

## Article

# Filipino College Students' Attitudes towards Religion: An Analysis of the Underlying Factors

Rito Baring <sup>1,\*</sup> , Philip Joseph Sarmiento <sup>2</sup> , Nestor Sibug <sup>3</sup>, Paolo Lumanlan <sup>4</sup>, Benita Bonus <sup>5</sup>, Cristina Samia <sup>2</sup> and Stephen Reysen <sup>6</sup>

<sup>1</sup> Theology & Religious Education Department, De La Salle University, Manila 0927, Philippines

<sup>2</sup> Christian Living Education Department, Holy Angel University, Angeles City 2009, Philippines; pjsarmiento@hau.edu.ph (P.J.S.); csamia@hau.edu.ph (C.S.)

<sup>3</sup> Psychology Department, Holy Angel University, Angeles City 2009, Philippines; nsibug@hau.edu.ph

<sup>4</sup> College of Social Sciences & Philosophy, Don Honorio Ventura Technological State University, Bacolor 2001, Philippines; plumanlan@dhvtsu.edu.ph

<sup>5</sup> School of Education, Holy Angel University, Angeles City 2009, Philippines; bbonus@hau.edu.ph

<sup>6</sup> Department of Psychology, Counseling and Special Education, Texas A&M-Commerce, TX 75429, USA; Stephen.Reysen@tamuc.edu

\* Correspondence: rito.baring@dlsu.edu.ph; Tel.: +63-524-4611 (local 534)

Received: 18 January 2018; Accepted: 13 March 2018; Published: 17 March 2018

**Abstract:** In the last 50 years, measures of religious constructs have been the subject of much scientific attention. Cross-cultural considerations necessitate that empirical claims on assessments about religion are validated by local data. While religion is typically viewed in terms of spirituality and religiosity, recent empirical studies indicate a shift in the interpretation of these dimensions in a more diffused and relaxed appreciation. Building up from these developments, in the present research, we develop and test the structure and reliability of a scale to assess students' attitudes towards religion. Using a sample ( $n = 2733$ ) of college students from two provincial universities in the Philippines, we employed data reduction techniques to understand the underlying factor structure. The results showed a three-factor measure of attitudes towards religion.

**Keywords:** attitudes towards religion; Filipino students; religiosity; spirituality; self-report measure of religion

## 1. Introduction

Poll surveys in the Philippines often assess attitudes towards religion in terms of religiosity and spirituality. These studies favor the impression that religion is essentially about faith and practice. Sociological inquiries generally frame these studies using “religious beliefs and practices” (Mangahas and Guerrero 1992), reflecting the inward and outward dimensions of belief. The inquiries gravitate around religious affiliation, e.g., Christianity, personal obligation such as religious practice and spiritual norms. The thin dividing line between the religious and spiritual dimensions suggested in local literature (Abad 2001) offers some new insights about how local contemporary studies in religion could be theorized. Recent empirical studies in religion see the fluid interaction between the institutional, obligatory, and spiritual dimensions. In a recent national youth survey (CBCP-ECY and CEAP 2014) in the country, religiosity and religious domains is assessed to include “private practice” and “religious experience.” These measures, however, are specifically directed towards forming baseline data for population profile regarding religion rather than investigate the underlying dimensions that characterize respondents' notions of religion. Considering the missing inquiry that provides an in-depth analysis of latent dimensions representing youth attitudes towards religion in the Philippines and in an ASEAN (Association of Southeast Asian Nations) setting, the researchers

decided to embark on this study. Attempts to locate assessment scales in the local and regional context intended to measure student attitudes toward religion did not yield favorable results. However, related scales developed from the West to assess attitudes towards Christianity (Francis et al. 1995) among undergraduate students are prevalent but are missing some peculiar characteristics of student perspectives found in recent local studies (Baring et al. 2016a; Batara 2015). Another assessment scale developed to assess attitudes towards religion is the Astley–Francis Scale of attitude towards theistic faith (Astley et al. 2012). This assessment is validated for internal consistency and reliability in varied Western settings. However, no validation was conducted for the Southeast Asian context. Obviously, these measures carry out delimiting objectives or context that are very specific to their design and development (Büssing 2017). A previous study (MacDonald et al. 2015) involving university students in eight countries evaluated the validity and reliability of the Expressions of Spirituality Inventory (ESI-R) and the Spirituality Adjective List (SAL). From the empirical findings, we considered that certain cultural factors (Hambleton 2005), e.g., ethnicity, may affect the outcomes of empirical designs and results. After reviewing the Astley–Francis Scale and the other related scales, we noted that certain atypical characteristics of student perspectives in our setting need to be articulated in our desire to develop an assessment tool for college students’ attitudes towards religion. We were looking at the diffused interaction between the religious and spiritual, the moral/ethical perspectives and personal views (Baring et al. 2016b) which emerged in a previous study in the local setting. In saying this, we did consider how contrasting studies have operationalized assessments that dealt with spirituality as being distinct from religiosity but inter-related (MacDonald et al. 2015). We fully understand that introducing a diffused conceptualization of spirituality and religiosity incorporated in a single construct looks unlikely in traditional empirical studies involving attitudes towards religion. The diffused state is not preferred in some Western settings where religiosity is distinguished from spirituality (Zwingmann et al. 2011) due to the secular context. However, the recent use of both Spirituality/Religiosity as a single construct in a growing number of studies (Baring et al. 2016b; Good and Willoughby 2014) from different environments supports our intent. The study of Religiosity/Spirituality as one construct in many other investigations render this pairing highly plausible.

