

Exploring Religiosity, Spirituality, Faith, and the Sacred in Chinese and Taiwanese Cultures

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ABSTRACT

The Meaningful Existence Scale is an 18-item instrument designed to explore four critical constructs central to meaning: religiosity, spirituality, faith, and the sacred. The relationship and composition of these factors were studied in two Asian populations, specifically Taiwan and China. Data analyses revealed that participants indicate a deeper nature and connection to the Divine.

Given the consistency of these factors across cultures, said factors could be conceptualized as universal elements which shape the experience of meaning in life. Despite the universal importance of these factors across various cultures, the manifestation of said does change within these Asian cultures.

INTRODUCTION

Science is continuing to explore the structures of psychological questionnaires assessing a wide range of latent traits, including religiosity.¹ The current study seeks to analyze the latent structure of the Scales of Meaningful Existence by using a combination of statistics including but not limited to factor analysis, discriminant function analysis, and logistic regression. Within Meaningful Existence, there are several important constructs which may manifest when exploring religiousness, spirituality, faith, and the sacred within various cultures such as the Chinese and Taiwanese cultures.

RELIGIOSITY AND SPIRITUALITY

In many cultures, religiosity and spirituality are very similar but separate constructs.² Although the exact nature of religiosity and spirituality is difficult to ascertain, there are several general features of these constructs.³ Researchers have identified five common features of religiosity and spirituality.⁴ First, the sacred is a broad concept which underlies both religiosity and spirituality

¹ Brouwers, André, and Welko Tomic. "Factorial structure of the existence scale." *Journal of Articles in Support of the Null Hypothesis* 8, no. 2. (2011): 21-30. doi: 10.1037%2Fmet0000074

² Streib, Heinz, and Ralph W. Hood Jr. "Semantics and psychology of spirituality." *A Cross-cultural Analysis*. Cham & Heidelberg & New York & Dordrecht & London (2016).

³ Hill, Peter C., Kenneth I Pargament, Ralph W. Hood, Jr, Michael E. McCullough, James P. Swyers, David B. Larson, and Brian J. Zinnbauer. "Conceptualizing religion and spirituality: Points of commonality, points of departure." *Journal for the theory of social behaviour* 30, no. 1 (2000): 51-77. doi: 10.1111/1468-5914.00119

⁴ Pargament, Kenneth I., Mahoney, Annette., Exline, Julie. J., Jones, James W., & Shafranske, Edward P.

thereby separating this construct from other similar constructs. Second, both constructs are engaged in some searching process and are therefore shifting in nature. Third, both religiosity and spirituality are multidimensional constructs with many different subdivisions within them, such as behavioral aspects, cognitive aspects, and emotional aspects.⁵ Fourth, both religiosity and spirituality can manifest in a variety of ways that include positive and negative ways. Lastly, the exploration of religiosity and spirituality concerns questions of values.⁶

While religiosity and spirituality display considerable overlap, there are pertinent differences within these constructs.⁷ For instance, religiosity emphasizes a search process, which can manifest in many different ways relative to spirituality as well as facilitating spirituality. In contrast, spirituality tends to emphasize the pursuit of the sacred, which can manifest in traditional religious ways as God, or in nonreligious ways (e.g., justice, nationality).⁸ Additionally, there are several critical differences between religiosity and spirituality such as conceptualizing religiosity as approaching the sacred through the mechanisms of organized religion, while spirituality was seen as approaching the sacred through personal experience, though this is not an absolute distinction.⁹ Based upon these Western studies and the consistency of the patterns observed across many studies, we predict religiosity and spirituality would manifest as related but conceptually distinct elements of meaningful existence in Chinese and Taiwanese cultures.

SACRED

As indicated above, the sacred is a foundational aspect underlying both the religiosity and spirituality, which can be conceptualized as something (e.g., person, idea, object) that is greater

in APA Handbook of Psychology, Religion, and Spirituality Volume 1: Content, Theory and Research., Edited by Kenneth I. Pargament, 3-19. Washington DC: American Psychological Association (2013).

⁵ Glock, Charles Y. "On the study of religious commitment." (1962): 98-110.

⁶ Pargament, "Content, Theory and Research," 3-19.

⁷ Capanna, Cristina, Paolo Stratta, Alberto Collazzoni, and Alessandro Rossi. "Construct and concurrent validity of the Italian version of the Brief Multidimensional Measure of Religiousness/Spirituality." *Psychology of Religion and Spirituality* 5, no. 4 (2013): 316-324. doi: 10.1037/a0033642; Ellor, James W., and Jasmine A. McGregor. "Reflections on the words "religion," "spiritual well-being," and "spirituality"." (2011): 275-278. doi: 10.1080/15528030.2011.603074; Hill, "Conceptualizing religion and spirituality: Points of commonality, points of departure," 51-77; Zinnbauer, "Religion and spirituality: Unfuzzifying the fuzzy," 549-564

⁸ Pargament, "Content, Theory and Research," 3-19.

