

Understanding Spirituality among Chinese College Students: Xin-Yang (信仰) and its Assessment

By
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Abstract

In spite of the effort researchers have made, there still seems to be a lack of cultural appropriateness when it comes to the concept of spirituality. Therefore, the current author considers the cultural appropriateness in the process of developing a scale that measures Chinese college students' level of spirituality. Three focus groups and face-to-face interviews were conducted to help understand the concept of spirituality among Chinese college students. *Xin-Yang* 信仰 is the Chinese word the current author decided to use and study among Chinese college students. After the pool of items is developed, a fourth focus group was held among the current researcher and a panel of experts in the field of psychology that enabled the researcher to establish face validity for the current scale. A pilot study was conducted to modify the pool of items. A sample of 2,307 college student participants were recruited online from five different provinces, autonomous regions, and direct-controlled municipality in China. Confirmatory factor analysis, item factor analysis, and structural equation modeling were performed with the data. The final *Xin-Yang* scale has three factors: characteristics, mental guidance, and relationship to others. *Xin-Yang* scale is a sound and helpful measurement. *Xin-Yang* seems to be an important construct to these Chinese college students in relationship to their psychological well-being. Specifically, *Xin-Yang* is significantly and positively related to hope, self-esteem, and self-efficacy. *Xin-Yang* is significantly and negatively related to psychological symptoms. In addition, *Xin-Yang* is significantly and positively related to spirituality. Relationships among these constructs were discussed. Limitations and implications were also discussed.

Language Translation Disclaimer

This dissertation contains Chinese passages in direct quotes. The English translations that follow were done by the current author. While reasonable efforts were made to provide accurate translations, inaccuracy is possible. No liability is assumed by the current author for any errors, omissions, or ambiguities in the translations provided in this paper.

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Chapter I: Introduction

Spirituality is a concept that gradually gained popularity among researchers in psychology over the past few decades. However, it is inevitable for researchers to face the fact that it is a concept that is difficult to define due to various reasons, and it has often been used mistakenly (Moberg, 2002; Ratnakar & Nair, 2012; Zinnbauer, et al., 1997). Some researchers even stated that "...it would appear that there is no such thing as a universal definition of spirituality and the theoretical probability of creating one is virtually impossible" (McSherry & Cash, 2004).

Regardless of the difficulties associated with the defining process, researchers have been dedicated to clarifying the concept with the hope of operationalizing it before systemically studying it. When approaching the definition of spirituality, many researchers have focused on the core feature of spirituality that is "sacred" or "the relationship with God" (Hill et al., 2000; Hodge, 2000). This approach is referred to as the "substantive" approach, and the boundary of scientific study and theology is thus delineated (Moberg, 2002). Respectively, other researchers have defined spirituality from a functional perspective that mainly focuses on the meaning making pieces, the interconnectedness with the outside world and a sense of purpose that spirituality is able to provide with people (Koenig, 2008; Bensen, Roehlkepartain & Rude, 2003; Tanyi, 2002).

Ongoing debate has been continuing with regard to the relation between "spirituality" and "religion" in modern academic world. Historically, spirituality and religion have not been differentiated from each other; instead, these two concepts were deeply interrelated. It is not until recently that many phenomena that are associated with religion start to be divided into

spirituality or religion (Zinnbauer, et al, 1999). It is inevitable that disagreements arise on a variety of issues pertaining to these two concepts.

Scholars, including those in the field of psychology, have debated over whether spirituality or religion is a broader concept. There are both consensus on the core of the concepts, which is “a search for the sacred”, as well as different opinions. If the focus is on how “a search for the sacred” is actualized, then spirituality is the broader concept, as spirituality does not limit itself within the traditional sacred context as religion does (Zinnbauer & Pargament, 2005). On the other hand, if the focus is on whether “a search for the sacred” is a means or an end, then religion is a broader concept than spirituality. Specifically, spirituality is said to be “a search for the sacred”, which could be considered as managing to reach the end; while religion is “a search for significance in ways related to the sacred”, and it implies the possibility of “the search for the sacred” being a means to reach the final goal of significance (Pargament, 1997; Zinnbauer & Pargament, 2005).

Inevitably, researchers have studied spirituality cross-culturally. Some scholars have called for attention and sensitivity to the cultural context in which spirituality is studied (Hill, & Pargament, 2003). Empirical evidence suggests that a culturally appropriate mindset is necessary when studying the concept of spirituality. For instance, researchers have demonstrated that one of the essential components of spirituality, the “sacred”, could not be readily translated to another language with all of the original three meanings in English, namely “set apart”, “numinous”, and “an action or ritual that confers sacred status” (Paloutzian & Park, 2013).

The study of spirituality in China is growing in quantity in recent years, but the study of spirituality among young people has been scarce. Based on a review of Western literature on spirituality, some researchers validated selected Western spirituality measures on Chinese

college students (Liang, 2006); some have started developing scales that measure spirituality among Chinese students (Liu, 2007); and Liang (2015) proposed that the localized Chinese spirituality be studied. These efforts seem to be mainly based on a Western theoretical framework.

As some researchers have pointed out, the limitations of current cultural studies in the U.S. are "...the widespread implicit assumption that the perspectives and terms of debate generated in the United States make perfect sense and are, therefore, exportable and meaningful everywhere" (Desmond, & Dominguez, 1996, p. 477). Additionally, "we have reached a time when no values from any single cultural perspective can provide frameworks adequate for understanding the changes affecting all of us" (Lee, 1995, p. 590). It is the current author's intention to conduct a culturally appropriate study on spirituality that reflects the Chinese college students' understanding of the concept.

Culture and Spirituality

In spite of the effort researchers have made, there still seems to be a lack of cultural appropriateness when it comes to the concept of spirituality. Joshanloo (2012) indicated that spirituality and religiosity are two related factors instead of a single factor among a sample of Iranian college students. However, the author did not provide any evidence showing that the participants' understanding of the concept of spirituality is similar to that of the Western scales used. Rich and Cinamon (2007)'s research findings encountered similar problems. They investigated Arab and Jewish late adolescents' understanding the spirituality. But they have not demonstrated any evidence of the equivalence between these adolescents' understanding of "spirituality" in Hebrew or Arabic and that of the Western concept spirituality either. Ho and Ho (2007) considered spirituality and enlightenment as interchangeable concepts in Eastern and

Western societies. They did not show their effort in proving these two concepts are the same thing, and it is the responsibility for the researchers to do so.

Language could be less of a problem if the study is conducted in a Western society or if Christianity is very influential in the culture. In Torskenæs, et al. (2015)'s study, it was dedicated to understanding the perception of nurses and caregivers from Malta and Norway on the concept of spirituality. The discussion was carried in Maltese and Norwegian for "better understanding and expression of ideas" (p. 43), even though the researchers did not have evidence for validity of equating a concept in two languages.

Interestingly, Van Der Walt, & De Klerk (2014) suggested that two spiritual measures developed in the U.S. do not have total transferability to South Africa. It ultimately indicated that the factor structures of measures of spirituality developed in one culture could not be readily transferred to another culture indiscriminately. Such research findings validate the notion that there are cultural specificities in how spirituality is viewed or evaluated. Thus, it is important that culturally specific assessment tools be developed to support research of spirituality in diverse cultures.

Spirituality and Psychological Well-being

Researchers have confirmed the positive influence that spirituality/religiosity has on people's psychological well-being. For instance, it was found that church affiliation or church attendance was associated with a higher level of psychological well-being (Leondari, & Gialamas, 2009; Rugira, Nienaber, & Wissing, 2013). In addition, it was found that there were significant positive correlations between religious/spiritual well-being and some psychological well-being indicators for the Austrian samples (Unterrainer, Ladenhauf, Moazed, Wallner-Liebmann, & Fink, 2010).

Reed and Niville (2014) found that both religiosity and spirituality are significantly and positively correlated with psychological well-being. What is more, spirituality functions as a mediator between religiosity and global mental health and between religiosity and life satisfaction. In another study, it was demonstrated that for a group of HIV-positive elders, the negative association between HIV stigma and their psychological well-being was partially mediated by spirituality (Porter, Brennan-Ing, Burr, Dugan, & Karpiak, 2017). This mediation effect was also observed by Anum and Dasti (2016), who found that among a group of Pakistani caregivers with children who have thalassemia, spirituality was partially mediating the relation between caregiver burden and the psychological well-being.

In a study conducted in Korea, it was found that among a group of Korean elders and their family caregivers, the elders' spirituality has impact on their own psychological well-being; the spirituality of the care-givers of these elders, on the other hand, has impact on both their own and these elders' psychological well-being (Kim, Reed, Hayward, Kang, & Koenig, 2011). Laubmeier, Zakowski, and Bair (2004) suggested that a higher level of spirituality is associated with less symptom severity, less distress, and better quality of life among some cancer patients. These findings provide evidence that spirituality is related to psychological well-being cross culturally.

Assessment of Spirituality

Existing studies that focus on the concept of spirituality mainly adopt a Western ideology when conceptualizing it. These scales could not successfully claim that they are free of the influence of religion, specifically Christian. In the majority of the measures that current author has reviewed, the word "God" or a concept of "a higher power" is included in the measures (Daaleman & Frey, 2003; Ellison, 1983; Genia, 1997; Hall & Edwards, 1996; MMS; Miller,

2004; Seidlitz, et al., 2002). It is not difficult to see the influence that Christian has on people's understanding of the concept of spirituality in Western society.

It is understandable when it is applied in Western cultures where Monotheistic conception, such as God is deeply embedded in people's mind. However, it could be problematic when one tried to apply these scales in cultures where Monotheistic God is not a widely accepted conception (Emmons and Crumple, 1999). Especially when it is studied in the Chinese cultural context, where people could not grasp the literal Chinese translation of spirituality, a culturally proper concept and a scale that could readily deliver as well as measure the meaning of spirituality is needed.

When it comes to measures of spirituality in China, some researchers have put effort into validating existing measures from the Western culture (Liang, 2006), which is problematic given the understanding that spirituality is a culturally specific concept. There are other scholars who have developed new scales to measure spirituality for Chinese. However, it is noted that they mainly generated factors of spirituality based on Western literature (Liu, 2007). It is clear that there is a lack of serious consideration of the cultural appropriateness when researchers try to develop scales measuring spirituality. Therefore, the current study aims at understanding Chinese college students' spirituality by examining how they define and experience spirituality, and developing an instrument to assess the construct that fits their culture and experiences.

Spirituality of Chinese College Students: Xin-Yang (信仰)

Through cross-cultural studies on spirituality, researchers have encountered problems in direct translation of the concept from English to another language. One example of the difficulties is in the translation of "sacred", which is an English word that has three major

meanings but only one in an Indian language (Lutzky, 1993; Otto, 1950; Paloutzian, & Park, 2013).

The difficulties that are associated with studying spirituality cross-culturally are not just pertinent to the etymological differences of the concept; they are also representative of the cultural construction of the concept and its influence on people. The English term of spirituality is closely associated with Christianity in Western culture, especially in American culture; however, a direct connection between religion and spirituality is less obvious in China (Hao, 2009; Lu & Guo, 2014). Consequently, Chinese people's understanding of spirituality is destined to be different from that of Westerners. Some researchers also stated that there is not a clear definition of spirituality in the studies conducted among college students (Li, & Cai, 2016). These problems were exemplified through current author's focus groups and face-to-face interviews with Chinese college students. When being presented with the literal translation of the term spirituality, the students had a difficult time describing their understanding of it or feelings related to it. However, when *Xin-Yang* (信仰), a Chinese concept that resembles the meaning of spirituality in English, was used, they became quite comfortable talking about their thoughts and ideas related to it.

Xin-Yang (信仰) can be used as a noun or a verb. It is common for Chinese to say that someone has or has no *Xin-Yang* (信仰), referring to an individual's spiritual state. When used as a verb, Ni, Cao, Fan, and Xu (2015) found that Chinese college students reported that they *Xin-Yang* 信仰 different things, including, Marxism, science, heroes/ idols, or traditional culture. There were also students who stated that they did not have any *Xin-Yang* (信仰). Promisingly, majority of the students in the study believe that it is important that one has some type of *Xin-Yang* 信仰 (Ni, Cao, Fan, & Xu, 2015).

Because of the multifaceted characteristic of spirituality among Chinese college students, it is important that researchers be open-minded toward the possibility of *diverse Xin-Yangs* (多元信仰) (Liang, 2015). It is likely that those who *Xin-Yang* (信仰) A would allow and respect others who *Xin-Yang* (信仰) B (Li, 2012). More and more researchers have adopted this mindset and support the notion that the ultimate goal of *Xin-Yang* (信仰) is to seek harmony, not sameness. Therefore, the goal of current study is not to perceive and assess *Xin-Yang* (信仰) toward a specific target that makes *Xin-Yang* (信仰) mean the same thing to everyone. Instead, the goal is to understand what it means for Chinese college students to have *Xin-Yang* (信仰) and let each of them have their own or generate one. It is essential that the current study pays special attention to culturally localized understanding of the concept, instead of imposing any preexisting theoretical framework on these Chinese students.

The Current Study

The current study used *Xin-Yang* (信仰) as a concept equivalent to spirituality in the Western culture and examines it among Chinese college students. The study consisted of two parts. Part one was collecting qualitative data through focus groups, face-to-face interviews, and online surveys at several different Chinese colleges for the purpose of defining and operationalizing *Xin-Yang* (信仰) for this population. The second part of the study focused on developing a scale measuring *Xin-Yang* (信仰) in the specific Chinese college students' cultural context. It was also the current author's intention to explore the relationship between *Xin-Yang* (信仰) and psychological health within this population, which provided observations about whether or not *Xin-Yang* (信仰) has similar psychological roles for Chinese college students as spirituality has for Americans.

Rationale of the Current Study

There are several reasons that the author chose to target this population, Chinese college students, for the current study. Firstly, as it is true in many cultures, college students are about to enter the society after graduation. They have on their shoulders the task of transitioning from a student to a working adult in the society as well as the responsibility of contributing their knowledge and skills to the society. It is essential that they have a clear sense of self, a clear goal to pursue, as well as a strong sense of belongingness in the society. As Chen (2013) has pointed out that a large proportion of Chinese college students claimed that they do not have any *Xin-Yang* (信仰), and there are a lot of negative consequences due to a lack of *Xin-Yang* (信仰). It is important that attention be paid to this concept among this population.

Secondly, China has opened its door since late 1970s'. Along with the globalization process, there have been significant cultural clashes between the traditional collectivistic cultural value and the individualistic cultural value coming from the Western society. In this process, young people are confronted by the desire/pressure to identify with the individualistic cultural values, often at the expense of the traditional Chinese values, as well as the desire/pressure to hold onto parts of the traditional Chinese cultural values. Since *Xin-Yang* (信仰) is very closely related to one's value systems (Ni, Cao, Fan, and Xu, 2015), it is imperative to understand the current status of *Xin-Yang* (信仰) among this population.

The decision about focusing on *Xin-Yang* (信仰), as an equivalent of spirituality for people in Western cultures, was made after reviewing Chinese literature and initial attempts to define the concepts for Chinese college students. Through three focus groups and a brief interview with 180 students, it was observed that Chinese college students have difficulties grasping and articulating their understanding of the concept of spirituality in its literal Chinese

translation, 精神性 or 灵性. Instead, they felt quite comfortable talking about *Xin-Yang* 信仰. It was then decided that *Xin-Yang* (信仰) is the more appropriate concept to use for assessing the Chinese college students' spirituality.

Purposes of the Current Study

Specifically, the current study sought to:

1. Understand how Chinese college students define and describe their *Xin-Yang* (信仰).
2. Develop an instrument to assess *Xin-Yang* (信仰) for Chinese students.
3. Identify similarities and differences between the dimensions of the concept of *Xin-Yang* (信仰) among Chinese college students and those of the concept of spirituality in Western literature.
4. Explore the relation between *Xin-Yang* (信仰) and psychological well-being among Chinese college students.
5. Discuss possible similarities between the role of *Xin-Yang* (信仰) in Chinese students' psychological well-being and that of spirituality in the Western literature.

Significance of the Current Study

It has been confirmed by multiple research studies that spirituality and psychological wellbeing is positively correlated (Kim, Reed, Hayward, Kang, & Koenig, 2011; Laubmeier, Zakowski, & Bair, 2004; Leondari, & Gialamas, 2009; Porter, Brennan-Ing, Burr, Dugan, & Karpiak, 2017; Rugira, Nienaber, & Wissing, 2013; Unterrainer, Ladenhauf, Moazedi, Wallner-Liebmann, & Fink, 2010). The current author would like to also explore the possible relation between *Xin-Yang* 信仰 and psychological well-being among Chinese college students, since *Xin-Yang* (信仰) is considered as an equivalent concept of spirituality in the current study.

China is going through a period of high-speed economic development in effort to bring the country to a better economic status. It was noted by the public that due to a focus on economic development, not enough attention is paid to the “精神文明建设” (Spiritual development) in the past few decades. Fan and Fan (2016) stated that Chinese people are going through a period of “灵魂幻灭” (disillusionment of spirit) and “信仰危机” (*Xin-Yang* 信仰 crisis) due to a pursuit of utilitarianism (p. 45). Chinese college students are going to take on the responsibility of developing the country when they enter the society, and they will decide where the country is heading to. Therefore, their *Xin-Yang* 信仰 will be an important factor that will affect the direction of development for the country.

Development of a valid, reliable, and culturally sensitive scale for measuring *Xin-Yang* 信仰 in China, seen as an equivalent concept to spirituality in Western cultures, would be a significant step toward understanding how Chinese college students experience and express spirituality as defined by Western theories. It would contribute to the dearth of spirituality studies in China. The current author would like to emphasize that the goal for this study was to identify and understand aspects of *Xin-Yang* 信仰 that may be similar or dissimilar to those of spirituality in the U.S. The study would also have practical values allowing empirical investigation of relations between *Xin-Yang* 信仰 and other psychological constructs for Chinese students. The results of the study could inform educators as well as policy makers in engendering regulations and guidelines that could promote the development of students' *Xin-Yang* 信仰. The current study was dedicated to understanding a concept in Chinese cultural context that is similar to a well-studied concept in Western culture, which should be a contribution to cross-cultural studies.

Chapter II: Literature Review

Defining Spirituality in Western Culture

The origin of spirituality could be traced back to be the “Pauline neologism” (Schneiders, 1989, p. 680). St. Paul used the adjective form “spiritual” (pneumatikos) to “describe any reality that was under the influence of the Holy Spirit” (Schneiders, 1989, p. 681). He also distinguished the “spiritual person” (pneumatikos) from the “natural person” (psychikos anthrōpos) in 1 Corinthians 2:14-15. It was not until the 12th century that spirituality started carrying a “philosophical meaning” that is in contrast to “materiality or corporeality” (Schneiders, 1989, p. 681). In the 17th century, spirituality was associated with “questionable enthusiasm or even heretical forms of spiritual practice (such as quietism)” (Schneiders, 1989, p. 681). Therefore, the use of spirituality by both Catholic and Protestant had been less and less common (Paloutzian & Park, 2013, p. 27). Starting the 19th century through early 20th century, spirituality firmly carried the meaning of living a “life of perfection” that is “distinguished from the ‘ordinary’ life of faith” (Schneiders, 1989, p. 681).

Shamanism was said to be the “substrate of ritual, cosmological, and symbolic commonality” of hunter-gatherer religions that is “underneath all of the contextual and cultural diversity” (Guenther, 1999, p. 426). Guenther (1999) further stated that shamanism is “making acknowledged contribution to Western spiritual life through the field of healing. The shaman’s healing practices are imbued with spirituality,…” (p. 431).

In terms of the defining spirituality, some definitions are said to be “substantive”, which are usually centering around “sacred” or “divine phenomena”. This way of approaching the concept tends to clearly delineate the definition boundary between “scientific theory and theology”. While for other definitions that are usually “functional”, they would aim to describe

what spirituality does or how individuals or groups are affected, and this way of defining spirituality seems to blur the definitional boundaries (Moberg, 2002).

Some researchers have demonstrated their preference to the first approach by their understanding of spirituality. For example, Hodge (2000) stated that “spirituality is defined as a relationship with a Transcendent Being (or whatever is considered Ultimate), informed by a certain spiritual tradition, which fosters a sense of meaning, purpose, and mission in life. In turn, this relationship produces fruit, such as altruism, love, forgiveness, etc., which has a discernible effect upon one's relationship to creation, self, others, and the Ultimate” (p. 2). Later on, Hodge (2001) specified the term “Transcendent Being” as “God”, and spirituality was defined “as a relationship with God, or whatever was held to be the Ultimate, that fostered a sense of meaning, purpose and mission in life” (p. 204). Along the similar line, Hill et al. (2000) defined spirituality as “the feelings, thoughts, experiences, and behaviors that arise from a search for the sacred” (p. 66).

However, it is not as simple as it was in “Newtonian physics, all scholars could employ a single definition that specifies universally necessary and sufficient criteria to identify a phenomenon of interest (e.g., religion or spirituality)” (Paloutzian & Park, 2013, p. 29). This type of definition was called “monothetic definition”, which “stipulates a single feature or a set of conjunctive features that specifies what a category term basically means, for by so doing it specifies a set of necessary and sufficient features or conditions for identifying instances of the group of objects comprehended by the category” (Saler, 2000, p. 79). Instead, many everyday concepts could be described as “prototypes”, which is a concept that was defined as “a central tendency of the distribution” that “then appears to operate in classification and recognition of instances” (Rosch, 1973, 1975, p. 329).