## 2. The Need for a New Measure: Peculiar Traits

This recent development henceforth takes note of the increasing attention given to the collapse of the distinction itself. Recent studies on Filipino youth articulations of religious belief already show a diffused appreciation of religion, morals and spiritual life (Baring and Cacho 2015). A growing recognition in the literature (Baring et al. 2016a, 2016b) studying Filipino youth profile records the loosening of the boundaries and distinctions proposed in the previous sacred–profane model. This observation is also noted in other Western literature (Koenig 2009) which sees the distinction of spirituality from religiosity as problematic for assessment purposes. In effect, this profound shift has given way to a new awareness which this inquiry is interested to explore and verify. Adolescence is a strategic period to understand the youths’ spiritual and religious engagements (King and Boyatzis 2004). Understanding the essential role of spirituality vis-à-vis religiosity in Filipino youth development (Ocampo et al. 2013) can be a significant step towards deepening the appreciation of local scholarship towards spirituality and religiosity among adolescents. To clarify therefore the peculiar turn of the youth’s appreciation of the spiritual and religious and how these are interspersed presents itself as a logical scope towards a study of youth attitudes towards religion. Locally, thus far, no research has attempted to provide an empirical explanation of the youth’s underlying attitudes towards religion. Youth studies in relation to religion are the usual demographic profiles mostly assessed with respect to other psycho-social variables reported in social weather stations and in commissioned reports. The present study will serve to bridge the un-articulated spaces between numerous baseline data serving to describe youth profile and students’ fundamental attitudes towards religion.

Previous scales designed to assess attitudes towards religion claim correspondence with specific religious traditions (Francis 1993). However, the recent shifts in meaning of the youth's appreciation of religion and the sacred necessitates that an approach to an attitude towards religion will have to consider religious and non-religious domains. Studying attitudes towards religion therefore necessitate expanding the meanings for religiosity and spirituality. In the present study the concept "religion" is understood in an inclusive sense, i.e., not exclusive to Christianity.

Religiosity is traditionally considered with respect to specific religious traditions while spirituality is understood in either way: as a function of religious lifestyle irrespective of one's religious affiliation or as a purely interior mindset. In recent sociological studies, religiosity is measured in terms of religious affiliation, behavior and commitment (Voas 2007). MacDonald et al. (2015) sees how spirituality can be treated distinctly from religiosity, as a multidimensional concept, as a psychological issue, and as a "universal domain of functioning" beyond its traditional associations with age and gender. The theme of transcendence vis a vis the subjective dispositions (David Elkins et al. 1988) is also associated with this notion. Spirituality is also examined as a humanistic concept (Koenig 2010). This differentiated description of religiosity and spirituality also provide interconnections. Literature review suggests that both notions offer humanistic and spiritual features. These features are gleaned when initial interviews conducted prior to the construction of the scale suggested non-traditional dimensions of spirituality that include human traits and motivations. We considered that these variables are essential to their attitude towards religion. Previous studies already see (Baring et al. 2016b; Hernandez 2011) the essential constitution of the human and social elements in the spiritual and religious domains. The present study sees the renewed interest towards youth spirituality in negotiated forms as an essential dimension of religion that sees a thriving experience-based spirituality (McQuillan 2006). Local data see spirituality and religiosity in previous literature as complementing aspects of the Filipino religious experience (Dy-Liacco et al. 2009; Mansukhani and Resurreccion 2009). The diffused character of the notions of religiosity and spirituality among the young (Baring et al. 2016b; Giordan and Swatos 2012; Tan 2009) partly explains the loosening of the youth distinctions of the religious and the spiritual. Citing Alexander and McLaughlin (2003), Tan's characterization of "tethered" and "untethered" spirituality (2009) describes the changed religious attitudes of the youth in an Asian setting.

### 3. Present Study

The purpose of the present study is to develop a self-report measure to assess Filipino Students' Attitudes towards Religion (FSAR) and test its validity and reliability. This is in response to an urgent need to provide empirical measures of religion in the region particularly in the Philippines. This collaborative effort is the first attempt to articulate an empirical basis for students' attitudes towards religion in the country. Secondly, we want to present the peculiar traits of the Filipino youth perspective towards religion which accommodates both Christian, personal and religiously diverse points of view.

### 4. Participants and Procedure

Participants ( $N = 2733$ , 58.1% female;  $M_{\text{age}} = 19.03$ ,  $SD = 2.03$ ) included college students in two Philippine universities. Participants indicated their age, sex, and college, and then completed an initial pool of 80 items regarding attitudes toward religion. They come from a private and government managed university in the province. These institutions cater to students who come from varied cultural, religious, and regional backgrounds. Participant profile included gender, university affiliation, academic course, and age. Since we considered religion in the inclusive sense, we decided that FSAR be administered to students with religious affiliation after its development.