⁹ Zinnbauer, "Religion and spirituality: Unfuzzifying the fuzzy," 549-564

than the individual. The sacred, however, is not limited to notions of a deity.¹⁰ While God can be a common manifestation of the sacred, particularly for individuals who identify with a particular religious tradition (e.g., Christianity, Islam, Judaism), the sacred can also be perceived as mother nature, humanity, or other entities greater than the self.¹¹ Given the importance of the sacred to religiosity and spirituality and the wide variety of manifestations of the sacred, we predict that meaningful existence within these cultures would yield a sacred component though the exact nature of the sacred can be debated.

FAITH

Although faith is universal worldwide, some religions (e.g., Christianity) treat faith as belief-based or knowledge-based reliance on the Sacred the belief is always self-evident. Other the other side of the spectrum, some religions (e.g., Buddhism) regard faith as correct discipline in thoughts to release self from unnecessary desires.¹² Regardless of religious affiliation, faith concerns the perception of the Sacred and how the Sacred impacts the individual. As such, faith relates to religiosity and spirituality through conceptualizations of the Sacred.

MEANINGFUL EXISTENCE IN ASIAN POPULATIONS

One critical factor to consider when exploring meaningful existence is language. Although researchers could translate prior measures of religiosity, spirituality, faith, and the sacred, into other languages, applying measures to China and Taiwan presents unique challenges.¹³ Presenting contents in an individual's primary language may facilitate the therapeutic process.¹⁴ For these reasons, we translated the Meaningful Existence scale into Traditional Chinese for the Taiwanese

¹⁰ Hill, "Conceptualizing religion and spirituality: Points of commonality, points of departure," 51-77.; Pargamanet, "Content, Theory and Research," 3-19; Zinnbauer, "Religion and spirituality: Unfuzzifying the fuzzy," 549-564

¹¹ Zinnbauer, "Religion and spirituality: Unfuzzifying the fuzzy," 549-564

¹² Clouser, Roy. "Can we know God is real?" *Koers* 79, no. 1 (2014): 1-16. doi: 10.4102/koers.v79i1.447; DeMoss, David. "Empty and extended craving: an application of the extended mind thesis to the four noble truths." *Contemporary Buddhism* 12, no. 2 (2011): 309-325. doi: 10.1080/14639947.2011.610638

¹³ Hafizi, Sina, Dina Tabatabaei, Amir Hossein Memari, Arash Rahmani, and Mohammad Arbabi. "Religious Commitment Inventory-10: Psychometric properties of the Farsi version in assessing substance abusers." *International Journal of High Risk Behaviors and Addiction* 6, no. 3 (2017): 1-4. doi: 10.5812/ijhrba.31651.

Villalobos, Bianca T., Ana J. Bridges, Elizabeth A. Anastasia, Carlos A. Ojeda, Juventino Hernandez Rodriguez, and Debbie Gomez. "Effects of language concordance and interpreter use on therapeutic alliance in Spanish-speaking integrated behavioral health care patients." *Psychological Services* 13, no. 1 (2016): 49-59. doi: 10.1037/ser0000051

participants and Simplified Chinese for the Chinese participants.

PURPOSE

The purpose of the present study was to explore differences in the manifestations of religiousness, spirituality, the sacred, and faith, among Chinese and Taiwanese participants. The project tested how the Chinese version of the Meaningful Existence scale worked in an Asian sample. We used two different translations of the Meaningful Existence Scale: Traditional Chinese and Simplified Chinese. Based on previous research from Western cultures as well as information from Eastern cultures, we predict that Meaningful Existence would manifest as four different but interrelated domains: religiosity, spirituality, faith, and the sacred. To further explore the nature of these constructs, we conducted a series of exploratory analyses to determine what if any differences exist in how these constructs appear in these four cultures. While we predict there would be some differences between these two cultures, we made no specific hypotheses about the difference precise differences in the manifestation of religiosity, spirituality, faith, and the sacred among Chinese and Taiwanese participants.

METHOD

Participants

The participants were recruited from China and Taiwan. There were 75 (51.02%) participants in the China sample and 72 (48.98%) participants in the Taiwan sample. In total, there were 147 participants, 56.5% female, and 43.5% male. With respect to age, 12.2% of participants were ages 20-29, 44.2% were ages 30-39, 27.2% were ages 40-49, and 16.3% were ages 50-59. With respect to education, 2.0% of participants were in Junior High School, 24.5% were in High School, 48.3% were in college, 17.0% were in Graduate School, and 8.2% were Post Graduates. Participants were 49.0% Taiwanese and 51.0% Chinese.