Spirituality and religion have been argued to be prototypical concepts by Saler (2000):

We can deal with religion in terms of a pool of elements that we deem typical of religion, without supposing that any one element is necessary for the existence of a religion. These elements or “typicality features” [such as theism] . . . are formally predicated of “religion,” [but] not all of them will be found in all “religions”. (p. xi)

Because prototypical concepts would exist on a continuum, it is difficult to delineate sharp boundaries. When it is close to its boundaries, it is likely that disagreement would arise regarding whether a specific case should fall within or outside of the boundaries. Spirituality and religion are certainly this type of concepts (Paloutzian & Park, 2013. p. 30).

In terms of the second approach of defining spirituality mentioned by Moberg (2002), some researchers have offered a definition of spirituality from a developmental perspective that essentially focus on the potentiality of children and youth growing spirituality as a quality. For instance, Benson, Roehlkepartain, and Rude (2003) stated that:

Spiritual development is the process of growing the intrinsic human capacity for self-transcendence in which the self is embedded in something greater than the self, including the sacred. It is the developmental “engine” that propels the search for connectedness, meaning, purpose, and contribution. It is shaped both within and outside of religious traditions, beliefs and practices. (pp. 205–206)

Being a physician himself, Koenig (2008) proposed two ways of conceptualizing spirituality. Firstly, when it comes to patients’ spirituality, it should be defined “as broadly as possible so that all patients have an opportunity to have their spiritual needs addressed (in whatever way they define those spiritual needs)” (p. 18). Secondly, if it is pertinent to research, then we should “return the definition of spirituality to its origins in religion, whether traditional

or nontraditional. . . . If there is no connection with either religion or the supernatural, then I would not call a belief, practice, or experience spiritual. I would call it humanistic” (pp. 16–17).

Furthermore, Tanyi (2002) stated that spirituality is a personal search for meaning and purpose in life, which involves connection to self-chosen and/or religious beliefs, values, and practices that give meaning to life. Additionally, meaning and purpose in life, connectedness, inner strength, self-transcendence, and belief are important components of spirituality.

Having nothing to do with uniform or prototypical definition, McSherry and Cash (2004) offered a taxonomy of spirituality hoping to “account for the diversity and subjectivity surrounding the word” (p. 154). Their taxonomy ranges from a theistic definition on the left end to a mystical definition on the right end. Towards the left end, the definitions tend to be “old”, while towards the right end, the definitions are “post-modern”. They pointed out that individuals’ specific definition of spirituality will be largely dependent on their worldview. So far this taxonomy offered the most comprehensive spectrum of defining spirituality among the researchers that the current researcher has encountered in literature review.

Markham (1998) stated that for the health care professional, spirituality has three elements “first, it is opposed to a reductionist account of personhood; second, it provides a meaning expressed in certain beliefs and values; and third, it is linked to the transcendent” (p. 74). Interestingly, the author pointed out that this way of defining spirituality is actually a “secularized version of the Christian understanding of spirituality”. With the fact that spirituality is not “a term recognized by every religious tradition”, one can see the potential problem of defining it this way. Specifically, for those who are from a different religion, they may see this definition as rather “strange” and “deeply irreligious” (p. 74). Granted it is just a discussion in

the health care profession, it will only become more complicated when it is a concept applied to the general population.

It was pointed out that in the field of psychology of religion and spirituality, some researchers have mainly focused on two important constructs when it comes to spirituality, and they are “sacred” and “transcendence”. These researchers seemed to define spirituality and religion on the basis of a “presumed singularity” in relation to these two constructs, and the “presumed singularity” distinguishes spirituality and religion from other common psychological processes. The problem of doing this is that it assumed a “self-evident” perspective without providing compelling reasons as to why they think spirituality and religion involve special psychological processes. Instead, it was stated that spirituality and religion involve psychological processes that are common in all healthy human functioning (Park, 2010). These psychological processes are related to humans and animals’ need to make meaning (Paloutzian & Park, 2013, p. 9-10). Essentially, it is the meaning making piece, rather than spirituality and religion that are the core psychological processes (Park, 2005).

Defining Religion, Differentiation from Spirituality, and Relatedness to Spirituality

In order for one to speak of spirituality, it is inevitable that one needs to talk about religion, since these two terms have been used in the literature interchangeably. Platvoet (1999) stated that “the religions are a natural class and refer to an observable reality that is waiting to be discovered by us” (p. 501). He further postulated that there are three types of religions in human history. The first group of religion consisted of “numerous non-doctrinal community religions” (p. 488). Three subtypes of the first group of religion include the “preliterate religion” of “tiny bands of food gathers”, the “preliterate religion” in “societies of the early food producers”, and the “early literacy religion” in “societies with more sophisticated food production” (p. 488). The

second group of religions are called “doctrinal trans-national religions of the first axial age” emerging between 1000 BCE and 632 CE, and they included the “missionary religions of Buddhism, Christianity and Islam, each complete with its ‘Scriptures’” (p. 492). The third group is called the “synthetic religions of the second axial age” appearing in the early 19th century, and the most typical one are the “newest post-Christian religions” (p. 496).

Just as spirituality was defined by researchers from different perspectives, religion was defined through substantive and functional approaches as well. Through substantive approach, religion was defined as its substance, the sacred; while for functional approach, religion was defined by its fulfilling the purpose of the individual’s life (Zinnbauer, Pargament, & Scott, 1999). For the first approach, an example would be to define religion as “an institution consisting of culturally patterned interaction with culturally postulated superhuman beings” (Spiro, 1966, p. 96). For the functional approach, Batson, Schoenrade, and Ventis (1993) defined religion as “whatever we as individuals do to come to grips personally with the questions that confront us because we are aware that we and others like us are alive and that we will die” (p. 8).

Some researcher has defined religion as an individualistic concept—“ religion, therefore, as I now ask you arbitrarily to take it, shall mean for us the feelings, acts, and experiences of individual men in their solitude, so far as they apprehend themselves to stand in relation to whatever they may consider the divine” (James, 1902/2008, p. 49). Some have seen religion as a socially constructed concept that “is a unified system of beliefs and practices relative to sacred things, that is to say, things set apart and forbidden—beliefs and practices which united into one single moral community called a Church, all those who adhere to them” (Durkheim, p. 44).

There is a need for researchers to provide a “universally valid definition” of religion that arise from the assumptions that it is possible to define religion universally, and it is necessary for

“achieving the integration of the sciences of religion(s)” (Platvoet, 1999, p. 506). For example, Pargament, Sullivan, Balzer, Van Haitsma, & Raymark, (1995) seemed to be dissatisfied with their research findings that the participants did not have a consensus on their understanding of the definition of religiousness. Specifically, in the first study they recruited 27 undergraduate students who all identified as being religious. These students were asked to read 100 vignettes or profiles and rate the individuals in the vignettes or profiles on a 9-point scale to decide their level of being religious. There were 10 cues that were identified and incorporated in the vignettes or profiles, including “(1) religious experience (degree or frequency one feels the presence of God in one's life), (2) personal benefits (degree one derives support, comfort, or meaning from formal religious elements), (3) doctrinal orthodoxy (whether or not one holds traditional Christian beliefs), (4) church attendance (frequency of attendance at religious services), (5) personal religious practice (frequency of prayer, Bible reading, and meditation outside of religious services), (6) evangelism (degree one actively attempts to convert others to his/her beliefs), (7) financial behavior (proportion of income donated to the church), (8) religious knowledge (amount of knowledge about central doctrines and teachings of one's religious denomination), (9) active-passive religious development (whether an individual came to his/her current religious beliefs and practices through a process of questioning and searching or through a simple acceptance of what was taught), and (10) altruism (acts of giving without gaining something in return as opposed to acts solely aimed toward personal gain)” (pp. 959-960). The results indicated that only one cue (personal benefits) was used by majority of the participants, indicating little consensus when it comes to defining whether an individual is religious. Their second study included 45 clergy only to find similar results that these clergy did not have

consensus on the definition of whether someone is religious. The only cue that was used by more than half of the clergy was church attendance (Pargament, et al, 1995).

Zinnbauer (1998) conducted a study using similar methodology to understand the definition of religiousness and spirituality. He recruited 21 clergy and 20 nurses as participants. Four identified religiousness cues are “formal/organizational religion (attendance at formal religious services and adherence to the church's prescribed tenets, doctrines, and practices), altruism (acts of giving without gaining something in return), personal religious practice (the frequency of prayer or Bible study not linked to involvement in a church or organized religion), and personal benefits (the degree an individual derives support or comfort from formal religious beliefs)” (p. 23). Also four cues were identified for spirituality, and they were personal/existential meaning (the degree to which one seeks meaning in one's life, insight into oneself, or understanding about the world), spirituality experiences (the degree to which one feels close to God and feels God's presence in one's life), sacred connection (the frequency one feels a sense of interconnectedness with the world and all living things), and spiritual discipline (the frequency of participation in activities intended to promote spiritual growth such as meditation or yoga (pp. 23-24). The author found that for both groups to define religiousness, they used both “fewer cues and fewer types of cues” (p. 41), indicating that there is greater agreement on the definition of religiousness. Participants in the clergy group identified “formal/organizational religion” as the core characteristic of both religiousness and spirituality; while participants in the nurse group did not identify any cue for either religiousness or spirituality (Zinnbauer, 1998). It seems that these researchers mentioned above would like to generate a set of core features of religiousness and spirituality that most people refer to when

defining these two concepts, which essentially represented what Platvoet (1999) had described as the need for a “universally valid definition” (p. 506).

Platvoet (1999) strongly opposed the essentialism approach of defining religion, through which religion would be “constructed as statements about the essence or nature of religion” and “imply...universal validity and unique truth and are...hegemonic” (p. 503). In his opinion, what should be adopted instead as an approach when defining religion is to “regard (religion) as no more than a legitimately wide and manifold set of ambiguous... constantly revisable, conceptual instruments for utilitarian research purposes” (Platvoet, 1999, p. 503). In a nutshell, it was suggested that researchers define religion as a way for them to “discover, investigate, interpret and explain some aspects of religion, or (a) particular religion(s)” (Platvoet, 1999, p. 512).

Many would agree that when referring to spirituality, it is usually embedded in a larger religious context. Hill, et al. (2000) posited that religion and spirituality are related concepts, and they proposed a set of criteria for defining and measuring spirituality and religiosity,

Criterion for spirituality

- A. The feelings, thoughts, experiences, and behaviors that arise from a search for the sacred. The term “search” refers to attempts to identify, articulate, maintain, or transform. The term “sacred” refers to a divine being, divine object, Ultimate Reality, or Ultimate Truth as perceived by the individual.

Criteria for religion

- A. The feelings, thoughts, experiences, and behaviors that arise from a search for the sacred. The term “search” refers to attempts to identify, articulate, maintain, or transform. The term “sacred” refers to a divine being, divine object, Ultimate Reality, or Ultimate Truth as perceived by the individual.

AND/OR:

- B. A search for non-sacred goals (such as identity, belongingness, meaning, health, or wellness) in a context that has as its primary goal the facilitation of (A);

AND:

- C. The meaning and methods (e.g., rituals or prescribed behaviors) of the search that receive validation and support from within an identifiable group of people (p. 66).

Cheon and Canda (2010) stated that “Everyone has spirituality, but not everyone affiliates with a religion or believes in a supernatural realm” (p. 122). Moberg (2008) also offered a distinction for researchers to differentiate spirituality from religiosity,

Religiousness, sometimes called religiosity, usually refers to membership and participation in the organizational structures, beliefs, rituals, and other activities related to a religious faith like Judaism, Hinduism, Islam, or Christianity, while spirituality typically has a more existential and experiential focus upon an individual’s internalized faith, values, and beliefs along with their consequences in daily behavior. Yet they overlap significantly in the everyday parlance of people, the conceptual interpretations of scholars, and the clinical understandings applied by medical personnel, psychologists, clergy, and persons in other service professions. (p. 101)

It is not difficult for one to conclude base on these researchers’ understanding of spirituality and religion that religiosity and spirituality are deeply related to each other, and their relationship is almost like siblings in the same family. Regardless of their differences, Moberg (2008) indicated the possibility of studying spirituality and religiosity together as they overlap, Under the recognition that spirituality as well as religion is an appropriate subject for scientific research and with mounting evidence of their overlap, there is a growing

consensus among sociologists and psychologists that they should be pursued as distinct concepts that nevertheless are so interrelated that they can also be studied together as Religion/Spirituality. (p. 102)

Besides these definitions of spirituality and religiousness, these two terms have been defined differently as to which one has a broader construct. Zinnbauer defined spirituality “as a personal or group search for the sacred”, and religiousness “as a personal search for the sacred that unfolds within a traditional sacred context” (Zinnbauer & Pargament, 2005, p. 35). From this definition, one could see that spirituality is a broader term than religiousness. Both terms involved the process of searching for the sacred, but spirituality extends from paths associated with traditional religions to individual and group experiences that are outside of socially or culturally defined systems, such as feelings of devotion and memories of a mystical experience. Musick, Koenig, Larson, and Matthews (1998) posited that “religion ... involves traditional religious beliefs, attitudes, and practices. Spirituality ... is a broader term that includes religion, but goes beyond” (p. 780).

On the other hand, Pargament defined spirituality as “a search for the sacred”, and religiousness as “a search for significance in ways related to the sacred” (Pargament, 1997, p. 32; Zinnbauer & Pargament, 2005, p. 36). Apparently, religiousness has a broader definition than spirituality in these definitions, that is, people could search a relationship with the sacred through religiousness, but they may also be seeking destinations like physical health, emotional well-being, intimacy with others, and so on. On the other hand, spirituality only refers to a search for the sacred, in which the sacred is the ultimate destination.

Some researchers also pointed out that spirituality focuses on the individual and psychological level, which involves individual’s belief and value system; while religiosity

focuses on the institutional and societal level, and it focuses on individuals' participation of the religious tradition and regulations (Wood, Hill, & Spilka, 2009).

Essentially, the way in which spirituality and religiousness are defined is in accordance to the specific psychological inquiry. Spirituality being defined broader is following the trends of believers and psychologists, since they also believe in this way. On the contrary, religiousness being broader is maintaining continuity of research within the psychology in religion of the last century (Zinnbauer & Pargament, 2005).

Zinnbauer, et al, (1999) posited that in contrast to the previous practice of researchers in which spirituality has not been distinguished from religiousness, a wide range of phenomena that are associated with religion have been divided into spirituality and religiousness currently. During the process, these two concepts were gradually polarized. Hence, spirituality was labeled as functional, dynamic, personal subjective, emotional/experiential-based, and positive; while religion was labeled as substantive, static, institutional objective, belief-based, and negative (Zinnbauer & Pargament, 2005; Zinnbauer, et al., 1999). This way of simply polarizing these two concepts could potentially impede researchers' objective view of the relationship between these two concepts and cause researchers to lose sight of the interconnectedness between spirituality and religion.

Similarly, it was suggested that spirituality be considered as having a social dimension such that people who label themselves as spiritual but not religious tend to group together and form their own group (Paloutzian & Park, 2013). Zinnbauer et al. (1999) used the Neibuhr's church-sect theory to understand this process. It was stated that "sectarian movements that break from established churches eventually tend to become church-like themselves over time as they grow" (Zinnbauer et al., 1999, p. 903). They also postulated that more and more people will be in

the “spiritual” group, which eventually making the group a majority. However, the danger of polarizing religion and spirituality as the institutional and the personal is “losing sight of the individual mission of the religious institution, and the social context of spirituality” (Zinnbauer et al., 1999, p. 904).

So far, it is clear that researchers concluded that spirituality could not be fully distinguished from religion based on their historical association. The current author conceptualizes spirituality as a concept that is overlapping with religion in many ways; however, there are also some distinctive features that are solely pertinent to spirituality. It is both the shared features of spirituality with religion and the distinct features of spirituality that the current paper looks at when it comes to spirituality.

Spirituality and Psychological Well-being

Researchers have confirmed the positive relation between religiosity/spirituality and psychological well-being. Obviously, some researchers have used religiosity and spirituality interchangeably by putting them together as one word. However, the more important issue is that the positive influence that these two concepts have on people’s psychological well-being. For instance, it was found that church affiliation or church attendance was associated with a higher level of psychological well-being in a sample of Greek Orthodox Christians and a sample of Tanzanian university students (Leondari, & Gialamas, 2009; Rugira, Nienaber, & Wissing, 2013).

Unterrainer, Ladenhauf, Moazedi, Wallner-Liebmann, and Fink (2010) have operationalized psychological well-being as “a sense of coherence” and their “satisfied needs”; for religious/spiritual well-being, they postulated that it is composed of “general religiosity”, “connectedness”, “experiences of sense and meaning”, “forgiveness”, “hope transcendent”, and

“hope immanent”. They have found significant positive correlations between religious/spiritual well-being and these psychological well-being indicators among a sample of participants recruited from the general population. The positive correlation was particularly strong for “hope transcendent” “hope immanent”, and “forgiveness” (Unterrainer, Ladenhauf, Moazedi, Wallner-Liebmann, & Fink, 2010).

Reed and Niville (2014) have found that among a group of Black American women both religiosity and spirituality are significantly and positively correlated with psychological well-being. Moreover, they also found that spirituality functions as a mediator between religiosity and global mental health as well as between religiosity and life satisfaction.

Some studies have solely focused on the concept of spirituality and its relation with psychological well-being. Kim, Reed, Hayward, Kang, and Koenig (2011) indicated that among a group of Korean elders and their family caregivers, the elders’ spirituality only influence their own psychological well-being; while for the caregivers of these elders, their spirituality influence not only their own but also these elders’ psychological well-being. In a sample of cancer patients, it was suggested that spirituality is associated with less symptom severity, less distress, and better quality of life (Laubmeier, Zakowski, & Bair, 2004).

In another study exploring the relation between spirituality and psychological well-being, it was demonstrated that for a group of HIV-positive elders, the negative association between HIV stigma and their psychological well-being was partially mediated by spirituality, meaning that spirituality was a positive buffer against the negative effect of HIV stigma on their psychological well-being (Porter, Brennan-Ing, Burr, Dugan, & Karpiak, 2017). Similarly, Anum and Dasti (2016) indicated that among a group of Pakistani caregivers with children who have thalassemia, caregiver burden was negatively correlated with their psychological well-being,

while spirituality was positively correlated with the psychological well-being. In addition, spirituality was also partially mediating the relation between caregiver burden and the psychological well-being.

In terms of the reasons why there is a positive relation between religiosity/spirituality and people's psychological well-being, some researchers have postulated that it is possibly due to several important aspects that the faith system is capable of providing. Specifically, it is through the social support, a sense of hope, and a sense of meaning and purpose in one's life that faith provides, people essentially have a better and happy life (Myers, 2000). In this sense, spirituality is influencing people's well-being through the mechanism of other possible mediators, such as social support, hope, and a sense of meaning as it was pointed out in Porter et. al (2017)'s study. The current study will also explore whether there is a positive correlation between *Xin-Yang* 信仰 and some psychological well-being variables.

Culture and Spirituality

For any construct to be appropriately measured, the specific culture the construct is in needs to be looked at carefully. Although researchers have brought cultural awareness into their research of spirituality, there still seems to be a lack of cultural appropriateness. Joshanloo (2012) investigated the relation between spirituality and religiosity in Islamic culture using some Western scales of spirituality and religiosity. The author indicated that spirituality and religiosity are two related factors instead of a single factor among a sample of Iranian college students. Even though the author stated that the measures of spirituality and religiosity seem to be "clear" and "not offensive" to these Iranian participants (Joshanloo, 2012, p. 219), the fact that the author used Western scales itself is susceptible to cultural bias. Specifically, the author did not provide any evidence showing that the participants' understanding of the concept of spirituality

is similar to that of the Western scales used, which diminish the validity of the author's statements.

Rich and Cinamon (2007)'s research findings encountered similar problems. They investigated Arab and Jewish late adolescents' understanding of spirituality. The researchers conducted semi-structured interviews in Hebrew or Arabic with these adolescents in order to be culturally sensitive. However, the researchers have not demonstrated any evidence of the equivalence between these adolescents' understanding of "spirituality" in Hebrew or Arabic and that of the Western concept spirituality either.

Similarly, Torskenæs, et al. (2015) conducted a research to understand the perception of nurses and caregivers from Malta and Norway on the concept of spirituality. In the focus groups, the discussion was carried in Maltese and Norwegian for "better understanding and expression of ideas" (p. 43). Still, the researchers did not have evidence for validity of equating a concept in two languages. However, two aspects of the participants made their understanding of spirituality comparable to the Westerners. One is that the two countries are in Europe, they should be considered Western. Two is the fact that most of these participants are Christian, and it is similar to many Westerners' experience with religion.

Mayer and Viviers (2014), in their longitudinal study that lasted for eleven years in South Africa, have focused on a single individual's development of spirituality and culture. This type of research is rarely conducted due to its time-consuming nature. Thus, the researchers' contribution should be acknowledged. Unfortunately, they are still not able to take into consideration one of the most important factors of any single culture—language. They specified that the conversations between the researcher and the researched were all carried in English. South Africa has 11 official languages due to different historical colonization, and one may

argue that it is legitimate for the researchers to conduct the research in English. However, one could also argue the lack of comprehensiveness that the research could capture in terms of the understanding of African people on spirituality.