To develop the self-report measure (FSAR), free essays and Focus Group Discussions (FGDs) were initiated in both participating institutions using the Concept Analysis Response model (Prasad and Mohan 2009) to help us understand how students view religion. Due to the highly varied composition

of students per class the researchers decided to pick 8–10 students for selection from each year level. An equal number of students were also selected for the free essay writing. The basic intent of study was explained to the participants upon selection. The aim of these essays and FGDs was meant to identify the orientation of their perceptions and attitudes towards religion. It was supposed to assist us in further framing students' attitudes towards religion and complement literature review. The FGD generated a large base of student perspectives that led to the construction of the items. We took note of their responses during the conversations and constructed an initial pool of 80 items thought to tap attitudes toward religion (see Table 1).

**Table 1.** Initial Item Composition from FGD and Free Essays (Level 1).

RELIGIOSITY	SPIRITUALITY
RELIGIOUS Dimension	RELIGIOUS Dimension
<b>a. Religious affiliation [Sees religiosity in terms of the person's institutional engagements] (5)</b>	<b>a. Religious affiliation [sees spirituality in terms of institutional identification] (8)</b>
1. A religious person follows his/her religion. 2. I believe in the doctrines of the Church. 3. I love God but hate religion. 4. The religious people are easily persuaded to believe in something. 5. I think religion keeps us blinded from the truths. (* eliminated items) I am presently affiliated to a religion. (1) Religious people are intolerant of those who hold different opinions (2) I honor Church doctrine through my speech and actions. (2) I know who to follow without religion. (3) I always depend on my faith. (1) My religion makes me religious. (1)	1. Spirituality is about believing in God. 2. For me spirituality is concerned with religious matters. 3. Spirituality is beyond any religion. 4. The spiritual person is one who loves religion. 5. Spirituality indicates how one's beliefs are practiced in daily life. 6. I leave everything to God. 7. I am happy to see different religions in my midst. 8. The religious person knows many things about Scriptures. (* eliminated items) Spirituality is about religion. (1, 3) It is about accepting Gods word. (8) About worship and glorifying God. (4) An aspect of a firm believer. (1, 4) One who surrenders everything to God. (6) One who believes in God. (1) Being spiritual is being faithful to God. (1) Someone who reads the Bible. (8) Being able to practice Christ's teachings. (5)
<b>b. Religious obligations [sees religiosity in terms of the person's religious obligations] (7)</b>	<b>b. Religious obligations [sees spirituality in terms of obligatory requirements] (6)</b>
1. Religious persons are those who go to Church. 2. A religious person is a person of prayer. 3. I observe religious traditions (e.g., devotions) in the Church. 4. Religiosity is measured in personal spiritual habits that I do. 5. It is about religious acts and devotions. 6. Passing by the church I do the sign of the cross. 7. I am active in church activities. (* eliminated items) I think I am not religious because I don't have time for the church. (1) I have stopped visiting the church now. (1) I take active part in Church assemblies. (1) I think religious persons perform religious rituals in church everyday. (1, 3, 5) Being religious is about showing one's beliefs in one's daily life. (3, 4)	1. I respect those who perform clerical (priestly) function in Church. 2. I don't go to Church but only during Simbang Gabi Masses. 3. I put into action the Lord's teachings. 4. I can still pray even without going to Church. 5. It is important that I dedicate a time for God. 6. I remember the souls or spirits of people who have died. (* eliminated items) Its about living out one's devotion to God. (2, 3) Spirituality is about being religious. (1, 2, 3) Following God's laws. (1, 2, 3) It reminds me of the Church. (1) It is an aspect of being religious. (1) One who believes without belonging to a church. (2)
<b>c. Divine Affiliation [sees religiosity in terms of identification with the divine] (4)</b>	<b>c. Divine Affiliation [looks at spirituality as a means to build relationship with God] (5)</b>
1. I believe a religious person is God-centered. 2. For me, religiosity promotes blind faith. 3. I feel that I need to have a relationship with God. 4. Religiosity means having a blessed life with God. (* eliminated items) The life I live reflects Jesus' teachings. (3, 4) I practice Christ's teachings in my life. (3) Being religious involves a personal acceptance of Jesus. (3, 4) A religious person is someone faithful to God. (3) A religious person is someone who lives his/her life for God. (3) I show utmost respect for God. (3, 4) One who is religious is God-fearing. (1) I love God above all. (3)	1. In my life, I try to do God's will. 2. In every decision I make, I put God first. 3. I feel that spiritual persons are enlightened by God. 4. Salvation for me is essential for religion. 5. I believe that God is merciful. (* eliminated items) None

Table 1. Cont.

