspectives of the qualitative study – focus group discussions, it found that:

<u>Christian students –</u>

Among the 13 Christians students, the majority of students (10 Christian students) think that there are positive impacts from their religious beliefs to their spiritual wellbeing in the communal domain, including nurturing their love for others, and enhancing their ability in forgiveness, mutual trust, respecting others and treating others well.

One of the respondents said,

> *It is difficult to forgive others…. But I believe in forgiving people for seventy times seven times, I would not take an eye for an eye, nor return the humiliation…. We should overcome evil with good, and make our enemies our friends…. This is the true meaning of forgiveness.*

> (University Y /BUS/Year 3/B)

This shows that the respondent can love others, accept others and forgive others, even to love his enemies, and he can do so because he obeys the commandments of Christianity. Therefore, there are positive impacts from religious beliefs to his spirituality in the communal domain.

Another respondent said,

> *Every time I go to church, I would learn a lot. For example when we share*
>
> *the gospel on the streets, we would face rejection and sometimes we would*
>
> *be scold…. I learned not to mind about it…. If someone is willing to listen,*
>
> *then I would try my best to explain the gospel, this is unselfish love.*

(University Y /BUS/Year 2/B)

This reflects that the respondents care for the weak and understand that there is no

boundaries for love to others, he cares for others and learn this unselfish love from his

religious belief.

Another respondent said,

> *I would pray for others, for example brothers and sisters from church, when*
>
> *they are sick, are facing public exams or have been dumped….   I know that*
>
> *they would pray for my studies and family.*

(University Y /BUS/Year 3/B)

This reflects that the respondent has learned how to love each other in church, because

churchgoers would call each other as brothers and sisters, just like a family. No matter what

happens to them, they would pray for each other and help each other.

Among the other 7 student who think that there are positive impacts from his religious

beliefs to his spiritual wellbeing in the communal domain, his response was more or less the same with the ones quoted above. In summary of these 10 students' responses, we can see that students whose religious belief is Christianity (including practicing prayer and going to church activities), their religious belief, which would have a great positive effect on students' spirituality in the communal domain, greatly contributed to their pursuit of their academic knowledge and success. It is obvious that Christians had the relatively highest spirituality in the communal domain.

Catholic students –

Among the 6 Catholic students, the majority of students (5 Catholic students), think there are positive impacts from their religious beliefs to their spiritual wellbeing in the communal domain, including that it nurtures their love for others, and enhances their ability in forgiveness, mutual trust, respecting others and treating others well.

One of the respondents said,

> I am a Catholic, and I would always go to church and confess to the priest….
>
> After my confession, I would forgive myself and the friend who offended me.

(University Y /A&L/Year 3/B)

The respondent said,

> *The Lord's prayer teaches us to forgive the debts of others as the Lord*
>
> *forgives our debts.*

(University X /S/Year 2/G)

This shows that the two respondents have reflected on their behaviours due to their religious belief, they know that every person has sinned, so that when we ask for forgiveness, we should also forgive.

Another respondent said,

> *It would absolutely affect students' development…. In my opinion, most*
>
> *influences are good…. My brothers and sisters in church are very mild and*
>
> *humble and more tolerate.*

(University Z /BUS/Year 3/G)

This shows that the respondent thinks that her church life and her religious belief has positive impacts to her, she could feel respect, love and care from others, and therefore she would treat others that way too.

In summary of these 3 students' responses, we can see that students whose religious belief is Catholic (including practicing prayer and going to church activities), their religious belief, which would have a great positive effect on students' spirituality in the communal

domain, greatly contributed to their pursuit of their academic knowledge and success.

Catholic was second to Christianity as having the second highest spirituality in the communal

domain among other religious beliefs.

Buddhist students –

There are only 2 Buddhists, they both think there are positive impacts from their

religious beliefs to their spiritual wellbeing in the communal domain, including that it

nurtures their love for others, and enhances their ability in forgiveness, mutual trust,

respecting others and treating others well.

For example, one of the respondents said,

> *I believe in karma…. Others will treat you the way you treat others, so I*
>
> *would treat others nicely and do goodness when I can. I learned to change*
>
> *my temper, and practice mercy and have a thankful heart from joining*
>
> *volunteer work, meditation and learning from the Buddha…. Now I am more*
>
> *considerate, and less stubborn, I can love others and am more spiritual.*

(University X /SS/Year2/B)

This shows that the respondent could treat others with love and care for them, respect

them because he believes in karma. So if you treat others well, others will also treat you well.

This reflects that the student is doing good works because of his religious belief, and he has become a nicer person.

Another respondent said,

> *I believe that we were born equal, I would like to be merciful like Buddha,*
>
> *and to help us all gain salvation.*

(University X /A&L/Year3/G)

This shows that the respondent understands that everyone is equal, so that we need to respect others because we are no better than them. She loves other people as she would like to share her salvation to others.

In summary of these 2 students' responses, we can see that students whose religious belief is Buddhist (including meditation and practicing religious activities), their religious belief would have a positive effect on students' spirituality in the communal domain.

Taoist student –

There was only 1 Taoist, he also thinks that there are positive impacts from his religious beliefs to his spiritual wellbeing in the communal domain, including that it nurtures his love for others, and enhances his ability in forgiveness, mutual trust, respecting others and treating others well.

The respondent said,

As a Taoist, I would practice Daoist meditation– Shouyi（守一）. … I would

shut myself up and meditate, imagine that I am my spirit, that combines with

my body…. The meditation helps me to become peaceful.

(University X /S/Year 3/B)

This reflects that the respondent would use meditation as a religious practice, so that he

focuses on other things and makes himself calm.

From this Taoist students' answer, we can see that his religious belief has a positive effect on

students' spirituality in the communal domain.

Students without any religious beliefs –

Among the 44 students who didn't have any religious belief, 13 of them didn't answer

the question, showing that they lack knowledge and interest in the relationship between their

religious beliefs and their spirituality in the communal domain.

Among the 31 students who have responded, the majority of them (27 students) think

that there is no relationship between their religious beliefs and their spirituality in the

communal domain. Some of them (9 students) have a lower spirituality in the communal

domain.

For example, one of the respondents said,

> *Hong Kong is a competitive society, if you treat others too well, you are ill-treating yourself.*

<div align="right">(University Z /A&L/Year2/B)</div>

This shows that this respondent thinks that being nice to others means to harm himself, especially in such a competing world.

Another respondent said,

> *There are very few nice people out there, but there are many liars and bad people, I have been cheated before, so I'm used to it.*

<div align="right">(University Z /BUS/Year 3/B)</div>

This shows that the respondent has once got cheated and thus lost all confidence in human beings. He could not forgive the person who harmed him, and is disappointed in people and tries to protect himself.

> *There is a Chinese saying, "You will be condemned if you don't fight for your own benefit." We don't have to harm people, but we must take care of ourselves.*

<div align="right">(University X /S/Year 2/B)</div>

This reflects that the respondent thinks that his own benefit is more important than taking care of other people and thinking of their benefits, he is selfish.

From the response of these 44 students (including 13 students not answering, 4 who think that there is conflict between the two aspects, and 27 who think that there is no relationship among them – with 9 students who had relatively low spirituality in the communal domain), we can see that there are a relatively low positive effect from religious beliefs on those students who have no religious belief and their spiritual wellbeing in the communal domain. .

4.7.4.3.1 A brief summary for students' religious beliefs related to spiritual well-being in the communal domain and academic performance

The findings indicate that students with religious beliefs would always have higher qualities and performances in the communal domain compared with students without religious beliefs. For instance, they would easily show their empathy, love, respect, care and trust to others. Also, they would always be in other people's shoes and they would easily understand the difficulties of others. It is because to love one another is the main focus in most of the religious beliefs. In their religious beliefs, they are taught about what love is and how to love others. Conversely, students without religious beliefs would easily get angry with others or lose temper to others because there is no peace and quiet in their minds and hearts.

They would have no trust in others because there is no love between them. They would also easily be arrogant, conceited and be jealous of others.

It also finds that there are significant differences in the following:

1   Christians and students without any religious beliefs

2   Catholics and students without religious beliefs

3   Buddhists and students without religious beliefs

Because of the similarity for Christianity and Catholic, the analysis and discussion are combined for the first two significant differences. Christians and Catholics are both taught by the Bible. There are a lot of chapters about love, love to others and to forgive others. For example, "but love your enemies, and do good, and lend, hoping for nothing again; and your reward shall be great, and you shall be the children of the Highest: for he is kind unto the unthankful and to the evil" (Luke 6:35). Christians and Catholics are cultivated in the atmosphere of love, forgiveness, trust and respect, thus they would be more spiritual in the communal domain. Conversely, students without religious beliefs would lack of training and education about the elements in the communal domain, such as love, care, respect and trust. They would definitely perform worse in this area.

Buddhism advocates mercy and benevolence (to love themselves and to love other people), and Buddhists would also do good, for example, they would have mercy on others and forgive others, so that they live this life well, and their next life can be better. Therefore,

Buddhists would also treat others with love, forgiveness, respect and trust. On the other hand, students without religious beliefs would have less empathy on others, and without the root of love, it would be harder for them to trust and respect others. Therefore, the significant effects from their religious beliefs (for example, Christianity and Catholics) on their spiritual wellbeing in the communal domain directly and largely contributed their pursuit for wisdom and academic excellence.

However, since there are only 2 Buddhist students and 1 Taoist, therefore we cannot make detailed analysis and have an all-rounded discussion on these two religions, this is the limitation of our study.

From the perspective of the relevant and recent researches, there are inconsistent results of the studies done in the past several decades for the relationship between the students' spirituality in the communal domain and their religious beliefs. Some studies found that there are no statistically significant differences in the relationship between students' spirituality in the communal domain and religious beliefs (Liang, 2006; Fu, 2011). However, another study done by Astin et al., (2010) found that there are positive and statistically significant relationship between students' spirituality in the communal domain and religious beliefs. It is consistent with the findings of our study.

4.7.5 A Summary for the discussion and analysis in the communal domain

Regarding the research question 1, the study quantitatively and qualitatively find that there are significant positively relationships between the students' spiritual wellbeing in the communal domain and their academic performance. Also, there are significant difference among students' spiritual well-being in the communal domain due to their different CGPA levels.

The findings of the quantitative research are used to establish the relationship, then the qualitative findings are employed to enrich the research data and add insights. The findings of the qualitative research help to explain how the background demographic variables are related to spiritual well-being in the communal domain and academic performance (research question 2). Students' family social economic background, major disciplines and their religious beliefs are regarded as related to spiritual well-being in the communal domain and academic performance.

There are positive relationships between the following:

1. students' socioeconomic background (including their family income and education level of parents),

2. their spiritual well-being (in the communal domain) and

3. their academic performance.

Students from families of better socioeconomic status would be more generous, more

polite, respect others and tolerate others more with patience. These attitudes would contribute for their humble in learning, exchange opinions with classmates and honest cooperation with others on their homework. Conversely, students from families with lower socioeconomic status, would have some unpleasant encounters and therefore would have less trust in others. This would become a barrier for them when exchanging thoughts with others in learning.

The major discipline - social science cultivate students care for others, and learn how to respect and work with other people. This train them a good learning attitude and this would benefit their learning

There are some impacts from religious beliefs to students' spiritual wellbeing in the communal domain for their pursuit of academic excellence. The doctrines, books and meditation practices of these religions would teach students to be more polite, and treat others with love and trust, and to forgive others when necessary. All of these attributes are contributed to happy learning and good learning.

4.8   Students' spiritual well-being in the environmental domain and their CGPA

4.8.1   From the perspective of the quantitative research

Based on the findings of the quantitative study, there were statistically significant

positive relationship ($P<0.05$) at the .01 level (two-tailed) between students' spiritual well-

being in the environmental domain and their academic performance according to the table

4.35. There are moderate effects (Pearson's r >0.3) for the positive relationships between

them. It means "the higher the CGPA of students, the higher their spiritual well-being in the

environmental domain'

Table 4.35: Correlations for spiritual well-being and academic performance

		Cumulative Grade Point Average (CGPA)
SWB Environmental	Pearson Correlation	.39**
	Sig. (2-tailed)	0
	N	1130

Note: ** Correlation is significant at the 0.01 level (2-tailed).

Based on the analysis of the One-way Anova, Table 4.36 shows that there are significant

differences among students' spiritual well-being in the environmental domain due to their

different CGPA levels. According to LSD, there are significant results for the mean

differences at .05 level in the spiritual well-being (environmental domain) between the

different CGPA of students. Table 4.37 shows the significant differences in the spiritual well-

being (environmental domain) between:

(1) Students with "CGPA 3.5 or above" - Elite Class (and "CGPA 3.0 – 3.49" - Above

Average") and categories of lower CGPA, such as "CGPA 2.5 – 2.99" (Average);

(2) Students with "CGPA 2.5 – 2.99" – Average and those in categories of lower CGPA; and

(3) Students with "CGPA 2.0 – 2.49" (Below Average) and "CGPA 1.99 or below" (Poor

Academic Performance).

Among the different CGPAs, in the environmental domain, students with CGPA 3.5 to

4.0 (Elite Class) got the highest scores of mean 3.30 and Students with CGPA 1.99 or below

(Poor Academic Performance) got the lowest scores of 2.43.

Table 4.36 Results of One-way Anova on Mean Difference of CGPA of Respondents
(N=1130) – for the environmental domain

Demographic Variables	Environmental domain
CGPA "CGPA 3.5 or above": Elite Class (N=123) "CGPA 3.0 to 3.4": Above Average (N=459) "CGPA 2.5 – 2.99": Average (N=343) "CGPA 2.0 – 2.49": Below Average (N=161) "CGPA 1.99 or below": Poor Academic Performance (N=44)	F=58.34 Average < Elite Class **(2.91 <3.30)*** Below Average < Elite Class **(2.64 <3.30)*** Poor Academic Performance < Elite Class **(2.43< 3.30)*** Average < Above Average **(2.91 < 3.28)*** Below Average < Above Average **(2.64 < 3.28)*** Poor Academic Performance < Above Average **(2.43 < 3.28)*** Below Average < Average **(2.64 < 2.91)*** Poor Academic Performance < Average **(2.43< 2.91)*** Poor Academic Performance < Below Average **(2.43< 2.64)***

 Note: Mean ratings are bold; *the mean difference is significant at the 0.05 level.

4.37: The significant differences in the spiritual well-being (environmental domain) between students with different C

	CGPA 3.5 or above" (Elite Class) (mean=3.33)	"CGPA 3.0 – 3.49" (Above Average) (mean=3.28)	"CGPA 2.5 – 2.99" (Average) (mean=2.91)	"CGPA 2.0 – 2.49" (Below Average) (mean=2.64)	"CGPA 1.99 (Poor Academic (mean=?)
above" (ass) (33)			X	X	X
– 3.49" (erage) (28)			X	X	X
– 2.99" (e) (91)	X	X		X	X
– 2.49" (erage) (64)	X	X	X		X
r below" (erformance) (43)	X	X	X	X	

s the mean differences at .05 level in the spiritual well-being (environmental domain) between the above different CGPA of students

4.8.2   The relationship between students' spiritual well-being in the environmental

domain and their CGPA: From the perspective of the qualitative research

CGPA 3.5 or above (Elite Class) –

Among the 5 students whose CGPA is 3.5 or above, the four students have high

spirituality in the environmental domain**.** They would always experience their connection

with the nature, to live in harmony with nature, and to appreciate the beauty of the

environment. For example, one of these 4 respondents said

> *The more I study, the more I become interested to the nature, I would want to*
>
> *explore the mysterious nature due to my curiosity.*

> (University X /A&L/Year 3/G)

This reflects that the respondent has a sense of the environment, she is interested to the

nature, and her interest to the nature is positively related to her pursue of knowledge. The

respondent could respond to different opinions in the focus group discussion with peace,

showing that she could live harmoniously with others.

Another respondent said,

> *When I see the plants, insects and birds in the nature, I would feel their*
>
> *liveliness, then I would understand that we should be optimistic and take the*
>
> *initiative in learning.*

(University Y /SS/Year 3/B)

This shows that the respondent does not only live in harmony with the nature, he even is encouraged by it to be optimistic and take the initiative in learning. The respondent was also very active in the discussion, he listened carefully to what others said, this reflects that he has great curiosity in things around him, which also explains why he is interested in knowing the mystery of the nature.

The respondent said,

> *As the sun rises and sets, I see that there is order in the nature, then I would*
>
> *think of the discipline and order in learning too.*

(University Y /BUS/Year 2/G)

This reflects that the respondent could learn the order and rules of the nature from appreciating the nature (sun rise and sunset), she understands that there are rules unchanging in the ever changing world, there should also be discipline and order in the aspect of learning as well.

Therefore, these 3 students have a high spirituality in the environmental domain. These 3 students are sufficient to represent the situation of students of this CGPA group. So, students who have CGPA 3.5 or above have the highest spirituality in the environmental domain.

CGPA 3.0 to 3.49 (Above Average) –

Students whose CGPA is above 3 relatively had higher spirituality in the environmental

domain. Among the 17 students whose CGPA is between 3.0 -3.49, the majority of them (13

students out of 17 students) would always experience their connection with the nature, to live

in harmony with nature, and to appreciate the beauty of the environment. For example, one of

the respondents said,

> *I love the quietness in the nature, the smell of the grass and the sound of the*
>
> *birds compose a very comfortable atmosphere. So, I always sit in open areas*
>
> *to read books, for example, when the weather is fine, I would sit on the green*
>
> *grass on the campus to study, it feels amazing.*

> (University Y /SS/Year 2/G)

This shows that the respondent's learning and his appreciation are linked together and

integrated closely. He really enjoys studying in the natural environment. Also, he has a good

and happy experience in it. The respondent had a bright voice, and he sat straight, it showed

that he is an energetic person.

Another respondent says,

I love hiking and camping. Though university life is quite busy, I would date

my friends to hike together. It is very enjoyable to be in the nature, I could

release all my negative thoughts, and feel refreshed afterwards.

(University Y /A&L/Year2/G)

This shows that the priority to appreciate the nature is put ahead of study. He

would release pressure and he feels refreshed afterwards. This shows that the

respondent gains positive influences for his studies from the nature.

Another respondent says,

When I go home after I study at the library at night, I would see the shining

stars and the white moon above me, then I would feel that although studying

may sometimes be lonely, I am lucky to have the universe with me.

(University X /A&L/Year 2/B)

This shows that the respondent has communication with the nature. He feels he gets

support from the stars and moon in the journey of learning.

For the other 10 students who also have high spirituality in the environmental domain,

their responses are more or less similar with the 3 quoted above. They agree that

environmental spirituality and the pursuit of academic performances do not contradict, but

complement each other. They agree that they could release pressure from studying in the

nature and could gain positive energy in it. They said that "the nature helps me to relax before exams", "the suburbs make me feel peaceful, and the peacefulness helps me concentrate in my studies", "to lie on the green grass under the blue sky is such a nice experience" and "I agree that the nature helps me to forget about the troubles in studying" etc.

These 13 students are the majority in the group, and are sufficient to represent the situation of students of this CGPA group. So, students whose CGPA is between 3.0 and 3.49 have high spirituality in the environmental domain.