Two Chinese researchers Ho and Ho (2007) seem to consider spirituality and enlightenment as interchangeable. They specifically pointed out “acting with spontaneity, “freedom from fixed ideas”, “experiencing ‘losing’ or ‘forgetting’ oneself” in Daoism, and “letting go of attachments” in Buddhism as typical behaviors of a spiritual individual (p. 63). We have to admit that one could “sense” the relatedness and connection between Daoism philosophy, Buddhism, and spirituality; however, it is the researchers’ responsibility to prove that they are the same thing, otherwise, they could not simply assume that they are.

Along the same line, it was suggested that two spiritual measures developed in the U.S. do not have total transferability to South Africa (Van Der Walt, & De Klerk, 2014). Essentially, it indicated that the factor structure of measures of spirituality developed in one culture could not be readily transferred to another culture without indiscriminately. Current study will make effort to bridge the gap between similar constructs in different cultures by developing a measure that could be grasped by local people and potentially be connected with each other through their similar influence on mental health.

Spirituality in Chinese Culture

Some researchers have made the statement that “all else being equal, the most successful definitions (of spirituality and religion) are those that support positive communication with the broadest range of audiences...” (Paloutzian & Park, 2013, p. 29). Apparently, there are already existing disagreements on the definition of spirituality in the West, not to mention it would not work quite well to reach the most audiences if we just simply adopt any of the definition of or

understanding of spirituality in the Western literature to the Chinese context. Hill and Pargament (2003) stated that measures of religion and spirituality should be sensitive to “specific traditions” as well as “cultural characteristics and issues” (p. 70). It is reasonable to conclude that researchers need to consider specific cultural factors of certain concepts and the influences these cultural factors have on people’s perception.

An illustration of the above statement would be around the definition of “sacred”, which is an essential concept that is frequently mentioned by researchers studying spirituality (Emmons & Crumple, 1999; Hill et al., 2000; Moberg, 2002; Pargament, 1997; Roehlkepartain et al., 2006; Zinnbauer & Pargament, 2005). It has been questioned with regard to the validity of applying “sacred” cross-culturally (Paloutzian & Park, 2013). There are usually three major meanings in English that are associated with the word “sacred”, including “set apart”, “numinous”, and “an action or ritual that confers sacred status” (Otto, 1950; Paloutzian & Park, 2013, p. 32; Zinnbauer, Pargament, & Scott, 1999, p. 907). However, it could not be readily translated to another culture, such as India. Out of the three meanings, the only one meaning that is confirmed refers to the “mediating ritual of sacrifice” (yajati) (Lutzky, 1993).

Some scholars have been dedicated to studying the concept of spirituality in Chinese culture. Liang (2015) posited that “追求超越性、神圣性; 突破制度化宗教的界限; 重视个人修为、强调人性价值; 推崇信仰的多元整合” (a pursuit of a transcendence and sacred, breaking the institutionalization of religion, paying special attention to improvement of the self, an emphasis on human value, and promoting an integration of diverse *Xin-Yangs* are the main characteristics of Chinese spirituality) (pp. 37-39). He further stated that these characteristics are in consistence with the core characteristics of spirituality in the West (Liang, 2015).

In terms of the relation between spirituality and religion, there is not such a strong tie for Chinese people. It might be possible that Chinese people are generally less religious. Yet, another hypothesis would be that Chinese people rarely stick to any single religion to form their belief system; instead, they take what they consider helpful from each religion. Consequently, they are not pious religious believers on any single religion, but they are not non-religious either. Nisbett, Peng, Choi, and Norenzayan (2001) provided a helpful way of understanding it:

Religions in East Asia have long been characterized by their interpenetrating and blending qualities. Societies and individuals readily incorporate aspects of several different religions into their worldviews. In contrast, for Christians, there is a strong tendency toward insistence on doctrinal purity. This sometimes results in religious wars in the West, a rarity in East Asia. (p. 304)

In addition to this, studies have been done in comparing religious motivation between Catholics, Jews, and Protestants. It was found that the religious motivation of Catholics and Jews is socially and community based, while for Protestants, their religious motivation is more individualistic. Therefore, it was concluded that differences in religious groups are thought to be representative of differences in cultures (Cohen and Hill, 2005; Cohen, Hall, Koenig, and Meador, 2007).

Lu and Guo (2014) stated that “精神性所代表的意义因文化的不同而具有明显的各自文化认同和民族特征。由于中西文化的差异，精神性的结构和功能也不一样” (the difference between spirituality-represented meanings is due to cultural differences, and these meanings have their distinct cultural identification and ethnic traits. Because of the difference between Chinese and Western culture, the structure and function of spirituality are different as well) (p. 510). Hao (2009) also stated that “不同的宗教带有严格的文化认同和明显的民族特

征, 因此精神性追求所包含的意义也就因传统文化的不同而迥异” (different religions have strict cultural identities and distinct ethnic characteristics, and therefore the meaning of spiritual pursuit are different as well due to cultural difference) (p. 89). In the west, the definition of spirituality is usually related to religion because of the religious tradition; while in China, the subjects of spirituality studies are not anywhere close to be religious. Consequently, “...我们在研究精神性的本土化过程中, 更需要从中国的现实生活考虑, 以科学的方法更广泛地研究人文的精神性” (...when we try to localize the studies of spirituality, we need to take into consideration China’s reality and use scientific methods to comprehensively study spirituality) (Lu, & Guo, 2014, p. 510).

In his article, Zhuo (2010) compared between Confucian spirit (*Ren-Ai*, loving benevolence) and Christian spiritual transcendence. Throughout the comparison, the author stated that:

“‘精神性’关涉到个体, 亦与群体共在密不可分。个我的精神性触及人的内心世界, 乃其内在修养。...但这种“修己”并不仅仅是洁身自好, 而有其从己出发, 超越自我的公众责任,...修养内心并不是孤立的, 封闭式修养, 这种‘内在精神’实质上应有着对宇宙的包容和把握, 它用超越物质之‘身’而体现出更高境界, 显露出一种由‘内心’所达的神圣之维,...” (Spirituality involves not only the individual, but also the larger group that is outside of the individual. The spirituality of any individual is related to one’s inner world, which is the inner *Xiu-Yang* (self-cultivation)...It is not just to better oneself, but to have a sense of public responsibility... *Xiu-Yang* is not to confine or seclude the individual; instead, this inner spirit encompasses a sense of embracement and certainty of the universe. It represents itself in a higher realm that transcends the physical

body, and it indicates the transcendent dimension that the inner world has reached....).
(pp. 1-2)

Essentially the author believes that Chinese Confucian philosophy has been teaching people to constantly improve oneself as well as to care about the people around the self, and it is a sign of one's spirituality. A sense of connectedness was also an important dimension that is associated with spirituality in Western literature, and it seems that there is some similarity between Western and Chinese scholars in terms of the conceptualization of spirituality.

Li and Cai (2016) stated that "...在大学生精神性研究领域，目前学界对“精神性”还没有一个公认、清晰的界定，学者们主要从词源追溯、多维构成以及动态建构等不同角度来尝试阐释” (...in the research area of college student spirituality, there is not a well-accepted and clearly definition for spirituality. Scholars have intended to clarify the definition from etymological perspective, multiple-dimension, and dynamic construction) (p. 104).

Xin-Yang 信仰, is it Chinese Spirituality?

Luo (2007) postulated that a belief was the foundation of *Xin-Yang* (信仰), although *Xin-Yang* (信仰) has a much deeper meaning than belief does. Specifically,

“信仰, 是人们关于普遍、最高 (或极高) 价值的信念...信仰是一种信念, 具有信念的基本特征, 即对于某些尚未被实现和证实的客观状态、观念等等的确信...信仰是信念的一种特殊的、强化的、高级的形式” (*Xin-Yang* is the belief that people hold about the universal, highest or very high value ...*Xin-Yang* is a type of belief and it has the basic characteristics of a belief, which is a certainty over some objective conditions or ideas that have not been realized or validated... *Xin-Yang* is a special, consolidated, and advanced form of beliefs). (Li, 2000, p. 4)

Ni, Cao, Fan, and Xu (2015) surveyed 900 college students in China to understand their current status on *Xin-Yang* (信仰), they found that “大学生对信仰选择迷茫无措，且信仰具有变动性和多元化的特征” (these college students are confused and bewildered about *Xin-Yang*, and their *Xin-Yang* is changeable and multifaceted) (p. 31). It was reported that only 6% of the surveyed students *Xin-Yang* (信仰) Marxism, 8% of them have a religious *Xin-Yang* (信仰), 13% worship some kind of idol, 28% *Xin-Yang* (信仰) science, 16% place their *Xin-Yang* (信仰) in traditional Chinese cultural heritage, and the remaining 29% reported that they do not have any *Xin-Yang* (信仰). However, it is important to note that “有82%的受访者认同信仰的重要性” (82% of these college students believed that it is very important that one has *Xin-Yang*) (Ni, Cao, Fan, and Xu, 2015, p. 31). For those who did not have a clear sense of *Xin-Yang* (信仰), they hope to construct their own. These researchers provided their own definition of *Xin-Yang* (信仰) that is “既不同等于宗教也不同等于理想，而是一种执着的人生态度和追求，是个体对自己生存的意义和价值、生活的前途和命运、人生的状态和归宿等等的超越性把握和持有” (not the same as religion, nor is it the same as aspiration, but it is a perseverant attitude and pursuing in one’s life. It is the individual’s sense of certainty and control over the transcendence of one’s meaning of living and value, one’s destiny of life, one’s living condition and destination) (p. 31).

Researchers have gradually adapted their understanding of the concept *Xin-Yang* (信仰). It was indicated by the fact that some researchers once believed the most effective or the best *Xin-Yang* (信仰) comes from science and relies on science (Li, 2000). Then gradually, the researchers’ mindset toward *Xin-Yang* (信仰) is less limiting, such that they think it is important to respect the Chinese culture whenever talking about *Xin-Yang* (信仰) in China. Specifically,

Chinese culture is very diverse because many other cultures have contributed to the formation process. For instance, we have 56 different ethnicities, yet we are all Chinese; and we value Confucianism, Buddhism, and Daoism, but we cannot say which philosophical system is ruling over the rest (Li, 2012). It is possible that the reason that the researchers adapted their approach toward *Xin-Yang* (信仰) is because the regulation on “信仰自由” (freedom of *Xin-Yang*) in Chinese Constitution has been revised for many times. When critical religious incidents or major sociopolitical movement like Cultural Revolution occurred, the government would make adjustment in this aspect, which would consequently change people’s ideology toward *Xin-Yang* (信仰). Fortunately, more and more researchers share the understanding that we cannot just say a specific type of *Xin-Yang* (信仰) is good or bad, instead, we need to adapt to a mindset in which pluralistic *Xin-Yang* (信仰) are accepted (Fan & Fan, 2016).

Some researchers chose to translate *Xin-Yang* (信仰) into “faith” (Luo, 2007; Hu, 2014), and the current author does not think that “faith” could fully capture the meaning of this Chinese concept. Hu (2014) summarized four major characteristics of *Xin-Yang* (信仰), which are 1. 信仰是一种“极度”相信的心理状态; 2. 信仰的对象可以是思想也可以是宗教; 3. 强调信仰的行为特征主要是极度相信; 4. 信仰过程注重整体性思维, 把信仰看成知、情、意、行的高度统一” (1. it is a very intense psychological state of believing in something; 2. the subject of *Xin-Yang* 信仰 could be ideology or religion; 3. the main characteristic of someone’s behavior of *Xin-Yang* 信仰 is being in an intense psychological state of believing in something; and 4. the process of *Xin-Yang* 信仰 is a holistic thinking process, which requires a unity of thoughts, emotions, will, and action) (p. 12). While for faith in English, the meanings of the word include: a) allegiance to a duty or a person; b) fidelity to one's promises; c) sincerity of intentions; d)

belief and trust in and loyalty to God; e) belief in the traditional doctrines of a religion; f) firm belief in something for which there is no proof; g) complete trust; h) something that is believed especially with strong conviction (Merriam-Webster's collegiate dictionary, 1997). It seems that three out of these eight definitions of "faith" are similar to *Xin-Yang* (信仰), which again raises the question of direct translation of concepts into another language that was mentioned in previous section of this paper.

Existing Measures on Spirituality

Even though it was stated that "given the multiplicity of religious and spiritual meanings, self-ratings of religiousness and spirituality (e.g. Likert-type ratings) are likely to yield uninformative and ambiguous data" (Zinnbauer et al., 1999, p. 914), Likert-type of measurements are still utilized quite often in the field to study the concept of spirituality. There are many existing Likert-type scales that measure the concept of spirituality from different perspectives. Here the author will briefly demonstrate several of the scales. Spiritual Transcendence Index (STI; Seidlitz, et al., 2002) measures the "perceived cognitive, affective, motivational, and transcendent concomitants of spirituality" (p 451). One subscale is coming from a specific relationship with God, while the other subscale is from a broader sense of spirituality. An item of the scale is "I maintain an inner awareness of God's presence in my life".

For Spiritual Well-Being Scale (SWBS; Ellison, 1983), ten items that have a reference to God measuring Religious Well-Being (RWB), specifically assessing an individual's relationship with God; and 10 items measure Existential Well-Being (EWB), which is measuring an individual's sense of life purpose and overall life satisfaction. An item in the RWB subscale would be "I believe that God loves me and cares about me".

Spiritual Index of Well-Being (SIWB; Daaleman & Frey, 2003) is a 12-item instrument that measures one's perceptions of their spiritual quality of life. The scale defines spirituality as a sense of meaning or purpose from a transcendent source. The scale is divided into two subscales: (1) self-efficacy subscale and (2) life-scheme subscale. An item in the SIWB scale is that "I don't know how to begin to solve my problems".

Spiritual Experience Index-Revised (SEI-R; Genia, 1997) is a 23-item scale that measures spiritual maturity in people with diverse religious and spiritual beliefs. The scale is a revised version of the Spiritual Experience Index. Mainly, the original has been shortened and revised into two subscales: Spiritual Support (13 questions) and Spiritual Openness (10 questions). Higher scores on the SEI were significantly correlated with lower dogmatism and intolerance of ambiguity. The SEI was also moderately correlated to higher religious participation and positively correlated with intrinsicness and quest. An item in the SEI-R scale is "My relationship to God is experienced as unconditional love".

Spiritual Assessment Inventory (SAI; Hall & Edwards, 1996) are measuring two hypothesized dimensions of spiritual maturity: awareness of God and quality of relationship with God. The scale was composed of six factors of spirituality maturity: Awareness, Instability, Grandiosity, Realistic Acceptance, Disappointment, and Impression Management. An item of the SAI is "I have a good sense of the direction in which God is guiding me".

Miller Measure of Spirituality (MMS; Miller, 2004) is composed of two dimensions: prosocial beliefs and the importance of a higher being. An example item of the second dimension is "My belief in a higher being affects and influences most of my life".

Spiritual Transcendence Scale (STS; Piedmont, 1999) is a 24-item scale that has three subscales: Universality, Prayer Fulfillment, and Connectedness. An example item of the scale is “When in prayer or meditation, I have become oblivious to the events of this world”.

Some Chinese scholars have started localizing the concept as well as measurement of spirituality. For instance, Liang (2006) revised the MMS into a scale that still has the same two dimensions: prosocial beliefs and the importance of a higher being. However, the items were reduced to 16.

Liu (2007) took a step further and developed a scale measuring spirituality. The researcher came up with four factors of spirituality based on the Western literature, and these four factors are beliefs in a sacred, transcendent experience, pursuit of values, and open to participate. The final version of the scale include 24s items.

These existing English measures are all landing on the concept of spirituality. Because these scales were developed in American society, the concept of spirituality is not only related to Christian religion, but it also is largely informed by the Christian religion. Take the Spiritual Transcendence Index for example, researchers claimed that it is “its focus on perceived psychological effects of one’s spirituality rather than on specific behaviors or beliefs, and its lack of reference to ‘religion’” that differentiate the scale from other scales that “connotes organized religion” (Seidlitz et al, 2002, p. 441). However, taking a further look at the scale, one finds that four of the eight items include the word “God”. It was reported that 96% of Americans report that they believe in God (Shorto, 1997). Therefore, it makes sense to people when it is applied in societies that are highly informed and influenced by Christianity, such as U.S. However, we need to remind ourselves of the fact that it is perhaps problematic to people from other cultures where Christianity and the concept “God” are not as pertinent. When this measure are introduced to

people in these cultures, one would postulate that they are not likely to score high on spiritual transcendence, and it might be because that they do not identify with the concept “God”. But is it really true that these individuals are less spiritually transcendent?

Similar problems could be seen in these other scales of spirituality in which the concept “God” was frequently mentioned, since they were all developed in contemporary America. For the scale SIWB that the word “God” was not mentioned specifically, and the two dimensions of the scale are “self-efficacy” and “life scheme”. However, it seems that there has been some distance between the conceptualization of spirituality in the scale and the core feature of spirituality that speaks to the search to a higher power or a sacredness.

It is widely accepted in Western culture (E.g., American culture) that people who think themselves as spiritual but not religious are usually incorporating the concept of God in their conceptualization of spirituality. According to Emmons and Crumple (1999), approximately 95% of the participants in a survey report a belief in God, and they claimed that the concept of “sacred” that is frequently mentioned in the definition of spirituality could not exist without God. In order to understand the concept of spirituality in Chinese culture, the current author tends to keep this in mind when approaching the concept of spirituality. It is essential that the conceptualization of spirituality is not influenced by Western ideology such that the universal acceptance of the association with God is transplanted to the current study.

For the revised Chinese scale of spirituality and Chinese scale of spirituality, the current author believes that these researchers still mainly base their understanding of spirituality on the Western literature, which is limiting in and of itself. It is very important that we try not to fit the Western understanding with Chinese college students; instead, we need to know what spirituality means to this population.

Chapter III: Methods

The current study is composed of two parts. The first part was to obtain preliminary data for developing the scale through focus groups and interviews. The second part is the scale development, validation of the scale, and the exploration and interpretation of the relationship among variables.

Study Part 1: Preliminary Investigations

Focus groups. Three focus groups were conducted to help understand the concept of spirituality among Chinese college students. The first group consisted of four Chinese undergraduate second-year students, one male and three female at the University of Kansas. Two students were majoring in psychology, one in accounting, and one in history. These Chinese students have only stayed in America for a year or two. Consequently, it is more likely that their value system is still largely representative of the Chinese college student population. The current author was the facilitator of the first focus group, and asked the following questions:

1. 你如何理解精神性？你怎样定意或描述它？在你的生活中你怎样体会到它的存在？你觉得它与你生活的价值有什么样的联系？你觉得你自己的精神性是体现在哪里的？(How do you understand “spirituality”? How do you describe it? How do you feel its existence in your everyday life? How do you think it is in connection with your life value? How do you think your own spirituality is shown?)
 - a. 你对重视个人修为有什么看法？(Why do you think it is important to pay attention to “ge ren xiu wei”?)
 - b. 你怎么理解强调人性价值？(How do you understand the importance of the value of humanity?)

- c. 你对推崇信仰的多元整合怎么看? (How do you see the promotion of integrating diverse *Xin-Yangs* 信仰?)
- d. 你怎么理解中国文化中“天人合一”的说法? (How do you understand the concept of “tian ren he yi” in Chinese culture?)
- e. 你对于“命”如何理解? (How do you understand “ming”?)
- f. 你对于“报”如何理解? (How do you understand “bao”?)
- g. 你如何理解追求超越性和神圣性? (How do you understand “transcendence” and “sacredness”?)
2. 你如何判断一个人是否具有精神性? (How do you decide whether an individual is spiritual?)
3. 你如何理解精神性和宗教的关系? 精神性涵盖宗教? 宗教涵盖精神性? 都不是? (How do you understand the relation between spirituality and religion? spirituality includes religion, vice versa, or neither?)
4. 对于精神性这个概念的理解, 你还有什么要补充的? (Do you have anything else to add to what you have shared?)

The second group of three male undergraduate students was recruited from a private university in China. One student was in his first year of studying mechanical engineering management, and the other two students were in their second year of studying architectural engineering management. These students were currently living in China, and it is reasonable to conclude that their value system is representative of the Chinese college student population. The current author trained an individual who also has educational background in Psychology to conduct the second focus group. The same set of questions were asked.

Upon the completion of the focus groups, the author listened to the recording material of each focus group and took notes of the major points that each student has stated regarding all questions. The author transcribed one of the focus groups, because the other piece of recording material was missing during the transferring process.

The researcher has found that these students all confirmed the existence of the concept of spirituality; however, it was difficult for them to describe the concept or to give their own definition of it. Prompted for the second time, some participants gave a definition of spirituality that is pertinent to a cognitive ability that helps people to perceive and understand their surroundings. In terms of the function of spirituality, participants have given consensus that spirituality is helpful in guiding behaviors, motivating, supporting human understanding, and providing explanations for certain inexplicable phenomena.