Procedure

The participants were recruited from two high-tech manufacturers in Taiwan and China. Both businesses were civil manufacturers for electronic products. The Scale of Meaningful Existence was translated by one author in this article, with the fidelity of the translation verified by one Taiwanese and one Chinese employee in the two businesses where the participants worked. Participants went to an online website to fill out the questionnaires. Across both businesses, participation was voluntary and was mostly due to interest in this topic.

Measure: Meaningful Existence Scale

The Meaningful Existence Scale is an 18-item measure designed to assess religiosity, spirituality, faith, and the sacred. Participants were presented with a series of items designed to explore religiosity, spirituality, faith, and the sacred. Participants responded to each item by indicating their agreement on a 6-point Likert type-scale. The alone, anchor, chaos, follow, seen, and life items were reverse scored. After analyses discussed below, we summed items within their particular subscale to yield four scores reflecting religiosity, spirituality, faith, and the sacred. The present study was a pilot test of this instrument. The exact wordings of all 18 items are presented in [Table 1](#).

Data Analysis

To determine if factor analysis was appropriate in the present study, the Kaiser-Meyer-Olkin test was conducted which indicated sufficient sample size for exploratory factor analysis in the Taiwanese sample, Chinese sample, and combined sample (KMO = 0.749, 0.713, 0.796 respectively, all $ps < .05$). Many items displayed strong correlations between other items on the Meaningful Existence Scale. Given the strong interrelation between religiousness, spirituality, the sacred, and faith, we elected to use an Exploratory factor analysis using Maximum Likelihood Estimate with Promax rotation ($Kappa = 4$).¹⁵ Factors were retained if Eigenvalues were greater than 1 in order to determine the number of factors.¹⁶ A final factor analysis was conducted using the same procedures specified above to establish a general conceptualization of meaningful existence across these Asian cultures. To assess the reliability of the MES Cronbach's alpha internal consistency reliabilities were computed. A discriminant function analysis was conducted to determine if there were any sufficient differences in how Chinese and Taiwanese individuals viewed these constructs. The subscales included in the analyses were based upon the combined sample factor loadings. A logistic regression analysis was conducted to determine if there were any sufficient differences in how Chinese and Taiwanese individuals viewed these constructs. The subscales included in the analyses were based upon the combined sample factor loadings. Kaiser-Meyer Olkin test revealed that there was a sufficient sample size to run Factor Analyses on these

¹⁵ Hill, "Conceptualizing religion and spirituality: Points of commonality, points of departure," 51-77.; Zinnbauer, "Religion and spirituality: Unfuzzifying the fuzzy," 549-564

¹⁶ Kaiser, Henry F. "The application of electronic computers to factor analysis." *Educational and psychological measurement* 20, no. 1 (1960): 141-151. doi: 10.1177/001316446002000116

data. However, the strong correlations between items given on this scale suggest that traditional principal components analyses are not applicable in these circumstances due to the strong intercorrelation between items and hypothesized constructs.¹⁷ For these reasons, we elected to use an Exploratory factor analysis using Maximum Likelihood Estimate with Promax rotation ($\kappa=4$) and employing the Kaiser Stoppage Rule to determine the number of factors and using a liberal cut off of 0.40 to determine which variables load on which factors.¹⁸

Results

Factor Loadings

Factor loadings for all items were provided in [Table 1](#). While a wide array of criteria exists for interpreting factor loadings, a stringent cutoff of 0.40 was employed.¹⁹ In the Chinese sample, five factors emerged with Eigenvalues greater than 1 (5.127, 3.346, 1.564, 1.311, 1.090, respectively). These factor loadings of these items can be seen in [Table 1](#). The seen and ancestor items did not correspond to any particular factor. In the Taiwanese Sample, five factors emerged with Eigenvalues greater than 1 (5.814, 2.967, 1.517, 1.458, 1.170, respectively). The factor loadings of these items can be seen in [Table 1](#). The chaos item did not correspond to any particular factor. In the combined sample, a four-factor solution emerged with Eigenvalues greater than 1: (5.30, 3.048, 1.465, 1.250, respectively). Results of the factor loadings can be found in [Table 1](#). The chaos and seen items did not correspond to any particular factor.