RELIGIOSITY	SPIRITUALITY
HUMAN Dimension	HUMAN Dimension
<b>a. Interior traits and dispositions [sees religiosity in terms of interior dispositions] (7)</b>  1. A religious person is someone who realizes their faults. 2. A religious person is someone who is well disciplined. 3. Religious persons are concerned about doing good deeds. 4. I think those who are religious have strong values and morals. 5. A religious person lives a stress-free life. 6. Religious persons are quite conservative. 7. Religiosity is associated with being hypocritical.	<b>a. Interior traits and dispositions [describes inner dispositions/spirituality as being induced by religious and institutional engagements] (20)</b>  1. Those who are religious are compassionate. 2. He/she is a loving and trusting person. 3. Religious people have a sincere heart. 4. I feel that a religious person is very reflective. 5. I feel the love of God in my life. 6. I feel that God is beside me when I'm down. 7. I'm always happy because God is in me. 8. I'm willing to do everything to please God. 9. I feel safe because of God. 10. Spirituality and religious values go together. 11. Loving someone intimately is a spiritual experience. 12. Serving God wholeheartedly is demanded by spirituality. 13. When I attend Church worship I feel free. 14. When I worship in church I feel holy. 15. A religious individual does not commit mistakes. 16. Religion generates a lifestyle that is founded on God. 17. Religious people possess positive attitudes towards others. 18. I cry with joy as I worship God. 19. My faith makes me feel like a newborn baby. 20. I only pray when I have a problem.
<b>Social commitment [being religious is demonstrated in significant help given to others/world]</b>  (* eliminated upon merging with the social commitment component items under "spirituality") It means being open to the world. (1) Someone who serves his neighbor without condition. (4) It is when Christians help their fellow human beings. (4)	<b>b. Social commitment [sees spirituality in terms of the human role as advocate for social transformation] (7)</b>  1. Spirituality involves concern for the environment. 2. Spirituality demands that I follow my own conscience. 3. Those who reject an immoral social order are religious. 4. Religious persons have the responsibility to improve society. 5. Being religious invites us to help the poor. 6. Lifting our spirit and others is the mark of religion. 7. A religious person is someone who serves neighbour without condition. (* eliminated items) Lifting one's spirit and that of others is the mark of spirituality. (5)
<b>Becoming human [sees religiosity in terms of the desire to promote the well-being of others.]</b>  (* eliminated upon merging with the spirituality items due to similarities) It involves getting connected to our emotions and appearance. (2) They possess positive attitudes towards others (2) Someone who is afraid of offending others. (4) One who is reflective about life. (2) It reflects the person's spirit, strength, freedom and faith. (3) A mark of complete dedication. (6) Has self-respect and respect for others. (7) It is shown in acts arising from one's pure intentions. (1, 5)	<b>c. Becoming human [seeing spirituality as a way for human development] (11)</b>  1. Spirituality involves looking at our lives with purpose. 2. Those that I know to be religious are in touch with themselves. 3. Faith essentially completes me as a person. 4. Spirituality involves inner peace of mind. 5. Religious persons possess a clean heart and mind. 6. Spirituality is a reflection of my beliefs and decisions. 7. Holy persons are those who value life. 8. Religion taught me to face life's problems without questioning God. 9. Religion reminds me that God created me. 10. A religious person is a role model. 11. Religiosity involves getting connected to our emotions and appearance. (* eliminated items) The spiritual life show our inner self. (1) A spiritual person is a model. (10)

Needed permissions were secured from the universities to conduct the survey using the 80-item self-report measure (FSAR). Students 18 years old and above participated in the survey after the instrument was explained to them. We first tested the hypothesized model with structural equation modeling. Due to poor fit, we abandoned the proposed model and reverted to traditional scale construction procedures. The data were randomly split into two samples. In the first sample, we performed a principal components analysis to reduce the number of items and examine the latent factor structure. In the second sample, we performed a factor analysis to check for the factorial validity of the measure of students' attitude towards religion.

## 5. Measures

To understand the underlying factor structure of Filipino students' attitudes towards religion, a self-report Likert scale measure (FSARS) was developed. We observe two levels of item development to

cover as much insight as possible. Table 1 shows the first level of item composition with a list of deleted items. The second level presents a revised list of items that were retained earlier in Table 1 now merged with additional items. Since religious constructs are traditionally thought to be multi-dimensional (Brown and Forgas 1980), we framed religiosity and spirituality within the initial pool of the scale. However, upon further examination of the spirituality pool of items, we saw the accommodation of items that equally reflect the human lifestyle and dispositions (Koenig 2010; Voas 2007) vis-à-vis the traditional spiritual articulation (David Elkins et al. 1988). In the process of instrument development, we realized that the inclusion of the spiritual and religious dynamic inevitably remains under the religious factor in the present study. The initial items tapping students' attitudes towards "religion" (cf. Table 1) reflected religious (exterior) and human (interior) factors. The religious factor included items reflecting: institutional affiliation (religious), religious obligation (religious) and divine identification (spiritual). Items constructed to assess the human factor included interior traits and dispositions, social commitment, and becoming human.

Through FGDs and essays, we asked the students about their thoughts, reflections and reactions about religion in terms of spirituality (or being spiritual) and religiosity (or being religious). To identify the items and dimensions of the construct, we manually reviewed the essays and FGD reports. First, we seeped through each essay and agreed which ideas stand out. Many items have to be eliminated in the first level due to duplications and fitness of meaning. The eliminated items (\*) are indicated in Table 1. We grouped all items representing student ideas about religiosity and spirituality. We identified the general orientation of ideas on which the items rested. We discerned two general conceptual groups we labeled as conceptual "dimensions" (Religious and Human dimensions). The items under the Religious dimension reflect how students appropriate the senses of religiosity and spirituality interchangeably. We discerned that they are looking at religiosity (and being religious) and spirituality (and being spiritual) in terms of: religious affiliation, religious obligations, and divine identification/affiliation. The conceptual similarities between items representing religiosity and spirituality under the Religious dimension is unexpected. In the beginning of our study, we hinted that a diffused notion of religion by students is likely considering our previous data from two previous local studies (Baring et al. 2016a, 2016b). However, we never expected that the pairing look so closely, as suggested by the two columns in Table 1. Their matching interpretation of human interiority and dispositions, social transformation and human development under the Human dimension with respect to religiosity and spirituality is equally amusing. However, the second and third characterization of spirituality and religiosity (e.g., social transformation and human development) under the Human dimension had duplicated or similar items. Similar items and those that reflect an exclusive reference to Catholicism were eliminated upon merging. Religiosity has a total of 23 items while spirituality has majority of items with 57. After the initial review from the FGDs, free essays and manual elimination of items, the Religious dimension constitute 35 items while the Human dimension have 45 items. A total of 80 items were developed after the review process.