When it comes to the relationship between spirituality, *Xin-Yang* 信仰, and religion, these students also reached consensus. Before getting into the relationship, it is important that we understand the concept of *Xin-Yang* 信仰, it is a concept Chinese people refer to as “对某种主张、主义、宗教或某人极度相信和尊敬，拿来作为自己行动的指南或榜样” (the status of believing or admiring a proposal, a doctrine, a religion, or an individual, and use the proposal, doctrine, religion, or the individual as a guideline or a model for one’s behaviors) (*Xian Dai Han Yu Da Ci Dian Shang Ce*, 2000). Participants all agreed that spirituality is the broadest concept that includes *Xin-Yang* 信仰 and religion. Within the realm of *Xin-Yang* 信仰, some people are religious and believe a specific religion.

Last but not least, the common traits that people who are spiritual did not reach consensus within these participants. Some of the mentioned traits include: independent, not easily

influenced by others, having a clear goal, sensitive, subjective, decisive, perseverant, and could be singled out by others.

Therefore, based on the data that was gathered from these two focus groups, the researcher consulted several experts in the field of psychology and decided to conduct a third focus group that is focusing on the concept of *Xin-Yang* 信仰 among Chinese undergraduate students. The set of questions are as follows:

1. 说到信仰你会想到什么? (What do you think of when asked about *Xinyang* 信仰?)
2. 你如何定义信仰? (How do you define *Xinyang* 信仰?)
3. 你觉得信仰在日常生活里面如何体现? (How do you see *Xinyang* 信仰 in everyday life?)
4. 你觉得信仰和价值/生命的意义有什么关系? (What is the relation between *Xinyang* 信仰 and values/meaning in life?)
5. 你觉得信仰在你的日常生活里面如何体现? (How is your *Xinyang* 信仰 reflected in life?)
6. 你如何判断一个人有信仰? (How do you tell whether one has *Xinyang* 信仰?)

The current author listened to the recording material of the third focus group and took notes of the major points of each participants. After the third focus group, which included the researcher and three undergraduate students out of the first focus group (one male student and two other female students), researcher has gathered the following information: *Xin-Yang* 信仰 is something an individual cherishes and it provides long-lasting spiritual power that will affect one's thoughts and ideas and motivates one's behaviors. It is closely related to one's values and meaning in life and will affect one's everyday life. *Xin-Yang* 信仰 can influence one's life

philosophy and it can be anything ranging from cooking and music to culture and one's outlook on life, world, and values.

Interestingly, all participants frequently referred to religion when they gave examples. The main idea remained that *Xin-Yang* 信仰 incorporates religion, meaning that *Xin-Yang* 信仰 is the broader concept. *Xin-Yang* 信仰 is the Chinese word the current author decided to use and study among Chinese college students.

After consulting the experts who are all professors in the field of psychology, the current author decided to collect more information on Chinese college students' understanding on the concept of *Xin-Yang* 信仰.

Face-to-face brief interviews. With the help of several research assistants, face-to-face interviews were conducted with 180 college students from a university in central China with regard to the following questions:

1. 你觉得信仰是什么？ (What do you think *Xin-Yang* 信仰 is?)
2. 你认为信仰有什么作用？ (What do you think is the function of *Xin-Yang* 信仰?)
3. 说到信仰你会想到什么？ (What do you think of when you think of *Xin-Yang* 信仰?)
4. 有信仰的人是什么样的？ (What are people who have *Xin-Yang* 信仰 like?)
5. 没信仰的人是什么样的？ (What are people who do not have *Xin-Yang* 信仰 like?)
6. 一个人有信仰会体现在什么方面？ (How would one's *Xin-Yang* 信仰 be amplified?)
7. 一个有信仰的人会有怎样的感受或者状态？ (How would people who have *Xin-Yang* 信仰 feel or how would they look like?)

8. 一个人有信仰的人会有怎样的行为表现？ (How would people who have *Xin-Yang* 信仰 act?)

The interviews were recorded and transcribed by the research assistants in China and the current author analyzed the data using the grounded theory method. Specifically, the data analysis followed the analytical steps laid out by Eaves (2001). All answers were read through and analyzed as to whether they can fall in any of the three following areas: the definition of *Xin-Yang* 信仰, the function of *Xin-Yang* 信仰, and the characteristics of *Xin-Yang* 信仰.

For the definition of *Xin-Yang* 信仰, answers of questions 1 and 3 were analyzed. A total of 267 items were included in the open coding stage. Then in the axial coding stage, 17 items were deleted because there is no useful information that these items could contribute (e.g., “I cannot think of anything” (想不到), “I don’t have any *Xin-Yang* 信仰” (没有信仰), “I don’t know” (不知道), or “mitochondrion” (线粒体)). In the selective coding stage, 19 categories were drawn from the 250 items that are “worship” (崇拜); “goals, directions” (目标, 方向); “principles, standards” (原则, 准则); “motivation” (动力); “beliefs” (信念); “non-beliefs” (非信念); “persistently believe, Believe” (执念, 相信); “inner sustenance” (寄托); “pursuit, yearning” (追求, 向往); “light, guidance” (光明, 向导); “power” (力量); “support” (支撑); “religion” (宗教); “sacrifice” (牺牲); “political *Xin-Yang* 信仰” (政治信仰); “outlook on value, outlook on the world, outlook on life” (价值观, 世界观, 人生观); “positive and beautiful” (美好的); “responsibilities on a macro-level” (宏观的责任); “soul-related” (灵魂的).

For the function of *Xin-Yang* 信仰, answers of question 2 were analyzed. A total of 192 items were included in the open coding stage. Then in the axial coding stage, 2 items were deleted because there is no useful information that these items could contribute (e.g., “It can

affect one's behaviors" (可以影响一个人的行为)). In the selective coding stage, 21 categories were drawn from the 190 items that are "guide" (引领, 指导, 引导); "achieve goals" (实现目标); "encourage, motivate" (激励, 给予动力); "conquer difficulties" (克服困难); "make the will firm" (坚定意志); "support" (支持, 支撑); "inner sustenance, comfort" (寄托, 安慰); "inspire" (启发); "fulfill" (成全); "enrich" (丰富); "meaning" (意义); "promote growth" (促进成长); "promote self-confidence" (增强自信心); "guide toward goodness" (导人向善); "guide toward evil" (相反的作用); "constrain, control" (约束, 控制); "hold in awe" (敬畏, 坚守); "national revival" (民族复兴); "Society forces individuals to identify" (社会强制个体认同); "make one dependent" (让人有依赖感); "no use" (没作用).

Categories 1 and 2 are then combined into one category "aim and guidance" (目标导向); categories 3 through 5 are combined into a category "move forward" (推动 向前); categories 6 and 7 are combined into a category named "support and comfort" (支撑, 安慰); categories 8 through 13 join one category "promote and level up" (促进, 提升); categories 14, 16, and 17 fall into one category "restrict" (约束), while category 15 is the opposite of this function—"mislead to wrong" (误入不正当的道路).

The third area is the characteristics of *Xin-Yang* 信仰, answers of questions 4, 7, and 8 were analyzed. A total of 650 items were included in the open coding stage. Then in the axial coding stage, 9 items were deleted because there is no useful information that these items could contribute (e.g., "It depends on the specific individual" (因信仰不同而不同), "This is what I want" (这是我要的), "There is no difference" (没什么两样). In the selective coding stage, 53 categories were drawn from the 641 items that are "have a firm goal or belief" (有坚定的目标,

信念); “being firm” (坚定); “have one’s own opinion” (有主见); “work hard” (努力奋斗); “have motivation” (有动力); “optimistic, eager, and to advance” (乐观, 积极, 向上); “not afraid, courageous” (无畏, 有勇气); “insisting, not giving up” (执着, 不放弃); “have spiritual support” (有精神寄托); “orderly and serious” (有条理, 认真); “being cautious” (做事严谨); “self-confident” (自信); “hopeful” (充满希望); “following rules” (有原则); “be restricted in certain aspects” (有所约束); “honorable” (正直); “full of passion” (充满热情); “trustworthy” (值得信任); “responsible” (责任感); “extreme” (偏执的); “hold in awe” (敬畏); “pious” (虔诚); “protect one’s *Xin-Yang* 信仰” (维护自己信仰); “life is meaningful” (人生有意义); “life is augmented” (生活充实); “appreciative” (感恩); “great” (伟大); “holy” (神圣); “like a Chinese communist” (像党员那样); “support Chinese communists” (拥护中国共产党); “spiritual world is enriched” (精神世界丰富); “full of energy” (精神抖擞); “happy and happiness” (幸福, 快乐); “aggregable” (待人处事很好); “kind” (善良); “excellent” (优秀); “doing good deeds” (做好事); “dedicated” (奉献); “care for others” (关爱他人); “valuable” (有价值); “love the country and its people” (热爱祖国人民); “moderate” (平和); “self-disciplined” (自律); “independent” (独立); “being kind to oneself” (善待自己); “know oneself” (有清晰的认知); “decisive” (做事果断); “loyal” (忠诚); “liberal” (自由); “united” (团结); “mediocre” (碌碌无为); “superstitious” (迷信); “aimless” (没有目标).

There are certain categories that are further combined into some condensed categories. Categories 1 through 3 are combined into “have a firm goal, direction, or belief” (有坚定的目标, 方向, 信念). Categories 4 and 5 join into a category “work hard and have motivation” (努力奋斗, 有动力). Categories 7 through 9 are combined into “insisting, not giving up” (执着, 坚持,

不放弃). Categories 10 and 11 form one category “being cautious” (严谨). Categories 12 and 13 are combined into one category “hopeful and self-confident” (充满希望, 自信). Categories 14 and 15 form one category “following rules” (有原则). Categories 18 and 19 join into a category “trustworthy and responsible” (值得信任, 有责任感). Categories 22 and 23 form one category “pious” (虔诚). Categories 24 through 26 are combined into “life is meaningful and augmented” (人生有意义, 充实). Categories 27 and 28 form one category “great and holy” (伟大, 神圣). Categories 29 through 30 are combined into “like a Chinese communist and support Chinese communists” (像党员那样, 拥护中国共产党). Categories 31 and 32 form one category “spiritual world is enriched and full of energy” (精神世界丰富, 精神抖擞). Categories 34 through 41 are combined into “demonstrate one’s value toward outside” (向外体现自身价值). Categories 42 through 47 are combined into “improve one’s self inwardly” (向内完善提高自身). Categories 51 and 53 form one category “aimless” (没有目标).

There are certain items that could not be categorized into any category due to the frequency that these items show up is very low (one time), such as “prioritize one’s *Xin-Yang* 信仰” (信仰第一), or “very painful” (痛苦).

Questions 5 and 6 are analyzed as well just to verify if there is any new information that could be added to the categories. The results indicate that the categories in questions 5 and 6 could be utilized to develop items, even though they do not add any new information to the dimensions.

Based on the information gathered from all three focus groups and these face-to-face interviews, the current researcher decided that there are three different dimensions of the concept

Xin-Yang 信仰 when it comes to what *Xin-Yang* 信仰 is, what the function of *Xin-Yang* 信仰 is, and what the characteristics of *Xin-Yang* 信仰 are.

For the definition dimension, there are: “ideas” (观念), “direction” (方向), “power” (力量), “positive” (美好的), and “related to soul” (灵魂的).

For the function of *Xin-Yang* 信仰 dimension, there are: “goal and guidance” (目标导向), “motivate, move along” (推动, 向前), “Support and comfort” (支撑, 安慰), “promote growth” (促进向上), “restrict” (约束), “national rejuvenation” (民族复兴), “society forces individual to identify” (社会强制个体认同), “makes individual dependent” (让人有依赖感), and “no use” (没作用).

For the characteristics dimension, there are: “cognition in pursuing the goal” (目标追求中的认知表现), “behaviors in pursuing the goal” (目标追求中的行为表现), “attitudes in pursuing the goal” (目标追求中的态度表现), “mental status” (精神状态), “interaction with others” (为人 处事中的表现), “reactions when facing one’s *Xin-Yang* 信仰” (面对信仰的表现), and the “characteristics of the self” (自我的特点). Items will be developed in each of these above-mentioned dimensions.

Study Part 2

Scale development. The scale development method (DeVellis, 2003) was followed to develop the items of the scale.

Focus groups and item development. Three focus groups of Chinese international undergraduate students in the U.S. and of college students in China were conducted to understand how Chinese undergraduate students understand the concept of spirituality. Along with the Chinese scholars’ understanding described in the literature review, the author of current

study will develop a pool of items for the concept of spirituality. Following areas will be covered when developing items: what is *Xin-Yang* (信仰), what is the function of *Xin-Yang* (信仰), and what are the characteristics of *Xin-Yang* (信仰).

Expert review for face validity. After the pool of items is developed, a panel of Chinese experts who are scholars in the field of psychology will be invited to review and comment on the items. Due to the Chinese cultural context that the scale is developed in, as well as its potential relation to this population's psychological health, it is the current author's understanding that it is more appropriate to consult experts in the field of psychology. Both individual feedback and a group discussion will be pursued. This process will help to establish face validity for the scale.

Pilot Study. The pilot study was designed to solicit opinions on whether the participants feel clear when answering the questions, whether they think the items are asking them about *Xin-Yang*, and whether they have any additional suggestions for the items. A total of 93 items were administered online to 36 people to increase facial validity. Of the 36 people, 28% are male, and 61% are female. Their age range from 18 to 49 years ($M=31.8$, $SD=7.7$). For their educational level, 31.3% are pursuing or having a Bachelor's degree, 28.1% are pursuing or having a Master's degree, and 40.6% are pursuing or having a doctoral degree.

Suggestions on the wording of the items, the way the questions were asked, and repetitive items were incorporated in editing the items. A reliability analysis was applied to in the pilot study, and items that have a mean less than 3 were deleted.

After the pilot study, a group meeting was held among the current author, the academic advisor of the current author, a visiting scholar in counseling psychology, and three other doctoral students to discuss items. The number of total items were reduced to 42 and 4

dimensions (personal characteristics, mental guidance, relationship to others, and values) were proposed instead of the original three dimensions (See Appendix 1 & 2 for specific items).

Participants. A sample of 2,307 college student participants were recruited online from five different provinces, autonomous regions, and direct-controlled municipality in China (Shaanxi, Hubei, Inner Mongolia Autonomous Region, Beijing, and Xinjiang Uygur Autonomous Region). A total of 704 valid surveys were maintained through checking against the two validity check items embedded in the survey. Another 504 valid surveys were collected through paper-pencil format at a university in Central China.

Among the 1,207 participants, 36.3% are male, and 63.6% are female. Their age range from 17 to 45 years ($M=20.1$, $SD=2.1$). For their educational level, 37.9% are in freshman year, 26.3% are in sophomore year, 22.1% are in junior year, 10.1% are in senior year, and 3.6% are in their fifth year. In terms of relationship status, 71.1% are single, while 27.5 are in a relationship. Majority of the students do not work (88.1%), while 9.5% reported that they have a part-time job. Only 2.4% reported that they have a full-time job. Regarding religions belief, 7.7% of the students reported having a religious belief, while 92.3% reported that they do not have one.

Measures. In order to fulfill the purposes of the current study, the current author administered the measure of *Xin-Yang* (信仰), a measure of spirituality, a measure on hope, a measure on life satisfaction, a measure of symptoms, a measure of self-esteem, and a measure of self-efficacy. Specifically, the following scales will be utilized.

Xin-Yang scale. The scale is a 42-item scale that has four subscales: outlook on values, mental guidance, relationship to others, and personal characteristics. The items can be answered using a 5-point scale that ranges from 1 (strongly disagree) to 5 (strongly agree).

Spiritual experience index-revised. The Spiritual Experience Index-Revised (SEI-R; Genia, 1997) is a 23-item scale measures faith and spiritual journey, aiming to not impose any particular faith as part of the questions. This questionnaire is a revised version of the Spiritual Experience Index. Mainly, the original has been shortened, and, through factor analysis, been revised into two subscales: Spiritual Support (13 questions) and Spiritual Openness (10 questions). The measure can be answered using a 6-point scale that ranges from 1 (strongly disagree) to 6 (strongly agree). The internal reliability ranges from .79 to .95.

The integrative hope scale. The Integrative Hope Scale (IHS; Schrank, Woppman, Sibitz, & Lauber, 2011) is a self-rating instrument with items being rated on a six-point Likert scale from 1, strongly disagree, to 6, strongly agree. It provides an overall score and four dimension scores, obtained by summing up the individual item scores, with negative items being rated inversely. This produces possible overall hope scores ranging from 23 to 138 with higher scores representing higher hopefulness. The scores for the sub-dimensions vary according to the number of items. The internal reliability ranges from .85 to .92.

The satisfaction with life scale. The satisfaction with life scale (SWLS; Diener, Emmons, Larsen, & Griffin, 1985) is a 5-item scale that measures global cognitive judgments of one's life satisfaction (not a measure of either positive or negative affect). Individuals need to indicate how much they agree or disagree with each of the 5 items using a 7-point scale that ranges from 1 (strongly disagree) to 7 (strongly agree). The internal reliability ranges from .66 to .81.

Brief Symptom Inventory--18. (BSI-18; Derogotis, 2000). It is a self-report measure assessing psychological symptoms and is a briefer version of the Symptom Checklist-90-R. Items are rated on a 5-point scale ranging from 0 (not at all) to 4 (extremely) to reflect the level

of distress an individual has experienced by each of the symptoms during the previous week. It measures three primary symptom dimensions (Depression, Anxiety, and Somatization) as well as global severity and is designed to provide an overview of a patient's symptoms and their intensity at a specific point in time. Dimension and global scores from the BSI-18 test correlate highly (i.e., $>.90$) with analogous scores from the SCL-90-R test based in a large community population.

Self-esteem scale. (SES; Rosenberg, 1965). It is a 10-item scale that measures global self-worth by measuring both positive and negative feelings about the self. The scale is unidimensional. All items are answered using a 4-point Likert scale format ranging from strongly agree to strongly disagree.

Self-efficacy scale. (SES; Schwarzer & Jerusalem, 1995). It is a 10-item scale that is designed to assess optimistic self-beliefs to cope with a variety of difficult demands in life. All items are answered using a 4-point Likert scale format ranging from not at all true to exactly true. Internal Consistency reported to be ranging from .76 to .90, with the majority in the high .80s.

Data analysis.

Confirmatory Factor Analyses. Current author performed several confirmatory factor analyses using robust maximum likelihood estimation (MLR) in Mplus v. 7.4 to test whether the subscales hold well. Accordingly, the nested model comparison will be conducted via likelihood ratio test (LRT). Full information maximum likelihood estimator (FIML) was used to handle missing data. Model fit was tested by using the comparative fit index (CFI), the Tucker-Lewis Index (TLI), and the root mean square error of approximation (RMSEA). MacCallum, Browne

and Sugawara (1996) have used 0.01, 0.05, and 0.08 to indicate excellent, good, and mediocre fit, respectively.

Item Factor Analyses. Due to the non-normality of the data, current author performed item factor analyses on the dataset. Accordingly, the nested model comparison will be conducted via Chi Square Difference Test (DIFFTEST). Weighted Least Square with Mean and Variance estimator (WLSMV) were used to handle missing data. Model fit was tested by using the comparative fit index (CFI), the Tucker-Lewis Index (TLI), and the root mean square error of approximation (RMSEA). MacCallum, Browne and Sugawara (1996) have used 0.01, 0.05, and 0.08 to indicate excellent, good, and mediocre fit, respectively.

Convergent validity. The survey dataset was also used to test for convergent validity in order to identify similarities and differences between the dimensions of the concept of *Xin-Yang* (信仰) among Chinese college students and those of the concept of spirituality in Western literature.

Concurrent validity. Based on the literature review, the current author found that spirituality was positive correlated with hope among African American adolescents, low-income job seekers, people in inpatient rehab units, and people with disabilities (Harley, & Hunn, 2014; Hong, Hodge, & Choi, 2015; Jones, Simpson, Briggs, & Dorsett, 2016). In addition, spirituality was also found to be significantly and positively correlated with life satisfaction among Hispanics and non-Hispanic Whites, adolescents in Portugal, undergraduate students, and community-dwelling persons in older age (Marques, Lopez, & Mitchell, 2012; Marquine, et al., 2014; Pashak, & Laughter, 2012; Skarupskia, Fitchettc, Evansa, & Leon, 2013). Research has established positive correlation between general self-efficacy and psychological well-being

(Ma, & Lin, 2006; Tong, & Song, 2004). In addition, self-esteem was identified as having correlated with psychological well-being as well (Chen, & Wang, 2004; Hu, Li, & Wang, 2006).

Because the established relations between spirituality and hope and life satisfaction, between self-efficacy and psychological well-being, and between self-esteem and psychological well-being the current author would like to examine whether a similar relation exists between *Xin-Yang* (信仰) and these different variables.

The 2000 Chinese college student dataset was utilized to explore the relation between *Xin-Yang* (信仰) and mental health among Chinese students and discuss possible similarities between the role of *Xin-Yang* (信仰) in Chinese students' psychological well-being and that of spirituality in the Western literature.