CGPA 2.5 to 2.99 (Average) –

For students whose CGPA is between 2.5 -2.99, they had lower spirituality in the environmental domain compared with the previous two groups (CGPA 3.5 or above and CGPA 3.0 – 3.49). Among the 22 students whose CGPA is 2.5 – 2.99, the majority (16 students), 7 of them didn't respond to the question, this shows that they lack knowledge or interest in the topic of spirituality in the environmental domain. The other 9 students had low spirituality in the environmental domain. They have less interest and awareness about the beauty of the nature. For example, one of the respondents said,

> *Actually I don't really understand and have never experienced what others*
>
> *say about unity with the nature, or to appreciate the nature. I believe in*

science and evidence, so I have never communicated with the nature and I

don't believe that you say exists.

(University Y /S/Year 3/B)

This shows that the respondent have less understandings about the appreciation

of the nature, integration with the nature and the appreciation of the environments

because of his strong belief in scientific thinking and scientific methodology. Also,

his confidence in scientific thinking is mainly contributed by his major in science.

Another respondent says,

We are very busy once the school term starts, the tests, homework and exams

have used up most of our time. We would even need to have revisions in our

long holidays, we don't even have time to go to the nature, and not to mention

the become unity with it!

(University Y /S/Year 2/B)

This shows that the respondent is nearly fully occupied by academic issues,

such as tests, assignments, group projects, exam and placement. Thus, he has no

time, nor energy nor the mood to connect with the nature.

Another respondent says,

> *I can't find any logic relationship between appreciating the nature and*
>
> *pursuing academic results.*

<div align="right">(University X /BUS/Year 3/G)</div>

This shows that the respondent has doubts for the relationship between the academic performance and spiritual wellbeing in the environmental domain. It is because he seems to lack of understanding and experiences for the integration with the nature and appreciation of the nature. The respondent was trying to impress others by his thoughts in the discussion, he did not try to stay in harmony.

For the other 6 students who also have low spirituality in the environmental domain, their responses are more or less similar with the 3 quoted above. All 9 respondents show a positive relationship between spirituality in the environmental domain and their CGPA, that is, the lower the spirituality in the environmental domain, the lower their CGPA. They said that "to connect with the nature is meaningless, I would rather spend my time on studying", "I'm too busy with my homework and exams, I don't have time to appreciate the nature", "I have no interest to know and connect to the nature" and "being too concentrated on my studies make me neglect other things happening to me" etc. Therefore, these 9 students have a low spirituality in the environmental domain. These 16 students are sufficient to represent

the situation of students of this CGPA group. So, students whose CGPA is between 2.5 and

2.99 have low spirituality in the environmental domain.

CGPA 2.0 to 2.49 (Below Average) –

From the findings of the qualitative research (the focus group discussion), students of

CGAP 2.0-2.49 have the lowest spirituality in the environmental domain. Among the 22

students whose CGPA is between 2.0 – 2.49, the majority (18 students), 9 of them didn't

answer the question, which reflects their lack of knowledge and interest in questions of

spirituality in the environmental domain. The other 9 students have relatively low spirituality

in the environmental domain, because they don't have experiences connecting with the

nature, appreciating the beauty of the nature and awing at a breathtaking view. For example,

one of the respondents said,

> *I never understand why people like to go fishing, hiking or camping. I think*
>
> *these activities are boring and meaningless, it is such a waste of time, why*
>
> *not use the time and effort to earn more money!*

(University X /S/Year 2/B)

This shows that the respondent does not understand the importance to be in harmony

with the nature. He objectively thinks that it is boring and meaningless to do such activities in

the nature. He is very practical, he thinks about earning money instead of studying. The

respondent talked really quick in the discussion, and his presentation skills were weak as he

could not present his thoughts well in order.

Another respondent said,

> *It's boring to go to the nature, if I had time, I would rather go shopping, sing*
>
> *karaoke and play video games!*

(University Y /BUS/Year 2/B)

The respondent only likes to play, he lacks interest in other healthy activities. He is stuck

in the concrete forest, and does not know that going to the nature could be a rest for the body

and soul.

Another respondent said,

> *I never have the feelings and experiences of the connection with the nature.*
>
> *Is it the description of the fictions?*

(University Y /S/Year2/B)

The respondent does not have any experience in connecting with the nature, and he

seriously lacks knowledge in such aspect. He thinks that these are fiction storylines, he is

very ignorant in this aspect.

For the other 6 students who also have low spirituality in the environmental domain,

their responses are more or less similar with the 3 quoted above. All 9 respondents show a positive relationship between spirituality in the environmental domain and their CGPA, that is, the lower the spirituality in the environmental domain, the lower their CGPA. They said that "I'm afraid of the heat and the sun", "I would rather sleep at home", "these activities are boring" and "I hate the suburbs, it's so dirty." etc. In summary of these 9 students and the attitude of the 9 students who didn't answer the questions, it shows that their spirituality in the environmental domain is lowest among the other CGPA groups.

These 16 students are the majority in this CGPA group, and their responses are sufficient to represent student's situation in this CGPA group. So, students whose CGPA is between 2.0 and 2.49 have the lowest spirituality in the environmental domain.

4.8.3 A brief summary for the positive relationship between students' spiritual wellbeing in the environmental domain and their academic performance

Students whose CGPA is 3.5 or above and students whose CGPA is 3.0 – 3.49 do not have great differences in their spiritual wellbeing in the environmental domain. They pursue knowledge in their studies and also pursue the mysteries of the nature, the nature of these two aspects are the same: curiosity. Therefore, students who are interested in studies, would also be interested in knowing about their environment, they could be involved in it and appreciate its magnificence.

From the focus group discussion, we can see that the spirituality in the environmental domain of students and their CGPA have positive and mutual relationships. Students with better academic results, i.e. students with CGPA 3.5 or above and students with CGPA 3.0 – 3.49, would tend to show higher spirituality in the environmental domain. These students with high spirituality in the environmental domain have some characteristics within their spirituality in the environmental domain that positively affects their learning, for example, they would be more peaceful in heart (which is near to the nature of the environment), they are more disciplined and in order (just like the nature has its own order) and they are energetic (just like the lively nature). These characteristics would lower their stress of learning and improve their quality and attitude towards learning. Therefore, students who have higher environmental spirituality would have higher CGPA.

Astin et al. (2010) defined "Equanimity" as the emotional and psychological status of being peaceful and feeling comfortable. They point out that students, who lack of equanimity, feel nervous and worried about their studies. It is the element of the quiet and peace in the natural environment.

The above findings about students' characters, which related to their spirituality and contribute to their academic success, are consistent with the other related researches mentioned in the literature reviews of the study.

However, students with CGPA between 2.0 – 2.49 don't even care about their own

academic results, and therefore they don't care for others and the nature. They could not connect with the nature and do not understand the meaning of protecting our environment. They have the lowest spiritual wellbeing in the environmental domain.

Since the spirituality in the environmental domain of students and their CGPA have positive and mutual relationships, these students with low spirituality in the environmental domain have some characteristics within their spirituality in the environmental domain that negatively affects their learning, for example, they do not have a peaceful heart (so they would easily be nervous in learning), they could not follow the pattern and order of the nature (so they would be short sighted and want to be successful immediately without going through the normal process of hard working) and they lack the liveliness we see in nature (so they could not face challenges in learning positively, they would only want to avoid the difficulties)etc. These characteristics would negatively affect the students' learning.

For students whose CGPA is between 2.5 -2.99, they have middle-ranged results, they understand the theory of "the strongest survive". This theory contradicts with the peacefulness and harmony in the nature, they are two totally different concepts. (The theory of "the strongest survive" is about competing and winning in order to live, but the nature teaches us about being in peace and living together in harmony.) Therefore these students have a lower spiritual wellbeing in the environmental domain. Since the spirituality in the environmental domain of students and their CGPA have positive and mutual relationships,

these students with low spirituality in the environmental domain want to conquer the world instead of living in harmony with it, they seldom appreciate things that happen around them and lack involvement and imagination. These characteristics would negatively affect the students' learning.

The findings of the positive relationship among student's CGPA and their spirituality and the significant differences among students' spirituality due to their different CGPAs shown from the quantitative research (Questionnaires) is supported by the evidence of this qualitative study based on the above observation and analysis of the focus group discussions for the students' spiritual well-being in the environmental domain. Also, "the higher the GPA of students, the higher their spirituality in the environmental domain" is supplemented by the evidences of the qualitative study.

From the perspective of the relevant and recent researches, there are very few researches on the relationship between the students' spirituality in the environmental domain and their academic performance. The findings of the study conducted by Astin et al., (2010) indicated that there are statistically significant differences for the relationship between the students' spirituality in the environmental domain and their academic performance. It is a positive relationship. It is consistent with the findings of our study.

4.8.4   Background variables related to spiritual well-being in the environmental

domain and academic performance

The qualitative findings indicate that major disciplines and religious beliefs are related

to spiritual well-being in the environmental domain and academic performance.

Simultaneously, the previously quantitative findings can be also used to support, supplement

and enrich the findings for the research Question 2.

4.8.4.1 "Major disciplines" related to spiritual well-being in the environmental domain

and academic performance

For the perspectives of the quantitative analysis, students from the faculty of Business

have got higher spiritual well-being (mean= 3.13) in the environmental domain and students

studying in the Social Science area have got lower spiritual well-being (mean= 2.87). The

order of the highest spirituality to the lowest is in the following:

1st: Business (mean=3.13)

2nd : Art & Language (mean=3.11)

3rd : Science (mean= 3.07)

4th : Science Social (mean=2.87)

Table 4.38 shows that there are significant differences (P<0.05) among students'

spiritual well-being in the environmental domain due to their different major disciplines

based on the analysis of One-way Anova.

Table 4.38: Results of One-way Anova on Mean Difference of Major disciplines of Respondents (N=1130) for the environmental domain

Demographic Variables	Environmental domain
Major Disciplines	F=10.37
"Social Science" (N=304)	"Social Science" <"Business" **(2.87<3.13)***
"Business" (N=320)	"Social Science" <"Art & Language" **(2.87<3.11)***
"Art & Language" (N=314)	"Social Science" <"Science" **(2.87<3.07)***
"Science" (N=192)	

Note: Mean ratings are bold; *the mean difference is significant at the 0.05 level.

According to LSD, there are significant differences in the spiritual well-being

(environmental domain) between the different major disciplines of students. Table 4.39 shows

the significant differences in the spiritual well-being (environmental domain) between

students from Social Science and the following categories:

- 'students from Art & Language';

- 'students from Business' and

- 'students from Science'

Table 4.39: The significant differences in the spiritual well-being (environmental domain) between the different major disciplines of students.

	Social Science (mean=2.87)	Business (mean=3.17)	Art & Language (mean=3.11)	Science (mean=3.07)
Social Science (mean=2.87)		X	X	X
Business (mean=3.17)	X			
Art & Language (mean=3.11)	X			
Science (mean=3.07)	X			

Note: X represents the mean differences at .05 level in the spiritual well-being (environmental domain) between the above different major disciplines of students

The mean (2.87) of students' spirituality in the environmental domain of students from Social Science are lower than the mean (3.11) of students from Art & Language, the mean (3.17) of students from Business, and the mean (3.07) of students from Science.

Among the different major disciplines of students, for the students' spiritual wellbeing in the environmental domain, students from Business got the highest scores of mean 3.17 and students from Social Science got the lowest scores of 2.87.

From the perspectives of the qualitative study – focus group discussions, it found that:

Business Students –

Among the 18 students who studied business, the majority (10 business students), think that there are positive impacts from their major disciplines to their spiritual wellbeing in the

environmental domain, including seeking their connection with the nature, living in harmony with nature, and appreciating the beauty of the environment.

For example, one of the respondents said,

> *My major in business trains me to find chances to create values…. For example, I had a project about Social enterprises, my topic was to save energy for the environment, and suggested Taxi companies to use battery cars instead of petroleum cars…. On one hand, they could go with the trend of environmental protection, and promote their image, on the other hand, they could lower the cost and higher the profit…. I got an A for the homework.*
>
> (University Y /BUS/Year 3/G)

This reflects that the respondent could use what she learns, she hopes that she could save energy for the environment (for example to use reusable batteries) by her business skills learned, so that she could improve our society and our way of living, and use power that are more sustainable. We can see that she treasures the environment and interacts with it. Another respondent said,

> *I have learned from business that success comes at the right time, the right place (meaning the nature) and with the right people. Many successful business plans would promote protecting the environment, this is the trend.*

For example, BYD Company advocates to save energy and protect the environment, they ask consumers to think for the next generation, and therefore they developed cars that run with battery, and was appreciated and invested by the famous investor warren buffett.

(University Y /BUS/Year 2/B)

This reflects that the respondent understands that the nature and important element to success in business, and that it affects our next generation. It shows her concerns and her attitude to live in harmony with the environment.

For the other 8 students, there are also positive impacts from their major disciplines to their spiritual wellbeing in the environmental domain, their responses are more or less similar to the ones quoted above. They would answer that "environmental capital is essential in business", "Sustainable/green innovations can improve positive influence on the natural environment" and "many business models have added in environmental issues" etc. In summary of these 10 students' responses, we can see that students whose major discipline is Business, their major discipline, which would have a great positive effect on students' spirituality in the environmental domain, greatly and directly contributed to their pursuit of wisdoms and academic success.

<u>Art and Language students –</u>

Among the 18 students who studied art & language, half of the students (9 art & language students) think that there are positive impacts from their major disciplines to their spiritual wellbeing in the environmental domain, including seeking their connection with the nature, living in harmony with nature, and appreciating the beauty of the environment. For example, one of the respondents said,

> *We would always use the nature as our topics in literature homework, we would need to express our feelings with words, so we would have more thoughts on nature, just like the famous poet Tao Yuenming's (陶淵明) 'Back to the countryside' (《歸園田居》).*

(University Y /A&L/Year 3/G)

This reflects that the respondent has passion towards the nature, and it is related to her major discipline. In her major studies, there are many literatures that talk about the nature, and the students would need to understand the nature in order to understand these literature. Therefore, the respondent would imagine the communication between the nature and human beings, just like the famous poet *Tao Yuenming's* as he writes about the unity of nature and human.

The respondent said,

The course needs us to compose literature about the nature, then we would

need to go to the nature to feel it and grasp its mysterious nature.

(University Y /A&L/Year 3/G)

This reflects that the respondent tries to communicate with the nature because of the requirement of the course. Therefore, she would learn more and more about the environment as she puts effort in learning and relaxing in it. She seems to appreciate and treasure the environment in her response.

For the other 7 students, there are also positive impacts from their major disciplines to their spiritual wellbeing in the environmental domain, their response are more or less similar to the ones quoted above. They would answer that their major disciplines "have many essay on the topic of the nature, and so I would learn to appreciate it too", "many poets like to stay in the rural areas and stay away from the city, and that's why they describe the nature as a beautiful place" and "we need to devout ourselves in the nature in order to understand what the poets are saying" etc. In summary of these 9 students' responses, we can see that students whose major discipline is art & language, their major discipline, which would have a great positive effect on students' spirituality in the environmental domain, contributed to their quest for their knowledge and academic breakthrough.

<u>Science students –</u>

Among the 18 students who studied Science, the majority of students (13 science students), 5 of them didn't answer the questions, showing that they lack knowledge and interest in the relationship between their major discipline and their spirituality in the environmental domain; 5 students think that there is no positive relationship between the two, and 3 students think that there is conflict between their major discipline and their spirituality in the environmental domain.

For example, one of the respondents said,

> *Majoring in Science allows me to analyze the universe and understand the world, to me, the nature is an object of my research.*

> (University Y /S/Year 3/B)

This shows that according to the respondent's major discipline – science, the nature is only an object for dissection, analysis and research. It reflects the respondent's indifferent attitude towards the nature.

Another respondent said,

> *I believe in Science, and so I would want to conquer the nature…. For example many scientists would invent machines to try to launch the moon…. Maybe in the future, human can live on other planets.*

(University X /S/Year 2/B)

This reflects that the respondent does not care for and appreciate the nature, he tends to want to conquer it due to his major discipline – science. The desire to conquer it contradicts with the characteristics of spirituality in the environmental domain, which is to respect, appreciate and live in unity with the nature.

In summary of these 13 students' responses (5 not answering, 3 think the two contradict and 5 don't think that there is a positive relationship), we can see that students whose major discipline is Science, their major discipline would have a relatively small positive effect on students' spirituality in the environmental domain and less contributed to their academic performance.

Social Science students –

Among the 18 students who studied Social Science, the majority of students (15 students), 4 of them didn't answer the questions, showing that they lack knowledge and interest in the relationship between their major discipline and their spirituality in the environmental domain; 7 students think that there is no positive relationship between the two, and 4 students think that there is conflict between their major discipline and their spirituality in the environmental domain.

For example, one of the respondents said,

We would care for people more than matters and things, because I think that

people are alive and things are dead…. So, if we concern about the

environment more than concerning on people, it would do us no good.

(University Y /SS/Year 3/G)

This reflects that the respondent's priority is that people is more important than the

environment.

Another respondent said,

Social Science is people oriented… we think that other things are less

important.

(University X /SS/Year 3/G)

This reflects that the respondent is also people oriented, and this is trained up by her

major disciple.

In summary of these 15 students' responses (4 not answering, 4 think the two contradict

and 7 don't think that there is a positive relationship), we can see that students whose major

discipline is Social Science, their major discipline would have a relatively small positive

effect on students' spirituality in the environmental domain and contributed least to their

academic performance.

4.8.4.1.1 A brief summary for students' major disciplines related to spiritual well-being in the environmental domain and academic performance

Different majors would have different emphasis and design in their courses, so their students would have different concerns. Some disciplines would cooperate with the nature, for example Business and Art & Language. Business is about flexibility and adaptation. Business students believe in the survival of the fittest, therefore they would work with the environment (including the nature), so to create values and opportunities. Therefore, the significant effects from their major disciplines on their spiritual wellbeing in the environmental domain directly and largely contributed their pursuit for wisdom and academic excellence.

Art & Language also relates to the nature, for example majoring in Literature, the students would need to read a lot of articles and do homework that have topics related to the nature. So, students would have feelings towards the nature in such an atmosphere.

In contrast, some disciplines are in opposite positions to the nature, for example Science and Social Science. Science would see the nature as an object to be studied and analyzed. Social Science is people-oriented, they think that the environment is less important. So, Social Science student's development of spiritual wellbeing in the environmental domain is the weakest, and have significant difference with students of Business, Art & Language and Science.

From the perspective of the relevant and recent researches, there are a very small amount of researches on the relationship between students' spirituality in the environmental domain and their major disciplines. The findings of Liu (2009) found that the there are no statistically significant differences in the relationship between students' spirituality in the environmental domain and their major disciplines. It is not consistent with the findings of our study.

4.8.4.2 "Religious beliefs" related to spiritual well-being in the environmental domain and academic performance

Based on the analysis of the One-way Anova, Table 4.40 shows that there are significant differences among students' spiritual well-being in the environmental domain due to their different religious beliefs.

Table 4.40: Results of One-way Anova on Mean Difference of Religious Beliefs of Respondents (N=1130) for the environmental domain

Demographic Variables	Environmental domain
Religious beliefs "Students without religious beliefs" : Nil (N= 900)	F=15.43 " Nil "< "Christians" **(2.97<3.34)***
"Students who are Christians": Christians (N=174)	" Nil "< Catholics **(2.97<3.32)***
"Students who are Catholics": Catholics (N=37)	" Nil "< Buddhists **(2.97 <3.32)***
"Students who are Buddhists": Buddhists (N=13)	
"Students who are Taoists": Taoists (N=6)	

Note: Mean ratings are bold; *the mean difference is significant at the 0.05 level.