Discriminant Function Analysis

Discriminant Function Analysis assessing the relationship between the various items and subscales on the area participants were in revealed a significant effect (Canonical Correlation = 0.555, Eigenvalue = 0.445, Wilks Lambda = 0.692, $\chi^2(18) = 50.904$, $p < .001$). Only one discriminant function appeared within these data. Box M test revealed significant deviations from assumptions (Box M = 363.817, $p < .001$). Log determinants for Taiwan, China, and Combined sample were erratic (-11.504, -9.793, -8.117). Additionally, the subscale and combined scales failed the variable

¹⁷ Hill, "Conceptualizing religion and spirituality: Points of commonality, points of departure," 51-77.; Zinnbauer, "Religion and spirituality: Unfuzzifying the fuzzy," 549-564

¹⁸ Kaiser, "The application of electronic computers to factor analysis," 141-151.

¹⁹ Hair, Joseph F., Rolph E. Anderson, Ronald L. Tatham, and C. William. "Black (1998), Multivariate data analysis." (1998): 577-664.; Stevens, James P. Applied multivariate statistics for the social sciences. Routledge, 2012.

tolerance test. Results of the analysis are presented below in [Table 2](#). The seen, Chaos, Religious, believe, anchor, follow, temple, scale total, religiosity subscale total, and faith total were significant predictors.

Logistic Regression

Logistic regression assessing the impact of all scale items and demographics on group membership in area revealed a significant effect (Cox & Snell $R^2 = 0.514$) (Nagelkerke $R^2 = 0.685$). $\chi^2 = 106.081$, $p < .05$). The results of the logistic regression are presented in [Table 3](#). There appear to be strong differences in response style with regard to age as well as the order, seen, religious, happy, and follow items.

Factor Analysis of China Participants

In Chinese Sample, five factors emerged representing the hypothesized dimensions of religiosity, spirituality, faith, and the sacred. The first factor is comprised of the unidimensional items anchor, believe, and follow as well as the multidimensional items of religious and temple. The believe, anchor, and follow items have the strongest factor loadings greater than 0.70 while temple item has a much smaller factor loadings. These patterns of loadings suggest that this item assesses organized religiousness, and thus this factor was named religiosity. The second factor is comprised of the unidimensional beauty, chaos, count, nature, and order items and no multidimensional items. The nature item has the highest factor loading of 0.687, closely followed by the chaos item at -0.681. These patterns suggest that this factor assesses spirituality, and thus, this factor was named spirituality. The third factor was composed of the unidimensional happy, material, and meaning item as well as the multidimensional religious. The happy and meaning items had the strongest factor loadings (0.834, and 0.611, respectively). The factor loadings suggest some higher level important figures such as a God or mother nature, and as such, this factor was named the sacred. The fourth factor was comprised of the unidimensional alone and life items and no multidimensional items. The life item had the largest factor loading of 1.033. These patterns of factor loadings suggest some belief in an unseen thing which provides order, and thus, this factor was named faith. The fifth factor was comprised of the unidimensional back items and the multidimensional temple item. As this factor contains only one unique item, this factor is likely composed of some random noise, and as thus, this factor was recommended to be dropped.

Factor Analysis of Taiwan Participants

In the Taiwanese Sample, five factors emerged, representing the hypothesized dimensions of religiosity, spirituality, faith, and the sacred. The first factor is comprised of the unidimensional items believe, follow, and temple as well as the multidimensional items of anchor and back. The believe, temple and back items have the strongest factor loadings greater than 0.80 while anchor and follow have much smaller factor loadings. These patterns of loadings suggest that this item assesses organized religiousness, and thus this factor was named religiosity. The second factor is comprised of the unidimensional religious, ancestor, and life item as well as the multidimensional anchor, happy, and meaning items. The ancestor item had the largest factor loading of 1.131 while the remaining items had smaller factor loadings around 0.60. These patterns suggest that this factor assesses a theistic form of spirituality. As such, this factor was named spirituality. The third factor was composed of the unidimensional material, beauty, and nature item as well as the multidimensional order, happy and meaning items. The beauty and nature items had the strongest factor loadings greater than 0.70. These factor loadings suggest feeling of some high-level figure of importance, such as a God, Tao, or mother nature. As such, this factor was named the sacred. The fourth factor was comprised of the unidimensional seen item and the multidimensional order and alone item. The seen item had the largest factor loading of approximately .7 while the remaining items had smaller factor loadings. These patterns of factor loadings suggest some believe in an unseen thing which provides order. As such, this factor was named faith. The fifth factor was comprised of no unidimensional item and the multidimensional alone and back items. However, as there are no unidimensional items which comprise this scale, this factor is likely composed of some random noise, and as such, this factor was recommended to be dropped.

Factor Analysis on All Participants

Within the combined sample, five factors emerged, representing the hypothesized dimensions of religiosity, spirituality, faith, and the sacred. The first factor is comprised of the unidimensional items believe, anchor, and follow as well as the multidimensional items of religious, ancestor, back, and temple. These patterns of loadings suggest that this item assesses organized religiousness, and thus this factor was named religiosity. The second factor is comprised of the unidimensional material and order, as well as the multidimensional items count, religious, ancestor, beauty, nature, happy, meaning.