Considering the high concentration of items under social transformation (e.g., 20 items), we revisited the item list to check for any need to move, modify or add items. Table 2 shows the final set of items under each dimension after item analysis, transfer, removal and addition of items. After removing some items, we added new statements thought to represent students' sentiments and behavior about religion. Table 2 shows a revised configuration of items: the Religious dimension has 45 items while the Human dimension has 35 items. Students' attitudes towards religion in this regard is understood in terms of the dynamics of religiosity and spirituality and viewed through Religious and Human dimensions. The religious dimension describes religiosity/spirituality items of institutional engagements, obligations and divine affiliation. The human dimension reflects religiosity/spirituality in terms of interior traits, social commitment and becoming human.

**Table 2.** The Operational Dimensions of the Construct and Item List (Level 2).

<b>RELIGIOUS DIMENSION</b>		
<b>INSTITUTIONAL AFFILIATION</b>	<b>(11 ITEMS)</b>	
	1. A religious person follows his/her religion.	*
	7. I love God but I hate religion	*
	26. I remember God when passing by the church	*
	30. My spirituality is a reflection of my beliefs and decisions	*
	34. Religiosity is associated with being hypocritical	*
	37. I respect those who work as priest/pastor/imam.	*
	40. A spiritual person is one who loves religion.	
	43. Religion reminds me that God created me	
	52. I am happy to see different religions in my midst	*
	68. I believe in the doctrines of the Church	*
	78. Salvation for me is essential for religion	
<b>RELIGIOUS OBLIGATION</b>	<b>(14 ITEMS)</b>	
	2. A religious person is one who goes to Church.	*
	5. For me, religiosity promotes blind faith	*
	8. I observe religious traditions (e.g., devotions) in the Church	*
	14. Religiosity is measured in personal spiritual habits that I do	*
	20. It is about religious acts and devotions	*
	28. A religious person is quite conservative	*
	31. For me spirituality is concerned with religious matters	*
	32. I am active in church activities	*
	38. A religious person is one who is compassionate	*
	55. A religious person knows many things about the Scripture	*
	56. I remember the souls or spirits of people who have died	*
	59. I only go to Church on occasion (ex: Simbang Gabi, fellowship, etc.).	*
	67. When I attend Church worship I feel free	*
	69. When I worship in church I feel holy	*
<b>DIVINE IDENTIFICATION</b>	<b>(20 ITEMS)</b>	
	9. I feel that I need to have a relationship with God	*
	15. Religiosity means having a blessed life with God	*
	21. In my life, I try to do God's will	*
	25. Spirituality is about believing in God	*
	27. In every decision I make, I put God first	*
	33. I feel that a spiritual person is enlightened by God	*
	41. I believe that God is merciful	*
	45. I put into action the Lord's teachings.	*
	48. I leave everything to God	*
	49. I can still pray even without going to Church	*
	53. It is important that I dedicate a time for God	
	54. I feel the love of God in my life	
	57. I feel that God is beside me when I'm down	
	58. I'm always happy because God is in me	
	60. I'm willing to do everything to please God	
	61. I feel safe because of God	
	66. Serving God wholeheartedly is demanded by faith	*
	73. Religion generates a lifestyle that is founded on God.	
	74. I believe a religious person is God-centered	
	77. I cry with joy as I worship God.	*
<b>HUMAN DIMENSION</b>		
<b>INTERIOR TRAITS/DISPOSITION</b>	<b>(12 ITEMS)</b>	
	3. A religious person is someone who realizes his/her faults.	
	6. A religious person is someone who is well-disciplined	
	13. A religious person is easily persuaded to believe in something	*
	16. I think a religious person is one who has strong values and morals	*
	18. My faith provides me inner peace of mind	*
	22. A religious person lives a stress-free life.	*
	50. I think that a religious person is very reflective.	*
	62. Spirituality and religious values go together	*
	65. A religious person is a person of prayer	*
	72. My faith demands that I follow my own conscience.	*
	75. A religious person possesses positive attitudes towards others	
	80. I only pray when I have a problem.	*

**Table 2.** The Operational Dimensions of the Construct and Item List (Level 2).

RELIGIOUS DIMENSION	
HUMAN DIMENSION	
SOCIAL COMMITMENT	(6 ITEMS)
	10. A religious person is concerned about doing good deeds
	11. A religious person is one who rejects an immoral social order
	17. A religious person has the responsibility to improve the society *
	23. Being religious invites us to help the poor. *
	35. A religious person is someone who serves neighbor without condition *
BECOMING HUMAN	76. Religion involves concern for the environment
	(17 ITEMS)
	4. Believing in faith involves looking at our lives with purpose.
	12. Faith essentially completes me as a person *
	19. I think religion keeps us blinded from the truths. *
	24. A religious person possesses a clean heart and mind *
	29. Lifting our spirit and others is the mark of religion. *
	36. Spirituality is beyond any religion. *
	39. Religion taught me to face life's problems without questioning God
	42. A person of faith is one who is loving and trusting. *
	44. Spirituality indicates how one's beliefs are practiced in daily life *
	46. A religious person has a sincere heart *
	47. A religious person is a role model *
	51. Religiosity involves getting connected to our emotions and physical appearance *
	63. A holy person is one who values life *
	64. Loving someone intimately is a spiritual experience. *
	70. Those that I know to be religious are in touch with themselves *
	71. A religious individual does not commit mistakes *
	79. My faith makes me feel like a newborn baby *
TOTAL ITEMS—80	

The numbers correspond to the item's actual placement in the final pre-survey scale. The (\*) indicates that the item is not included in the three-factor model (Model 3) which had the best fit.