According to LSD, there are significant results for the mean differences in the spiritual well-being (environmental domain) between students with different religious beliefs. Table 4.41 shows the significant differences in the spiritual well-being (environmental domain) between students without religious beliefs and the following categories:

1. Students who are Christians

2. Students who are Catholics

3. Students who are Buddhists

Table 4.41: The significant differences in the spiritual well-being (environmental domain) between students with the different religious beliefs

	Students who are Christians (mean=3.34)	Students who are Catholics (mean=3.32)	Students who are Buddhists (mean=3.32)	Students who are Taoists (mean=3.33)	Students without religious beliefs (mean=2.97)
Students who are Christians (mean=3.34)					X
Students who are Catholics (mean=3.32)					X
Students who are Buddhists (mean=3.32)					X
Students who are Taoists (mean=3.33)					
Students without religious beliefs (mean=2.97)	X	X	X		

Note: X represents the mean differences at .05 level in the spiritual well-being (environmental domain) between the students with different religious beliefs

The mean (2.97) of students' spirituality in the environmental domain of students without religious beliefs are lower than the mean (3.34) of Students who are Christians, the mean (3.32) of Students who are Catholics, and the mean (3.32) of Students who are Buddhists.

Among the different religious beliefs of students, for the students' spiritual wellbeing in the environmental domain, students, who are Christians got the highest scores of mean 3.34 and students without religious beliefs got the lowest scores of 2.97.

In addition, there were statistically significant differences (P<0.05) between students' spiritual well-being in the environmental domain and their frequencies of going to Church/ Religious group and their frequencies of prayer or meditation according to the table 4.42 and table 4.43 respectively. There are positive relationships between them. It means "the more the frequencies of students going to church or religious group (and the more the frequencies of students' prayer or meditation), the higher their spiritual wellbeing in the environmental domain".

Table 4.42: Correlations for spiritual well-being and the frequencies of going to Church/ Religious group

		The frequencies of going to Church/ Religious group
SWB Environmental	Pearson Correlation	.20**
	Sig. (2-tailed)	0
	N	1130

Note: ** Correlation is significant at the 0.01 level (2-tailed).

Table 4.43: Correlations for spiritual well-being and the frequencies of prayer or meditation

		The frequencies of prayer or meditation
SWB Environmental	Pearson Correlation	.11**
	Sig. (2-tailed)	0
	N	1130

Note: ** Correlation is significant at the 0.01 level (2-tailed).

From the perspectives of the qualitative study – focus group discussions, it found that:

Christian students –

Among the 13 Christian students, the majority of students (9 Christian students) think that there are positive impacts from their religious beliefs to their spiritual wellbeing in the environmental domain, including to seek their connection with the nature, live in harmony with nature, and appreciate the beauty of the environment.

For example, one of the respondents said,

> *The Bible teaches us to treasure and respect the nature, it says in the Bible that human have the image of God and to rule over the World. Let them rule over the fish of the sea and over the birds of the sky and over the cattle and over all the earth, and over every creeping thing that creeps on the earth.*

> (University X /SS/Year 3/G)

This shows that the respondent thinks that the ecology is important since the Bible has taught us to treasure and manage the environment which was created by God. It also shows that we are closely related to the nature.

Another respondent said,

> *For since the creation of the world His invisible attributes, His eternal power*
>
> *and divine nature, have been clearly seen, being understood through what*
>
> *has been made, so that they are without excuse.' It is so wonderful.*

<div align="right">(University X /BUS/Year 2/B)</div>

This shows that the respondent could see the wonderful creation of God through the beautiful sceneries of the nature. This shows that there is interaction between religious beliefs and spirituality in the environmental domain.

Religious activities, for example, prayers and devotion, have close relationship with the nature. For example, one of the respondents said

> *To meditate in the nature, one should also have patience…. (As a Christian,)*
>
> *I would close my eyes and imagine a peaceful scenario of the nature, so that*
>
> *my heart can be in peace and I could appreciate God's work…. I can feel the*
>
> *Holy Spirit being with me as I enjoy the beauty of the nature, I would give*
>
> *thanks to God as He is wondrous, Amen!*

<div align="right">(University X /A&L/Year 3/G)</div>

This shows that the respondents think that to pray, meditate and have devotion in the nature is a good way to communicate and connect with God, and they feel closer to God

there.

Among the other 5 students who think that there are positive impacts from their religious beliefs to their spiritual wellbeing in the environmental domain, their responses are more or less the same with the ones quoted above. In summary of these 9 students' responses, we can see that students whose religious belief is Christianity (including practicing prayer and going to church activities), their religious belief would have a great positive effect on students' spirituality in the environmental domain and greatly contributed to their academic performance. It is obvious that Christians had the relatively highest spirituality in the environmental domain.

Catholic Students –

Among the 6 Catholic students, the majority of students (5 Catholic students), think there are positive impacts from their religious beliefs to their spiritual wellbeing in the environmental domain, including to seek their connection with the nature, live in harmony with nature, and appreciate the beauty of the environment.
One respondent said,

> *When I see the sun rise and sunset every day, and the four seasons changing*
>
> *in order, I would realize how wonderful His creation is.*

(University Z /SS/Year2/B)

This reflects that the respondent has observed the nature and lives within it, he understands the love of God through the magnificent nature, and he appreciates God's creation.

>*A prayer or mediation is more effective and efficient when taken place in the natural environment.*

>(University X /SS/Year3/G)

This shows that the respondent thinks that the natural environment is a good place for prayer and meditation, believers would feel closer to God.

Among the other 3 students who think that there are positive impacts from their religious beliefs to their spiritual wellbeing in the environmental domain, their responses are more or less the same with the ones quoted above. They would answer that "the church cooperates with different environmental organizations, I have joined the activities hoping to put some effort on protecting our nature" and "we usually go to the nature to have retreats, so that we can have a peaceful heart and soul". In summary of these 5 students' responses, we can see that students whose religious belief is Catholic (including practicing prayer and going to church activities), their religious belief would have a great positive effect on students' spirituality in the environmental domain and greatly contributed to their academic performance. Catholic was second to Christianity as having the second highest spirituality in

the environmental domain among other religious beliefs.

Buddhist students –

There are only 2 Buddhists students, they both think that there are positive impacts from their religious beliefs to their spiritual wellbeing in the environmental domain, including to seek their connection with the nature, live in harmony with nature, and appreciate the beauty of the environment.

For example, one of the respondent said,

> *(As a Buddhist), I would respect and be amazed by the nature, and think that*
>
> *I should live in harmony with the nature…. I would not kill animals (to leave*
>
> *the six paths of transmigration), so I am a vegetarian.*

> (University X /SS/Year 2/B)

This shows that the respondent would communicate with the nature due to his religious belief, therefore he is amazed by it. He lives in harmony with the nature, he is a vegetarian and does not eat meat in order to leave the six paths of transmigration.

Another respondent said,

> *We should focus on our spirits, and live a simple life, then we can be on the*
>
> *path to Buddha, and live in harmony with the nature. In other words, our life*

depends on many other matters, and it is made up by many different

relationships, which links up the individual to others, and to society and the

environmental. I used to love shopping, I would buy whatever I want instead

of thinking clearly whether I need it. Now I have less desire, because I do not

want to waste resources and pollute our world.

(University X /A&L/Year 3/G)

This shows that the respondent has paid more attention on the environment and paid

more effort to live in harmony with it because of her religious belief. Therefore, she lives a

simple life, and saves the resources, so not to destroy our planet. Her lifestyle derives from

her religious belief.

In summary of these 2 students' responses, we can see that students whose religious

belief is Buddhist (including meditation and practising religious activities), their religious

belief would have a positive effect on students' spirituality in the environmental domain.

Taoist student –

There is only 1 Taoist, he also thinks that there are positive impacts from his religious

beliefs to his spiritual wellbeing in the environmental domain, including to seek their

connection with the nature, live in harmony with nature, and appreciate the beauty of the

environment.

The respondent said,

> *Life is simple but satisfied and happy. I live in harmony with the environment,*
>
> *and I have less desire, I live a simple life, I would recycle products to make*
>
> *less pollution.*

(University X /S/Year 3/B)

This shows that the respondent pursue peace and harmony with the environment, and to live a simple life. His lifestyle is related to the core values of Taoism – to live according to the nature.

From this Taoist students' answer, we can see that his religious belief (including meditation and practising religious activities) has a positive effect on students' spirituality in the environmental domain.

Students without any religious beliefs –

Among the 44 students who didn't have any religious belief, 18 of them didn't answer the question, showing that they lack knowledge and interest in the relationship between their religious beliefs and their spirituality in the environmental domain.

Among the 26 students who have responded, they all think that there is no relationship between their religious beliefs and their spirituality in the environmental domain. Within

these 26 students, 10 of them have a lower spirituality in the environmental domain. For

example, one of the respondents said,

> *I always hear people saying that global warming is a big problem and the*
>
> *ice at the North Pole is melting, the polar bears will soon die since they have*
>
> *no food. Some people will be very worried, but I would just laugh at them.*
>
> *What does the North Pole has to do with us? I think they are overreacting.*

<div align="right">(University Z /BUS/Year 3/B)</div>

This shows that the respondent does not care about the nature at all, he does not care

about the beautiful scenery disappearing soon. He laughs at people and doubt about their

mercy to the nature, it shows that he seriously lacks knowledge and communication with the

nature.

Another respondent said,

> *I don't agree with those who say that we are cutting down too many trees*
>
> *and destroying our planet. Can we not use wood and paper? Should our life*
>
> *go back to ancient times?*

<div align="right">(University Z /SS/Year 3/B)</div>

This shows that the respondent does not have any sense on protecting our world, he

thinks that we should give up on the nature to live a modern life, this shows that he does not

care about the environment.

Another respondent said,

> *Globalization brings us improvement and opportunities, but you say that it's*
>
> *evil and destroys our environment, that our ecology is imbalanced… you*
>
> *have to make the choice and exchange for the better, it wouldn't be best if*
>
> *we don't improve and stop production.*

(University X /S/Year 3/B)

This shows that the respondent is a materialist and a utilitarian, he only cares about the

short term benefit and neglects the importance of long term environmental protection.

From the response of these 44 students (including 18 students not answering, and 26

who think that there is no relationship among them – with 10 students who had relatively low

spirituality in the environmental domain), we can see that there are a relatively low positive

effect from religious beliefs on those students who have no religious belief and their spiritual

wellbeing in the environmental domain. .

4.8.4.2.1 A brief summary for students' religious beliefs related to spiritual well-being in the environmental domain and academic performance

The most important book in Christianity and Catholic – the Bible, has many chapters that talked about the nature, for example, Genesis mentioned how God created the earth and things on it. Therefore, human and the nature are closely related, and we should treasure it and respect it.

Buddhism has a lot of books that mentioned about the nature as well, they believe that we should not destroy our environment and should not kill animals. They also believe in karma, so if human destroy our environment, we would suffer from the bad consequences.

Taoism advocates to follow the nature, *DaoDeJing*（《道德經》）talks about how the form of change of the nature and how to live in harmony with it. The most ideal way is to live in harmony and cooperate with the nature.

Students without religion have no concept about the nature, and have less feelings to it. They do not know how to be involved in it. Their spirituality in the environmental domain is worst among students of other religions. Their spiritual wellbeing in the environmental domain has significant different with (1) Christian students, (2) Catholic students and (3) Buddhist students. Thus, the significant effects from their religious beliefs (for example, Christianity, Catholics and Buddhism) on their spiritual wellbeing in the environmental domain directly and largely contributed their pursuit for wisdom and academic excellence.

However, since there are only 2 Buddhist students and 1 Taoist, therefore we cannot make detailed analysis and have an all-rounded discussion on these two religions, this is the limitation of our study.

From the perspective of relevant and recent researches, there are very few studies on the relationship between the students' spirituality in the environmental domain and their religious beliefs. The findings of the study conducted by Chang & Chen (2008) proved that there are significant differences for the relationship between the religious beliefs and their spirituality in the environmental domain. It found that spirituality of people with religious beliefs would be higher than that of people without religious beliefs in the environmental domain. It is consistent with the findings of our study.

4.8.5   A Summary for the discussion and analysis in the environmental domain

Regarding the research question 1, the study quantitatively and qualitatively find that there are significant positively relationships between the students' spiritual wellbeing in the environmental domain and their academic performance. Also, there are significant difference among students' spiritual well-being in the environmental domain due to their different CGPA levels.

The findings of the quantitative research are used to establish the relationship, then the qualitative findings are employed to enrich the research data and add insights. The findings of

the qualitative research help to explain how the background demographic variables are related to spiritual well-being in the environmental domain and academic performance (research question 2). Students' major disciplines and their religious beliefs are regarded as related to spiritual well-being in the environmental domain and academic performance.

There are not any great impact from the major discipline – social science to the development of their spiritual wellbeing in the environmental domain for their pursuit of academic success. It is because social science focuses on people, students might have neglected the changes in our environment. On the contrast, there are great impacts from Business – major discipline to students in this aspect. Therefore, the business discipline does not only teach students about knowledge in business, it also enhances their appreciation towards their environment and to think of ways to solve problems according to the changes we face in our environment. This learning process has trained their problem-solving skills by interacting with the issue, and this has also enhanced their academic results.

There are some impacts from religious beliefs (Christianity, Catholics and Buddhism) to students' spiritual wellbeing in the environmental domain for their pursuit of academic excellence. It is because some of religious activities take part in the natural environments and they would think of the nature to help their prayers or mediation. Therefore, these practices or religious activities would help them to release their pressure from school and get the energies from the natural environment for their academic success.

4.9   The relationship between Students' spiritual well-being in the transcendental domain and their CGPA

4.9.1   From the perspective of the quantitative research

The quantitative data shows that there are statistically positive significant differences for the relationship between students' spiritual wellbeing in the transcendental domains ($P<0.05$) at the .01 level (two-tailed) and their academic performance according to the table 4.44. For the transcendental domain, it effects are lower but it is close to the moderate effect for the positive relationships between them. It means "the higher the CGPA of students, the higher their spiritual well-being in the transcendental domain'.

Table 4.44: Correlations for spiritual well-being and academic performance for the transcendental domain

		Cumulative Grade Point Average (CGPA)
SWB Transcendental	Pearson Correlation	.28**
	Sig. (2-tailed)	0
	N	1130

Note: ** Correlation is significant at the 0.01 level (2-tailed).

Based on the analysis of the One-way Anova, Table 4.45 shows that there are significant differences among students' spiritual well-being in the transcendental domain due to their different CGPA levels. According to LSD, there are significant results for the mean differences at .05 level in the spiritual well-being (transcendental domain) between the different CGPA of students. Table 4.46 shows the significant differences in the spiritual well-being (transcendental domain) between:

1. Students with "CGPA 3.5 or above" - Elite Class and categories of lower CGPA, such as "CGPA 3.0 – 3.49" - Above Average" and "CGPA 2.5 – 2.99" (Average);

2. Students with "CGPA 3.0 – 3.49" - Above Average") and categories of lower CGPA, such as "CGPA 2.5 – 2.99" (Average);

3. Students with "CGPA 2.5 – 2.99" – Average and those in categories of lower CGPA; and

4. Students with "CGPA 2.0 – 2.49" (Below Average) and "CGPA 1.99 or below" (Poor Academic Performance).

Among the different CGPAs, in the transcendental domain, students with CGPA 3.0 to 3.4 (Above Average) got the highest scores of mean 2.98 and Students with CGPA 1.99 or below (Poor Academic Performance) got the lowest scores of 2.07.

Table 4.45: Results of One-way Anova on Mean Difference of CGPA of Respondents (N=1130) – for the transcendental domain

Demographic Variables	Transcendental domain
CGPA	F=18.42
"CGPA 3.5 or above": Elite Class (N=123)	Above Average > Elite Class (**2.98>2.82**)*
	Average < Elite Class (**2.63 < 2.82**)*
"CGPA 3.0 to 3.4": Above Average (N=459)	Below Average < Elite Class (**2.37< 2.82**)*
	Poor Academic Performance < Elite Class (**2.07 < 2.82**)*
"CGPA 2.5 – 2.99": Average (N=343)	Average < Above Average (**2.63< 2.98**)*
	Below Average < Above Average (**2.37 < 2.98**)*
"CGPA 2.0 – 2.49": Below Average (N=161)	Poor Academic Performance < Above Average (**2.07<2.98**)*
	Below Average < Average (**2.37 < 2.63**)*
"CGPA 1.99 or below": Poor Academic Performance (N=44)	Poor Academic Performance < Average (**2.07 < 2.63**)*
	Poor Academic Performance < Below Average (**2.07<2.37**)*

Note: Mean ratings are bold; *the mean difference is significant at the 0.05 level.

4.46: The significant differences in the spiritual well-being (transcendental domain) between students with different C

	CGPA 3.5 or above" (Elite Class) (mean=2.82)	"CGPA 3.0 – 3.49" (Above Average) (mean=2.98)	"CGPA 2.5 – 2.99" (Average) (mean=2.63)	"CGPA 2.0 – 2.49" (Below Average) (mean=2.37)	"CGPA 1.9 (Poor Academic (mean=
or above" Class) =2.82)		X	X	X	X
.0 – 3.49" Average) =2.98)	X		X	X	X
.5 – 2.99" rage) =2.63)	X	X		X	X
.0 – 2.49" Average) =2.37)	X	X	X		X
9 or below" c Performance) =2.07)	X	X	X	X	

resents the mean differences at .05 level in the spiritual well-being (transcendental domain) between the above different CGPA of students

4.9.2 The relationship between Students' spiritual well-being in the transcendental domain and their CGPA: From the perspective of the qualitative research

CGPA: 3.5 or above (Elite Class) –

Students whose CGPA is above 3.5 had the highest spirituality in the transcendental domain. Among the 5 students whose CGPA is 3.5 or above, the four students have high spirituality in the transcendental domain. They would always have good personal relationship with the Divine/God and honest worship of the Creator. Also they experience oneness with God, prayer in life and keep peace with God. For example, one of these 4 respondents said

> *The fear of the LORD is the beginning of wisdom. My religion teaches me to pursue the truth, so I can use the same attitude in learning.*

(University Y /SS/Year 3/B)

This reflects that the respondent pursues truth in his studies seriously based on his religion and his relationship with God. It shows that he first has a good relationship with God (to fear the Lord), and can live it out and pursue truth and beauty.

Another respondent said,

> *I have faced many failures in my studies, but whenever I read this verse in the Bible, "Forgetting what is behind and straining toward what is ahead, I press on toward the goal to win the prize for which God has called me*

heavenward in Christ Jesus." I could stand up again.

<div align="right">(University Z /BUS/Year 2/B)</div>

This reflects that the respondent gains confidence, strength and relies on God from his daily scripture reading.

One of the respondents who has no religious belief said,

> *Although I have no religious belief, I believe that there is a God somewhere*
>
> *out there. I think that you sow what you reap, if you do good, you will be*
>
> *repaid good, vice versa.*

<div align="right">(University Y /BUS/Year 2/G)</div>

This shows that the respondent is not sure about the existence of God, but she believes that this God should be righteous and fair: that we would be repaid good if we do good, therefore, she also works hard in her studies believing that her hard work will pay off.

Therefore, these 3 students have a high spirituality in the transcendental domain. These 3 students are sufficient to represent the situation of students of this CGPA group. So, students who have CGPA 3.5 or above have the highest spirituality in the transcendental domain.