Chapter IV: Results

Qualitative Data Analysis

Qualitative data analysis was conducted on the data collected from the 180 brief interviews. The analysis followed the qualitative data analysis method based on the Grounded Theory outlined by Strauss and Corbin's (1990). The author took responsibility of analyzing the qualitative data, and a consensus approach was used in data coding at all stages (open coding, axial coding, and selective coding stages). The research team would go back and forth between the raw data (both notes from the focus groups and the brief interviews in transcripts) and group discussion till the consensus was reached. The results of the analysis are shown in the following three areas:

Meaning of Xin-Yang. The definition of *Xin-Yang* was derived from the analysis of brief interviews. When asked what *Xin-Yang* means to them, a total of 250 different answers were included in the open coding stage. Then in the axial coding stage, 11 subcategories were drawn from the 250 answers. They are "faith", "beliefs", "worldview", "guidelines for life", "moral limits", "persistence toward goals", "responsibilities", "psychological strength", "positive motivation", "mental support", and "lighthouse in heart". Under the subcategory "faith", there are concepts, such as "religion" and "political *Xin-Yang*". In the selective coding stage, 3 categories emerged based on semantic abstraction, meaning that semantically similar subcategories were eventually included in the same category. The categories are "ideology", "principles", and "emotional power". Finally the core category that "the definition of *Xin-Yang*" was identified. The results are illustrated in figure 1.

The function of Xin-Yang. For the questions of the function of *Xin-Yang*, a total of 190 answers were included in the open coding stage. In the axial coding stage, 10 subcategories were drawn from the 190 answers. They are “searching for meaning”, “pursuing a bright future”, “inspiring effort”, “promoting growth”, “improving confidence”, “meeting challenge”, “conquering difficulties”, “strengthening the will”, “avoiding wrong-doings”, and “setting standards for own behaviors”. In the selective coding stage, 4 categories emerged based on semantic abstraction. The categories are “guidance for life”, “growth facilitation”, “encouragement”, and “self-discipline”. The core category that is “the function of Xin-Yang” was identified. The results are illustrated in figure 2.

The characteristics of people who have Xin-Yang. A total of 641 answers describing the characteristics of *Xin-Yang* were identified at the open coding stage. In the axial coding stage, 18 subcategories were drawn from the 641 answers to describe the characteristics of *Xin-Yang*. The subcategories are “showing willingness to sacrifice”, “making industrious effort”, “being persistent approaching goals”, “hopeful” “optimistic”, “fulfilled” “happy”, “energetic”, “truthful”, “passionate”, “responsible”, “altruistic”, “pious”, “kind”, “peaceful”, “self-disciplined”, “independent”, “self-aware”. In the selective coding stage, 4 categories emerged based on semantic abstraction. They are “behaviors”, “mental state”, “relationship with others”, and “characteristics of the self”. Finally the core category “the characteristics of people who have *Xin-Yang*” was identified. The results are illustrated in figure 3.

The Survey Data Analysis

Descriptive analysis. A total of 1,219 complete surveys were collected online from five different provinces, autonomous regions, and direct-controlled municipality in China (Shaanxi, Hubei, Inner Mongolia Autonomous Region, Beijing, and Xinjiang Uygur Autonomous Region), and 503 through a paper-pencil format from a college in central China. Based on the result of two validity check items that asked participants to follow specific instructions (e.g., “Please choose strongly agree”), 704 of the 1,129 online surveys passed the validity check. A series of independent sample t-tests was conducted to compare the mean of items from the major variables between the 704 participants and the 515 participants who did not pass the validity check. The results showed that the mean difference for 95 out of 134 items are different in mean comparison. Hence, the decision was made to exclude the 515 surveys from all data analysis. In the end, a total of 1,207 surveys were included.

For the 42 *Xin-Yang* items that were included in the final survey, Means range from 3.40 to 4.32, SDs range from .67 to 1.12. Since a higher value indicates a higher level of *Xin-Yang*, it seems that the participants’ level of *Xin-Yang* tends to land on the higher end of the scale.

For the 23 Hope items that were included in the final survey, Means range from 3.50 to 5.23, SDs range from .76 to 1.37. For the positively worded items, the participants also tend to land on the higher end, potentially indicating a higher level of Hope. Except for this one item “I’ve been pretty successful in life”, most participants tend to endorse the lower end. Chinese college students’ level of hope is similar to the Mean of 4.08 identified in Schrank, Woppmann, Sibitz, and Lauber’s (2011) article among a group of Austria people who are older than 16 years.

For the 5 Life Satisfaction items that were included in the final survey, Means range from 3.03 to 4.36, SDs range from 1.45 to 1.73. It seems that the participants’ level of Life Satisfaction tends to locate on the middle part of the scale. Compared to the elderly sample mean

of 5.1 in Diener, Emmons, Larsen, & Griffin's (1985) original study, the Chinese college students' level of life satisfaction is lower.

For the 18 Brief Symptom items that were included in the final survey, Means range from 1.15 to 2.21, SDs range from .54 to 1.06. It indicates that the participants' level of symptoms tends to be lower in general. Compared to the range of Means of .19 to .94 in a Holland college student population (Meijer, de Vries, & van Bruggen, 2011) our Chinese participants' Means are a little higher.

For the 10 Self-Efficacy items that were included in the final survey, Means range from 2.11 to 3.05, SDs range from .76 to .88. It seems that the participants' level of Self-Efficacy tends to be falling in the middle part. The Means are comparable to the Means of 1.96 to 2.86 of a group of college students in Hong Kong (Schwarzer, Babler, Kwiatek, Schroder, & Zhang, 1997).

For the 10 Self-Esteem items that were included in the final survey, Means range from 2.52 to 3.16, SDs range from .63 to .88. It seems that the participants have a higher level of Self-Esteem. The range of Means of the Chinese college students is smaller than the range of Means from 1.20 to 5.00 among a group of American college students (Gray-Little, Williams, & Hancock, 1997).

For the 23 Spirituality items that were included in the final survey, Means range from 2.56 to 5.00, SDs range from 1.22 to 1.51. The Means of the "spiritual support subscale" items range from 3.45 to 4.17, but for the item "My relationship to God is experienced as unconditional love", the Mean was 2.56. Also, for the item "My faith enables me to experience forgiveness when I act against my moral conscience", the Mean was 2.76. Mostly, the endorsement of this subscale tends to stay in the middle part. The Means of the "spiritual

openness” subscale range from 3.56 to 5.00, which clearly indicated a higher openness endorsement among the participants (Please refer to table 23 and 24 for details). The Means are comparable to the Mean of 3.32 among a group of college students (Genia, 1991) (Please see table 1-2 for details).

Confirmatory factor analysis. Exploratory factor analysis (EFA) is usually used to explore possible factor structures of observed variables without presumption on the factor structure, while confirmatory factor analysis (CFA) is used to verify the preconceived factor structures of observed variables (Wang, & Wang, 2012). The current study hypothesized four dimensions of *Xin-Yang* based on existing theories. Dimension 1 is “personal characteristics” (个人特质) and has 19 items; dimension 2 is “mental guidance” (精神向导) and has 8 items; dimension 3 is “relationship to others” (与他人的关系) and has 9 items; dimension 4 is “values” (价值取向) and has 6 items. Thus, confirmatory factor analyses were performed for all factors using Maximum Likelihood Robust (MLR) as estimator in Mplus v. 7.4 (Muthén & Muthén, 1998-2015). In order to perform CFA, the data need to fulfil the requirement of multivariate normal distribution. The histograms all indicated that the item responses are not normally distributed. Therefore, confirmatory factor analysis does not apply to this dataset, even though the model fit for all factors are considerably well (under .08).

Item factor analysis. Item factor analysis (IFA) specifies a nonlinear relationship between binary, ordinal, or nominal item responses and the latent variable (Embreston, & Reise, 2000). Likert-type responses were treated as ordinal response instead of interval ones. It is applied to the *Xin-Yang* scale data. In addition, Weighted Least Square with Mean and Variance (WLSMV) in Mplus v. 7.4 (Muthén & Muthén, 1998-2015) was used as the estimator.

For Factor 1 (Characteristics) that has 19 items, the test statistic for model fit is 3216.649 (χ^2) ($p < .01$), with a CFI value of .854. The model has an RMSEA of .129. These statistics indicated a global misfit of this model. Thirteen items were retained based on having high loadings on the factor. The one parameter logistic model (1PL) fit significantly worse than two parameter logistic model (2PL), therefore, loading for each item was kept different instead of being made the same (See table 3 for details).

For Factor 2 (Mental Guidance) that has 8 items, the test statistic for model fit is 415.066 (χ^2) ($p < .01$), with a CFI value of .962. The model has an RMSEA of .128. These statistics indicated a global misfit of this model. All 8 items were retained based on having high loadings on the factor. The 1PL fit significantly worse than the 2PL, therefore, loading for each item was kept different (See table 5 for details).

For Factor 3 (Relationships to Others) that has 9 items, the test statistic for model fit is 277.405 (χ^2) ($p < .01$), with a CFI value of .978. The model has an RMSEA of .086. These statistics indicated a global fit of this model. All 9 items were retained based on having high loadings on the factor. The 1PL fit significantly worse than the 2PL, therefore, loading for each item was kept different (See table 7 for details).

For Factor 4 (Outlook on Values) that has 6 items, the test statistic for model fit is 292.483 (χ^2) ($p < .01$), with a CFI value of .986. The model has an RMSEA of .153. These statistics indicated a global misfit of this model. Three items were removed due to having low loadings on the factor. However, an expert consultation resulted in a total removal of this factor due to high conceptual overlapping between this factor (outlook on values) and the concept of Xin-Yang. Item 28, originally from factor 4, was included in factor 1 due to content similarity (See table 9 for details).

Based on the initial model fit of each factor and model modification indices, a number of method factors and error covariances were added in order to improve the model fit. In addition, category 1 (not apply at all) and category 2 (does not apply) were combined for all items in the Xin-Yang scale due to low frequency counts. Specifically, category 1 only ranges from .3% to 4.5% of the total count.

After applying the modification, Factor 1 (Characteristics) that now has 14 items was retested for model fit. The test statistic for model fit is 592.592 (χ^2) ($p < .01$), with a CFI value of .971. The model has an RMSEA of .078. These statistics indicated a global fit of this model (See table 4 for details).

Factor 2 (Mental Guidance) that now has 8 items was retested for model fit. The test statistic for model fit is 131.282 (χ^2) ($p < .01$), with a CFI value of .988. The model has an RMSEA of .075. These statistics indicated a global fit of this model (See table 6 for details).

Factor 3 (Relationships to Others) that now has 9 items was retested for model fit. The test statistic for model fit is 176.125 (χ^2) ($p < .01$), with a CFI value of .986. The model has an RMSEA of .072. These statistics indicated a global fit of this model (See table 8 for details).

A 3-correlated-factor model (including Factor 1, Factor 2, and Factor 3) was tested as the foundation to further test a higher-order factor model (Xin-Yang). The test statistic for model fit is 2769.389 (χ^2) ($p < .01$), with a CFI value of .935. The model has an RMSEA of .069. All the statistics indicated that there is a global fit of this model.

A higher-order factor model fit significantly worse than the 3 correlated factor model, which is indicated by the Chi-square test for difference testing (DIFFTEST) of 426.776 ($p < .01$); however, the model has an RMSEA of .077 with a CFI value of .916. Also, *Xin-Yang* accounts for a significant amount of variance in the 3 lower factors. Specifically, *Xin-Yang* accounts for

92.5% variance of lower order Factor 1 (Characteristics), Xin-Yang accounts for 48% variance of the lower order Factor 2 (Mental Guidance), and Xin-Yang accounts for 72% variance of lower order Factor 3 (relationship to Others).

Lastly, all 31 items were included as a whole, instead of having three lower-order-factors to test a single factor model. This result showed that the single factor model fit significantly worse than a higher-order factor model, which is indicated by the Chi-square test for difference testing (DIFFTEST) of 761.75 ($p < .01$), an RMSEA of .11, and a CFI value of .828. It indicated that a total score (or factor) will not be as useful as 3 separate factors.

Item Factor Analysis for Other Scales

For Integrative Hope scale that has 23 items, category 1 (strongly disagree) and 2 (disagree) for the positively worded items were combined because participants had low frequency counts in each of them. Therefore, category 1 and 2 for positive worded items were combined. In addition, bi-factors based on the positive and negative wording of the items were added to account for the residual variance that the Hope variable did not account for. Then the test statistic for model fit is 2176.8 (χ^2) ($p < .01$), with a CFI value of .905. The model has an RMSEA of .094. These statistics indicated a close fit of this model. (See table 10 for details).

For Life Satisfaction scale that has 5 items, after two error covariances were added to account for the residual covariance between some items, the test statistic for model fit is 7.105 (χ^2) ($p < .01$), with a CFI value of 1.0. The model has an RMSEA of .034. These statistics indicated a global fit of this model (See table 10 for details).

For Self-Efficacy scale that has 10 items, after two method factors and 4 error covariances were added to the model to account for the residual covariance between some items,

the test statistic for model fit is 278.348 (χ^2) ($p < .01$), with a CFI value of .986, and an RMSEA of .085. These statistics indicated a global fit of this model (See table 10 for details).

For Self-Esteem scale that has 10 items, after bi-factors were added to the model based on the positive and negative wording of the items to account for the residual variance that the Self-Esteem variable did not account for, the test statistic for model fit is 457.665 (χ^2) ($p < .01$), with a CFI value of .972. The model has an RMSEA of .103. These statistics indicated a close fit of this model (See table 10 for details).

For Brief Symptoms Index-18 that has 18 items, category 4 (severely) and 5 (very severely) for the positively worded items were combined because of the low frequency counts in each of them. Therefore, category 4 and 5 for positive worded items were combined. In addition, 2 method factors were added to the model to account for the residual covariance between some items. Then the test statistic for model fit is 759.016 (χ^2) ($p < .01$), with a CFI value of .765. The model has an RMSEA of .063. These statistics indicated a global fit of this model (See table 10 for details).

For Spiritual Experience Index-Revised (SEI) that has 23 items and 2 subscales, after 2 method factors and 4 error covariances were added to the model to account for the residual covariance between some items, the test statistic for model fit is 1803.977 (χ^2) ($p < .01$), with a CFI value of .963. The model has an RMSEA of .079. These statistics indicated a global fit of this model (See table 10 for details)

Structural Equation Modeling

After obtaining model fit for each latent variable for the measurement model, a structural equation modeling (SEM) was conducted on all variables. The purpose was to test if there are certain mediational relationships between these latent variables.

Based on the theoretical assumption that spirituality is positively related to many psychological well-being variables, *Xin-Yang* and SEI were used as the latent predictor variables respectively, and Hope, Life Satisfaction, Self-Efficacy, Self-Esteem, and Brief Symptoms were used as the latent criterion variables. The SEM tested the following relationships: between *Xin-Yang* and all the latent criterion variables; between SEI and all the latent criterion variables; whether hope is mediating the relationship between *Xin-Yang* and all latent criterion variables, and whether hope is mediating the relationship between SEI and all latent criterion variables.

Initially, the SEM did not converge using the original latent variables. Thus the factor scores of each participant were used to run multiple path models. When the relationship between Hope and all other variables was fixed, log-likelihood value for the path models is -10001.432, the model fit test statistic for model fit is 1378.963 (χ^2) ($p < .01$), with a CFI value of .535. The model has an RMSEA of .435. These statistics indicated a global misfit of this model.

At the same time, the relationship between *Xin-Yang* and Life Satisfaction, Self-Efficacy, Self-Esteem, and Brief Symptoms was significant when hope was not included ($\beta = .572$, $SE = .032$, $\beta^* = .494$, $p < .001$; $\beta = .460$, $SE = .028$, $\beta^* = .444$, $p < .001$; $\beta = .485$, $SE = .031$, $\beta^* = .453$, $p < .001$; $\beta = -.440$, $SE = .033$, $\beta^* = -.402$, $p < .001$). The relationship between SEI and Life Satisfaction and between SEI and Self-Efficacy was significant ($\beta = .107$, $SE = .028$, $\beta^* = .103$, $p < .001$; $\beta = .168$, $SE = .025$, $\beta^* = .182$, $p < .001$), but that with Brief Symptoms and Self-Esteem was not. The negative relationship between *Xin-Yang* and Brief Symptoms was significant, indicating that the higher one's *Xin-Yang* is, the lower the symptoms experienced by the individual. *Xin-Yang* and SEI are positively correlated ($r = .351$, $p < .001$). For *Xin-Yang* and other criterion variables, the relationship was positive in nature, indicating a higher level of *Xin-*

Yang would be associated with a higher level of Life Satisfaction, Self-Efficacy, and Self-Esteem (See table 12 and figure 5 for details).

When including Hope in the model, log-likelihood value for the path models was -9285.119, and the model fit perfectly and was irrelevant. In terms of the relationship between *Xin-Yang* and Life Satisfaction, Self-Efficacy, Self-Esteem, and Brief Symptoms, they were significant when including hope ($\beta = .450, SE = .042, \beta^* = .389, p < .001$; $\beta = .265, SE = .037, \beta^* = .259, p < .001$; $\beta = .137, SE = .039, \beta^* = .129, p = .001$; $\beta = -.278, SE = .044, \beta^* = -.254, p < .001$). The relationship between *Xin-Yang* and Brief Symptoms remained significant and negative, but reduced in magnitude. The relationship between *Xin-Yang* and other latent criterion variables remained significant and positive, but reduced in magnitude. The relationship between SEI and Life Satisfaction, Self-Efficacy, Self-Esteem, and Brief Symptoms was also significant when hope was included ($\beta = .075, SE = .029, \beta^* = .072, p = .01$; $\beta = .117, SE = .025, \beta^* = .128, p < .001$; $\beta = -.120, SE = .027, \beta^* = -.127, p < .001$; $\beta = .096, SE = .030, \beta^* = .099, p = .001$). Interesting to note, the relationship between SEI and Self-Esteem and Brief Symptoms was negative in nature. The relationship between Hope and *Xin-Yang*, SEI, Life Satisfaction, Self-Efficacy, Self-Esteem, and Brief Symptoms were all significant ($\beta = .711, SE = .022, \beta^* = .660, p < .001$; $\beta = .185, SE = .020, \beta^* = .193, p < .001$; $\beta = .266, SE = .035, \beta^* = .160, p < .001$; $\beta = .305, SE = .035, \beta^* = .330, p < .001$; $\beta = .483, SE = .037, \beta^* = .491, p < .001$; $\beta = -.228, SE = .042, \beta^* = -.224, p < .001$). All the analysis results indicated that Hope partially mediated the relationship between *Xin-Yang* and the latent criterion variables and between SEI and life-satisfaction and self-efficacy, and mediated the relationship between SEI and brief symptoms and self-esteem.

The mediation relationships that were hypothesized all hold true. Specifically, Hope partially mediated the relationship between *Xin-Yang* and Life Satisfaction ($\beta = .122$, $SE = .029$, $p < .001$), Hope partially mediated the relationship between *Xin-Yang* and Self-Efficacy ($\beta = .189$, $SE = .025$, $p < .001$), Hope partially mediated the relationship between *Xin-Yang* and Self-Esteem ($\beta = .343$, $SE = .029$, $p < .001$), Hope partially mediated the relationship between *Xin-Yang* and Brief Symptoms ($\beta = -.162$, $SE = .030$, $p < .001$), Hope partially mediated the relationship between SEI and Life Satisfaction ($\beta = .032$, $SE = .008$, $p < .001$), Hope partially mediated the relationship between SEI and Self-Efficacy ($\beta = .049$, $SE = .008$, $p < .001$), Hope mediated the relationship between SEI and Self-Esteem ($\beta = .090$, $SE = .012$, $p < .001$), Hope mediated the relationship between SEI and Brief Symptoms ($\beta = -.042$, $SE = .009$, $p < .001$). (See table 11-12 and figure 5 for details).

Psychometric Properties of Xin-Yang Scale

Reliability. For the *Xin-Yang* scale, IFA was used to test model fit for each subscale, and test information was utilized to generate reliability indication for each item. Based on the factor score range for each item, reliability of Characteristics is .89; for Mental Guidance, it is .91; and for Relationship to Others, it is .86 (Reliability = Test information/ (Test information + 1)).

Convergent Validity. The results have shown that *Xin-Yang* scale has convergent validity based on the established validity evidence of the SEI-Revised scale measuring spirituality. The fact that there is a significant and positive correlation between *Xin-Yang* scale and spirituality indicates that *Xin-Yang* scale is likely measuring a similar concept for a Chinese population, which can also be seen as evidence that *Xin-Yang* scale has high convergent validity.

Concurrent Validity. The hypothesis concerning the relationship between *Xin-Yang* and the psychological well-being variables chosen in current study was generally supported. All the statistically significant relationships between *Xin-Yang* and the psychological well-Being variables demonstrate that *Xin-Yang* is significantly and positively correlated with one's psychological well-being, just as spirituality is, which was shown in previous studies. Perhaps, it is reasonable to further test whether *Xin-Yang* is an indicator of one's psychological well-being.

Chapter V: Discussions

***Xin-Yang* Scale is a Sound and Helpful Measurement Tool**

Previous researchers have directly translated existing scales of spirituality and tried to gather validity and reliability evidence for the existing scales in China, or they have developed scales of spirituality based on a Western theoretical framework (Liang, 2006; Liu, 2007). Unlike what these researchers have done, the current study used a qualitative approach that is based on the Grounded Theory to gather information about Chinese college students' understanding of the concept spirituality first. It was through focus groups, the decision was made to develop a culturally appropriate scale of *Xin-Yang* (instead of spirituality) This has been an intentional effort to fulfill the goal of conducting multiculturally competent research. It was through discreet reading of current literature and careful analysis of the qualitative data that initial items of the *Xin-Yang* scale were developed.