These patterns suggest that this factor assesses spirituality, and thus, this factor was named spirituality. The third factor was composed of the unidimensional alone, life, as well as the multidimensional items count, religious, ancestor, beauty, nature, happy, meaning, and back. These patterns of factor loadings suggest some important figure greater than the self (i.e., God or Mother Nature) and thus, this factor was named the sacred. The fourth factor was comprised of no unidimensional items and the multidimensional items beauty, back, and temple. These patterns of factor loadings suggest some believe in an unseen thing which provides order, and thus this factor was named faith. There was no fifth factor in the combined sample. As such, the nature of meaningful existence is similar in Asian cultures, though the composition of religiosity, spirituality, faith, and the sacred may differ.

Evaluation of Factor Loadings

Cross loadings

Within these factor loadings, several important nuances are observed. Primarily, while some items are unidimensional, many items cross-load onto multiple factors. Within the Taiwan data, while material, seen, religious, believe, ancestor, beauty, nature, follow, life and temple are unidimensional, order, anchor, alone, happy, meaning, and back cross load onto at least two different factors which varied depending upon the specific item.

Within the China data, there was substantially less cross loading. While Material, order, count, believe, anchor, alone, beauty, nature, happy, meaning, follow, life, and back were unidimensional, religious and temple were multidimensional. These patterns of loadings may suggest that China tends to view religion spirituality, the sacred and faith as more isolated while Taiwan views these concepts as heavily related. This phenomenon may be due in part to the tendency of individuals in Asian cultures to accept high degrees of ambiguity compared to western cultures. Alternatively, individuals in Asian cultures may see certain words as highly related to religious ideology, and thus, certain elements may evoke religious or spiritual elements.

While some research suggested that items can only be retained in the event each item corresponds to one factor, newer models have been developed to allow for cross loading such as

multidimensional item response theory.²⁰ Additionally, the overlap between religiosity, spirituality, faith, and the sacred suggests that some degree of cross loading might be inevitable when assessing these four constructs.

Common factor loadings

In addition to the high degree of cross loading, several consistent factor loadings were observed across the Taiwanese and Chinese cultures. For the religiosity factor, both cultures comprised this factor of the believe, anchor, follow, and temple items. The Taiwanese culture included the back item while the Chinese culture included the religious item. Results suggest that both cultures see religion as relating to some organizational components and a core of life. The Chinese culture seems to view religion in very orthodox ways while the Taiwanese culture views religion in historical ways, which emphasized a sense of support as a source of well-being.

Within the spirituality factor, both cultures viewed these constructs in divergent ways. The Taiwanese culture included the religious, ancestor, anchor, happy, meaning, and life items while the Chinese culture included the order, count, beauty, and nature items. No common items were observed for both cultures. The Taiwanese cultures seem to view spirituality in terms of organized religion and in emotional ways, while the Chinese culture views spirituality in very earthly and structured ways. Overall, results suggest that spirituality is noticeably different in both cultures.

Both the Chinese and Taiwanese cultures saw Faith as composing material, happy, and meaning. However, the Taiwanese culture saw faith as containing order, beauty, and nature, while the Chinese culture saw faith as containing religious. This suggests that the Chinese culture views faith in the context of organized religion, while the Taiwanese culture views faith in emotional terms.

Both the Chinese and Taiwanese cultures saw the sacred as alone. The Taiwanese culture saw the sacred as relating to order and seen while the Chinese culture saw the sacred as relating to life. These results suggest that the sacred is something to be pursued as an individual. However, the Chinese culture saw the sacred as more critical to daily life while the Taiwanese culture saw

²⁰ Thurstone, Louis Leon. "The measurement of social attitudes." *The journal of abnormal and social psychology* 26, no. 3 (1931): 249-269. doi: 10.1037/h0070363; Reckase, Mark D. "Multidimensional item response theory models." In *Multidimensional item response theory*, pp. 79-112. Springer, New York, NY, 2009.

the sacred in very tangible ways.

Reliability Analysis

Results of the reliability analysis are presented below in [Table 4](#). To assess the reliability of the MES Cronbach's alpha internal consistency reliabilities revealed consistent measures of religiosity, spirituality, faith, and the sacred. The majority of scales in Taiwan displayed sufficient reliabilities, while many subscales in China did not display sufficient reliabilities. Among the Taiwan sample, the faith subscale did not display sufficient reliability furthermore; removing any one item would not increase reliability. Within the China sample, both the spirituality and faith constructs displayed low reliabilities. Within the spirituality subscale, removing the chaos item would substantially increase the reliability of this subscale (Cronbach's alpha = 0.699). However, within the faith subscale, removal of items would not impact reliability. Within the sacred subscale in the China sample, while this scale is close to displaying sufficient reliability, removing the material item would slightly increase the reliability of this subscale (Cronbach's alpha = 0.714). In the combined sample, all subscales displayed sufficient internal consistency reliabilities.