CGPA 3 and 3.49 (Above Average) –

Based on the observation of the focus group discussion, students whose CGPA is between 3.00 and 3.49 relatively had high spirituality in the transcendental domain. Among the 17 students whose CGPA is between 3.0 -3.49, the majority of students (9 students of 17 students) have good personal relationship with the Divine/God and honest worship of the Creator. (Among the 9 of them, 5 are Christians, 1 is a Catholic, and 3 of them do not have religious beliefs.) Also they could always experience oneness with God, always pray in life and keep peace with God.

For example, one of the respondents said,

> *I have always been active at church, I am part of the worship team… my results are above average, and I have experienced God's guidance and protection.*

(University Z /BUS/Year 2/B)

This shows that the respondent could experience God's guidance and protection through serving at church. He feels the support within him, and therefore this gives him a positive impact in his studies.

Another respondent said,

But seek first his kingdom and his righteousness, and all these things will be

given to you as well. I think the more I involve in church, the more strength

I have to study. It is because brothers and sisters at church would always

care, support and encourage you. Whether your life is meaningful or busy

and messy, it depends on how you manage you time.

(University Y /BUS/Year 3/G)

This shows that the respondent would first seek a good relationship with God before he

pursues good academic results. When you have a good relationship with God, you become

more optimistic and happy, these characteristics would help students to face their problems

and overcome their difficulties.

The other respondent said,

By joining regular church activities, I learn how to maintain and discipline

my study life, and I feel that I am close to God when I pray to Him and serve

Him, and I am more confident to face the future.

(University X /BUS/Year 2/B)

This shows that the respondent would actively participate in weekly meetings at church,

for example, weekly worships and fellowship. He does not only build a good relationship

with God, he also builds up a disciplined habit, which helps him in his studies.

For the other 3 Christian students who also have high spirituality in the transcendental domain, their responses are more or less similar with ones quoted above. They responded that "The Lord is my strength", "I don't worry about my studies because of Jesus", and "faith has make me become more initiative". This shows that students' spirituality in the transcendental domain and their pursuit of academic results do not contradict each other, they have mutually positive relationships.

One of these 3 respondents who has does not have any religious belief said,

> *Life if full of ups and downs, it's just the same with our academic results. We need not be too concerned, just let it be.*

(University Z /A&L/Year 2/B)

This shows that the respondent understands that life is full of changes. Although he does not have any religious belief, he has a relaxed attitude of "just let it be", he needs not be too concerned about his marks or honours. He will just need to do his best, and he will be blameless.

Another respondent said,

> *I believe that we should be content to what we have. To success, we should be achieving the goal step by step.*

(University Y /Science/Year 2/B)

This shows that although he does not have any religious belief, the respondent knows that we should achieve our goal step by step, to gain success in learning is just the same. Another respondent said,

I do not believe in religions, but I believe the cause and effect theory. You reap what you sow. If you work hard in your studies, then you would get good results. This is very simple and fair.

(University X /SS/Year 2/B)

This reflects that the respondent understands and agrees that there is order in the universe. Although he does not have a religious belief, he uses his logic to reflect on his learning attitude. He believes that the world is fair.

Therefore, these 9 students have high spirituality in the transcendental domain. These 9 students are the majority in the group, and are sufficient to represent the situation of students of this CGPA group. So, students whose CGPA is between 3.0 and 3.49 have high spirituality in the transcendental domain.

CGPA 2.5 – 2.99 (Average) –

For students whose CGPA is between 2.5 -2.99, they had lower spirituality in the transcendental domain compared with the previous two groups (CGPA 3.5 or above and

CGPA 3.0 – 3.49). Among the 22 students whose CGPA is 2.5 – 2.99, the majority (16 students), 8 of them didn't respond to the question, this shows that they lack knowledge or interest in the topic of spirituality in the transcendental domain. The other 8 students had low spirituality in the transcendental domain. It is because they could not have personal relationship with God and seldom pray in life. Also they have misunderstandings about the religious beliefs. For example, one of the respondents said,

I and a few classmates have tried to predict our fate with Tarot cards, and

we used crystals to add some luck, we hoped that we could pass the exams.

(University Z /A&L/Year 3/G)

This reflects that the respondent thinks that she could use some non-practical ways to hope that they could get good results. She believes that these crystals and Tarot cards are religious to her.

Another respondent said,

This year, I have Fan Tai Sui(犯太歲), that's why I'm so unlucky this year

and met a professor that doesn't like me.

(University Y /A&L/Year 3/G)

This reflects that the respondent thinks that the professor *doesn't like her because she is*

unlucky and not for other reasons. And she is unlucky because she has Fan Tai Sui(犯太歲) .

This is her interpretation from her religious aspect.

Another respondent said,

> *Who would believe in gods and ghosts in this era? We should believe in science, only ignorant women and children would believe in gods, university students would not.*

(University Y /Science/Year 2/B)

The respondent lacks knowledge of religious faith, because he thinks that religion is only about believing in ghosts and gods, this is a very shallow interpretation.

Another respondent said,

> *I have never seem ghosts and gods, I doubt whether religious beliefs exist.*

(University X /BUS/Year 3/G)

This reflects that the respondent is in doubt with religions.

Another respondent said,

> *Why would you believe in religions? No wonder there are so many blessing gangs (祈福黨) out there.*

(University Y /Science/Year 3/B)

This reflects that the respondent denies religious faith, and mixes religion with the

blessings gangs and mock at them, it shows that the respondent lack knowledge in religion and does not respect it.

For the other 3 students who also have low spirituality in the transcendental domain, their responses are more or less similar with the 5 quoted above. These 3 respondents show a positive relationship between spirituality in the transcendental domain and their CGPA, that is, the lower the spirituality in the transcendental domain, the lower their CGPA. They said that "I don't believe religions at all", "religions are not reasonable" and "there are many questions that cannot be answered in religion). Therefore, from the answer of these 8 students and the attitude of the other 8 students who did not answer, it shows that they have a low spirituality in the transcendental domain. These 16 students are sufficient to represent the situation of students of this CGPA group. So, students whose CGPA is between 2.5 and 2.99 have low spirituality in the transcendental domain.

CGPA 2 – 2.49 (Below Average) –

For students whose CGPA is between 2 -2.49, they had the lowest spirituality in the transcendental domain compared with the previous three groups. Among the 22 students whose CGPA is between 2.0 – 2.49, the majority (15 students), 7 of them didn't answer the question, which reflects their lack of knowledge and interest in questions of spirituality in the transcendental domain. The other 8 students have relatively low spirituality in the

transcendental domain, because they could not have good personal relationship with God and seldom pray in life. Also they also have misunderstandings about the religious beliefs. For example, one of the respondents said,

When a person dies, it is just like turning off a light, I do not believe that ghosts or gods exists. My poor results is my own fault, I don't believe that praying would do any help to my studies.

(University Z /A&L/Year 3/B)

The respondent denies the existence of a God or creator. He blames himself for his poor results and does not think that anyone or god could help him about it.

Another respondent said,

I think I lack some luck, every time when I take an exam, the questions would be from the parts I haven't revised, but those that I have revised wouldn't be asked. I'm so unlucky, it's my fate.

(University Z /BUS/Year 3/B)

The reflects that the respondent does not take responsibility for his own failure in studies, he blames it to luck and fate, and he thinks that it cannot be changed. His attitude reflects that he is discontent with the arrangement of his fate.

Another respondent said,

> *My grandma went to offer the first incense for me, and thought that it could*
>
> *help my grades, but my results were worse than the previous year.*

<div align="right">(University X /BUS/Year 2/B)</div>

This reflects that the respondent lacks knowledge and interest in religion and spirituality in the transcendental domain, because he even let others do the offering rituals for him. He only wants to get good results without paying any effort. He didn't reflect upon himself and find out the problem.

Another respondent said,

> *They say that God would protect you if you worship Him, I give incense to*
>
> *my ancestors every day and night, why didn't they protect me and give me*
>
> *good results?*

<div align="right">(University X /S/Year 2/B)</div>

This shows that the respondent only wants to be protected by his ancestors, but he doesn't understand the meaning of offering incense and religion, he just wants an excuse for his poor results.

For the other 4 students who also have low spirituality in the transcendental domain, they said that "Gods don't exist", "Human beings make their own gods", "there are no gods"

and "I haven't seen god, so He doesn't exist" etc. We can see that they don't believe in God, and do not have any religious beliefs, so they have low spirituality in the transcendental domain.

In summary of these 8 students and the attitude of the 7 students who didn't answer the questions, it shows that their spirituality in the transcendental domain is lowest among the other CGPA groups. These 15 students are the majority in this CGPA group, and their responses are sufficient to represent student's situation in this CGPA group. So, students whose CGPA is between 2.0 and 2.49 have the lowest spirituality in the transcendental domain.

4.9.3 A brief summary for the positive relationship between students' spiritual wellbeing in the transcendental domain and their academic performance

Students whose CGPA is 3.5 or above and students whose CGPA is 3.0 – 3.49 do not have great differences in their spiritual wellbeing in the transcendental domain. They pursue knowledge in their studies and also pursue the truth of the Divine/ creator/ God, the nature of these two aspects are the same: to pursue the truth. Therefore, students can pray in life, worship the creator and always have good personal relationship with the Divine/God.

From the focus group discussion, we can see that the spirituality in the transcendental domain of students and their CGPA have positive and mutual relationships. Students with

better academic results, i.e. students with CGPA 3.5 or above and students with CGPA 3.0 –

3.49, would tend to show higher spirituality in the transcendental domain. These students

with high spirituality in the transcendental domain have some characteristics within their

spirituality in the transcendental domain that positively affects their learning, for example,

they are gentle and humble (because they understand that human beings are small compared

to the universe), they would be confident and optimistic (because they could feel the presence

of God) and have a calm spirit (because they know the creator has heard them praying and

worshipping) etc. These characteristics would lower their stress of learning and improve their

attitude towards learning. Therefore, students who have higher spirituality in the

transcendental domain would have higher CGPA.

Although from the analysis of the quantitative research, we can see significant

differences in students' spiritual wellbeing in the transcendental domain among the two

groups (students with CGPA 3.5 or above and students with CGPA 3.0 – 3.49), we cannot see

such significant difference in the focus group discussion observation.

Fontana (2007) believes that meditation (including ideational and non-ideational) aims

to train people's concentration, tranquility and insight. For example, Christians would

connect with God through their prayer and Bible reading, so that they can easily reach a

peaceful status of their inner lives. Others can develop their concentration and reach

tranquility through silent contemplation and mindfulness. A neurologist, Davidson et al.

(2003) finds that meditation is useful for the development of the functions in brain. He finds

that meditation will enhance the frequency of 'gamma wave' and also activate brain

synchrony. This would really help children learning. Students, who always have prayer,

meditation, or self-reflection, would feel peaceful and tend to have better results (Astin et al.,

2010; Flannery, 2012).   Silence and quiet are the key elements of spiritual development and

creative learning (Astin et al., 2012).

The above findings about students' characters, which related to their spirituality and

contribute to their academic success, are consistent with the other related researches

mentioned in the literature reviews of the study.

However, students with CGPA between 2.0 – 2.49 have poor results and are weak in

doing analysis or understanding religion. They would go to extremes, for example, some

students would become very superstitious, and want to get good results without working

hard, some students would look down on religions and think that only ignorant people would

believe in God. Therefore, they have the lowest spirituality in the transcendental domain.

These students with low spirituality in the transcendental domain have some

characteristics within their spirituality in the transcendental domain that negatively affects

their learning, for example, they use fate as an excuse (so that they cannot change or

breakthrough the difficulties faced in learning), they would doubt about things (so they

cannot concentrate in studies, and would use their superstitious behaviours as an excuse of

their poor results) and they do not have passion to pursue the truth (so they are also lazy in learning). These characteristics would negatively affect the students' learning.

For students whose CGPA is between 2.5 -2.99, they have middle-ranged results, their critical thinking is also just average level, and their understanding for religions is also average. Therefore, they may not easily have oneness with God, peace with God and personal relationship with the Divine/God. So, they have a relative low spiritual wellbeing in the transcendental domain.

Since the spirituality in the transcendental domain of students and their CGPA have positive and mutual relationships, these students with low spirituality in the transcendental domain would use science to explain religion (but they fail to understand that science and religion are two different modes of thinking), they are being too objective on the fact that whether they have seen God (but they don't realize that no science student has even really seen the universal explosion) and they use fate as an excuse for their difficulties in learning (instead of reflecting on themselves). These characteristics would negatively affect the students' learning.

The findings of the positive relationship among student's CGPA and their spirituality and the significant differences among students' spirituality due to their different CGPAs shown (Except for the significant differences between students with CGPA 3.5 or above and students with CGPA 3.0 – 3.49) from the quantitative research (Questionnaires) is supported

by the evidence of this qualitative study based on the above observation and analysis of the focus group discussions for the students' spiritual well-being in the transcendental domain. Also, "the higher the CGPA of students, the higher their spiritual well-being in the transcendental domain" is supplemented by the evidences of the qualitative study.

From the perspective of the relevant and recent researches, the studies done in the past several decades for the relationship between the students' spirituality in the transcendental domain and their academic performance measured by CGPA have inconsistent results. Some of the studies found that there are no statistically significant differences in the relationship between the academic performance and their spirituality in the transcendental domain (Reyes, 2006; Zern, 1987; Smartt, 2014).

On the other hand, some of the studies found that there are significant differences for the relationship between them (Astin et al., 2010; Line, 2005; Regnerus, 2001). The findings of the studies indicated a significant positive relationship between students' spirituality in the transcendental domain and their academic performance as expressed in the CGPA. It showed that the higher the students' spirituality in the transcendental domain, the higher CGPA of the students. It is consistent with the findings of our study.

4.9.4   Background variables related to spiritual well-being in the transcendental domain and academic performance

The qualitative findings indicate that family social-economic status and religious beliefs are the factors for the above positive relationship in the transcendental domain.

Simultaneously, the previously quantitative findings can be also used to support, supplement and enrich the findings for the research Question 2.

4.9.4.1 "Family social-economic status" related to spiritual well-being in the transcendental domain and academic performance

There were statistically significant positive relationship (P<0.05) at the .01 level (two-tailed) between students' spiritual well-being in the transcendental domain and their annual level of family income according to the table 4.47. In addition, there is a positive significant relationship (P<0.05) at the .01 level (two-tailed) between students' spiritual well-being in the transcendental domain and their parents' (including father and mother) education levels in accordance with table 4.48. Thus, it means "the higher the annual level of family income (and the higher parental education levels) of students, the higher their spiritual wellbeing in the transcendental domain'.

Table 4.47: Correlations for spiritual well-being and annual income level of family for the transcendental domain

		Annual income level of family
SWB Transcendental	Pearson Correlation	.11**
	Sig. (2-tailed)	0
	N	1130

Note: ** Correlation is significant at the 0.01 level (2-tailed).

Table 4.48: Correlations for spiritual well-being and the HIGHEST level of education attained by students' parents (including father and mother) for the transcendental domain

		The HIGHEST level of education attained by students' Father	The HIGHEST level of education attained by students' Mother
SWB Transcendental	Pearson Correlation	.23**	.21**
	Sig. (2-tailed)	0	0
	N	1130	1130

Note: ** Correlation is significant at the 0.01 level (2-tailed).

Table 4.49: Results of One-way Anova on Mean Difference of Annual Income level of
Family of Respondents (N=1130) for the transcendental domain

Demographic Variables	Transcendental domain
Annual Income level of family "Less than $120,000" (N=129): Lowest Income "From $120,000 - $240,000" (N=378): Lower Income "From $240,001 -$480,000" (N=536): Middle Income "From $480,001 and above" (N=87): Higher Income	F=4.22 Lowest Income < Higher Income **(2.64<2.90)*** Lower Income < Higher Income **(2.65<2.90)*** Lower Income < Middle Income **(2.65<2.79)***

Note: Mean ratings are bold; *the mean difference is significant at the 0.05 level.

Based on the analysis of the One-way Anova, Table 4.49 shows that there are significant differences among students' spiritual well-being in the transcendental domain due to the difference of their annual family income. According to LSD, there are significant results for the mean differences at .05 level in the spiritual well-being (transcendental domain) between students with different annual family income. Table 4.50 shows the significant differences in the spiritual well-being (transcendental domain) between:

1. 'students with annual family income more than $480,001' (Higher Income) and the

   following categories:

I. 'students with annual family income less than $120,000 (Lowest Income) and

II. 'students with annual family income $120,000 - $240,000' (Lower Income)

2. 'students with annual family income from \$120,000 to \$240,000 (Lower Income) and

   ''students with annual family income from \$240,001 to \$480,000 (Middle Income).

Among the different annual family incomes of students, in the transcendental domain,

students with annual family income of \$480,001 and above got the highest scores of mean

2.90 and Students with annual family income less than \$120,000 got the lowest scores of

2.64.

50: The significant differences in the spiritual well-being (transcendental domain) between students with the different family incomes

	Annual family income more than $480,001 (Higher Income) (mean=2.90)	Annual family income from $240,001 to $480,000 (Middle Income) (mean=2.79)	Annual family income from $120,000 to $240,000 (Lower Income) (mean=2.65)	Annual family income than $120 (Lowest Inc (mean=2.
mily income more n $480,001 her Income) ean=2.90)			X	X
mily income from 01 to $480,000 dle Income) ean=2.79)			X	
mily income from 00 to $240,000 ver Income) ean=2.65)	X	X		
mily income less n $120,000 vest Income) ean=2.64)	X			

resents the mean differences at .05 level in the spiritual well-being (transcendental domain) between the above different annual family incom

From the perspectives of the qualitative study – focus group discussions, it found that:

<u>A better family social-economic status –</u>

Among the 20 students who have a relatively higher family social-economic status (whose parents have education of university level, better occupations and higher family income, for example: annual family income $480,001 or above), the majority of students (10 students), think there are positive relationship and positive impacts from their family background to their spiritual wellbeing in the transcendental domain, including having good personal relationship with the Divine/God/Transcendence and honest worship of the Divine/God/Transcendence. Also they could always experience oneness with Divine/God/Transcendence, always pray in life and keep peace with Divine/God/Transcendence.

For example, one of the respondents said,

> *My parents explained the difference of different religions to me when I was young, they bought some books to study it together with me.*

> (University Y /S/Year 2/B)

> *I have asked my parents about the different of cult and heresies, they would explain it to me patiently and bring me to faith.*

> (University Y /A&L/Year 3/G)

This shows that since the two respondent's parents have high level education, they have better ability of analytical thinking and could explain complicated and abstract thoughts. This has enhanced the respondents to know more about faith.

The other 8 students also agree that there are positive relationship and positive impacts from their family background (social-economic status) to their spiritual wellbeing in the

transcendental domain. Their response is more or less the same with the 3 quoted above. They responded, "I am thankful that I have an abundant life, I believe that it is God's provision" and "Everything is from the Lord".

From the answers of these 10 students who have relatively better family backgrounds, their family social-economic status, would have a great positive effect on students' spirituality in the transcendental domain and largely contributed to their serious attitudes of learning and academic achievement. It is obvious that families with better social-economic status have the relatively highest spirituality in the transcendental domain.

An average family social-economic status –

Among the 25 students who have a relatively average family social-economic status (whose parents have education of secondary school level, average occupations and average family income, for example: annual family income $240,001 - $480,000), the 6 students, think that there are positive relationship and positive impacts from their family background to their spiritual wellbeing in the transcendental domain. These 6 students have a relatively high spirituality in the transcendental domain.