This conceptual definition was formulated after literature review of relevant local and foreign studies, students' free essays and FGDs conducted in two schools. The orientation of their perspectives is distinctly different from previous scales of religion (Francis et al. 1995) or of theistic faith (Astley et al. 2012). The items were rated on a 5-point Likert-type response scale, from 1 = *strongly disagree* to 5 = *strongly agree*. We considered that our measure (FSAR scale) reflect students' articulated ideas while carefully weighing scholarly discussions on the matter to address some of the cultural peculiarities of the measure (Hill and Maltby 2009).

## 6. Results

### 6.1. Test of Hypothesized Model

To test the proposed model, we conducted structural equation modeling (with Amos 19, bootstrapping with 5000 iterations). In the first model, we examined the six proposed dimensions without higher order factors. As shown in Table 3 (Model 1), the fit was poor. Next, we tested the model with the six dimensions falling under two higher order factors (i.e., Religious and Human). As shown in Table 3 (Model 2), the fit for this model was also poor. As the hypothesized model failed to fit the data appropriately, we moved to construct a measure using the initial items.

**Table 3.** Model Fit Statistics.

Model Fit Statistics						
	$\chi^2(\delta\phi)$	CFI	NFI	RMSEA [90% CI]	AIC	ECVI [90% CI]
Model 1	30,425.43 (3065)	0.698	0.676	0.057 {0.057, 0.058}	30,775.43	11.27 {11.06, 11.47}
Model 2	30,656.50 (3073)	0.696	0.673	0.057 {0.057, 0.058}	30,990.5	11.34 {11.14, 11.55}
Model 3	856.80 (149)	0.93	0.916	0.059 {0.055, 0.063}	938.8	0.688 {0.623, 0.758}

## 6.2. Scale Construction

To explore possible underlying factors in attitudes toward religion items, we first split the dataset randomly in half creating two samples (cf. Table 4). In the first sample ( $n = 1367$ ), we conducted principal components analyses to reduce the number of items. In the second sample ( $n = 1366$ ), we conducted a factor analysis (principal axis factoring). Because we expected the factors to be related, we used oblimin rotation for the analyses. After removing items with low loadings, singletons, doubletons, and items loading on multiple factors (see Table 1 for eliminated items), we arrived at a final scale containing three factors as suggested by eigenvalues and scree plot (see Table 4 for items and pattern matrix factor loadings, and see Table 5 for structure matrix loadings). Factor 1 contained items reflecting perceptions of religious belief (eight items). Institutional affiliation is the norm for Factor 1. Factor 2 contained items reflecting affective responses towards religion (six items). Factor 2 refers to students' identification with the divine through affective responses. Cognitive and behavioral items under divine identification did not perform well after oblimin rotation. Factor 3 contained items reflecting behavioral responses towards religion (five items). In contrast to Factor 2, Factor 3 assesses items of religiosity reflecting interiority, social commitment, and well-being. In the second sample, the factor structure was replicated (see Tables 4 and 5). Congruence coefficients between the two samples, with factor analysis and oblimin rotation for both samples, were adequate: Factor 1 = 0.99; Factor 2 = 0.99; and Factor 3 = 0.97. Additionally, we tested the model as separate factors with structural equation modeling using the second sample and found good fit with the data (Table 3, Model 3). The three-factor structure was retained. We examined the correlations between the factors and found them all positively correlated with one another in both samples (see Table 4).