Differences Between Chinese and Taiwanese Cultures

To determine if there were any sufficient differences in how Chinese and Taiwanese individuals viewed these constructs, a discriminant function analysis was conducted revealed that participants from Taiwan were endorsed the religious, anchor, follow items higher than participants from China. Participants from China endorsed the Chao, Believe, and temple items higher than participants from Taiwan as indicated by the classification function coefficients. Logistic Regression analyses revealed that Taiwanese individuals are more likely to respond higher to the seen, religious, and follow items while Chinese individuals are more likely to respond higher to the order and happy items as well as being younger. Overall, Taiwanese may regard family tradition as tightly connected with religious experience; while Chinese may regard religious experience as directly related to personal well-being and universal structure or order.

DISCUSSION

The purpose of the present study was to translate the Scale of Meaningful Existence into two kinds of Chinese and experiment if participants read differently. Also, Chinese language was assumed to cause overlapping of comprehension among various sentences from the items in the scale of M.E., while the latent factors were kept as same with those in the North American society. Results

suggest that Chinese and Taiwanese individual do perceive these constructs as four similar but strongly interrelated factors comprising religiosity, spirituality, the sacred, and faith. In both the Chinese sample, Taiwanese sample, and when analyzing both data simultaneously, a 4-factor solution emerges comprising religiosity, spirituality, faith, and the sacred. The high amount of overlap and cross loading was understandable given the strong relationships between these constructs.²¹ Further, when exploring these constructs, researchers have observed that religiosity items and spirituality items tend to form separate factors though there is a strong relationship between both elements.²²

Though religiosity and spirituality were very similar, the manifestation of these constructs did differ across Chinese and Taiwanese cultures. Reliance on the language Traditional Chinese leads to higher reading of overlapping meanings from questions in the ME scale, as it was revealed by more cross-loadings. On the contrary, China citizens are used to reading by Simplified Chinese, and thus their understandings of the ME scale were more logically discerning. In the results, the less occurrence of cross-loadings was discovered.

While there does appear to be some consistency among the differences between Taiwanese and Chinese individuals with regard to the general nature 4-factor nature of meaningful existence, there are critical differences between these two cultures. Both analyses concluded that Taiwanese individuals endorse the religious and follow items more than the Chinese participants suggesting that economic reform of China is taking citizens away from traditional practices of religion, while Taiwanese citizens accept behaviors of religious practices while keeping adapting to modern economy. This suppression and reform of religion within China and the acceptance of religion within Taiwan may explain the differences in the perceptions of these four factors. However, the discriminant function analysis suggests that the anchor item is critical while the logistic regression suggests the seen item is more critical.

Chinese individuals displayed no consistent pattern of endorsing specific items. There are several possible reasons for these inconsistent findings. Mathematically speaking, the discriminant function analysis has the potential of identifying multiple discriminant functions if these manifest

²¹ Hill, "Conceptualizing religion and spirituality: Points of commonality, points of departure," 51-77.; Zinnbauer, "Religion and spirituality: Unfuzzifying the fuzzy," 549-564

²² Piedmont, R. L. "Assessment of spirituality and religious sentiments, technical manual." (2004).

within the data. As such, it is possible that the Order and Happy items are representing a different undetected discriminant function. Additionally, the assumptions for the discriminant function analyses were not met as evidenced by the Box M test. Additionally, supplemental Pearson r correlations and normality tests revealed strong correlations between items and violations of statistical assumptions. As such, it is equally possible that some findings from the discriminant function analysis may be errors.

Culturally speaking, the differences between the nature of religiosity, spirituality, faith, and the sacred may be due in part to language comprehension. As Chinese citizens used Simplified Chinese to read, they tend to read the questions about religious mindsets or spirituality in a relatively distinguishable way, compared to Taiwanese citizens, who rely on Traditional Chinese to read daily.