For example, one of the respondents said,

> *My parents would try to explain and talk with me about Christianity even*
> *though they are not well really educated. I would think I am fortunate to be*
> *a Christian because of my parents.*

> (University Y /SS/Year 3/G)

This shows that the respondent's parents could explain and share about their faith with the respondent even though they do not have high education levels.

> *My parents are Buddhists, they believe that good acts would receive rewards,*

so I understand that the abundance I now have in life are the results of my

regular good deeds.

(University X /A&L/Year 3/G)

This shows that the respondent's parents would discuss with the respondent about their faith, and this has directly affected his thoughts and behaviours. Therefore, he would know the linkage between his daily life and his faith, for example, 'good acts would receive rewards'.

The other 4 students also agree that there are positive relationship and positive impacts from their family background (social-economic status) to their spiritual wellbeing in the transcendental domain. Their response is more or less the same with the 4 quoted above.

In summary of these 25 students who have relatively average family backgrounds, including 9 not answering, 10 thinking that there is no relationship between family background and spirituality in the transcendental domain, and 6 thinking that there is a positive relationship), we can see that their social-economic status of their family has different extends of impacts on their spirituality in the transcendental domain.

A relatively lower family social-economic status –

Among the 21 students who have a relatively lower family social-economic status (whose parents have education of primary school level, lower occupations and lower family income, for example: annual family income $240,000 or below), 9 of them did not answer the question, showing that they lack knowledge and interest in the relationship between their family background and their spirituality in the transcendental domain. 8 of the students think that there is no relationship between their family social-economic status and their spirituality in the transcendental domain.

However, the other 4 students, think that there are positive relationship and positive impacts from their family background to their spiritual wellbeing in the transcendental domain, that is, the worse their family background, the lower their spirituality in the transcendental domain.

For example, one of the respondents said,

> *I have no religion….My parents are primary school graduates….They have no knowledge in any religion….All religions are the same to them… So, we do not share or discuss about religion at home.*

<div align="right">(University Z /A&L/Year 2/G)</div>

This shows that the respondent's parents would not discuss about religion at home because they lack knowledge in religions due to their low education level. They do not understand religions, so they think that "All religions are the same".

Another respondent said,

> *My parents are busy at work, and they get frustrated by life….They have no interest in religion, and believe that there is nothing after one dies.*

<div align="right">(University X /S/Year 2/G)</div>

The other respondent said,

> *Our life isn't easy….Money is their religion, because the happiness of the whole family depends on money.*

<div align="right">(University Z /SS/Year3/B)</div>

This reflects that the two respondent's family are too busy working and don't have the time and mood to learn about a religion. They can't even handle things in this world, so they

don't care about the future world.

In summary of these 21 students whose family background is relatively poor (having a lower social-economic status, including 8 not answering, 9 thinking that there is no relationship between family background and spirituality in the transcendental domain, and 4 thinking that there is a positive relationship), we can see that their social-economic status of their family has different extends of impacts on their spirituality in the transcendental domain. Comparing to students in the other two groups, these students have a relatively lower spirituality in the transcendental domain.

4.9.4.1.1 A brief summary for students' family social-economic status related to spiritual well-being in the transcendental domain and academic performance

The findings indicate that for the transcendental aspects, parents who have higher education could present and analyze clearly, so that they can discuss religions with their children. Parents who have higher education would also give their children more freedom, which is good for their development on their spirituality in the transcendental domain.

For the transcendental domain, when our basic needs in life are satisfied, we can pursue a higher level of satisfaction, for example, religion: then they and their children will have time to think about what happens after death. But when their basic needs are not yet satisfied, they would not have the time and mood to think about religion and spirituality. Thus, the significant effects from their family social-economic status on their spiritual wellbeing in the transcendental domain directly and largely contributed their pursuit for wisdom and academic excellence.

From the perspective of the relevant and recent researches, some of the studies found that there are no significant differences for the relationship between their parental social and economic status and their spiritual well-being in the transcendental domain (Lin, 2006; Fu,

2011). However, another researches proved that there are significant differences in the relationship between them (Liu, 2007). They indicated that students with higher parental social and economic status would show higher spirituality in the transcendental domain. It is consistent with the findings of our study.

4.9.4.2 "Religious beliefs" related to spiritual well-being in the transcendental domain and academic performance

Based on the analysis of the One-way Anova, Table 4.51 shows that there are significant differences among students' spiritual well-being in the transcendental domain due to their different religious beliefs.

Table 4.51: Results of One-way Anova on Mean Difference of Religious Beliefs of Respondents (N=1130) for the transcendental domain

Demographic Variables	Transcendental domain
Religious beliefs "Students without religious beliefs" : Nil (N= 900) "Students who are Christians": Christians (N=174) "Students who are Catholics": Catholics (N=37) "Students who are Buddhists": Buddhists (N=13) "Students who are Taoists": Taoists (N=6)	F=100.24 " Nil "< "Christians" **(2.53<3.61)*** "Buddhists"< "Christians" **(2.78 <3.61)*** "Taoists"< "Christians" **(2.77 <3.61)*** " Nil "< "Catholics" **(2.53<3.52)*** "Buddhists"< Catholics" **(2.78 <3.52)*** "Taoists" < Catholics" **(2.78 <3.52)***

Note: Mean ratings are bold; *the mean difference is significant at the 0.05 level.

According to LSD, there are significant results for the mean differences in the spiritual well-being (transcendental domain) between students with different religious beliefs. Table 4.52 shows the significant differences in the spiritual well-being (transcendental domain) between students without religious beliefs and the following categories:

1. Students without religious beliefs

2. Students who are Buddhists

3. Students who are Taoists

Both the means of students' spirituality in the transcendental domain of students who are Christians (3.61) and Catholics (3.52) respectively are higher than the means (2.53) of students without religious beliefs, the mean (2.78) of students who are Buddhists and the mean (2.77) of students who are Taoists

Among the different religious beliefs of students, for the students' spiritual wellbeing in the Transcendental domain, students, who are Christians got the highest scores of mean 3.62 and students without religious beliefs got the lowest scores of 2.53.

Table 4.52: Lists of the significant differences in the spiritual well-being (transcendental domain) between students with the different religious beliefs

	Students who are Christians (mean=3.61)	Students who are Catholics (mean=3.52)	Students who are Buddhists (mean=2.78)	Students who are Taoists (mean=2.77)	Students without religious beliefs (mean=2.53)
Students who are Christians (mean=3.61)					X
Students who are Catholics (mean=3.52)					X
Students who are Buddhists (mean=2.78)					
Students who are Taoists (mean=2.77)					
Students without religious beliefs (mean=2.53)	X	X			

Note: X represents the mean differences at .05 level in the spiritual well-being (transcendental domain) between the students with different religious beliefs

In addition, there were statistically significant differences (P<0.05) between students' spiritual well-being in the transcendental domain and their frequencies of going to Church/ Religious group and their frequencies of prayer or meditation according to the table 4.53 and table 4.54 respectively. There are positive relationships between them. It means "the more the frequencies of students going to church or religious group (and the more the frequencies of students' prayer or meditation), the higher their spiritual wellbeing in the transcendental domain".

Table 4.53: Correlations for spiritual well-being and the frequencies of going to Church/ Religious group for the transcendental domain

		The frequencies of going to Church/ Religious group
SWB Transcendental	Pearson Correlation	.50**
	Sig. (2-tailed)	0
	N	1130

Note: ** Correlation is significant at the 0.01 level (2-tailed).

Table 4.54: Correlations for spiritual well-being and the frequencies of prayer or meditation for the transcendental domain

		The frequencies of prayer or meditation
SWB Transcendental	Pearson Correlation	.21**
	Sig. (2-tailed)	0
	N	1130

Note: ** Correlation is significant at the 0.01 level (2-tailed).

From the perspectives of the qualitative study – focus group discussions, it found that:

Christian Students –

Among the 13 Christian students, the majority of students (12 Christian students), think that there are positive impacts from their religious beliefs to their spiritual wellbeing in the transcendental domain, including having a good personal relationship with the Divine/God/Transcendence and honest worship of the Divine/God/Transcendence. Also they could always experience oneness with Divine/God/Transcendence, always pray in life and keep peace with Divine/God/Transcendence.

For example, one of the respondents said,

Last year my mother went into the hospital because of stroke. The doctor told

me and my father to be prepared, the chances are high that she would become

paralyzed for the rest of her life. My father and I cried and the pastor and

brother and sisters from church came to the hospital to pray for her. I was

so touched and could feel that God was with us. Now my mom is much better,

although she cannot move as freely as before, I am already satisfied.

(University Y /SS/Year 3/G)

This shows that the respondent has experienced the power of God during the unfortunate incident. The doctor told her that the chances are high that her mother would become paralyzed for the rest of her life, but after the pastor and church friends came to pray for her, her mother is now much better, she has really experienced God's presence.

Another respondent said,

To pray is the most direct way to communicate with God.

(University Y /SS/Year 3/G)

Another respondent said,

It seems that if I pray harder, I would become more powerful, and have more

faith in God, and become closer to Him.

(University Y /BUS/Year 3/B)

The two respondents above understand the importance of prayer – not only to communicate and connect to God, but also to strengthen their faith in God, it would also enhance their spirituality in the transcendental domain.

A respondent said,

Whenever I face huge difficulties, for example, a failure in public exam, I would pray very hard, for example I would fast as I pray….After prayers, I could find my way again and start all over again.

(University Y /BUS/Year 2/B)

This shows that the respondent has a close relationship to God, because whenever he faces difficulties, the first thing he would do is to pray, and every time he prays, his problems would be solved.

Among the other 8 students who think that there are positive impacts from their religious beliefs to their spiritual wellbeing in the transcendental domain, their responses are more or less the same with the ones quoted above. In summary of these 12 students' responses, we can see that students whose religious belief is Christianity (including practicing prayer and going to church activities), their religious belief would have a great positive effect on students' spirituality in the transcendental domain and greatly contributed to their academic success. It is obvious that Christians had the relatively highest spirituality in the transcendental domain.

Catholic students –

Among the 6 Catholic students, the majority of students (5 Catholics), think there are positive impacts from their religious beliefs to their spiritual wellbeing in the transcendental domain, including having a good personal relationship with the Divine/God/Transcendence and honest worship of the Divine/God/Transcendence. Also they could always experience oneness with Divine/God/Transcendence, always pray in life and keep peace with Divine/God/Transcendence.

For example, one of the respondent said,

> *Glory be to the Father, and to the Son, and to the Holy Spirit. As it was in the beginning, is now, and ever shall be, world without end. Amen. (A Catholic prayer)*

(University Y /A&L/Year 3/B)

This reflects that the respondent could communicate with God and feel his presence through prayers.

> *Every time I attend mass at church, I would feel that my religion is real.*

(University Z /BUS/Year 3/G)

This shows that after the respondent joins church activities, she would have a better relationship with God.

> *I had tried to seriously read the Bible, and at the time my thoughts were also very spiritual.*

(University X /S/Year 2/G)

This reflects that when the respondent is willing to pursue her faith seriously, her spirituality (relationship with God) would be better.

Among the other 2 students who think that there are positive impacts from their religious beliefs to their spiritual wellbeing in the transcendental domain, their responses are more or less the same with the ones quoted above. They agree that there is a positive relationship between their religious beliefs and their spirituality in the transcendental domain.

In summary of these 5 students' responses, we can see that students whose religious belief is Catholic (including practicing prayer and going to church activities), their religious

belief, would have a great positive effect on students' spirituality in the transcendental domain and greatly contributed to their academic performance. Catholic was second to Christianity as having the second highest spirituality in the transcendental domain among other religious beliefs.

Buddhist students –

There are only 2 Buddhists students, they both think that there are positive impacts from their religious beliefs to their spiritual wellbeing in the transcendental domain, including having a good personal relationship with the Divine/God/Transcendence and honest worship of the Divine/God/Transcendence. Also they could always experience oneness with Divine/God/Transcendence, always pray in life and keep peace with Divine/God/Transcendence.

> *(As a Buddhist,) I would actively practice Buddhism to transcend the 6 paths of transmigration. （六度輪迴）"Moreover, they could always meditate in life and keep peace. "It is a practice to recite Buddhist scripture for my merit.*

> (University X /SS/Year 2/B)

This shows that the respondent is willing to practice his faith in order to transcend to a transcendental world.

> *Meditation helps me to practise Buddhism….To meditate in Buddhism is to help believers to practise Buddhism, so the more they meditate, their spirituality would become higher.*

> (University X /A&L/Year 3/G)

This shows that meditation helps the respondent to practice Buddhism, and she thinks that her spiritual wellbeing (Transcendental domain) would be enhanced by the frequency of Meditation.

In summary of these 2 students' responses, we can see that students whose religious belief is Buddhist (including meditation and practising religious activities), their religious belief would have a positive effect on students' spirituality in the transcendental domain.

Taoist student –

There is only 1 Taoist, he thinks that there are positive impacts from his religious beliefs to his spiritual wellbeing in the transcendental domain, including having a good personal relationship with the Divine/God/Transcendence and honest worship of the Divine/God/Transcendence. Also they could always experience oneness with Divine/God/Transcendence, always pray in life and keep peace with Divine/God/Transcendence.

> *(As a Taoist), I believe that there is a natural law – the Dao（道）... I would practice Daoist meditation– Shouyi（守一）. This helps me to come close to Dao（道）.*

> (University X /S/Year 3 /B)

This reflects that the respondent understands his religious belief– the Dao（道）, and he would practice Daoist meditation– *Shouyi*（守一） to come closer to Dao.

From this Taoist students' answer, we can see that his religious belief has a positive effect on students' spirituality in the transcendental domain.

Students without any religious beliefs –

Among the 44 students who didn't have any religious belief, 36 of them didn't answer the question, showing that they lack knowledge and interest in the relationship between their religious beliefs and their spirituality in the personal domain.

Among the 8 students who have responded, they all think that there should be a relationship between their religious beliefs and their spirituality in the transcendental domain. However, they understand that they have no religious belief, so they cannot explain and experience the relationship between the two aspects.

From the response of these 44 students (including 36 students not answering, 8 who think that there is some relationship among them), we can see that there are a relatively low positive effect from religious beliefs on those students who have no religious belief and their spiritual wellbeing in the transcendental domain. Also, their spirituality in the transcendental domain is also the lowest.

4.9.4.2.1 A brief summary for students' religious beliefs related to spiritual well-being in the transcendental domain and academic performance

Religious belief is not only a spiritual part of human being's spiritual life. It is a common phenomenon that people with religious belief would generally have a higher spirituality. Students who have religious beliefs have better spirituality in the transcendental domain than students who do not have religious beliefs. Christians have the highest spirituality, Catholics have the second highest, and then the Buddhist and Taoist. Christians (including Catholics) and those who do not have religious beliefs have great differences in their spirituality in the transcendental domain because students who do not have religious beliefs would not communicate with God and do not understand the importance to build a relationship with Him.

Christians (including Catholics) and Buddhists and Taoists' students have differences in their spiritual wellbeing in the transcendental domain. It is because Christians would establish a good relationship with God, they would pray to Him and praise Him. Buddhists do not believe in God, they would practice Buddhism in hope to transcend the six paths of transmigration. Taoists also do not believe in God, they believe in the natural law – Dao, which is also the Dao in Yinyang （陽陰）and the 5 elements （五行）. Thus, the significant effects from their religious beliefs (for example, Christianity and Catholics) on their spiritual wellbeing in the transcendental domain directly and largely contributed their pursuit for wisdom and academic excellence.

However, since there are only *2* Buddhist students and 1 Taoist, therefore we cannot make detailed analysis and have an all-rounded discussion on these two religions, this is the limitation of our study.

From the perspective of the relevant and recent researches, there are inconsistent results of the studies for the relationship between students' spirituality in the transcendental domain and religious beliefs in the past decades. Some of studies found that there are no significant differences for the relationship between them (Chen, 2006; Fu, 2011; Huang, 2003).

However, other researches showed that there are significant differences for the relationship between religious beliefs and their spirituality in the transcendental domain (McClure & Laden, 1982; Lee, 2006; Chang & Chen, 2008; Wong et al., 2011; Lin, 2006; Huang, 2011; Liang, 2006; Liu, 2007). The findings of these studies indicated that the spirituality of people with religious beliefs would be higher than that of people without religious beliefs.

For example, the study done by (Huang, 2011) show that people with Christian, Buddhist and Taoists religious beliefs would have higher spirituality than those without religious beliefs. It is quite similar with the findings of the study conducted by (Liu, 2007). It

indicated that the ordering sequence from high to low in the spirituality in the transcendental domain: Christian Students, Buddhist Students, students with other religious beliefs and students without any religious beliefs. It is consistent with the findings of our study.

4.9.5   A summary for the discussion and analysis in the transcendental domain

Regarding the research question 1, the study quantitatively and qualitatively find that there are significant positively relationships between the students' spiritual wellbeing in the transcendental domain and their academic performance. Also, there are significant difference among students' spiritual well-being in the transcendental domain due to their different CGPA levels.

The findings of the quantitative research are used to establish the relationship, then the qualitative findings are employed to enrich the research data and add insights. The findings of the qualitative research help to explain how the background demographic variables are related to spiritual well-being in the transcendental domain and academic performance (research question 2). Students' family social economic background and their religious beliefs are regarded as related to spiritual well-being and academic performance.

There are positive relationships between the following:

1.   students' socioeconomic background (including their family income and education level of parents),

2.   their spiritual well-being (in the transcendental domain) and

3.   their academic performance.

For students with better socioeconomic status, their parents would be more open-minded on the aspect of religion, easily explore and discuss with their children, communicate well, and have good analyzing ability, it would help students to have critical thinking on their way

of faith. These analyzing and criticizing skills would be useful in their academic studies as well.

There are some impacts from religious beliefs (Christianity and Catholics) to students' spiritual wellbeing in the transcendental domain for their pursuit of academic excellence. Reading the bible, praying and worships, which are performs and conducts of the religious followers, are the communication and contact with the Creditor. These activities would certainly enhance students' spiritual wellbeing in the transcendental domain. Also, these religious activities, ceremonies and rules don't only train up their self- disciplines, concentration and persistence but also enforce their self-confidence and optimistic attitudes. Therefore, these attributes are beneficial to the pursuit of academic excellence.

4.10   Conclusion

In conclusion, based on the above quantitative and qualitative findings, the study overall indicate a moderate positive relationship between the spiritual well-being (including overall and specific domain) of the respondents and their academic performance, and demonstrate that students with different academic performance have different levels of spiritual wellbeing. Thus, it shows that "the higher the CGPA of students, the higher their spiritual wellbeing (all domains)'.

Students' with higher spiritual well-being in specific domains, would tend to show certain characteristics, attitudes, values and personalities. For example, students with high spirituality in the personal domain would tend to be optimistic, disciplined and could focus well. Also, students with high spirituality in the communal domain would tend to show love, trust, respect, accept and forgive others. Furthermore, students with high spirituality in the environmental domain would tend to show a peaceful mind, an ordered life and have passion.

In addition, students with high spirituality in the transcendental domain would tend to be more humble, confident and have a peaceful soul. All these characteristics have positive impacts for better learning of students.