The current version of the *Xin-Yang* scale contains 31 items loaded on 3 dimensions, namely Characteristics, Mental Guidance, and Relationship to Others. According to the results of the survey data analysis, the current study's validation effort produced positive results. The findings show that the 31-item *Xin-Yang* scale possesses sound psychometric qualities, including moderate to high reliability for each of the three dimensions and satisfactory validity.

Specifically, *Xin-Yang* scale has established convergent validity. The spirituality scale (SEI-R) was a spirituality measure that strives to not impose any particular faith on the questions, and one that has sound psychometric properties. Therefore, the moderate to strong correlation between *Xin-Yang* scale and SEI-R is indicative of convergent validity. Another important piece of validity evidence for the *Xin-Yang* scale is the finding that *Xin-Yang* significantly predicted all psychological well-being variables, which shows concurrent validity.

***Xin-Yang* is Meaningful and Beneficial for Chinese College Students**

Contrary to the claim that there is a lack of *Xin-Yang* among the young generation in China (Chen, 2013), and the public perception that Chinese young people, born after the 1990's, are a "lost generation" in spirituality (Fan & Fan, 2016), the results of the current study revealed that *Xin-Yang* is actually very important to young college students. Based on the mean of the *Xin-Yang* items, it seems that these Chinese college students tend to endorse the higher end on all *Xin-Yang* items. From this finding we could hypothesize that having *Xin-Yang* is a characteristic of these Chinese college students' self-concept. Moreover, as the most items of the *Xin-Yang* scale are positive in nature, it is reasonable to say that the current Chinese college students have positive desires and *Xin-Yang* might be one way of expressing this positivity.

In addition, perhaps it is not that young people do not have *Xin-Yang*, but it is that researchers do not know how to understand their *Xin-Yang*. Due to living in increasingly globalized and modern cultural context, young people's *Xin-Yang* may have characteristics that are not familiar to older generations. Thus, it is advisable that what some have named as *Xin-Yang* crisis be tested in real life contexts, before being considered as a reality of Chinese college students.

Based on the results of the qualitative data analysis, it appears that our participants used *Xin-Yang* as a noun or as a verb in different contexts. They noted that some people have *Xin-Yang*, and some do not, referring to an individual's spiritual state. When used as a verb, they articulated that a person could *Xin-Yang* diverse targets. Consistent with the findings of Ni, Cao, Fan, and Xu (2015) that Chinese college students reported they could *Xin-Yang* any of the followings: Marxism, science, heroes/idols, and traditional culture, among others. Furthermore, our participants in both focus groups and interviews showed enthusiasm and positivity when

talking about their view of *Xin-Yang*, which is also consistent with the previous observation that majority of the college students believe that it is important that one has some type of *Xin-Yang* in life (Ni, Cao, Fan, & Xu, 2015). Again, this contradicts the theory of spiritual or *Xin-Yang* crisis.

The *diverse Xin-Yangs* (多元信仰) (Liang, 2015) among young Chinese college students is one phenomenon deserving attention and respect. From a social or a cultural perspective, it is important that those who *Xin-Yang* Target A would allow others to *Xin-Yang* Target B and respect different *Xin-Yangs* (Li, 2012), as long as the concerned *Xin-Yang* does not threaten others or communities. In the *Xin-Yang* or spirituality research community in China, this mindset has been gradually accepted by researchers who support the notion that the ultimate goal of *Xin-Yang* is to seek harmony, not sameness. The findings of this study supported this position as well. Our participants showed openness toward *Xin-Yang* diversity by coming up with a large number of affirmative descriptors of *Xin-Yang*, viewing those with a high level of *Xin-Yang* positively, and deemed *Xin-Yang* as having significant function for motivating individuals to succeed and grow, while acknowledging that the target of *Xin-Yang* does not need to be the same.

The current *Xin-Yang* scale has three lower level factors, and each lower-level factor speaks to an important aspect of these Chinese college students' *Xin-Yang*. For lower-level Factor 1 — Characteristics of those who have *Xin-Yang*, a common feature is that those individuals tend to behave in a way that is conducive to fulfilling one's faith, beliefs and worldview, which are subcategories of "ideology". It is important to note that the "mental state" of the individuals who have *Xin-Yang* was described as being "hopeful", "optimistic", and feeling "fulfilled", "happy", and "energetic". Similar to the relationship between spirituality and psychological well-being that has been established (Myers, 2000; Tanyi, 2002), it seems that

Xin-Yang relates to psychological well-being in a positive manner among Chinese college students.

When it comes to the function of *Xin-Yang*, lower-level Factor 2 emerged. The items in this dimension demonstrated that participants identified that *Xin-Yang* can “provide guidance” for one’s life. It might be due to that these emerging adults, are facing the need to form a clear sense of identity, both to themselves and to other people. With this mission, they are in need of guidance to successfully go through this daunting process. The function of “facilitating growth” and “encouragement” appeared to be beneficial as well.

Lower-level Factor 3 is Relationship to Others. It was claimed that emerging adults are negotiating between their traditional cultural values and the global cultural values due to the globalization process at the present time (Berman, et al, 2014), and some people are concerned that the younger generation in China would disown their cultural heritage and take on the global cultural value instead. However, the findings seemed to show that Chinese college students still subscribe some traditional Chinese values that put an emphasis on relationships. Because connection with one’s culture is psychologically helpful, having *Xin-Yang* does appear beneficial to young people.

***Xin-Yang* for Chinese versus Spirituality for Westerners and Psychological Well-Being**

Xin-Yang and Spirituality are correlated concepts for this sample. If only based on this correlation, one might argue that spirituality can be used to study Chinese students’ spiritual experience. Technically, this may mean that some of the items of the spirituality measure were relevant to Chinese college students. However, further examination showed two pieces of evidence that led to a different conclusion. One is that participants rarely endorsed two items of the spirituality measure that were related to the concept God, or a sense of forgiveness one would

grant oneself that we usually see in the Western religious context. By definition, spirituality almost does not exist without some sense of a higher power or sacred, which has been agreed upon by most spiritual scholars.

Secondly, the study results also showed that *Xin-Yang* is closely related to all psychological well-being indicators (life satisfaction, self-efficacy, and self-esteem) positively and with psychological symptoms negatively. Clearly, *Xin-Yang* is associated with psychological well-being, and the stronger one's *Xin-Yang* is, the higher the well-being is. Spirituality, on the other hand, failed to predict self-esteem or psychological symptoms. These findings at least suggest that spirituality as defined in Western cultures, does not have the clear and direct role in psychological well-being for Chinese as it is for the Westerners. Thus, it is reasonable to draw the conclusion that *Xin-Yang* is a better concept than spirituality to apply in understanding current Chinese college students' life and spiritual development, as well as in studying their spirituality.

Hope seems to be an important psychological construct to consider. It functioned as a partial mediator for the relationship between *Xin-Yang* and all the psychological well-being variables (life satisfaction, self-efficacy, self-esteem, and psychological symptoms). For spirituality, Hope was fully mediating the relationship between spirituality and self-esteem and psychological symptoms significant, and it partially mediated the relationship between spirituality and life satisfaction and self-efficacy. Specifically, it means that a sense of hope is helpful for these Chinese college students who have *Xin-Yang* to obtain psychological well-being. This finding has been similar to previous researchers' finding that it is through the social support, a sense of hope, and a sense of meaning and purpose in one's life that one's faith system provides, one would have a better and happy life (Myers, 2000).

However, the relationship between Spirituality and Self-Esteem is negative, indicating that the higher one's level of spirituality is, the lower one's level of self-esteem. This finding is unexpected and deserves attention through further research. Xi (2011) has pointed out that even though it was written in the Constitution of the People's Republic of China that people have the liberty to believe in any religion, Marxism, dialectical materialism, and atheism are emphasized in Chinese school education. Therefore, the negative correlation between spirituality and self-esteem may imply that these young people may feel it is normal to be distant from "God" or the concept of religion that do not add positive feelings to them. Likewise, a similar relationship was observed between spirituality and Brief Symptoms. Those who scored high on spirituality tend to experience more negative symptoms. Again, Chinese college students have formed a negative emotional valance with spirituality, which may lead to psychological symptoms.

Limitations

The *Xin-Yang* scale was developed for the Chinese college student population. However, the validity evidence was gathered from participants from different colleges in five large regions in China. The sample was nowhere near being representational of the whole college population in China. Thus, caution is needed when the scale is used to assess *Xin-Yang* among Chinese students in future research.

The scales measuring psychological well-being in the current study were developed in Western culture because no equivalent scales were available in Chinese. Also, among the English scales that are used in the current study, 2 out of 6 had Chinese versions had been validated (the General Self-Efficacy Scale and the Rosenberg Self-Esteem Scale). For the rest of the English scales (the Spiritual Experience Index-Revised, the Integrative Hope Scale, the Satisfaction with Life Scale, and the Brief Symptom Inventory-18), although translation and

back translation process (Brislin, 1980) was used to ensure the accuracy of the scales, no validation study was ever conducted. Thus, caution is needed in interpreting the findings of the current study. The seemingly less acceptable model fit of the translated scales might be another piece of evidence concerning a lack of validity of the scales used.

The attempt was not successful in running a full SEM among the latent variables. It was through factor scores of the latent variables that the path models and mediation models were built. Noted by Grice (2001), treating observed factor scores as if they were representing actual latent variables could be less accurate, because each factor score has a distribution of possible values. However, given the options available, this decision is reasonable although less than perfect.

Implications

The results of this study shed light on a few concerns related to how cross-cultural research should be conducted. The first concern is the validity of any empirical investigation that studies a Western concept in a non-Western culture, China in this case. In the past, researchers used the literal translation of spirituality attempting to investigate Chinese' understanding and experience of spirituality (e.g., Li, & Cai, 2016; Liang, 2006; Liu, 2007). This practice has been seen as problematic by multiple authors (Hao, 2009; Li, & Cai, 2016; Lu & Guo, 2014; Otto, 1950; Paloutzian & Park, 2013; Zinnbauer, Pargament, & Scott, 1999). From what we observed through our focus groups, such practice may lead to questions concerning the validity of the results. When participants do not understand the term fully, construct validity of the study can be compromised. When participants can not relate to the term in their experience, cultural validity may be at risk. Based on these findings, it is essential that future study pay special attention to

culturally indigenous understanding of the concept, instead of imposing any preexisting theoretical framework on the participants.

Furthermore, the current author personally felt the influence of Western ideology on her conceptualization of the construct. Specifically, it takes much effort to tease out her presupposition associated with spirituality. The author had to have frequent discussion in order to keep her bias in check. The author believes that it is not uncommon in cross-cultural research, especially when we start from the Western literature as a guide. It is important that researchers adopt an etic perspective by immersing themselves in the specific cultural context in which the study is conducted.

Another important and interesting observation during the research process is the use of validity check items in the survey. It is commonly practiced to use some validity check items when conducting survey studies in Western literature. However, the two validity items inserted in the survey caused significant confusion among the participants who used the paper-pencil format survey. Some Chinese college students found the validity check items puzzling and did not know how to answer these items. They asked for clarification, and when not receiving a clear answer from the research assistants who administered the survey, they started guessing the intention behind the items and wondering what “tricks” the items were playing. It might be that the Chinese culture is a high-context one where individuals have the tendency to figure out what the question was implying just like they would in other circumstances. It is reasonable to claim that the generally acceptable way of delivering a validity check item among Western participants may not work equally well among Chinese participants. It is of great value to further study what type of validity check would be more appropriate to use when conducting research in China.

In terms of practical implication, the current study provides potential useful information for psychological service practitioners who work with Chinese college students and Chinese international students. It is important to pay attention to the developmental level, including the developmental level of *Xin-Yang* among these college students. Based on the significant relationship that *Xin-Yang* has with the psychological well-being variables, it would be informative if practitioners and educators could further test in real life context whether the Chinese college students' development in *Xin-Yang* could promote their psychological well-being. When it comes to working with Chinese international students, counselors could explore with these students about the role *Xin-Yang* plays in their life in order to help them adjust their life abroad in an effective manner.