Dimensionality

A crucial factor to consider within this study is the degree of cross loading. While the Taiwan data cross loaded more heavily than the China data, there were many items which assessed both religiousness, spirituality, the sacred, and faith. Given the strong overlap between these dimensions and the desire to assess all dimension through one instrument, the existence and degree of cross loading is not surprising.²³

A second factor which may contribute in part to the degree of cross-loading is culture such that participants may be interpreting a particular question differently depending upon what culture they are in. When translating instruments into other contexts, researchers must be cognizant of the cultural differences, which may shape how individuals interpret specific items on a questionnaire.²⁴ The ambiguous nature of religiosity, spirituality, faith, and the sacred combined with the cultural differences in China and Taiwan may contribute in part to the degree of cross-loading observed.²⁵

While some researchers may arbitrate that psychologists can carefully design scales such

²³ Hill, "Conceptualizing religion and spirituality: Points of commonality, points of departure," 51-77.; Zinnbauer, "Religion and spirituality: Unfuzzifying the fuzzy," 549-564

²⁴ Geisinger, Kurt F. "Cross-cultural normative assessment: Translation and adaptation issues influencing the normative interpretation of assessment instruments." *Psychological assessment* 6, no. 4 (1994): 304-312. doi: 10.1037/1040-3590.6.4.304

²⁵ Hill, "Conceptualizing religion and spirituality: Points of commonality, points of departure," 51-77.; Zinnbauer, "Religion and spirituality: Unfuzzifying the fuzzy," 549-564

that only unidimensional items are to be used for the scale because unidimensional items make scientific understanding more efficient, such an orientation would minimize our philosophical conceptualizations of religiosity, spirituality, the sacred and faith by ignoring all overlapping elements and retaining unique elements.²⁶ In theology, these constructs can be separate constructs while somehow relating to one another.

As such, cross loading elements are unavoidable in the present context to ensure a full representation of the constructs. Given these theoretical overlapping among these four constructs, specific analyses were chosen, which allow for correlated factors and cross loadings.

Strengths and Weaknesses of the present study

Strengths

The present study represents an early attempt to explore the nature of religiosity, spirituality, faith, and the sacred in two Asian cultures. Testing the Scale of ME on the East Asian population has been innovative and intrepid. While many Westerners make consider the freedom of religious expression to be universal, such beliefs are not true on a global scale. There are many countries who display hostile views towards religion, spirituality, as well as adherents of these belief systems.

Weaknesses

One weakness within the present study is the lack of consistency between the discriminant function analysis and logistic regressions. While some items consistently predicted differences between cultures, other patterns were more difficult to detect. This may be due in part to the violation of statistical assumptions.

Directions for future research

The present study offers several critical directions for future research, such as the validation of the meaningful existence scale. Such an instrument which can evaluate these four critical constructs within these two cultures has profound implications for academic research as well as clinical practice. Future research may seek to confirm the exiting factor structure as well as reestablish test-retest reliability, parallel forms reliability, predictive and discriminant validity.

²⁶ Thurstone, "The measurement of social attitudes," 249-269.

CONCLUSION

The present study was an exploration of meaningful existence within two Asian cultures: China and Taiwan. While meaningful existence does display the same structure, being comprised of religiosity, spirituality, faith, and the sacred, the composition of meaningful existence varies. Nonetheless, understanding the nature and manifestation of religious and spiritual experiences within these cultures can provide many useful insights for clinical practice, academic research, and geopolitics.

APPENDIX

Table 1 Table of Factor Loadings of items in the China, Taiwan and Combined Sample.

		Religiosity	Spirituality	Faith	Sacred	Noise
The most important aspects of my life are not <i>material</i> .	China	-.133	.250	.454	-.219	-.137
	Taiwan	-.073	-.131	.579	.223	.306
	Combined	-.133	.250	.454	-.219	-.137
I know there is an <i>order</i> to this universe.	China	.028	.585	.029	-.045	-.206
	Taiwan	.045	.076	.469	.421	.283
	Combined	.028	.585	.029	-.045	-.206
My family provides a stable spiritually sound presence that I can <i>count</i> on.	China	-.310	.544	.040	-.104	.181
	Taiwan	-.029	.333	.260	.236	-.129
	Combined	-.310	.544	.040	-.104	.181
I only believe what I have <i>seen</i> .	China	.212	-.303	-.132	-.162	-.283
	Taiwan	.257	-.139	-.143	.695	-.160
	Combined	.212	-.303	-.132	-.162	-.283
This world is filled with disorder and <i>chaos</i>	China	-.162	-.681	.257	.041	-.167
	Taiwan	-.008	-.123	-.070	.058	-.189
	Combined	-.162	-.681	.257	.041	-.167
My family has <i>religious</i> belief.	China	.518	.089	.514	-.030	.070
	Taiwan	.040	.596	.104	-.108	.103
	Combined	.518	.089	.514	-.030	.070
I do not feel <i>anchored</i> in my family's religious values.	China	.719	-.008	-.089	.076	.068
	Taiwan	.521	.559	-.200	-.003	.154
	Combined	.719	-.008	-.089	.076	.068
I do not <i>believe</i> in God/Buddha I experience God/Buddha	China	.773	-.214	.178	-.184	.030
	Taiwan	.911	-.029	-.148	.261	.175
	Combined	.773	-.214	.178	-.184	.030
I feel fulfilled through the tradition of my <i>ancestors</i> .	China	.372	.373	.232	.130	.089
	Taiwan	-.042	1.131	-.214	-.026	.231
	Combined	.372	.373	.232	.130	.089
I feel <i>alone</i> and unprotected.	China	.090	-.213	.207	.388	.191
	Taiwan	-.195	.311	-.015	.567	-.584
	Combined	.090	-.213	.207	.388	.191
I feel strong and <i>happy</i> .	China	.089	-.079	.834	.096	-.010
	Taiwan	.022	.396	.556	-.108	.013