On the contrary, students' with lower spiritual well-being in specific domains, would show certain characteristics, attitudes, values and personalities. For example, students with low spirituality in the personal domain would tend to be less energetic, less concentrative and easily to show pessimistic values towards life. Also, students with low spirituality in the communal domain would tend to be more self-centered, and neglect others. Moreover, students with low spirituality in the environmental domain would not easily show inner peaceful statues and appreciate things around them, including the nature. In addition, students with low spirituality in the transcendental domain would easily believe that failure is their fate, they doubt a lot and do not pursue the truth seriously. All these characteristics have negative impacts for students' learning.

Besides, major disciplines, family social-economic status and religious beliefs are found to be related to university students' spiritual well-being (including overall and specific domain) and their academic performance in both the quantitative and qualitative part of the study. Thus, these demographic features are used to delineate and analyze the positive relationship and the variety of patterns of relationship between academic performance and spiritual wellbeing. Also, these demographics, which closely correlates to spiritual characters and personalities: concentration, perseverance, self-confidence, self-discipline and interpersonal relationship, contribute to the pursuit of academic success.

CHPATER FIVE

CONCLUSIONS

This chapter summarizes the findings of the study and has four sections. The first

section presents the conclusions of this study. The second section reviews the limitations of

the research. The third section discusses the contributions of the study. The last section

proposes directions for further study.

5.1   Summary of findings

This study aims to examine the relationship between the personal, communal,

environmental, and transcendental domains of spiritual well-being of university students in

Hong Kong and their academic performance as measured by CGPA. The study is guided by

two research questions:

Research Question One: What is the relationship between the spiritual well-being and

academic performance of university students as measured by CGPA?

(A) What are the relationships between the spiritual well-being (overall level) and academic

performance of university students as measured by CGPA?

(B) What are the relationships between the spiritual well-being (specific domain) and their

academic performance of university students as measured by CGPA?

Students' spiritual well-being in the personal domain and their CGPA,

Students' spiritual well-being in the communal domain and their CGPA,

Students' spiritual well-being in the environmental domain and their CGPA, and

Students' spiritual well-being in the transcendental domain and their CGPA?

Research Question Two: If there are any relationships between university students' spiritual

well-being and their academic performance, how are the background demographic variables,

including major discipline, family socio-economic status and religious beliefs related to spiritual well-being and academic performance?

(A) How are the background demographic variables related to spiritual well-being (overall levels) and academic performance?

(B) How are the background demographic variables related to spiritual well-being (specific domains) and academic performance?

Students' spiritual well-being in the personal domain and their CGPA,

Students' spiritual well-being in the communal domain and their CGPA,

Students' spiritual well-being in the environmental domain and their CGPA, and

Students' spiritual well-being in the transcendental domain and their CGPA?

Answer to Research Question One: The quantitative research portion consisted of 1130 participants from three selected Hong Kong universities for the questionnaires. The overall results reveal a moderate positive relationship between the spiritual well-being (including overall and specific domain) and academic performance of the respondents, and demonstrated that their academic performance corresponded to their level of spiritual well-being. Thus, the higher the CGPA, the higher the spiritual well-being in all domains of the student. The qualitative method comprised 11 focus group discussions, and its findings support and further illustrate the quantitative findings. The study also performed data triangulation.

The students with higher academic performance, such as the students who are in the Elite Class (CGPA of 3.5 or above) and students who are above average (CGPA of 3.0 up to 3.49), had relatively higher spiritual well-being (in all domains) than students with lower academic performance, such as average (CGPA of 2.5 up to 2.99) and below average (CGPA 2.0 up to 2.49) students. The qualitative findings also support the quantitative findings: (1) positive relationships between students' spiritual well-being (all domains) and their academic

performance as well as (2) their significant differences in the spiritual well-being in their different CGPA banding.

Answer to Research Question Two: Major disciplines, family social-economic status, and religious beliefs are found to be related to spiritual well-being and academic performance of university students in both the quantitative and qualitative parts of the study. Thus, these demographic features are used to delineate and analyze this positive relationship and the variety in the patterns of the relationship between academic performance and spiritual well-being. Demographic features that closely correlate to spiritual characteristics and personalities, namely, concentration, perseverance, self-confidence, self-discipline, and interpersonal relationship, also contribute to the pursuit of academic success.

The main components of effective learning and academic success include (1) attention/concentration (Bernt & Bugbee Jr, 1993; Grimes, 1997), (2) perseverance (Almlund, et al., 2011; Farrington, et al, 2012), (3) self- confidence/self-efficacy (Pajares, 1996; Zimmerman, 1995), (4) self-discipline (Duckworth, 2005; Zimmerman, 2002), and (5) interpersonal relationships (Allen, 1985; Graziano, 2007). The related concepts, rationale, and findings have been mentioned in Chapters 2 and 4.

Socioeconomic background of family:

The study finds that family social-economic status (including family income and education level of parents) are related to university students' spiritual well-being and their academic performance.

In the personal domain, students with high family socioeconomic status also have high spiritual well-being, because their mothers have more time to take care of their children and be present as they grow up. These students would have more happiness and be more satisfied; this nurtured development helps them cope with pressures and challenges when they face

difficulties in their education. Moreover, these families are more willing to invest money, time, and effort in their children's personal development and expose their children to different learning activities. For example, most students with high socioeconomic status have learned to play the piano and violin at a young age, as well as sketching, drawing, and pottery for arts. For physical education, they have tried sports, such as basketball, football, and volleyball. They have a well-rounded learning experience. Therefore, these students easily exhibit characteristics within their spirituality in the personal domain that positively affect their learning, namely, concentration, perseverance, and self-confidence. They have better adaptation and learning skills in their academic learning as well. These characteristics directly increase the efficiency and motive of students in learning.

Compared with students from families with high socioeconomic status, those with lower socioeconomic status have fewer opportunities to discover their interests and strengths and would take more time to discover their self-value and their direction in life. Therefore, their development in learning also slows down.

In the communal domain, students from families with better socioeconomic status are generous, because they understand how fortunate they are to be born into a wealthy family. They are polite and respectful of others, because their parents are also well educated and are good role models. These students are patient with others, because their well-educated parents are more rational and have taught them the same practices.

These students exhibit some characteristics within their spirituality in the communal domain that positively affects their learning, namely, respect, love, and care for others (i.e., good interpersonal relationships). Thus, they are more willing to cooperate with others in learning (which is based on trust), exchange opinions when learning (which is based on respect), expand their thoughts (which is based on acceptance and forgiveness of others), and sacrifice and go the extra mile when doing group projects (which is based on love). These

characteristics directly expand the students' range of learning and improve their way of learning.

Conversely, students from families with lower socioeconomic status have a relatively tight budget, and are therefore not as generous as others. They live hard lives and come across unpleasant encounters, such as being cheated or seeing others commit suicide; these issues cause them to have less trust in others, which become a barrier for them when exchanging thoughts with others in learning.

In the transcendental domain, students with better socioeconomic status have parents who are more open-minded about religion and would explore and discuss it with their children. Well-educated parents can communicate well and have good analytical skills and critical thinking about faith; these students acquire the same qualities from their parents. Hence, these students' analysis and critical thinking skills to pursue the truth on religion from multiple angles can also be useful in their academic studies.

These students also exhibit some characteristics within their spirituality in the transcendental domain that positively affect their learning, such as concentration, self-confidence, and good interpersonal relationships. Because these students understand that human beings are small compared to the universe, they are gentle and humble; because they feel the presence of God, they are confident and optimistic; and finally because they know the creator hears them pray and worship, they have a calm spirit. These characteristics lower the stress levels from their learning and improve their attitude towards learning. In part, their family cultivation contributes to the development of these characteristics for students.

Students from families with lower socioeconomic status have lesser support because their parents already have a tough time making a living, and therefore would seldom discuss religion with their children. Even if they do talk about it, it would be difficult for them to have a deep discussion because of their relatively low education level. These students would

thus lack the opportunity to pursue truth (wisdom) with determination in this aspect.

Major disciplines:

The present study finds that that the major disciplines of students are related to university students' spiritual well-being and their academic performance. Students develop their critical thinking and develop their character and attitude during their studies in the university.

Social science is a people-oriented subject that focuses mainly on society and people's livelihoods and personal growth. This field inspires students to ponder on the questions on life, such as the meaning of life, the value of oneself, true joy, and so on. Therefore, social science does not only teach them knowledge in social science concepts, but also raises their awareness and understanding of themselves. Social science students consider the environment to be relatively less important, because their major focuses on people. These students also need to fulfill practicum requirements; social workers need to go to a community to care for its members and ultimately learn how to respect and work with other people. These experiences develop their skills to help and trust others. Therefore, these students gradually develop and exhibit characteristics within their spirituality in the personal and communal domains that have a positive effect on their learning, such as good interpersonal relationships, self-confidence, and self-discipline. These characteristics directly enhance their learning qualities and learning motives.

After Social Science students, Business students registered the next highest spiritual well-being levels in the personal and communal domain. Most Business students had good results in public exams. Business students are concerned primarily with their own success and career path, and have a clear target and direction in life. The subjects they take focus not only on money, because most universities have already added subjects such as "Corporate

Responsibility" and "Business Ethics". The Business major discipline in universities now combines the logical thinking of Science and the concern for humanity of Social Science. Creating value for others at the right time, right place, and most importantly with the right people is important for business students. Therefore, business courses in universities require their students to complete group projects to develop their team spirit and their relationships with others. In their internships, business students work in companies and learn how to respect others as well as gain trust and support from others.

Business students have the highest spiritual well-being in the environmental domain compared with other major disciplines. They are trained to be more flexible, because their curriculum emphasizes the development of their insights, creativity, organizing skills, curiosity, and because business students are adventurous, they can also see opportunities in crises. In the face of problems on global warming, energy, and food crisis, the business curriculum has added many environment-friendly perspectives to develop students' abilities to create sustainable businesses and opportunities. Therefore, the business discipline does not only teach students knowledge in business, but also enhances their appreciation for their environment and their problem-solving skills to face the changes in our environment.

These students gradually develop and exhibit some characteristics within their spirituality in the personal, communal, and environmental domains that positively affect their learning, namely, good interpersonal relationships, self-confidence, and self-discipline. These characteristics contribute to their pursuit of academic excellence.

Science deals in "proof, facts, and truth" and therefore does not talk of sentiments and humanity. The answers in science are either black or white; no gray area exists. Science students consider nature as an object to be studied and analyzed. Most science students pursue the truth and the scientific spirit. They lack a human touch and are not considerate of others when compared with students from other disciplines. Moreover, most of science

students are thought themselves as losers in the public exam (except those who study Medicine). These students selected their major discipline because they believe they have no other choice. They exhibit helplessness when describing their studies and admitted to studying a major they are not interested in and think it is a waste of money and time. Without understanding the real meaning of studying science, they are miserable. Thus, these students would likely exhibit poor interpersonal relationships and self-confidence in their major and professions, compared with students from other disciplines. The development of the spirituality in the personal, communal, and environmental domains of Science students is the worst among all disciplines and contributes less to their academic performance.

Most students who study Art and Language are sentimental. They follow their instincts and do not always think logically and rationally. Their major subjects, such as "Literature Appreciation" and "Post Modernism Studies," require them to understand the meaning behind words and understand abstract concept. "The meaning of life" is just a phrase, and its "identity" can be interpreted in many ways. Thus, joy or peace appears to be more of a spiritual state than something specific. When Art and Language students express their emotions, they utilize beautiful words instead of something concrete. Unlike Social Science students, Art and Literature seldom exhibit their concern for others; this limited communication with others is related to their major discipline. Literature and Language subjects focus on the cultivation of a student's personality, taste, and independent critical thinking. These qualities are very personal (individual) and not communal. Therefore, they communicate less with others. Although these students exhibit relatively low spiritual well-being in the personal and communal domains, they display a relatively high level in the environmental domain, because this major relates to nature. Literature students need to read a considerable amount of articles and hand in homework on topics related to nature. Thus, these students have feelings towards nature, which allow them to develop and exhibit

gradually some characteristics within their spirituality in the environmental domain that have a positive effect on their learning, for instance, quiet and concentration.

<u>Religious beliefs:</u>

The study also finds that students' religious beliefs are related to their spiritual well-being and academic performance. The religions of Christian and Catholic students clearly have a significant positive effect on their spiritual well-being in the personal, communal, environmental, and transcendental domains. Students who practice a religion have more chances to reflect on the meaning and value of their lives, because the teachings in the Bible and church, or their church worship, fellowship, and prayer practices every week give them peace and joy in their hearts. Their religion teaches them to respect their identity as a student and child; they understand their responsibilities from these identities. Therefore, these students are more serious in their studies than those who do not practice any religion.

The doctrines, books, and meditation practices of these religions also teach students to be more polite, to treat others with love and trust, and to forgive others when necessary. Therefore, they are more open-minded in learning and sharing.

Christian and Catholic students also pray or meditate every day to have peace in their hearts. In these prayers and meditation sessions, they think of nature, such as the sky or the ocean, to calm themselves. Having peace in their hearts definitely benefits their learning. Believers also enjoy retreats in remote areas in nature. These practices or religious activities help them to relieve pressure from school and obtain energy from the natural environment. Thus, they can achieve good academic results because they can cope with their stress.

Religious practitioners read the Bible, pray, and worship; these practices are done to communicate with the Creator. Thus, these activities enhance students' spiritual well-being in the transcendental domain. These religious activities, ceremonies, and rules not only develop

their self-discipline, concentration, and persistence, but also reinforce their self-confidence and optimism. Therefore, these attributes developed by their commitment to and search for religious beliefs are beneficial to the pursuit of academic excellence.

Buddhist students have higher spiritual well-being levels in the communal and environmental domain but lower levels in the transcendental domain compared with other religious practitioners, because Buddhists do not believe in God. They practice Buddhism to transcend the six paths of transmigration. Buddhism advocates mercy and benevolence (to love themselves and to love other people). Buddhists also do good by showing mercy to others and forgiving others, to live their current lives well and to ultimately have an even better next life. Many books on Buddhism mention nature as well; Buddhists believe that the environment should not be destroyed, and animals should not be killed. They also believe in karma; if humans destroy the environment, they suffer from the consequences. Therefore, these students develop and exhibit some characteristics within their spirituality in the communal and environmental domain that positively affect their learning, namely, good interpersonal relationships, quiet, concentration, and self-discipline.

Students without religious beliefs had the worst spiritual well-being worst in all domains. They would relatively worry and feel helpless in the face uncertainties, especially in the unfavorable and difficult situations. They also easily feel confused on the meaning of life because they face identity crisis. These students also relatively seldom show their empathy, love, respect, care and trust toward others. They could also be easily arrogant, conceited and jealous of others. Furthermore, they would relatively have no full concept on nature, and have less feeling toward it. They do not know how to be involved in the world, and do communicate with God, and do not understand the importance of building a relationship with Him. Therefore, the development of the spirituality of students without religious belief in all domains is the worst among all students, and has lesser contributions to their academic

performance.

5.2   Limitations

Despite its contributions, the study is not free from limitations. The present study has five major limitations: 1) sample size and generalization of the results, 2) the instrument (SHALOM), 3) measurement of students' achievements, 4) data collection, and 5) focus group discussions.

5.2.1   The sample size and generalization of the results

The samples of this study have some limitations. First, the quantitative study through questionnaires has a sample size of 1,130 participants (n = 1130) from three selected universities in Hong Kong, and only Year 2 and Year 3 students were selected to be interviewed. The number of participants (1,130) is a relatively small number compared with the total population (Year 2 and Year 3 university students in Hong Kong). As a result, the generalizability of the findings in this study may be limited, because only three universities were selected and only Year 2 and Year 3 students were interviewed. The integrity and comprehensiveness of the phenomena may not be depicted accurately.

5.2.2   Instrument – SHALOM

SHALOM was originally developed by John Fisher in English and was translated into Chinese by Dr. Wong in 2013 (Fisher & Wong 2013). However, discrepancies in the meanings and understanding of special terms and concepts still exist. For example, some participants expressed their confusion and misperception of the specific domains, with participants having difficulties in identifying proper domains, such as for "awe at a breathtaking view" and "a sense of 'magic'" in the environment domain and "oneness with God" in the transcendental domain. Simplifying the abstract terminologies and concepts, such

as spirituality, transcendental spiritual well-being, and transcendence, is necessary to allow respondents to understand the questions fully and answer them properly.

5.2.3   Measurement of students' achievement

In the study, students' academic achievement was measured by their CGPA during their studies. This single indicator may not easily reflect a student's learning status, process, progress, motivation, and interests in their studies. Complete assessments and different forms of assessments, such as regular assignments, mid-term tests, and student assignments or projects, are necessary, because they provide more information for researchers to analyze the relationship between students' academic performance and their spiritual well-being. Some suggestions for the further studies based on the limitations mentioned above are discussed as follows.

First, SHALOM well-being is regarded as a satisfactory tool for evaluating the status of students' spirituality through the survey. As mentioned earlier, research on students' spiritual well-being and their relationship to academic performance in Hong Kong is still in its infancy stage. Although this research and other studies indicate that SHALOM is applicable to Hong Kong students (Fisher & Wong, 2013; Yuen, 2010), improvements can be made on the scope and reliability of the instrument.

According to the principal component analysis (PCA), only three domains were identified and discovered from the 20 questions on SHALOM, instead of the four specific domains proposed by Fisher (1999). The Personal and Communal domains of spiritual well-being were grouped into one component rather than as two distinct domains. Future studies should observe the details of these differences. Future studies should also emphasize the validity of the reliability of the items in these two domains (personal and communal) to measure students' spiritual well-being.

Second, this research method can expand its scope for future studies. The findings of the present study should be replicated in other universities in Hong Kong. Survey participants of the quantitative research portion should include students of different year levels (such as From Year 1 to Year 4) in all universities in Hong Kong to increase the diversity of the participants. This diversity allows the findings of this study to be generalized to a wider student population. For the qualitative research method, face-to-face individual interviews with students, their teachers, parents, and friends should be performed to obtain objective and rich findings from the different perspectives.

This study can be replicated in secondary and primary school settings in Hong Kong to determine whether any differences or similarities exist among different educational levels; replication can test the generalizability of the findings of the current study. This study can also be replicated for schools (including primary schools, secondary schools, and universities) in other countries, such as Japan, Thailand, and Korea to perform cross-cultural research.

5.2.4 Data collection

All data were collected from and reported by the respondent students in Year 2 and Year 3 and the interviewer (the author). A self-reporting method was initially used for the questionnaires. The respondents may have selected the ideal answers instead of their real answers and could have also overrated or underrated themselves in the questionnaire. Even the verification of the findings of the study from the questionnaires (in the first stage) by using focus group discussions suffers this risk, because only the interviewer (the author) was involved. The analysis and judgment based on the observation of the discussions may not be very objective. Thus, results would be rich, diverse, and objective, if data are collected from and reported by other stakeholders, such as their parents, teachers, and friends in future

research.

5.2.5   Focus group discussions

The study used only 11 focus groups with six students from three universities in Hong Kong in each group. The number of focus group discussions for the three selected universities is not sufficient and may not verify accurately the data from the quantitative research. Moreover, only one interviewer/observer (the author) was involved in the focus group discussions, thereby creating the risk of bias and unfair opinions for the observation of the focus group discussion.

All of the limitations mentioned above can be eliminated through the improvement in research design for future studies. However, these limitations in no way render the findings in the present study invalid or unreliable.