**Table 4.** Factor Loadings for Religion Attitudes Measure, Pattern Matrix.

Item	Sample 1			Sample 2		
	F1	F2	F3	F1	F2	F3
1. Religion generates a lifestyle that is founded on God.	<b>0.741</b>	0.015	0.025	<b>0.679</b>	−0.07	0.007
2. A spiritual person is one who loves religion.	<b>0.727</b>	0.08	−0.096	<b>0.686</b>	0.123	−0.041
3. A religious person possesses positive attitudes towards others.	<b>0.724</b>	0.064	0.149	<b>0.634</b>	−0.056	0.155
4. I believe a religious person is God-centered.	<b>0.703</b>	−0.011	0.116	<b>0.685</b>	−0.111	−0.001
5. Religion involves concern for the environment.	<b>0.676</b>	−0.069	0.017	<b>0.55</b>	−0.009	0.176
6. Religion reminds me that God created me.	<b>0.606</b>	−0.125	−0.015	<b>0.546</b>	−0.103	0.021
7. Salvation for me is essential for religion.	<b>0.582</b>	−0.198	−0.04	<b>0.467</b>	−0.117	0.048
8. Religion taught me to face life's problems without questioning God.	<b>0.528</b>	−0.058	0.139	<b>0.475</b>	−0.106	0.044
9. I feel the love of God in my life.	−0.052	<b>−0.838</b>	0.051	−0.018	<b>−0.802</b>	0.012
10. I feel that God is beside me when I'm down.	0.011	<b>−0.835</b>	−0.005	0.003	<b>−0.808</b>	0.01
11. I feel safe because of God.	0.018	<b>−0.823</b>	0.018	0.082	<b>−0.805</b>	−0.068
12. I'm always happy because God is in me.	0.032	<b>−0.796</b>	−0.061	−0.013	<b>−0.763</b>	−0.013
13. It is important that I dedicate a time for God.	0.017	<b>−0.774</b>	0.057	0.064	<b>−0.606</b>	0.132
14. I'm willing to do everything to please God.	0.148	<b>−0.59</b>	−0.001	0.18	<b>−0.468</b>	0.033
15. A religious person is someone who realizes his/her faults.	0.075	0.049	<b>0.718</b>	0.099	0.045	<b>0.54</b>
16. A religious person is one who rejects an immoral social order.	0.026	0.057	<b>0.684</b>	0.067	−0.005	<b>0.449</b>
17. A religious person is someone who is well-disciplined.	0.084	0.063	<b>0.68</b>	0.065	0.065	<b>0.546</b>
18. Believing in faith involves looking at our lives with purpose.	−0.143	−0.209	<b>0.656</b>	−0.163	−0.148	<b>0.568</b>
19. A religious person is concerned about doing good deeds concerned about doing good deeds.	0.087	−0.052	<b>0.647</b>	0.144	0.009	<b>0.56</b>
Eigenvalue	6.82	2.11	1.37	6.85	1.96	1.34
Variance	35.91	11.08	7.21	36.06	10.33	7.05
$\alpha$	0.85	0.88	0.73	0.85	0.88	0.69
Mean	4.09	4.48	4.18	4.11	4.49	4.18
Standard Deviation	0.63	0.6	0.59	0.61	0.57	0.56
Correlation with F1	—	0.51	0.54	—	0.53	0.53
Correlation with F2	—	—	0.39	—	—	0.41

Note. Sample 1 principle components analysis, Sample 2 factor analysis (both using oblimin rotation). All correlations significant at  $p < 0.01$ .

**Table 5.** Factor Loadings for Religion Attitudes Measure, Structure Matrix.

Item	Sample 1			Sample 2		
	F1	F2	F3	F1	F2	F3
Item 1	<b>0.746</b>	−0.32	0.362	<b>0.716</b>	−0.402	0.429
Item 2	<b>0.648</b>	−0.208	0.212	<b>0.603</b>	−0.19	0.296
Item 3	<b>0.764</b>	−0.305	0.46	<b>0.75</b>	−0.435	0.545
Item 4	<b>0.762</b>	−0.36	0.444	<b>0.738</b>	−0.442	0.444
Item 5	<b>0.714</b>	−0.373	0.352	<b>0.656</b>	−0.357	0.497
Item 6	<b>0.655</b>	−0.388	0.308	<b>0.608</b>	−0.377	0.382
Item 7	<b>0.651</b>	−0.441	0.296	<b>0.551</b>	−0.365	0.37
Item 8	<b>0.618</b>	−0.338	0.402	<b>0.551</b>	−0.356	0.366
Item 9	0.341	− <b>0.833</b>	0.314	0.377	− <b>0.799</b>	0.373
Item 10	0.376	− <b>0.838</b>	0.286	0.4	− <b>0.814</b>	0.387
Item 11	0.389	− <b>0.838</b>	0.308	0.433	− <b>0.813</b>	0.353
Item 12	0.354	− <b>0.789</b>	0.226	0.349	− <b>0.751</b>	0.334
Item 13	0.384	− <b>0.801</b>	0.33	0.433	− <b>0.698</b>	0.45
Item 14	0.407	− <b>0.654</b>	0.269	0.425	− <b>0.571</b>	0.354
Item 15	0.384	−0.23	<b>0.736</b>	0.388	−0.254	<b>0.576</b>
Item 16	0.316	−0.189	<b>0.677</b>	0.328	−0.246	<b>0.49</b>
Item 17	0.37	−0.207	<b>0.689</b>	0.347	−0.22	<b>0.553</b>
Item 18	0.252	−0.371	<b>0.662</b>	0.236	−0.333	<b>0.544</b>
Item 19	0.408	−0.312	<b>0.705</b>	0.461	−0.321	<b>0.638</b>

Note. Sample 1 principle components analysis, Sample 2 factor analysis (both using oblimin rotation).