		Religiosity	Spirituality	Faith	Sacred	Noise
	Combined	.089	-.079	.834	.096	-.010
There is <i>beauty</i> in all creation.	China	-.117	.501	.261	-.040	.114
	Taiwan	.096	.093	.724	-.250	.095
	Combined	-.117	.501	.261	-.040	.114
<i>Nature</i> is “Heaven on earth.”	China	.226	.687	.168	.003	-.228
	Taiwan	-.016	-.029	.767	-.040	.035
	Combined	.226	.687	.168	.003	-.228
I see <i>meaning</i> in life.	China	-.266	.176	.611	.151	.035
	Taiwan	.103	.581	.454	-.096	.112
	Combined	-.266	.176	.611	.151	.035
I do not experience meaning in <i>life</i> .	China	-.030	-.024	.009	1.033	-.112
	Taiwan	.005	.643	.116	-.062	-.114
	Combined	-.030	-.024	.009	1.033	-.112
I always feel God/Buddha has my <i>back</i> .	China	.254	.002	-.063	-.048	.877
	Taiwan	.824	-.002	.006	.000	-.430
	Combined	.254	.002	-.063	-.048	.877
The place I feel safe is in a <i>temple</i> of worship.	China	.394	-.072	.033	-.039	.665
	Taiwan	.954	-.164	.176	.038	.019
	Combined	.394	-.072	.033	-.039	.665
I do not feel the need to <i>follow</i> any formal way of worship.	China	.710	.208	-.337	.120	.056
	Taiwan	.678	.117	.097	.068	.039
	Combined	.710	.208	-.337	.120	.056

Table 2 Table of Significant Predictors of Culture as determined through Discriminant Function Analysis

	Wilks' Lambda	F	Canonical Correlation Coefficient
material	1.000	.020	.080
order	.999	.205	-.404
count	.998	.307	.146
seen	.916	13.349***	.552
chao	.962	5.679*	-.279
religious	.884	19.109***	.813
believe	.947	8.090**	-.128
ancestor	.995	.799	-.331
anchor	.970	4.525*	.108
alone	1.000	.040	-.045
beauty	.998	.361	.201
nature	.984	2.297	-.044
happy	.999	.212	-.560
meaning	.998	.332	.394
follow	.926	11.599***	.362
life	.998	.244	-.098
back	.985	2.141	-.399
temple	.953	7.119**	.214
Total Meaningful Existence	.952	7.339**	
Total Religiosity	.927	11.451***	
Total Spirituality	.986	2.065	

Total Sacred	.986	2.017	
Total Faith	.971	4.400*	

* indicates $p < .05$, ** indicates $p < .01$, *** indicates $p < .001$

Table 3 Table of Significant Predictors of Culture as determined through Logistic Regression

	<i>B</i>	Odds Ratio
material	-.078	.925
order	1.268**	3.555
count	.156	1.169
seen	-.849**	.428
chao	.302	1.353
religious	-1.926***	.146
believe	.066	1.068
ancestor	.260	1.296
anchor	.079	1.082
alone	.275	1.317
beauty	-.859	.424
nature	1.008	2.739
happy	1.313**	3.717
meaning	-.825	.438
follow	-.945**	.389
life	.521	1.684
back	.733	2.081
temple	-.040	.961

* indicates $p < .05$, ** indicates $p < .01$, *** indicates $p < .001$

Table 4 Table of Internal consistency reliabilities for the Meaningful Existence Scale.

Factor	Cronbach's alpha Taiwan	Cronbach's Alpha China	Cronbach's Alpha Combined
Whole Scale	0.825	0.722	0.786
Religiousness	0.895	0.832	0.882
Spirituality	0.869	0.125	0.810
Sacred	0.781	0.668	0.795
Faith	0.490	0.591	0.718
Fifth Factor	0.278	0.927	N/A