5.3   Contributions

After the presentation of the conclusions for this research, this part discusses its contributions and significances. Few empirical studies have been conducted on the relationship between the spirituality and academic performance of students. Related research has focused only on quantitative studies and not on the significant differences among students' spiritual well-being. In addition, the relationship of spiritual well-being to university students' academic achievements in Hong Kong has not been examined. This research aims to help describe, explain, define, and interpret the spiritual well-being of students in universities. This study also attempts to explain the relationship between their spiritual well-being and academic performance through quantitative and qualitative research through a survey of 1130 participants and 11 focus group discussions, respectively. The research makes significant contributions by proposing new trends and theories and expanding existing knowledge in the areas of spirituality and learning. The study also provides empirical

evidence to support the existence of positive relationships between students' spiritual well-being (including overall and specific domains) and their academic performance.

Moreover, this research further explores the influences of the spiritual well-being of students in Hong Kong's universities on the perspectives of students' comments in focus group discussions. The findings provide a path for new educational directions in Hong Kong's universities. The educators in universities can utilize the results of this study to help their students strengthen their spirituality through additional tailor-made programs. The overall academic qualities of students and university rankings will be largely enhanced. The contributions of this research have three aspects:

1) Revealing university students' spiritual well-being in Hong Kong;

2) Finding the relationship among students' spiritual well-being and academic performance; and

3) Showing which demographic variables related spiritual well-being and academic performance.

5.3.1 Application of the SHALOM in Hong Kong Universities

From the assessment view, although this project was a preliminary study for Hong Kong's university students' spiritual well-being and its assessment, the Chinese version of SHALOM has already been used previously in Hong Kong (Fisher & Wong, 2013). This tool has been proven to be a reliable and valid method for judging university students' spiritual well-being (all domains) and their academic performance in Hong Kong.

The quantitative research portion of this study involved a total of 20 questions; specific questions and concepts were used for each domain in the questionnaires. For each question, the students selected a rating from 1 to 5, which makes it easy to measure the levels and standards of students' spiritual well-being in the specific domain and overall level. Therefore,

these results can be a good instrument for different stakeholders, such as teachers and parents, to assess the students' spiritual well-being. The different questions in the four specific domains in the questionnaires also provide a framework and guidance for the analysis of the qualitative research (focus group discussions) portion in the study. Thus, framework analysis for the qualitative data was clearly made to support and supplement the findings in the four specific domains.

The findings of the study were not only analyzed using triangulation (from quantitative and qualitative studies); SHALOM was also used to test the reliability and validity of the research on Hong Kong's university students.

5.3.2   Spiritual wellbeing and academic performance

This research bridges the research gap between university students' spiritual well-being (all domains) and their academic performance. The results of the study quantitatively and qualitatively showed the existence of significant positive relationships between students' spiritual well-being (all domains) and their academic performance. Significant differences among students' spiritual well-being (all domains) in the different CGPA bandings were also highlighted.

This study supports the argument that "the higher the CGPA of students, the higher their spiritual well-being (all domains)". Students with higher spiritual well-being perform relatively better academically, because they possess characteristics and personalities related to spiritual well-being that contribute to academic success. Students' spiritual well-being (factors related to spirituality) contribute to their academic success; these factors include: (1) Attention/concentration, (2) Perseverance, (3) Self-confidence/self-efficacy, (4) Self-discipline, and (5) Interpersonal relationship.

Theoretically, these findings provide a direction and theoretical framework for how

students' spiritual well-being can enhance their academic performance. The university management, educators, and administrators can utilize these results to enhance students' spiritual well-being and ultimately improve their learning outcomes.

5.3.3   Demographic variables for the above relationship

The findings of this study indicate that students' major disciplines, family social-economic status, and religious beliefs related to the links (positive relationships) between their spiritual well-being and academic performance. Theoretically, these findings provide a path and conceptual model for determining the possible background variables that are related to students' spiritual well-being (all domains) and their demographics (major disciplines, family social-economic status, and religious beliefs).

As mentioned above, some general studies, such as Critical Thinking, Ethics, Human Spirit, and Social Studies are recommended for students from different major disciplines. Overseas exchange programs, internship schemes, and experiences in dormitories should also be provided to university students regardless of their socioeconomic status to allow them to have varied experiences in their university lives. Creating a holistic development for students is key. University students are also encouraged not only to understand themselves but also different religious beliefs; they are supposed to think about why they live and where they go after death. All of the above suggestions aim to promote students' well-rounded development and ultimately enhance their spiritual well-being and academic performance.

As for the three background variables that related to the students' spiritual well-being and their academic performance, a summary list of the means to enhance students' spirituality and improve their academic performance is presented as follows:

- Provide interdisciplinary subjects and other humanities related subjects as electives;

- Provide students with opportunities to participate in community service, including volunteer

work and charitable jobs;

- Offer students more chances for International exchange and overseas experiences;

- Present students with more learning experiences in different areas, including Art, Music, and Sports

- Facilitate an enriched campus life for students (such as living in student halls and organizing student unions or student organizations);

- Create a good interactive learning atmosphere (by maintaining relatively small classes to emphasize close teacher-child relationships); and

- Encourage freedom of religious pursuits

5.4 Further studies

Three directions for future studies are recommended based on the findings of this study and the limitations highlighted in 5.2. First, the contributions from the positive relationships should be explored in terms of students' lifelong learning. The demographic data collected in the study could be also used for further studies to answer questions such as the following:

1. What are the contributions of the positive relationships to students' lifelong learning?

2. Are there any significant differences in lifelong learning of these students with different demographic variables, such as major disciplines, family social-economic status, and religious beliefs?

Second, for the spirituality and learning of students, further development of studies on the spiritual qualities related to academic success, such as concentration and perseverance, is valuable. Hence, future studies could attempt to answer questions such as the following:

1. How can the spiritual qualities (such as attention/concentration, perseverance, self-confidence/self-efficacy, self-discipline, and interpersonal relationship) of students be improved in the pursuit of academic success and learning?

2.   What are the main obstacles for the development of university students' spiritual well-being (the spiritual qualities in particular) in the pursuit of academic success?

Third, for Life and Value education, focus should be given to the effects of general education. This study shows that major disciplines, course curriculum, and different modules contribute significantly to the development of students' spiritual well-being. Thus, the following question should be explored:

To what extent does general education, such as Life Education and Holistic Education, contribute to the development of students' spiritual well-being in the pursuit of academic success?

Future studies can use the findings of the current study to continue and enrich the study of spirituality and learning.

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Appendix 1: THE QUESTIONNAIRE (ENGLISH VERSION)

INFORMATION SHEET

"The correlational study on the relationship between the students' spiritual well-beings

and their relationship to their academic performances in Hong Kong universities"

The primary purpose of this study is to explore the relationship of Hong Kong university students' spiritual well-being and their academic performance. There are two parts of the research: Firstly, the questionnaire consisting of (1) John Fisher's SHOLAM and (2) demographic information will be conducted from the sample population (Year 2 and Year 3 students from the selected 3 universities in Hong Kong).

Secondly, the focus group discussions will be employed. The questionnaire will take around 5 minutes. The first part of the research conducted by questionnaires will last for one semester (about 3 months) so as to collect the sufficient data. The focus group discussions will take about 1 hour. For the second part of the study carried out by focus group discussions will last for 2 months. There are no any risks and discomfort for the research and the data collection.

You have every right to withdraw from the study at any time without negative consequences. All information related to you will remain confidential, and will be identifiable by codes known only to the researcher.

Thank you for your interest in participating in this study.

ENGLISH VERSION OF THE QUESTIONNAIRE

(1: SHALOM AND 2: PERSONAL DEMOGRAPHIC INFORMATION)

Spiritual Health And Life-Orientation Measure for Education Students (SHALOM)©

Spirituality can be described as that which lies at the heart of a person being human. Spiritual

health can be seen as a measure of how good you feel about yourself and how well you relate

to those aspects of the world around you which are important to you.

*Please **give responses** to each of the following items, by **circling** the **numbers in each** of the*

***column**, to show:*

How you feel (about spiritual well-being) each item reflects your personal experience most

of the time. **Spiritual well-being** is the feeling of peace and quiet and also it is a level of

satisfaction from their personal lives.

Each response is graded:

1 = very low   **2** = low   **3** = moderate   **4** = high   **5** = very high.

*Please respond to **ALL ITEMS IN THE COLUMN***

Do not spend too much time on any one item. It is best to record your first thoughts

	How you feel				

Developing：

A love of other people	1	2	3	4	5
Personal relationship with the Divine/God	1	2	3	4	5
Forgiveness toward others	1	2	3	4	5
Connection with nature	1	2	3	4	5
A sense of identity	1	2	3	4	5

Developing：

Worship of the Creator	1	2	3	4	5
Awe at a breathtaking view	1	2	3	4	5
Trust between individuals	1	2	3	4	5
Self-awareness	1	2	3	4	5
Oneness with nature	1	2	3	4	5

Developing：

Oneness with God	1	2	3	4	5
Harmony with the environment	1	2	3	4	5
Peace with God	1	2	3	4	5
Joy in Life	1	2	3	4	5
Prayer in Life	1	2	3	4	5

Developing：

Inner Peace	1	2	3	4	5
Respect for others	1	2	3	4	5
Meaning in Life	1	2	3	4	5
Kindness towards other people	1	2	3	4	5
A sense of 'magic' in the environment	1	2	3	4	5

PERSONAL AND DEMOGRAPHIC INFORMATION

1. Gender: _____male _____female
2. Age: _____
3. Nationality: _____
4. University: _____ University X _____ University Y _____ University Z
5. Major Subject (specify Department/faculties):_____
6. Year of study: _____Year 2 _____Year 3
Others (please specify :_____)

7. Annual income level of family
_____ Less than HK$ 120,000
_____ HK$ 120,000 – HKS 240,000
_____ HK$ 240,001 – HKS 360,000
_____ HK$ 360,001 – HKS 480,000
_____ HK$ 480,001 – HKS 600,000
_____ HK$ 600,001 – HKS 720,000
_____ HK$ 720,001 – HKS 840,000
_____ HK$ 840,001 – HKS 960,000
_____ HK$ 960,001 above

8. Number of Step-Siblings _____

9. Your cumulative Grade Point Average (GPA)
_____ 3.5 to 4.0 (Mostly A's) or equivalent
_____ 3.0 to 3.4 (Mostly B's) or equivalent
_____ 2.5 to 2.9 (Mostly C's) or equivalent
_____ 2.0 to 2.4 (Mostly D's) or equivalent
_____ 1.5 to 1.9
_____ Less than 1.5

10. Religion: _____ Protestant _____ Catholic _____ Buddhist_____ Taoism _____ Muslim
_____ No religion_____ Other religion (please specify:_____)

11. What is the HIGHEST level of education attained by your parents?
(Please tick as appropriate)

Highest level of education attained	Father	Mother
No formal education at all		
Primary schooling (p.1-p.6)		
Junior secondary schooling (F.1-F.3)		
Senior secondary schooling (F.4-F.5)		
Matriculated (F.6-F.7)		
Postsecondary (Certificate/ Diploma)		
University (with a degree)		
Postgraduate studies (Master or Doctoral level)		

12a. What is your father's present occupation? _____

12b. What is your mother's present occupation? _____

If your father is presently retired or unemployed, please state his occupation before retirement or unemployment:	Father	Mother
Unskilled Workers, Handlers, Cleaners, Helpers & Labourers		
Plant & Machine Operators, Assemblers & Inspectors		
Precision Production, Craft and Repair Mechanics & Repairers		
Skilled Agricultural & Fishery Workers		
Service Occupations/ Sales Occupations		
Administrative Support Occupations, including Clerical		
Technicians & Related Support Occupations		
Professional Specialty Occupations/ Associate Professionals		
Executives, Administrators, & Managers		
Capitalists, Businessmen, Proprietors, Directors		
Others (Please specify:_____)		

This is the end of the questionnaire. Thank you for your participation.

Appendix 1: THE QUESTIONNAIRE (CHINESE VERSION)

有關資料

香港之大學/大專學生的靈性幸福和他們的學業成績表現之間的關係的相關性研究

本研究的主要目的是探討香港之大學生的靈性幸福和他們的學業成績表現之間的關係。本研究由兩部分組成: 第一部分是按照 John Fisher 之 SHOLAM 和人口統計資料（如年齡、性別、收入等等）設計而成，這會以問卷形式進行。所挑選的 3 所本港大學之二年級和三年級學生為 本研究之人群樣本。

問卷調查每分將花費大約 5 分鐘。本研究第一部分通過問卷調查方式進行，將持續一學期（大約 3 個月），以收集足夠的數據。第二部為分聚焦小組討論，每組需時約 1 小時。聚焦小組進行將持續 2 個月。本研究收集之數據只用於學術研究，沒有涉及任何風險和不適。

閣下享有充分的權利在任何時候決定退出這項研究，更不會因此引致任何不良後果。凡有關閣下的資料將會保密，一切資料的編碼只有研究人員得悉。

謝謝閣下有興趣參與這項研究。

香港之大學/大專學生的靈性幸福和他們的學業成績表現之間的關係的相關性研究

CHINESE VERSION OF THE QUESTIONNAIRE (1: SHALOM AND 2: DEMOGRAPHIC

INFORMATION)

調 查 問 卷 (中文版) (1: 心 靈 健 康 及 生 命 取 向 和 2: 個 人 背 景 資 料)

心靈可說是人之所以作為人的核心。 心靈健康可以視作一個尺度， 顯示你對自己有

多滿意，及與自己生命中認為重要的東西的切合程度。

請針對下面每一項目，分別**圈出每欄下面的數字**，提供一次答案，顯示

你**覺得**該範疇在多大程度上反映你的個人體驗 **(關於靈性幸福**，又稱**心靈安泰)**。

心靈安泰/靈性幸福是 平和安靜的感受，也是一種源自個人生活層面的滿足感。

每個回答按以下描述分級：

　　1 = 極低　　2 = 低　　3 = 普通　　4 = 高　　5 = 極高

不要在任何一項上面，花太長時間考慮。最好第一時間記下你的想法。

<u>你的感受</u>

培養出：

對他人的愛	1	2	3	4	5

(例如**心靈安泰**培養出對*他人的愛*, 你的感受是**普通**請**圈** 3)

和神靈的個人關係	1	2	3	4	5
寬恕心	1	2	3	4	5
和大自然的連繫	1	2	3	4	5
自我身份意識	1	2	3	4	5

培養出：

對造物主的崇敬	1	2	3	4	5
對懾人景致的敬畏感	1	2	3	4	5
人與人之間的互信	1	2	3	4	5
自我知覺	1	2	3	4	5
與大自然交融	1	2	3	4	5

培養出：

神我交融	1	2	3	4	5
與環境協諧	1	2	3	4	5
與神和睦	1	2	3	4	5
生命的喜悅	1	2	3	4	5
禱告的生活	1	2	3	4	5

培養出：

內心安寧	1	2	3	4	5
尊重別人	1	2	3	4	5
生命意義	1	2	3	4	5
和善待人	1	2	3	4	5
對環境的「奧妙」感	1	2	3	4	5

個人背景資料　　　　請回答所有問題　（回答不記名）
請在適當空格填上✓，並在虛線上填寫資料，顯示答案。

1. 性別　　　女　[　]　男　[　]
2. 年齡: _____
3. 國籍: _____
4. 所屬大學: _____ University X _____ University Y _____ University Z
5. 主修: (請註明: 學系/院系) _____
6. 就讀年級: 二年級 _____ 三年級_____ 其他 (請註:_____)

7. 家庭收入水平 (每年計)
_____ 少於 HK$ 120,000
_____ HK$ 120,000 – HKS 240,000
_____ HK$ 240,001 – HKS 360,000
_____ HK$ 360,001 – HKS 480,000
_____ HK$ 480,001 – HKS 600,000
_____ HK$ 600,001 – HKS 720,000
_____ HK$ 720,001 – HKS 840,000
_____ HK$ 840,001 – HKS 960,000
_____ HK$ 960,001 或以上

8.自己兼職工作經驗 (包括實習生計劃)　　9. 自己兼職收入 (平均每月計)
_____ 無　　　　　　　　　　　　_____ 無
_____ 1 個月　- 3 個月　　　　　_____ HK$ 1,000 – HK$ 3,000
_____ 4 個月　- 6 個月　　　　　_____ HK$ 3,001 – HK$ 5,000
_____ 7 個月　- 12 個月　　　　_____ HK$ 5,001 – HK$ 7,000
_____ 13 個月 - 18 個月　　　　_____ HK$ 7,001 – HK$ 9,000
_____ 18 個月或以上　　　　　　_____ HK$ 9,001 或以上

10. 兄弟姐妹數目: _____

11. 學業成績(cumulative Grade Point Average (GPA)
_____ GPA 3.5 至 4.0 (多數學科成績達 A 級)或同等成績
_____ GPA 3.0 至 3.4 (多數學科成績達 B 級)或同等成績
_____ GPA 2.5 至 2.9 (多數學科成績達 C 級)或同等成績
_____ GPA 2.0 至 2.4 (多數學科成績達 D 級)或同等成績
_____ GPA 1.5 至 1.9
_____ GPA 少於 1.5

12. 宗教信仰: _____ 基督教 _____ 天主教 _____佛教 _____ 道教 _____ 回教 _____
無宗教信仰_____其他宗教(請註明:_____)

13. 你有多常到宗教場所（例如教堂或寺廟）/ 宗教聚會（除參加婚禮或喪禮之外）？
從沒有［ ］ 每年一次［ ］ 每年兩三次［ ］ 每月一次［ ］ 多數的星期［ ］
每星期多次［ ］

14. 你有多常**參加義工或自願性工作**？
從沒有［ ］ 只在有偶然的時候［ ］ 每年一兩次［ ］ 每月一次［ ］ 每星期［ ］
每天［ ］

15. 你有多常禱告或冥想？
從沒有［ ］ 只在有需要的時候［ ］ 每年一兩次［ ］ 每月一次［ ］ 每星期
［ ］ 每天［ ］

16. 父母最高學歷 (請在適當位置加上『v』號)

最高學歷	父親最高學歷	母親最高學歷
無受過正式教育		
小學程度(小一至小六)		
初中程度(中一至中三)		
高中程度(中四至中五)		
預科 (中六至中七)		
大專程度 (証書/ 文憑課程)		
大學程度 (大學學位)		
研究院 (碩士/ 博士學位)		

17. a. 父親目前的職業＿＿＿＿＿＿ (請在以下職位類別適當位置加上『v』號)
17. b. 母親目前的職業＿＿＿＿＿＿ (請在以下職位類別適當位置加上『v』號)

父母目前的職位 (若父母現正退休或失業，請填寫之前的職位)	父親	母親
非技術工人 (例如:雜工、地盆工人、清潔、包裝工人)		
機械操作員及包裝工人 (例如: 啤工、司機、焊工、印刷工人、打磨工人、五金工人)		
生產及維修技工 (例如: 機械維修、電工、木匠、水喉匠、裁縫)		
農業及漁業技術工人 (例如: 有機耕種、花農、漁夫、豬農)		
服務及零售從業員 (例如: 保安、厨師、侍應、髮型師、銷售員、管工、助護)		
辦公室支援人員 (例如:文員、秘書、打字員、簿記、銀行出納員、接待員)		
技術員 (例如: 實驗室技術員、電腦程式員、律師行師爺)		
專業人員(例如: 律師、會計師、醫生、工程師、護士、教師、社工)		
行政及管理人員 (例如: 經理、行政人員、高級警官、政務官、立法會議員)		
資產階級 (例如:資本家、商人、公司董事)		
其他 (請明:＿＿＿＿＿＿＿＿＿＿＿＿＿＿)		

全部問卷完畢。感謝你的參與。

Appendix 2: Admissions Grades for the JUPAS member-institutions in Hong Kong

In Hong Kong in 2012 (According to the Admissions Grades)
二零一二年香港各大專院校學士學位收生成績結果排名

This ranking is based on the admission grades of programmes offered by the JUPAS member-institutions in Hong Kong. Since different universities and different programs have different admission requirements, in order to standardize the ranking, the results below are analyzed according to the median admission grades of two advanced level (A' Level) subjects with A = 5 points, B = 4 points, C = 3 points, D = 2 points, E = 1 point. Starting 2005, the ranking of the schools corresponds to the average of the admission grades and the number of the programmes the university offered.