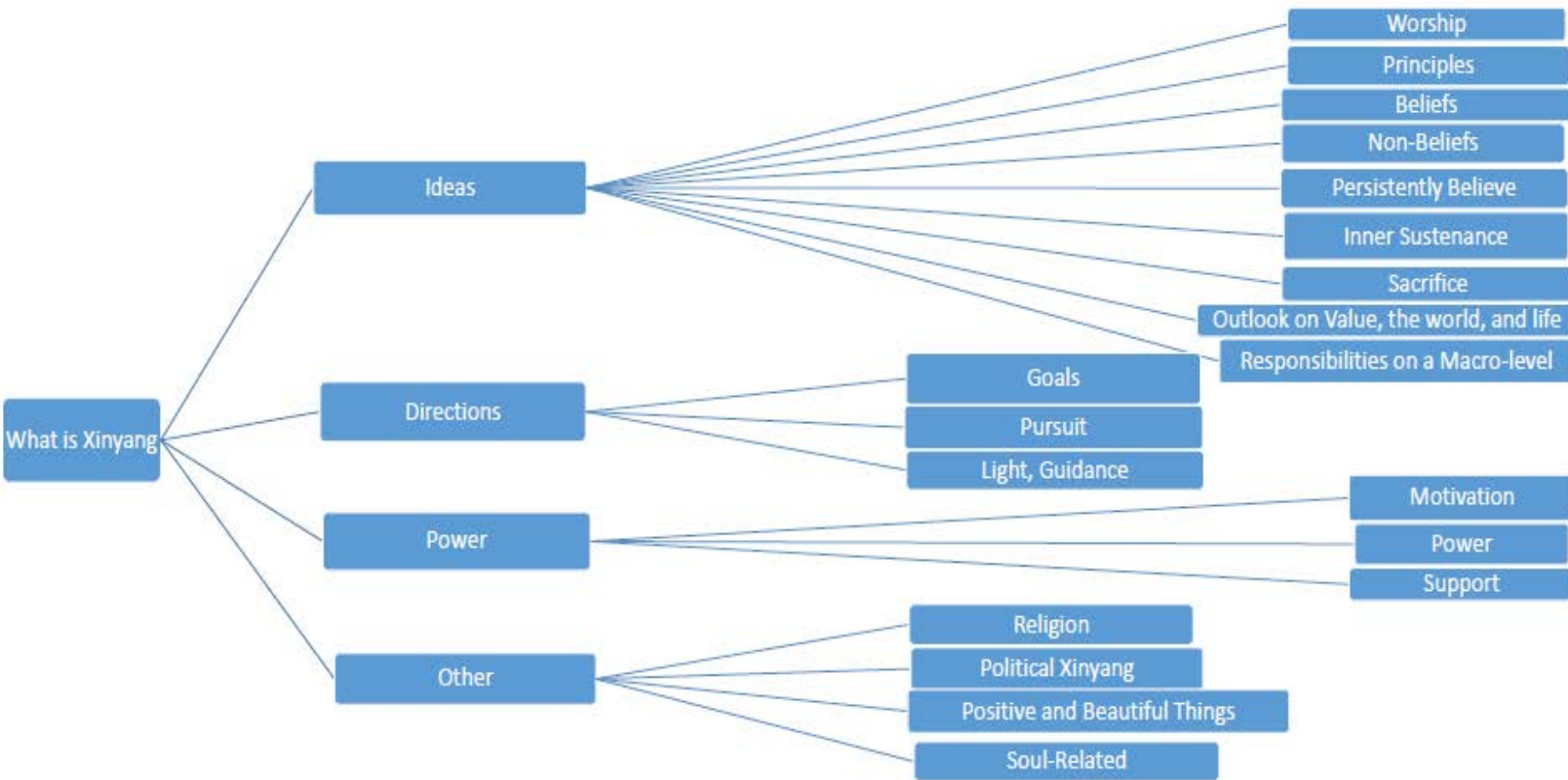


Figure 1 Meaning of Xin-Yang

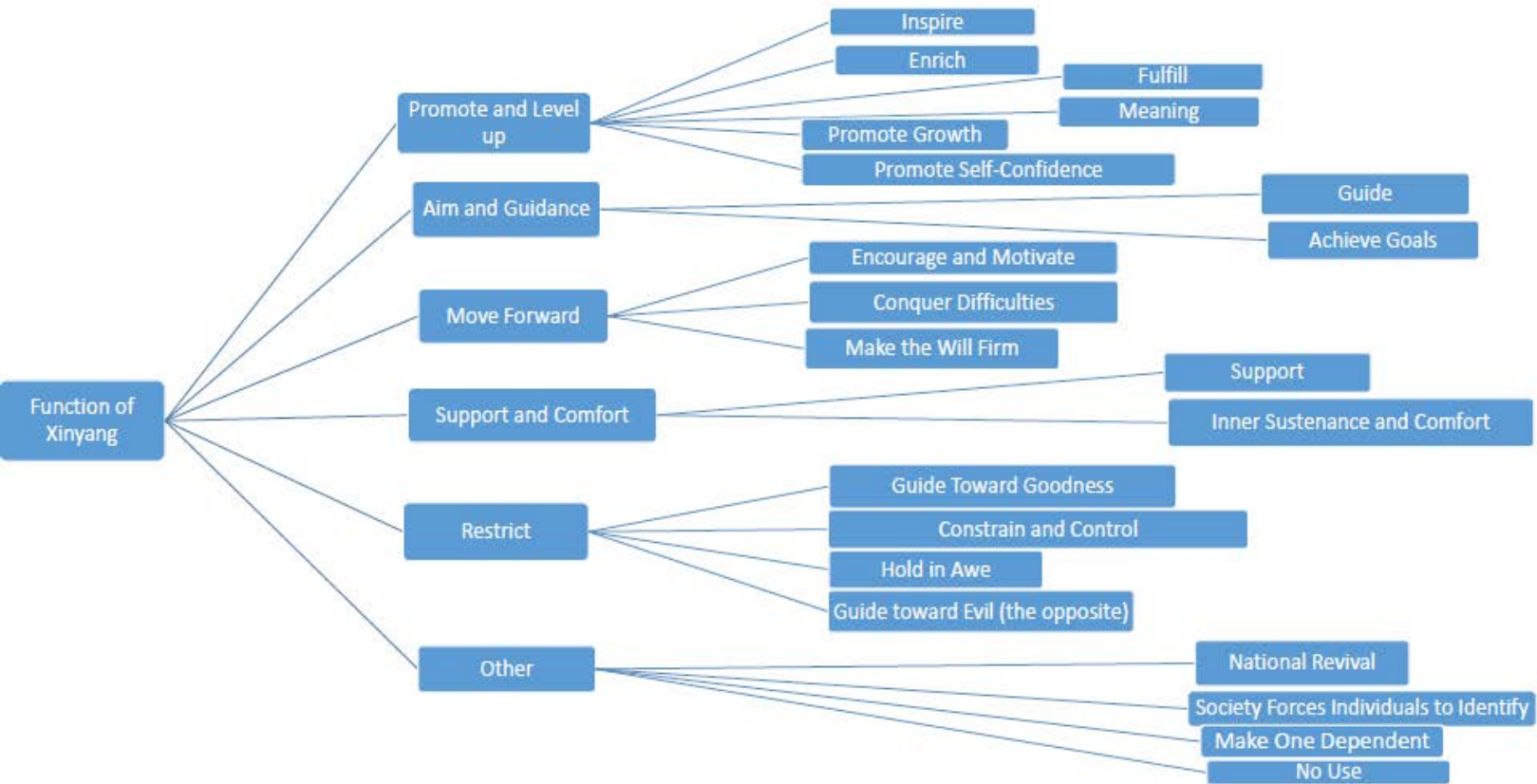


Figure 2 Function of Xin-Yang

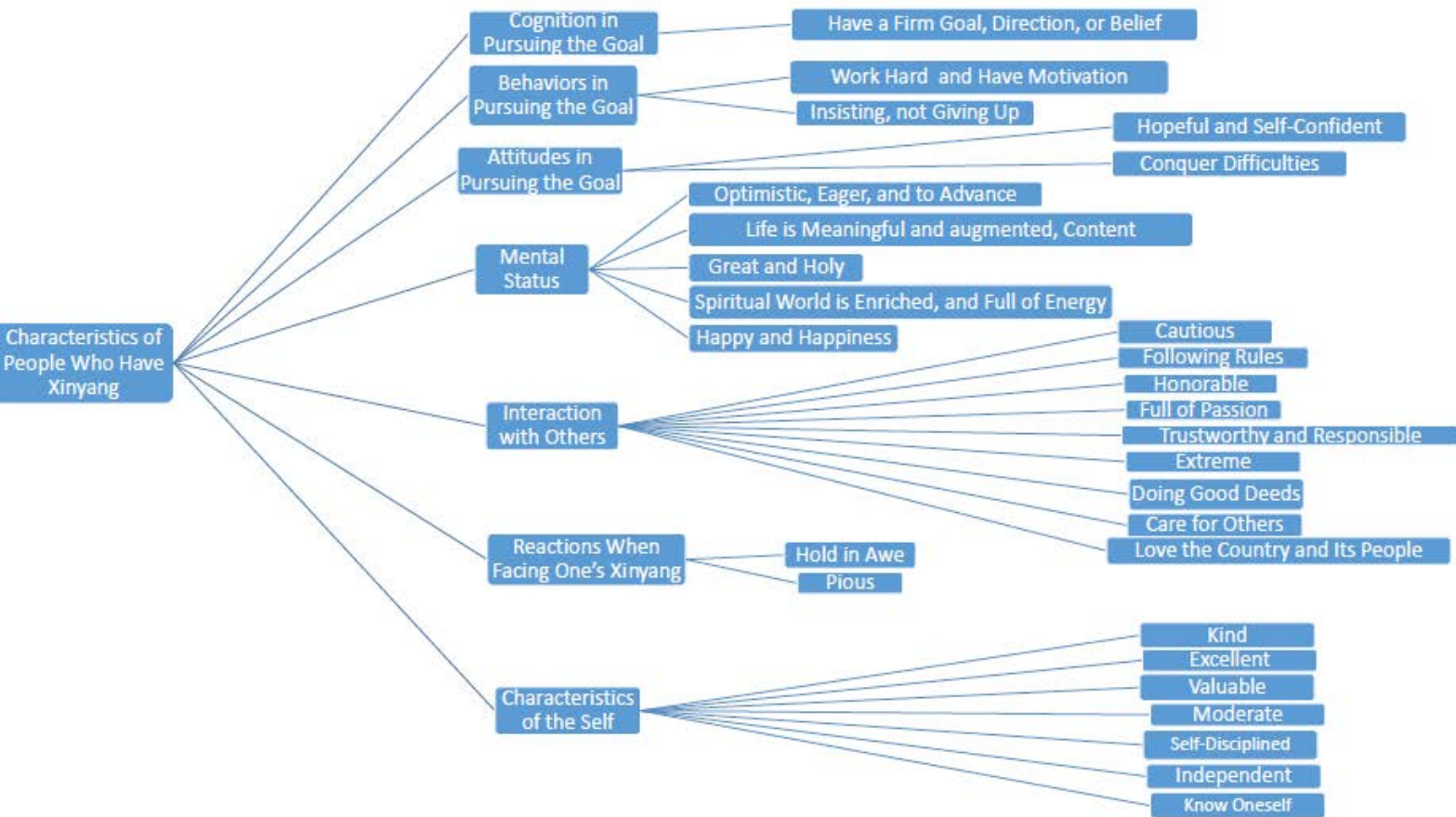


Figure 3 Characteristics of Xin-Yang

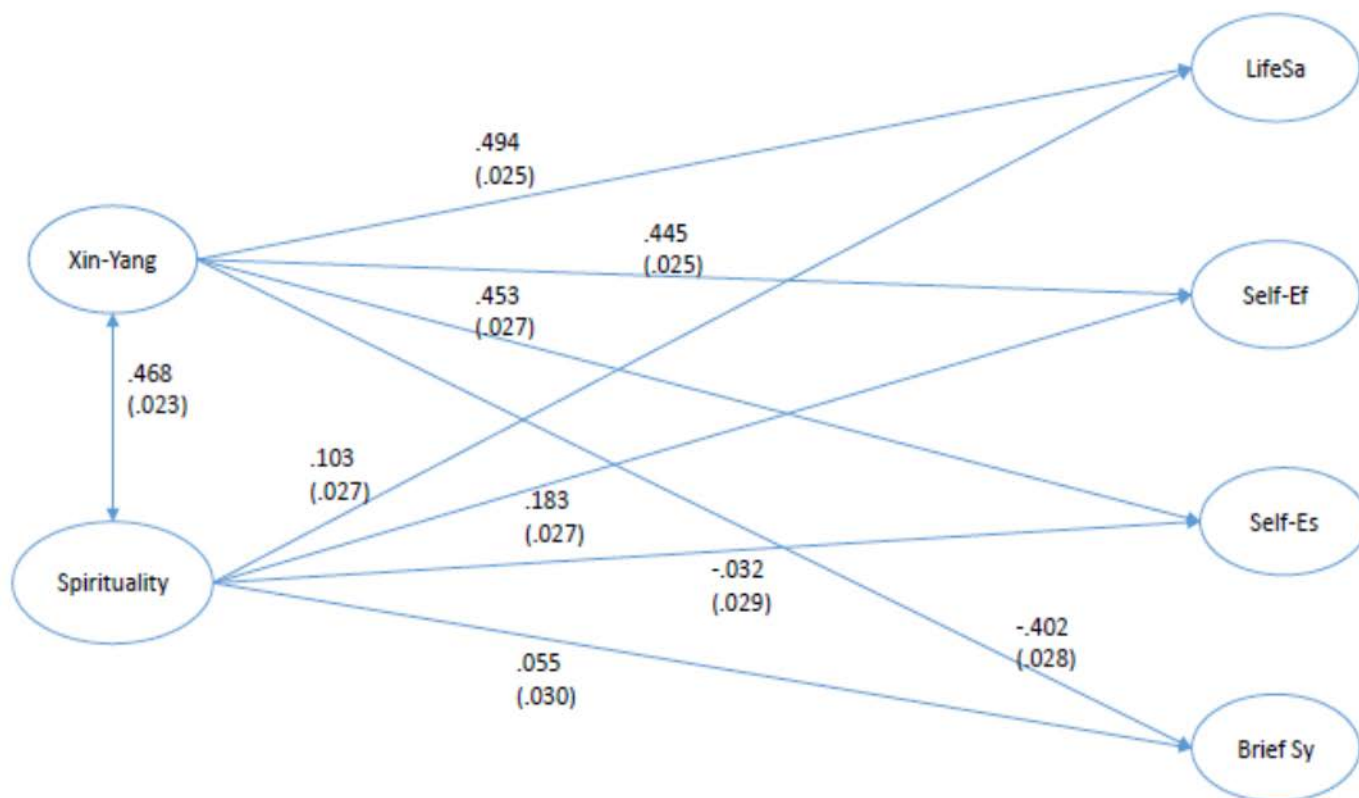


Figure 4 Path Model

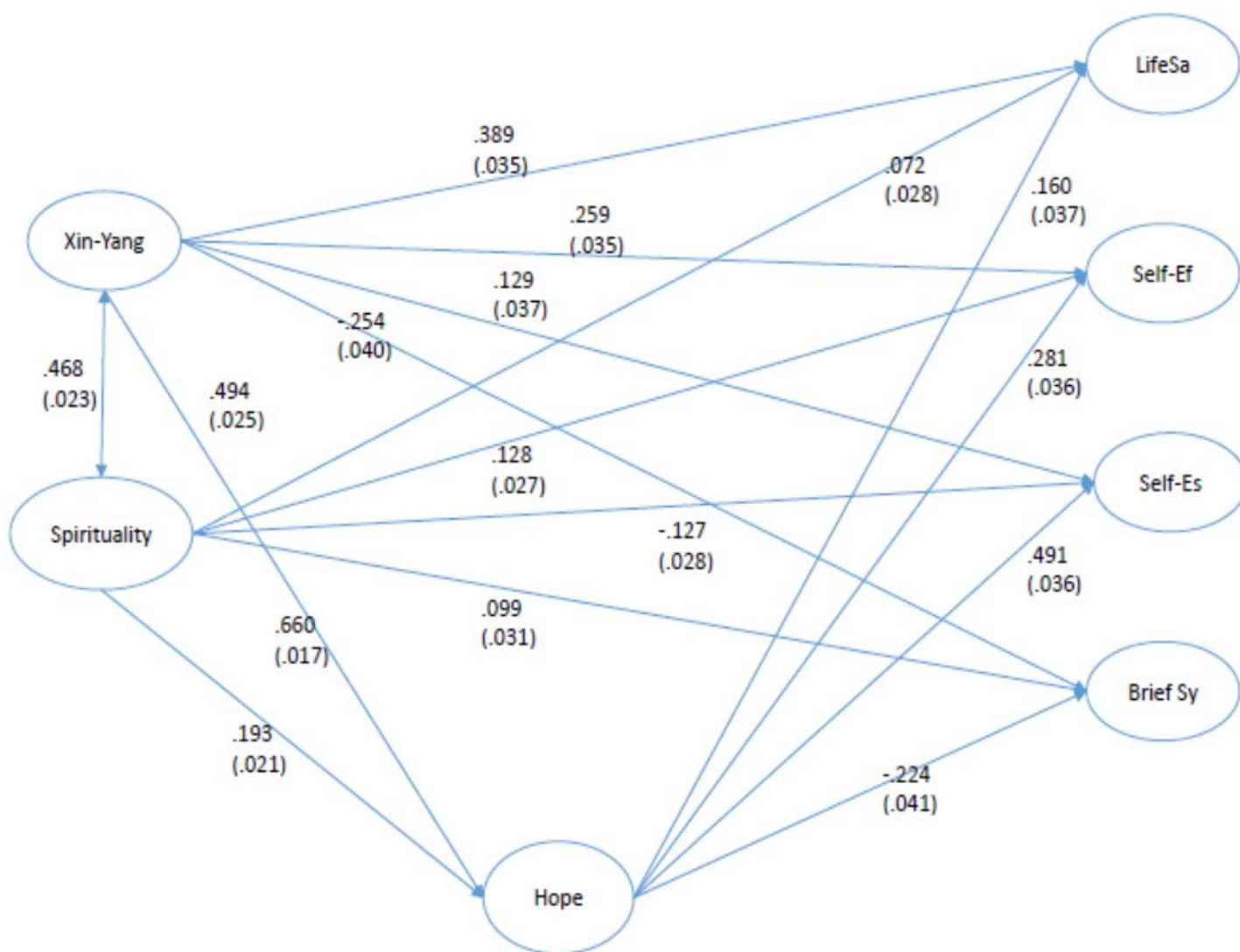


Figure 5 Mediation Model

Table 1 Item Mean and SD for Xin-Yang, Hope, and Life Satisfaction

Item	Mean	SD	Item	Mean	SD	Item	Mean	SD	Item	Mean	SD
A1	3.39	1.12	A22	3.85	.89	B1	4.36	.99	B22	4.79	.95
A2	4.20	.70	A23	3.83	.87	B2R	3.71	1.24	B23	4.17	1.33
A3	3.75	.85	A24	3.98	.83	B3	5.10	.76	C1	4.02	1.56
A4	3.72	.82	A25	4.32	.67	B4	4.87	.98	C2	4.36	1.45
A5	3.86	.86	A26	4.05	.81	B5	4.60	.93	C3	4.33	1.49
A6	4.29	.70	A27	4.06	.82	B6R	4.06	1.21	C4	3.62	1.57
A7	4.26	.70	A28	3.73	.93	B7	4.24	1.19	C5	3.03	1.73
A8	4.26	.71	A29	3.98	.77	B8	5.22	.78			
A9	3.67	.91	A30	4.27	.72	B9	4.77	.98			
A10	4.06	.83	A31	4.26	.67	B10R	3.77	1.30			
A11	3.57	.93	A32	4.26	.67	B11	4.43	1.25			
A12	3.75	.84	A33	4.07	.74	B12	4.67	.92			
A13	3.77	.88	A34	3.42	.97	B13R	3.49	1.37			
A14	3.41	1.02	A35	4.25	.69	B14	4.67	.97			
A15	3.86	.80	A36	4.17	.71	B15	4.94	.92			
A16	3.88	.81	A37	3.83	.88	B16R	3.69	1.32			
A17	3.70	.91	A38	3.74	.86	B17	4.35	1.06			
A18	3.93	.81	A39	3.91	.79	B18	2.91	1.23			
A19	4.18	.72	A40	3.89	.81	B19R	3.68	1.26			
A20	3.61	.94	A41	3.69	.94	B20	4.34	1.21			
A21	3.80	.82	A42	3.66	.90	B21	4.39	1.15			

Table 2 Item Mean and SD for Symptoms, Self-Efficacy, Self-Esteem, and Spirituality

Item	Mean	SD	Item	Mean	SD	Item	Mean	SD
D1	1.78	.89	E4	2.42	.86	G5	3.93	1.37
D2	2.02	.97	E5	2.34	.87	G6	2.56	1.40
D3	2.21	1.03	E6	2.97	.80	G7	3.70	1.45
D4	1.34	.73	E7	2.76	.82	G8	3.60	1.49
D5	1.97	1.06	E8	2.52	.83	G9	3.76	1.43
D6	2.21	1.06	E9	2.84	.77	G10	4.17	1.23
D7	1.51	.87	E10	2.27	.86	G11	2.76	1.47
D8	1.87	1.01	F1	3.03	.70	G12	3.50	1.44
D9	1.83	1.05	F2	3.16	.67	G13	3.45	1.44
D10	1.35	.70	F3R	3.03	.76	G15R	3.92	1.51
D11	1.47	.81	F4	3.05	.63	G16	4.01	1.23
D12	1.62	.92	F5R	2.52	.78	G17R	4.34	1.48
D13	1.66	.97	F6	3.02	.68	G18	4.56	1.30
D14	1.52	.88	F7	2.89	.72	G19	3.93	1.31
D15	1.88	1.00	F8R	2.79	.88	G20	3.65	1.38
D16	1.59	.93	F9R	3.03	.82	G21R	3.85	1.39
D17	1.15	.54	F10R	3.14	.81	G22	3.56	1.28
D18	1.55	.80	G1	3.74	1.35	G23	3.90	1.27
E1	3.05	.76	G2	3.88	1.37	G24R	5.00	1.33
E2	2.78	.77	G3	3.95	1.35			
E3	2.11	.88	G4	3.58	1.41			

Table 3 Initial 19 Items Factor 1 Loadings

Items	Loading	P-Value two-tailed
A4	.62	<.001
A5	.64	<.001
A15	.47	<.001
A16	.70	<.001
A17	.69	<.001
A18	.68	<.001
A20	.62	<.001
A21	.68	<.001
A22	.65	<.001
A23	.78	<.001
A24	.78	<.001
A26	.64	<.001
A27	.74	<.001
A34	.58	<.001
A37	.68	<.001
A38	.57	<.001
A39	.64	<.001
A41	.67	<.001
A42	.65	<.001

Table 4 Final 14 Items factor 1 Loadings with Method Factors and Error Covariances

Items	Loading	P-Value two-tailed
A17	.64	<.001
A18	.54	<.001
A20	.71	<.001
A21	.68	<.001
A22	.76	<.001
A23	.77	<.001
A24	.81	<.001
A26	.78	<.001
A27	.71	<.001
A28	.64	<.001
A34	.51	<.001
A37	.56	<.001
A38	.57	<.001
A41	.67	<.001

Table 5 Initial 8 Items Factor 2 Loadings

Items	Loading	P-Value two-tailed
A1	.50	<.001
A3	.69	<.001
A9	.56	<.001
A10	.64	<.001
A11	.80	<.001
A12	.87	<.001
A13	.83	<.001
A14	.70	<.001

Table 6 Final 8 Items Factor 2 Loadings with Error Covariances

Items	Loading	P-Value two-tailed
A1	.52	<.001
A3	.68	<.001
A9	.51	<.001
A10	.64	<.001
A11	.84	<.001
A12	.82	<.001
A13	.78	<.001
A14	.73	<.001

Table 7 Initial 9 Items Factor 3 Loadings

Items	Loading	P-Value two-tailed
A25	.63	<.001
A29	.68	<.001
A30	.72	<.001
A31	.82	<.001
A32	.80	<.001
A33	.77	<.001
A35	.49	<.001
A36	.74	<.001
A40	.63	<.001

Table 8 Final 9 Items Factor 3 Loading with Error Covariances

Items	Loading	P-Value two-tailed
A25	.69	<.001
A29	.64	<.001
A30	.79	<.001
A31	.82	<.001
A32	.79	<.001
A33	.70	<.001
A35	.80	<.001
A36	.70	<.001
A40	.62	<.001

Table 9 Initial 6 Items Factor 4 Loading

Items	Loading	P-Value two-tailed
A2	.32	<.001
A6	.45	<.001
A7	.98	<.001
A8	.87	<.001
A19	.50	<.001
A28	.40	<.001

Table 10 Model Fit Information for All Variables

Model	χ^2	df	RMSEA	CFI/TLI	WRMR
Xin-Yang	3442.44	421	.08	.92/.91	2.35
Spirituality	1803.98	213	.08	.96/.96	1.64
Hope	2176.80	187	.09	.91/.90	2.30
Symptoms	759.02	132	.06	.98/.97	1.46
Life-satisfaction	7.12	3	.03	1/1	.22
Self-efficacy	278.35	29	.09	.99/.98	1.29
Self-esteem	457.665	33	.10	.97/.96	1.77

Table 11 Correlation among All Variables

	Xin- Yang	Spirituality	hope	Life- satisfaction	Self- efficacy	Self- esteem	Symptoms
Xin-Yang	--						
Spirituality	.35***	--					
Hope	.54***	.41***	--				
Life- satisfaction	.42***	.29***	.41***	--			
Self- efficacy	.36***	.30***	.40***	.36***	--		
Self- esteem	.431***	.14***	.40***	.29***	.24***	--	
Symptoms	-.28***	-.11***	-.29***	-.33***	-.18***	-.33***	--

Note. ***p < .001.

Table 12 Standardized Parameter Estimates for the Mediation Model with all Direct and Indirect Effects

Parameters	Life-satisfaction	Self-efficacy	Self-esteem	Symptoms
Direct				
Xin-Yang	.57(.03)***	.45(.03)***	.48(.03)***	-.44(.03)***
Spirituality	.11(.03)***	.17(.03)***	-.03(.03)	.05(.03)
Indirect				
Xin-Yang	.45(.04)***	.27(.04)***	.14(.04)***	-.28(.04)***
Spirituality	.08(.03)**	.12(.03)***	-.12(.03)***	.10(.03)***
Hope	.17(.04)***	.27(.04)***	.48(.04)***	-.23(.04)***

Note. *** $p < .001$, ** $p < .01$, all other values are non-significant at $p > .05$.

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Appendices

Appendix 1-A Informed Consent for Focus Group

Informed Consent

The Department of Educational Psychology at the University of Kansas supports the practice of protection for human subjects participating in research. The following information is provided for you to decide whether you wish to participate in the present study. You should be aware that even if you agree to participate, you are free to withdraw at any time without penalty.

This study is for better understanding how Chinese undergraduate students understand the concept of “spirituality” in the context of Chinese culture. You will participate in a focus group with three other undergraduate students to share your thoughts and understanding of this concept in the context of Chinese culture. It should last about 1 to 1 and a half hours.

The content of the questions should cause no more discomfort than you would experience in your everyday life. Although participation may not benefit you directly, we believe that the result of the study will enhance counseling practitioners’ understanding of the importance of this concept in the therapy process.

Your participation is strictly voluntary. You may withdraw from the study at any point during the process. There will be absolutely no negative consequences for not participating or withdrawing at any point. Your name will not be associated in any way with the research findings.

Thank you very much for your participation and support!

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This study requires that I am 18 years or older and I voluntarily participate. By signing here, I state that I agree to participate in the focus group. If I have any questions, I could contact Shengnan Li at shengnanli@ku.edu. I understand that if I have any additional questions about my rights as a research participant, I may call (785) 864-7429, write the Human Research Protection Program, University of Kansas, 2385 Irving Hill Road, Lawrence, Kansas 66045-7568, or email irb@ku.edu.

Signature

Date

Appendix 1-B Informed Consent for Focus Group (Chinese)

知情同意书

美国堪萨斯大学的心理学和教育研究部通过并支持此研究。提供以下信息供您决定您是否愿意参加本研究。即使您同意参加，您也有随时退出的权利，且不必承担任何责任。

这项研究是为了更好地了解中国大学生在中国文化背景下如何理解精神性这个概念。您将和三至五个大学生参与一个焦点小组，分享你们对精神性在中国文化背景下的理解。时间约为一个到一个半小时。

这个焦点小组不会对您的日常生活造成不利影响。虽然您不太可能直接从参与此研究中获益，但是这项研究获得的信息将帮助我们更好地了解中国大学生群体对精神性的理解，这些信息将有助提高咨询师在咨询过程中对此概念的更好应用。

您的参与是完全自愿的。您可以拒绝参与或在任何时候退出研究，绝对不会对您造成任何负面影响。研究结果中不会以任何形式呈现您的名字。

非常感谢您的支持！

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此研究要求我年满十八岁，并自愿参与这个研究。通过以下的签名，我将同意参与小组。如果我有任何问题，可与研究人员李盛楠联系，邮箱：shengnanli@ku.edu。我如果有其他关于作为参与者的问题，我可以通过电话(785) 864-7429，通信联系 Human Research Protection Program, University of Kansas, 2385 Irving Hill Road, Lawrence, Kansas 66045-7568，或者电子邮件 irb@ku.edu。

签名

日期

Appendix 2-A Informed Consent of Audio Recording for Focus Group**Authorization to be Tape-Recorded in Focus Group**

By signing this form, I am allowing the researcher to audio tape me as part of this research. I agree that what I share in the focus group could be recorded. I understand that I could choose to not answer certain questions, ask to turn off the recording device during the process, or withdraw from the group at any time without any penalty.

Si gnat ur e

Dat e

Appendix 2-B Informed Consent of Audio Recording for Focus Group (Chinese)

焦点小组录音同意书

我同意我在焦点小组中的分享可以被录音。我理解我可以不回答某些问题，在小组进行的任何阶段要求关掉录音设备，或者在任何时间退出小组而没有任何不良后果。

参与者签名

日期

Appendix 3-A Information Statement for Pilot Study

Information Statement

The Department of Educational Psychology at the University of Kansas supports the practice of protection for human subjects participating in research. The following information is provided for you to decide whether you wish to participate in the present study. You should be aware that even if you agree to participate, you are free to withdraw at any time without penalty.