是項排名是根據香港大學聯合招生處公佈的各學科入學成績資料。由於每間大學每個學系對考生的入學成績都有不同要求，為了公平及統一起見，以下成績分析只是按兩科高考的中位數 (Median Quartile) 分數計算，A = 5 分，B = 4 分，C = 3 分，D = 2 分，E = 1 分。自二零零五年起，學士學位入學成績排名，按照每間大專院校對考生的兩科高考入學成績準則和香港各大專院校所提供的學士學位課程的平均值計算。

2013 Ranking 排名 (按 2012 入學數據計算 According to the Admission Grades in 2012)	Name of the Institution 院校名稱	*Sum of Median, Mean and Average of Highest/Lowest Score of individual Programme of (4 core subjects plus 1 best elective subject) 4 科核心科目 +1 科 最佳選修科成績	No. of Programmes the Institution offered 院校提供的學士課程數目	Arithmetic average 算術 平均值	2012 Ranking 排名 (按 2011 入學數據計算 According to the Admission Grades in 2011)
1	HKU 港大	952.5	34	28.01	1
2	CUHK 中大	1150	46	25.00	2
3	HKUST 科大	88	4	22.00	3
4	HKBU 浸大	361	17	21.24	5
5	CityU 城大	148	7	21.14	6
6	PolyU 理大	1075.80	51	21.09	4
7	LU 嶺大	61.80	3	20.60	7
8	HKIEd 教院	322	17	18.94	8

Sourced from JUPAS website. 資料來源: 大學聯合招生辦法網頁

HKBU : Hong Kong Baptist University 香港浸會大學
CityU : City University of Hong Kong 香港城市大學

CUHK : The Chinese University of Hong Kong　香港中文大學
HKU : The University of Hong Kong　香港大學
HKIEd : The Hong Kong Institute of Education　香港教育學院
LU : Lingnan University　嶺南大學
PolyU : The Hong Kong Polytechnic University　香港理工大學
HKUST : The Hong Kong University of Science and Technology　香港科技大學

*The institutions admission grades using in this report including the sum of median, mean and average of highest/lowest score of individual programme. Statistically, these values are not equal. However, in view of the present situation, these three calculation approaches are applied for reference. These data will be adjusted in the next ranking report as soon as a new version of calculation is applied.

The following institutions adopt institutions published "median" grading calculation method: CUHK, HKUST, HKBU and CityU.
The following institutions adopt institutions published "mean" grading calculation method: HKIEd, PolyU and LU.
The following institutions adopt institutions published "(the highest scores + the lowest scores) / 2 of applicants admitted to each
programme" grading calculation method: HKU.

*在各院校課程入學分數計算上，本排名榜會同時採用院校各課程入學計分結果的 median、mean 及最高分與最低分的平均值計算。在統計上，這三值並不完全相等；但由於現時各院校公佈入學分數形式有異，所以不得不同時以三種計分方式作參考。一旦各校有較統一分數計算方式時，本榜將在下一次排名時採用。另外、分數計算方法是以各課程 median、mean 或最高/最低平均值分數總和除以課程數目計算。

以下院校採用院校公佈之 median 分數計算：中大、科大、浸大及城大
以下院校採用院校公佈之 mean 分數計算：教院、理大及嶺大
以下院校採用院校公佈之(每科最高成績 + 每科最低成績) / 2 計算：港大

Appendix 3: The Best University in Hong Kong

The university ranking done by Public Opinion Programme (POP), The University of Hong Kong: The survey results from secondary school principals

香港最佳大學按香港大學民意研究計劃，中學校長調查結果排名

2013 ranking	院校	2012 ranking
1	香港大學 HKU	1
2	香港中文大學 CUHK	2
3	香港科技大學 HKUST	3
4	香港理工大學 PolyU	4
5	香港城市大學 CityU	6
6	香港浸會大學 HKBU	5
7	香港教育學院 HKIEd	7
8	嶺南大學 LU	8

香港最佳大學按香港大學民意研究計劃，中學校長調查結果排名

Appendix 4: THE FOCUS GROUP PROTOCOL (ENGLISH VERSION)

INFORMATION SHEET

"The correlational study on the relationship between the students' spiritual well-beings and their relationship to their academic performances in Hong Kong universities"

The primary purpose of this study is to explore the relationship of Hong Kong university students' spiritual well-being and their academic performance. There are two parts of the research: Firstly, the questionnaire consisting of (1) John Fisher's SHOLAM and (2) demographic information will be conducted from the sample population (Year 2 and Year 3 students from the selected 3 universities in Hong Kong).

Secondly, the focus group discussions will be employed. The questionnaire will take around 5 minutes. The first part of the research conducted by questionnaires will last for one semester (about 3 months) so as to collect the sufficient data. The focus group discussions will take about 90 minutes. For the second part of the study carried out by focus group discussions will last for 2 months. There are no any risks and discomfort for the research and the data collection.

You have every right to withdraw from the study at any time without negative consequences. All information related to you will remain confidential, and will be identifiable by codes known only to the researcher.

Thank you for your interest in participating in this study.

"The correlational study on the relationship between the students' spiritual well-beings and their relationship to their academic performances in Hong Kong universities"

Focus Group Protocol

The focus group discussions are used to support, supplement and enrich the findings of the study conducted by quantitative method – questionnaires in the first part.   Also, it is used to explore the spiritual well-being of students deeply and their relationships with academic performance.

Spirituality can be described as that which lies at the heart of a person being human. Spiritual health can be seen as a measure of how good you feel about yourself and how well you relate to those aspects of the world around you which are important to you.

Spiritual well-being is the feeling of peace and quiet and also it is a level of satisfaction from their personal lives.

John Fisher – the author of SHALOM (**Spiritual Health And Life-Orientation Measure**) classify spiritual well-being into four categories: (1) personal, (2) communal, (3) environmental and (4) Transcendental domain.

(1) Personal: It is about understanding yourself, personal growth, and pursuit of ideals and cherish of life.

(2) Communal: it is about interpersonal skills, getting along with others and respect for each other and so on.

(3) Environmental: it is about environmental awareness, awareness to ecological balance and conservation of the nature and so on.

(4) Transcendental: religious fanaticism, and the pursuit of spiritual worship rituals within unity.

In accordance with the above four domains of spiritual well-being: (1) Personal, (2) Communal, (3) Environmental and (4) Transcendental aspects, students are asked to answer the following questions: on the above four areas, please answer the following questions:

(1) Personal Domain

1. How do you think your personal growth and pursuit of ideals are influenced or shaped by "Age"?   For example, there are higher requirements of personal growth as students get elder?

2. How do you think your personal growth and pursuit of ideals are influenced or shaped by "Your University"? For example, are there provided good learning environments and more resources?

3. How do you think your personal growth and pursuit of ideals are influenced or shaped by "your major disciplines"? For example, are there chances for inspiration of students potentials or life direction?

4. How do you think your personal growth and pursuit of ideals are influenced or shaped by "your family income"? For example, more money and times are spent by parents to cultivate children development?

5. How do you think your personal growth and pursuit of ideals are influenced or shaped by "your part-time work experiences and part-time income"? For example, would students get independent or mature after you work?

6. How do you think your personal growth and pursuit of ideals are influenced or shaped by "your number of siblings"?

7. How do you think your personal growth and pursuit of ideals are influenced or shaped by "your academic performances"? Would you please share your academic performance on how to influence or shape you in the above domains? For example, students are encouraged to share a profound experience about your academic life (such as failure in examinations or getting a good offer) for your development.

8. How do you think your personal growth and pursuit of ideals are influenced or shaped by "religious beliefs"? For example, would students understand themselves through religious beliefs?

9. How do you think your personal growth and pursuit of ideals are influenced or shaped by being actively involved in the life of the church or religious activities?

10. How do you think your personal growth and pursuit of ideals are influenced or shaped by "your parental education levels"?

(2) Communal domain

11. How do you think your interpersonal skills and respect for others are influenced or shaped by "Your University"?

12. How do you think your interpersonal skills and respect for others are influenced or shaped by "your major disciplines"?

13. How do you think your interpersonal skills and respect for others are influenced or shaped by "your family income"?

14. How do you think your interpersonal skills and respect for others are influenced or shaped by "your part-time work experiences and part-time income"?

15. How do you think your interpersonal skills and respect for others are influenced or shaped by "your number of siblings"?

16. How do you think your interpersonal skills and respect for others are influenced or shaped by "your academic performances"? Would you please share your academic performance on how to influence or shape you in the above domains? For example, students are encouraged to share a profound experience about your academic life (such as failure in examinations or getting a good offer) for your development.

17. How do you think your interpersonal skills and respect for others are influenced or shaped by "religious beliefs"?

18. How do you think your interpersonal skills and respect for others are influenced or shaped by actively joining volunteer activities or charitable activities?

19. How do you think your interpersonal skills and respect for others are influenced or shaped by actively praying or meditating?

20. How do you think your interpersonal skills and respect for others are influenced or shaped by being actively involved in the life of the church or religious activities?

21. How do you think your interpersonal skills and respect for others are influenced or shaped by "your parental education levels"?

(3) Environmental domain

22. How do you think your environmental awareness and awareness to ecological balance are influenced or shaped by your Age?

23. How do you think your environmental awareness and awareness to ecological balance are influenced or shaped by "Your University"?

24. How do you think your environmental awareness and awareness to ecological balance are influenced or shaped by "your major disciplines"?

25. How do you think your environmental awareness and awareness to ecological balance are influenced or shaped by your year of study?

26. How do you think your environmental awareness and awareness to ecological balance are influenced or shaped by "your part-time income"?

27. How do you think your environmental awareness and awareness to ecological balance are influenced or shaped by "your academic performances"? Would you please share your academic performance on how to influence or shape you in the above domains? For example, students are encouraged to share a profound experience about your academic life (such as failure in examinations or getting a good offer) for your development.

28. How do you think your environmental awareness and awareness to ecological balance are influenced or shaped by "religious beliefs"?

29. How do you think your environmental awareness and awareness to ecological balance are influenced or shaped by actively joining volunteer activities or charitable activities?

30. How do you think your environmental awareness and awareness to ecological balance are influenced or shaped by actively praying or meditating?

31. How do you think your environmental awareness and awareness to ecological balance are influenced or shaped by being actively involved in the life of the church or religious activities?

32. How do you think your environmental awareness and awareness to ecological balance are influenced or shaped by "your parental education levels"?

(4) Transcendental Domain

33. How do you think your religious fanaticism and the pursuit of spiritual worship rituals within unity are influenced or shaped by "Your University"?

34. How do you think your religious fanaticism and the pursuit of spiritual worship rituals within unity are influenced or shaped by family income?

35. How do you think your religious fanaticism and the pursuit of spiritual worship rituals within unity are influenced or shaped by "your number of siblings"?

36. How do you think your religious fanaticism and the pursuit of spiritual worship rituals within unity are influenced or shaped by "your academic performances"? Would you please share your academic performance on how to influence or shape you in the above domains? For example, students are encouraged to share a profound experience about your academic life (such as failure in examinations or getting a good offer) for your development.

37. How do you think your religious fanaticism and the pursuit of spiritual worship rituals within unity are influenced or shaped by "religious beliefs"?

38. How do you think your religious fanaticism and the pursuit of spiritual worship rituals within unity are influenced or shaped by actively joining volunteer activities or charitable activities?

39. How do you think your religious fanaticism and the pursuit of spiritual worship rituals within unity are influenced or shaped by actively praying or meditating?

40. How do you think your religious fanaticism and the pursuit of spiritual worship rituals within unity are influenced or shaped by being actively involved in the life of the church or religious activities?

41. How do you think your religious fanaticism and the pursuit of spiritual worship rituals within unity are influenced or shaped by "your parental education levels"?

It is the End! Thank you for your participation.

Appendix 4: THE FOCUS GROUP PROTOCOL (CHINESE VERSION)

有關資料

香港之大學/大專學生的靈性幸福和他們的學業成績表現之間的關係的相關性研究

本研究的主要目的是探討香港之大學生的靈性幸福和他們的學業成績表現之間的關係。本研究由兩部分組成: 第一部分是按照 John Fisher 之 SHOLAM 和人口統計資料（如年齡、性別、收入等等）設計而成，這會以問卷形式進行。所挑選的 3 所本港大學之二年級和三年級學生為 本研究之人群樣本。

本研究第一部分通過問卷調查方式進行，將持續一學期（大約 3 個月），以收集足夠的數據。第二部為分聚焦小組討論，每組需時約 90 分鐘。聚焦小組進行將持續 2 個月。本研究收集之數據只用於學術研究，沒有涉及任何風險和不適。

閣下享有充分的權利在任何時候決定退出這項研究，更不會因此引致任何不良後果。凡有關閣下的資料將會保密，一切資料的編碼只有研究人員得悉。

謝謝閣下有興趣參與這項研究。

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焦點小組協議

心靈可說是人之所以作為人的核心。 心靈健康可以視作一個尺度， 顯示你對自己有多滿意，及與自己生命中認為重要的東西的切合程度。**(關於靈性幸福，又稱心靈安泰)** 。

心靈安泰/靈性幸福是 平和安靜的感受，也是一種源自個人生活層面的滿足感。 John Fisher – SHALOM (**心靈健康及生命取向**之問卷) 原作者將**心靈安泰/靈性幸福** 分為四個範疇: (1) 個人 、 (2) 對他人、 (3) 環保自然 及 (4) 神或宗教。

(1) 個人方面:是關於認識自己、個人成長、理想追求及珍惜生命等。

(2) 對他人方面:是關於待人接物、與人相處和對尊重對方等。

(3) 環保自然方面:是關於環保意識、重視生態平衡和愛護大自然等。

(4) 神或宗教方面: 宗教熱情、敬神儀式和追求靈內合一。

同學請就以上四方面以討論形式回答以下問題:

(1) 個人方面

1. 你認為年齡如何影響或塑造你的個人成長？例如自己逐漸長大 ，要求會越來越高，更努力追求理想？

2. 你認為所讀的大學如何影響或塑造你的個人成長？例如提供良好學校環境、有更多的資源投入 ？

3. 你覺得主修學科如何影響或塑造你的個人成長？例如潛能啟發、幫忙尋找人生方向？

4. 你認為家庭收入如何影響或塑造你的個人成長？例如父母更多投放錢和時間培養孩子發展？

5. 你認為兼職工作及兼職收入如何影響或塑造你的個人成長？例如加速同學成長，變得獨立成熟 ？

6. 你認為兄弟姊妹數目如何影響或塑造你的個人成長？

7. 你認為學業成績如何影響或塑造你的個人成長？請試分享一件**深刻事情**(如考試失敗)關於學業在這範疇上對你的發展。接著追問，兩者之間 (學業生活和靈性幸福)存在矛盾衝突或是互相支持？

8. 你認為宗教如何影響或塑造你的個人成長？例如更明白自己？

9. 你認為積極投入教會生活 或宗教活動 如何影響或塑造你的個人成長？

10. 你認為父母教育水平如何影響或塑造你的個人成長？例如學習或模仿的對象？

（2）對他人方面

11.　你認為所讀的大學如何影響或塑造你的待人接物及與人相處？例如學校文化？

12.　你覺得主修學科如何影響或塑造你的待人接物及與人相處？

13.　你認為家庭收入如何影響或塑造你的待人接物及與人相處？

14.　你認為兼職工作及兼職收入如何影響或塑造你的待人接物及與人相處？

15.　你認為兄弟姊妹數目如何影響或塑造你的待人接物及與人相處？

16.　你認為學業成績如何影響或塑造你的待人接物及與人相處？請試分享一件深刻事情(如考試失敗)關於學業在這範疇上對你的發展。接著追問，兩者之間（學業生活和靈性幸福)存在矛盾衝突或是互相支持？

17.　你認為宗教如何影響或塑造你的待人接物及與人相處？

18.　你認為積極投入教會生活 或宗教活動 如何影響或塑造你的待人接物及與人相處？

19.　你認為積極參與義務工作或慈善活動如何影響或塑造你的待人接物及與人相處？

20.　你認為時常禱告或 冥想如何影響或塑造你的待人接物及與人相處？

21.　你認為父母教育水平如何影響或塑造你的待人接物及與人相處？

（3）環保自然方面

22. 你認為年齡如何影響或塑造你對生態平衡的重視和愛護大自然？

23. 你認為所讀的大學如何影響或塑造你對生態平衡的重視和愛護大自然？

24. 你覺得主修學科如何影響或塑造你對生態平衡的重視和愛護大自然？

25. 你認為就讀年級如何影響或塑造你對生態平衡的重視和愛護大自然？

26. 你認為兼職收入如何影響或塑造你對生態平衡的重視和愛護大自然？

27. 你認為學業成績如何影響或塑造你對生態平衡的重視和愛護大自然？ 請試分享一件深刻事情(如考試失敗)關於學業在這範疇上對你的發展。接著追問，兩者之間（學業生活和靈性幸福)存在矛盾衝突或是互相支持？

28. 你認為宗教如何影響或塑造你對生態平衡的重視和愛護大自然？

29. 你認為積極投入教會生活 或宗教活動 如何影響或塑造你對生態平衡的重視和愛護大自然？

30. 你認為積極參與義務工作或慈善活動如何影響或塑造你對生態平衡的重視和愛護大自然？

31. 你認為時常禱告或 冥想如何影響或塑造你對生態平衡的重視和愛護大自然？

32. 你認為父母教育水平如何影響或塑造你對生態平衡的重視和愛護大自然？

（4）神或宗教方面

33. 你認為所讀的大學如何影響或塑造你的宗教熱情和對靈內合一的追求？

34. 你認為家庭收入如何影響或塑造你的宗教熱情和對靈內合一的追求？

35. 你認為兄弟姊妹數目如何影響或塑造你的宗教熱情和對靈內合一的追求？

36. 你認為學業成績如何影響或塑造你的宗教熱情和對靈內合一的追求？ 請試分享一件深刻事情(如考試失敗)關於學業在這範疇上對你的發展。接著追問，兩者之間（學業生活和靈性幸福)存在矛盾衝突或是互相支持？

37. 你認為宗教如何影響或塑造你的宗教熱情和對靈內合一的追求？

38. 你認為積極投入教會生活 或宗教活動 如何影響或塑造你的宗教熱情和對靈內合一的追求？

39. 你認為積極參與義務工作或慈善活動如何影響或塑造你的宗教熱情和對靈內合一的追求？

40. 你認為時常禱告或 冥想如何影響或塑造你的宗教熱情和對靈內合一的追求？

41. 你認為父母教育水平如何影響或塑造你的宗教熱情和對靈內合一的追求？

完畢。感謝你的參與。