We are conducting this study to measure the concept of Xin-Yang. This will entail your completion of a survey. For the survey, your participation is expected to take approximately 10 minutes to complete. The content of the survey should cause no more discomfort than you would experience in your everyday life.

Although participation may not benefit you directly, we believe that the information obtained from this study will help us gain a better understanding of the concept of Xin-Yang 信仰. It could also inform educators as well as policy makers in engendering regulations and guidelines that could promote the development of students' Xin-Yang 信仰. Your personal information will not be associated in any way with the research findings. Therefore, no data will ever be reported in connection to you individually. It is possible, however, with internet communications, that through intent or accident someone other than the intended recipient may see your response.

Completion of the survey indicates your willingness to take part in this study and that you are at least 18 years old. If you have any additional questions about your rights as a research participant, you may call (785) 864-7429 or write the Human Research Protection Program (HRPP), University of Kansas, 2385 Irving Hill Road, Lawrence, Kansas 66045-7563, email irb@ku.edu or shengnanli@ku.edu .

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Appendix 3-B Information Statement for Pilot Study (Chinese)

研究说明

堪萨斯大学的教育心理学系支持维护参加研究者人权的研究行为。下列信息用来让你决定是否有意愿参加本研究。需要明确的是，即使你同意参加此研究，你也可以在任何时候无后果地退出研究。

此研究需要你来参与完成一个量表，收集的结果会被用来帮助研究者认识大学生对于信仰的理解。整个量表最多需要 10 分钟完成。量表内容不会对你的日常生活造成不适。

虽然参加这项研究不会直接让你受益，但你的信息能够帮助我们更好地了解信仰这个概念。同时它还能帮助教育者和决策者制定促进学生发展信仰的相关指导方针。我们恳切地希望你能参加这个研究，但是否参加完全取决于你的意愿。为了保护你的隐私，你的个人信息和量表结果不会有任何联系。故此，请不要担心你的隐私会被泄露。在此请注意，通过互联网传递的信息，我们无法杜绝他人意外的泄露或恶意窃取。

如果你愿意参加并完成此研究，请确保你已满十八岁。如果你有其他关于作为研究参与者的问题，请联系(785) 864-7429 或者写信给 Human Research Protection Program (HRPP), University of Kansas, 2385 Irving Hill Road, Lawrence, Kansas 66045-7563, 或者写电子邮件给 irb@ku.edu 或 shengnanli@ku.edu。

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Appendix 4-A Information Statement for Final Study

Information Statement

The Department of Educational Psychology at the University of Kansas supports the practice of protection for human subjects participating in research. The following information is provided for you to decide whether you wish to participate in the present study. You should be aware that even if you agree to participate, you are free to withdraw at any time without penalty.

We are conducting this study to measure the concept of Xin-Yang. This will entail your completion of a survey. For the survey, your participation is expected to take approximately 30 minutes to complete. The content of the survey should cause no more discomfort than you would experience in your everyday life.

Although participation may not benefit you directly, we believe that the information obtained from this study will help us gain a better understanding of the concept of Xin-Yang 信仰. It could also inform educators as well as policy makers in engendering regulations and guidelines that could promote the development of students' Xin-Yang 信仰. Your personal information will not be associated in any way with the research findings. Therefore, no data will ever be reported in connection to you individually. It is possible, however, with internet communications, that through intent or accident someone other than the intended recipient may see your response.

Any participant who enters the name and email in the Qualtrics without having completed the survey will be automatically entered into a raffle to win 50 RMB (10 prizes in total, each is 50 RMB, about \$8). If you withdraw from the study, you will still be eligible for the raffle.

Completion of the survey indicates your willingness to take part in this study and that you are at least 18 years old. If you have any additional questions about your rights as a research participant, you may call (785) 864-7429 or write the Human Research Protection Program (HRPP), University of Kansas, 2385 Irving Hill Road, Lawrence, Kansas 66045-7563, email irb@ku.edu or shengnanli@ku.edu .

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Appendix 4-B Information Statement for Final Study (Chinese)

研究说明

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此研究需要你来参与完成一个量表，收集的结果会被用来帮助研究者认识大学生对于信仰的理解。整个量表最多需要 30 分钟完成。量表内容不会对你的日常生活造成不适。

虽然参加这项研究不会直接让你受益，但你的信息能够帮助我们更好地了解信仰这个概念。同时它还能帮助教育者和决策者制定促进学生发展信仰的相关指导方针。我们恳切地希望你能参加这个研究，但是否参加完全取决于你的意愿。为了保护你的隐私，你的个人信息和量表结果不会有任何联系。故此，请不要担心你的隐私会被泄露。在此请注意，通过互联网传递的信息，我们无法杜绝他人意外的泄露或恶意窃取。

参与此研究的同学如果愿意，请留下你的姓名和邮箱来参加抽奖（共 10 个名额，每个人 50 元人民币）。如果你没有完成问卷，你仍会获得参与抽奖的机会。

如果你愿意参加并完成此研究，请确保你已满十八岁。如果你有其他关于作为研究参与者的问题，请联系(785) 864-7429 或者写信给 Human Research Protection Program (HRPP), University of Kansas, 2385 Irving Hill Road, Lawrence, Kansas 66045-7563, 或者写电子邮件给 irb@ku.edu 或 shengnanli@ku.edu。

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Appendix 5-A 42-Item Xin-Yang Scale

1. I have something to worship.
2. I have some rules that I obey.
3. I have a belief that is very steady.
4. I have confidence for things.
5. I am willing to sacrifice for things I believe.
6. I have my own outlook on value.
7. I have my own outlook on the world.
8. I have my own outlook on life.
9. I have a clear goal in my life.
10. I have something that my heart yearn for.
11. I have some guidance for my spirit.
12. I have some psychological power.
13. I have a spiritual support.
14. Xin-yang is something that is deep in my soul.
15. I am improving constantly.
16. I am inspired constantly.
17. I feel that my life is rich.
18. I have my own opinion.
19. I have certain rules that I obey.
20. I feel settled down in my heart.
21. When I encounter crisis, I can see hope.
22. I am optimistic.
23. I am energetic.
24. My life is meaningful.
25. I am appreciative.
26. I feel blessed.
27. I treat myself kindly.
28. I am pious.
29. I am serious.
30. I am a trustworthy person.
31. I am a responsible person.
32. I do good deeds in my life.
33. I am dedicated toward others.
34. I am decisive.
35. I am kind.
36. I am worthy.
37. I am calm.
38. I have a clear understanding of myself.
39. I am allegiant to my ideas.
40. I rally people around me.
41. I feel free.
42. I feel humble.

Appendix 5-A 42-Item Xin-Yang Scale (Chinese)

1. 我有发自内心的崇拜。
2. 我有内心坚守的原则。
3. 我有一种坚定不移的信念。
4. 我有对事物坚定的信心。
5. 我愿意为自己所信之事做出牺牲。
6. 我有自己的价值观。
7. 我有自己的世界观。
8. 我有自己的人生观。
9. 我有明确的人生目标。
10. 我有自己心灵的向往。
11. 我有精神的向导。
12. 我有一种心理力量。
13. 我有一种精神支柱。
14. 信仰是我灵魂深处的东西。
15. 我在不断进步。
16. 我不断得到启发。
17. 我感到生活充实。
18. 我有自己的主见。
19. 我有自己坚守的原则。
20. 我的内心感到安定。
21. 在我遇到危难时，我能看到希望。
22. 我很乐观。
23. 我充满活力。
24. 我的人生有意义。
25. 我懂得感恩。
26. 我感到幸福。
27. 我善待自己。
28. 我很虔诚。
29. 我做事认真。
30. 我是值得信任的人。
31. 我是有责任感的人。
32. 我会在生活中做好事。
33. 我会为他人奉献。
34. 我做事果断。
35. 我很善良。
36. 我是有价值的。
37. 我心平气和。
38. 我对自己有清晰的认识。
39. 我忠诚于自己的理念。
40. 我团结周围的人。
41. 我感到自由。
42. 我感到谦卑。

Appendix 6-A Final 31-Item Xin-Yang Scale

Please answer according to your true belief as to whether the following items apply to you. There is no right or wrong answer. 1 represents not apply at all, 2 represents does not apply, 3 represents neither apply nor not apply, 4 represents apply, 5 represents totally apply.

Mental Guidance:

I have something to worship.
 I have a belief that is very steady.
 I have a clear goal in my life.
 I have something that my heart yearn for.
 I have some guidance for my spirit.
 I have some psychological power.
 I have a spiritual support.
 Xin-yang is something that is deep in my soul.

Relationship to Others:

I am appreciative.
 I am serious.
 I am a trustworthy person.
 I am a responsible person.
 I do good deeds in my life.
 I am dedicated toward others.
 I am kind.
 I am worthy.
 I rally people around me.

Characteristics:

I feel that my life is rich.
 I have my own opinion.
 I feel settled down in my heart.
 When I encounter crisis, I can see hope.
 I am optimistic.
 I am energetic.
 My life is meaningful.
 I feel blessed.
 I treat myself kindly.
 I am pious.
 I am decisive.
 I am calm.
 I have a clear understanding of myself.
 I feel free.

Appendix 6-B Final 31-Item Xin-Yang Scale (Chinese)

请根据自己的真实想法，判断以下的条目是否符合自己的理解。答案没有对错之分。1 代表完全不符合，2 代表不符合，3 代表不置可否，4 代表符合，5 代表完全符合。

精神心灵的向导：

我有发自内心的崇拜。
我有一种坚定不移的信念。
我有明确的人生目标。
我有自己心灵的向往。
我有精神的向导。
我有一种心理力量。
我有一种精神支柱。
信仰是我灵魂深处的东西。

与他人的联系：

我懂得感恩。
我做事认真。
我是值得信任的人。
我是有责任感的人。
我会在生活中做好事。
我会为他人奉献。
我很善良。
我是有价值的。
我团结周围的人。

个人特质：

我感到生活充实。
我有自己的主见。
我的内心感到安定。
在我遇到危难时，我能看到希望。
我很乐观。
我充满活力。
我的人生有意义。
我感到幸福。
我善待自己。
我很虔诚。
我做事果断。
我心平气和。
我对自己有清晰的认识。
我感到自由。

Appendix 7-A Spiritual Experience Index-Revised

Please indicate to what extent you agree or disagree with the following statements. 1= Strongly Disagree, 2= Disagree, 3= Somewhat Disagree, 4= Somewhat Agree, 5= Agree, 6= Strongly Agree

Spiritual Support Subscale

1. I often feel strongly related to a power greater than myself.
2. My faith gives my life meaning and purpose.
3. My faith is a way of life.
4. I often think about issues concerning my faith.
5. My faith is an important part of my individual identity.
6. My relationship to God is experienced as unconditional love.
7. My faith helps me to confront tragedy and suffering.
8. I gain spiritual strength by trusting in a higher power.
9. My faith is often a deeply emotional experience.
10. I make a conscious effort to live in accordance with my spiritual values.
11. My faith enables me to experience forgiveness when I act against my moral conscience.
12. Sharing my faith with others is important for my spiritual growth.
13. My faith guides my whole approach to life.

Spiritual Openness Subscale

- 1. I believe that there is only one true faith.**
2. Ideas from faiths different from my own may increase my understanding of spiritual truth.
- 3. One should not marry someone of a different faith.**
4. I believe that the world is basically good.
5. Learning about different faiths is an important part of my spiritual development.
6. I feel a strong spiritual bond with all of humankind.
- 7. I never challenge the teachings of my faith.**
8. My spiritual beliefs change as I encounter new ideas and experiences.
9. Persons of different faiths share a common spiritual bond.
- 10. I believe that the world is basically evil.**

(Item 1, 3, 7, and 10 in Spiritual Openness subscale are reverse coded)

Appendix 7-B Spiritual Experience Index-Revised (Chinese)

请根据自己的真实想法，判断以下的条目是否符合自己的理解。答案没有对错之分。1代表完全不同意，2代表不同意，3代表有些不同意，4代表有些同意，5代表同意，6代表完全同意。

精神性支持分量表

1. 我经常感到有比我更强大的力量与我关联。
2. 我的信仰给我生活意义和目的。
3. 我的信仰是一种生活方式。
4. 我经常考虑和我信仰有关的事。
5. 我的信仰是我个人认同重要的一部分。
6. 我对上帝的关系可以被体验为一种无条件的爱。
7. 我的信仰帮助我面对悲剧和痛苦。
8. 我从相信一个更高力量中得到精神力量。
9. 我的信仰通常是一种深入的感情体验。
10. 我有意识地努力使我的精神价值和我的生活保持一致。
11. 我的信仰使我在自己做出有悖道德良心的行为时感到宽恕。
12. 同他人分享我的信仰对我的精神成长很重要。
13. 我的信仰引导我整个的生活方式。

精神性开放分量表

1. 我相信只有一个真正的信仰。
2. 不同于我信仰的观点能促使我增加对于精神性真理的理解。
3. 一个人不应该和与自己信仰不同的人结婚。
4. 我相信世界根本上是好的。
5. 学习不同的信仰是我精神性发展的一个重要部分。
6. 我感受到与全人类有一种强烈的精神联结。
7. 我从来不质疑关于我信仰的教诲。
8. 在我遇到新观念和新体验时我的精神信念会改变。
9. 拥有不同信仰的人们分享一种共同的精神联结。
10. 我相信世界根本上是邪恶的。

Appendix 8-A Integrative Hope Scale

Please indicate to what extent you agree or disagree with the following statements. 1= Strongly Disagree, 2= Disagree, 3= Somewhat Disagree, 4= Somewhat Agree, 5= Agree, 6= Strongly Agree

1. I have deep inner strength
- 2. It is hard for me to keep up my interest in activities I used to enjoy**
3. There are things I want to do in life.
4. I feel loved.
5. Even when others get discouraged, I know I can find a way to solve the problem.
- 6. It seems as though all my support has been withdrawn.**
7. I have a sense of direction.
8. I look forward to doing things I enjoy.
9. I believe that each day has potential.
- 10. I am bothered by troubles that prevent my planning for the future.**
11. I have someone who shares my concerns.
12. I can see possibilities in the midst of difficulties.
- 13. I am hopeless about some parts of my life.**
14. I am needed by others.
15. I feel my life has value and worth.
- 16. I feel trapped, pinned down.**
17. I make plans for my own future.
18. I've been pretty successful in life.
- 19. I find myself becoming uninvolved with most things in life.**
20. I am valued for what I am.
21. My past experiences have prepared me well for my future.
22. I intend to make the most of life.
23. I have a faith that gives me comfort.

(Item 2, 6, 10, 13, 16, and 19 are reverse coded)

Appendix 8-B Integrative Hope Scale (Chinese)

请根据自己的真实想法，判断以下的条目是否符合自己的理解。答案没有对错之分。1代表完全不同意，2代表不同意，3代表有些不同意，4代表有些同意，5代表同意，6代表完全同意。

1. 我有深深的内在力量。
2. 我很难对我过去很喜欢的活动保持兴趣。
3. 生活中有我想做的事情。
4. 我感到被爱。
5. 即使别人感觉气馁，我知道我可以找到解决问题的方法。
6. 感觉好像给予我的支持都被收回了。
7. 我有方向感。
8. 我很期待做我喜欢做的事情。
9. 我相信每一天都有潜力。
10. 我被困难所困扰，使我无法计划未来的事情。
11. 我有帮我分担我的忧虑的人。
12. 我在困难当中看到可能性。
13. 我对我生活的一些部分感到无望。
14. 我被他人需要。
15. 我觉得我的生命有价值。
16. 我觉得被困住和限制住了。
17. 我对自己的未来有计划。
18. 我的生活已经很成功了。
19. 我发现自己和生活中大多数事情变得没有参与感。
20. 因为我是我，所以被珍视。
21. 我过去的经历使我对未来做好准备。
22. 我打算充分利用我的生活。
23. 我有能给我带来安慰的信仰。

Appendix 9-A Satisfaction with Life Scale

Using the 1 - 7 scale below, indicate your agreement with each item by placing the appropriate number on the line preceding that item. Please be open and honest in your responding.

1 - Strongly disagree; 2 – Disagree; 3 - Slightly disagree; 4 - Neither agree nor disagree; 5 - Slightly agree; 6 – Agree; 7 - Strongly agree

- _____ In most ways my life is close to my ideal.
- _____ The conditions of my life are excellent.
- _____ I am satisfied with my life.
- _____ So far I have gotten the important things I want in life
- _____ If I could live my life over, I would change almost nothing.

Appendix 9-B Satisfaction with Life Scale (Chinese)

请在每个题目后面圈出最符合您的标号。请开放、诚实的回答。

1-完全不同意； 2 - 不同意； 3 -略不同意； 4 - 既不同意也不反对； 5 - 略同意； 6 - 同意；
7 - 非常同意。

- 1、 在很多方面，我现在的生命接近我的理想生活。
- 2、 我的生活状况非常好。
- 3、 我对自己的生活很满意。
- 4、 目前为止，我已经得到了生活中想要的重要的东西。
- 5、 如果我能重新活一次，我几乎不会做出任何改变。

Appendix 10-A The Brief Symptom Inventory-18 (BSI)

Please report the extent to which you have been distressed or bothered in the previous 7 days by each symptom. Use the scale below. 1-None at all, 2-Mildly, 3-Moderately, 4-Severely, 5-Very severely.

1. Faintness
2. No Interest
3. Nervousness
4. Chest Pains
5. Lonely
6. Tense
7. Nausea
8. Blue
9. Scared
10. Short of Breath
11. Worthlessness
12. Panic Episodes
13. Numb or Tingling
14. Hopelessness
15. Restlessness
16. Body weakness
17. Pessimistic thoughts of life
18. Fearful

Appendix 10-B The Brief Symptom Inventory-18 (BSI; Chinese)

请在以下条目中选出你在过去 7 天里是否有被如下的状况所困扰。1-完全没有，2-有一点，3-中等程度，4-非常，5-极其严重。

1. 头晕
2. 失去兴趣
3. 情绪不安
4. 胸口疼痛
5. 孤独
6. 紧张
7. 反胃
8. 沮丧
9. 害怕
10. 气短
11. 失去意义
12. 恐慌症状
13. 麻木或异常兴奋
14. 没希望
15. 烦躁不安
16. 身体虚弱
17. 有自杀的想法
18. 恐惧

Appendix 11-A General Self-Efficacy Scale

Please indicate to what extent you agree or disagree with the following statements. 1 = Not at all true 2 = Hardly true 3 = Moderately true 4 = Exactly true.

1. I can always manage to solve difficult problems if I try hard enough.
2. If someone opposes me, I can find the means and ways to get what I want.
3. It is easy for me to stick to my aims and accomplish my goals.
4. I am confident that I could deal efficiently with unexpected events.
5. Thanks to my resourcefulness, I know how to handle unforeseen situations.
6. I can solve most problems if I invest the necessary effort.
7. I can remain calm when facing difficulties because I can rely on my coping abilities.
8. When I am confronted with a problem, I can usually find several solutions.
9. If I am in trouble, I can usually think of a solution.
10. I can usually handle whatever comes my way.

Appendix 11-B General Self-Efficacy Scale (Chinese)

请根据自己的真实想法，判断以下的条目是否符合自己的理解。答案没有对错之分。1-完全不正确，2-有一点正确，3-中等程度正确，4-完全正确。

1. 如果我尽力去做的话，我总是能够解决问题的。
2. 即使别人反对我，我仍有办法取得我所要的。
3. 对我来说，坚持理想和达成目标是轻而易举的。
4. 我自信能有效地应付任何突如其来的事情。
5. 以我的才智，我定能应付意料之外的情况。
6. 如果我付出必要的努力，我一定能解决大多数的难题。
7. 我能冷静地面对困难，因为我可信赖自己处理问题的能力。
8. 面对一个难题时，我通常能找到几个解决方法。
9. 有麻烦的时候，我通常能想到一些应付的方法。
10. 无论什么事在我身上发生，我都能够应付自如。

Appendix 12-A Rosenberg Self-Esteem Scale

Below is a list of statements dealing with your general feelings about yourself. Please indicate how strongly you agree or disagree with each statement. 1-Strongly agree, 2-Agree, 3-Disagree, 4-Strongly disagree.

1. On the whole, I am satisfied with myself.
- 2. At times I think I am no good at all.**
3. I feel that I have a number of good qualities.
4. I am able to do things as well as most other people.
- 5. I feel I do not have much to be proud of.**
- 6. I certainly feel useless at times.**
7. I feel that I'm a person of worth, at least on an equal plane with others.
- 8. I wish I could have more respect for myself.**
- 9. All in all, I am inclined to feel that I am a failure.**
10. I take a positive attitude toward myself.

(Item 2, 5, 6, 8, 9, and 10 are reverse coded)

Appendix 12-B Rosenberg Self-Esteem Scale (Chinese)

下面是一些关于我们对自己看法的句子，请根据你的真实情况选择。1-很不符合。2-不符合，3-符合，4-非常符合。

1. 我感到我是一个有价值的人，至少与其他人在同一水平上。
2. 我感到我有许多好的品质。
3. 归根到底，我倾向于觉得自己是一个失败者。
4. 我能像大多数人一样把事情做好。
5. 我感到自己值得自豪的地方不多。
6. 我对自己持肯定的态度。
7. 总的来说，我对自己是满意的。
8. 我要是能看得起自己就好了。
9. 我确实时常感到自己毫无用处。
10. 我时常认为自己一无是处。