### 6.3. Age, Sex, and Academic Program

Having constructed the measure, we next examined correlations with age and mean responses by participant sex and academic program using the full dataset (i.e., both samples combined). Zero-order correlations showed that participants' age was significantly negatively related to religious beliefs ( $r = -0.07$ ,  $p = 0.001$ ) and affective responses towards religion ( $r = -0.06$ ,  $p = 0.003$ ), and non-significantly related to behavioral responses towards religion ( $r = -0.04$ ,  $p = 0.067$ ). However, the size of the sample likely contributed to the significance of the correlations between age and the first two factors. To examine possible differences depending on sex of participants we conducted a MANOVA with sex of participant as the independent variable and religious dimensions as dependent variables. The omnibus test was not significant: Wilks'  $\Lambda = 0.99$ ,  $F(3, 2729) = 0.79$ ,  $p = 0.498$ ,  $\eta_p^2 = 0.001$ . No significant differences were observed between male and female participants on the three religious dimensions. Lastly, we conducted a MANOVA with participants academic program as the independent variable and religious dimensions as the dependent variables. The four academic programs reflected sciences (e.g., nursing), social sciences (e.g., psychology), business (e.g., accounting), and education. The omnibus test was significant: Wilks'  $\Lambda = 0.99$ ,  $F(3, 2634) = 0.79$ ,  $p < 0.001$ ,  $\eta_p^2 = 0.004$ . As shown in Table 6, students in business and social sciences rated their religious beliefs significantly higher than science students. Business students rated their degree of affective responses towards religion significantly higher than science students. Business and education students rated their degree of behavioral responses towards religion significantly higher than science students. However, we should note that the effect sizes are very small.

**Table 6.** Means (Standard Deviation) by Participants' Academic Program.

Variable	Social				$F(3, 2636)$	$p$ -Value	$\eta_p^2$
	Sciences	Sciences	Business	Education			
Religious Beliefs	4.02 (0.63) <sub>a</sub>	4.13 (0.62) <sub>b</sub>	4.15 (0.60) <sub>b</sub>	4.10 (0.63) <sub>ab</sub>	5.69	0.001	0.006
Affective Responses	4.44 (0.57) <sub>a</sub>	4.47 (0.59) <sub>ab</sub>	4.55 (0.56) <sub>b</sub>	4.52 (0.59) <sub>ab</sub>	4.08	0.007	0.005
Behavioral Responses	4.12 (0.60) <sub>a</sub>	4.17 (0.59) <sub>ab</sub>	4.22 (0.57) <sub>b</sub>	4.22 (0.52) <sub>b</sub>	4.06	0.007	0.005

Note. Means with different subscripts are significantly different at  $p < 0.05$ .

## 7. Discussion

From the analyses performed earlier, we gathered very favorable results for the underlying factor structure and corresponding reliability scores. The overall internal consistency score for the FSAR scale is  $\alpha = 0.82$ , indicating higher incidences of shared co-variances and suggests that the FSAR scale is a consistent measure of students' attitudes towards religion. The FSARS is a reliable measure to assess Filipino student attitudes towards religion in this context. From an initial 80-item self-report measure, FSARS was reduced to 19 items after a series of principal components analyses. The sub-scales identified from the item pool were found to be positively correlated to one another. The correlations affirm the presence of significant relationships between each distinct sub-scale.

Construct validity of the new model was supported with factor analysis. A unique configuration constituting three underlying factors is confirmed. The scale describes students' cognitive, affective, and behavioral appreciations of religion. Factor 1 is a configuration of religious beliefs (institutional affiliation). Factor 2 represents students' emotional dispositions towards God (divine identification). Factor 3 refers to the behavioral dimension (religious lifestyle). Factor 3 assesses religiosity covering interior disposition, social commitment and well-being. FSARS assesses institutional affiliation, divine identification and religiosity. Note that the notion "religion" in this context is not restricted to institutional meanings appended to the Christian faith. Given that the retained items reflect students' personal meaning-making patterns, the three factors articulate personal appropriations of belief, the divine, and religious practice. Brown and Forgas (1980) three-factor model from an earlier study suggested a contrast between the institutional and personal components. Instead of a conceptual contrast, however, the three-factor structure from our data manifests the interaction between the personal (Factors 2 and 3) and institutional (Factor 1) orientations.

Recent studies on religious attitudes that utilize the religiosity-spirituality framework also cite the personal-religious dynamics. Tsang and McCullough (2003) proposed two-level hierarchical model of religiosity and spirituality reflects aspects of our appreciation prior to the survey. Their model underscored "dispositional" and "operational" levels which refer to personal-religious viewpoints. The three factors (religious belief, affective response, and religious behavior towards religion) in this study also imply personal-religious perspectives. Other related scales describe similar affective dimensions (Astley et al. 2012). The identification of affective perceptions among the latent factors points to the fundamental role that emotions play in their appreciation of religion. Davies (2011) succinctly identified the role of emotions in the formation of religious identity. Among the young, the influence of the affective disposition remains an essential point to understand religious belief.

Consistent with previous data (Baring et al. 2016b), the factors underscore the place of the sacred in student perceptions towards religion. Previous studies (Hill et al. 2000; Tsang and McCullough 2003) highlight the broad sense in which the sacred is understood in empirical studies: "a divine being, divine object, Ultimate Reality, or Ultimate Truth as perceived by the individual" (Hill et al. 2000, p. 66). Despite recent deviations from institutional identification in recent youth studies on belief, "religion" from these data remains nested in discourses of the sacred. This steadfast association with the sacred, in its new articulations (Baring et al. 2017; Baring 2012) appear peculiar to the Southeast Asian (ASEAN) experience while the Western data have demonstrated evident separation from traditional notions of the sacred. Factors 1 (religious belief) and 2 (affective response) reaffirm the youth's appropriation of religion as a sacred affiliated construct. Lynch (2007) discussion of new spiritualities in the West also provides some grounding about how notions of the divine are reinterpreted in peculiar articulations not devoid of institutional underpinnings. These contemporary interpretations describe atypical characterizations of the sacred in fine distinctions of what Lynch calls "progressive spirituality."

The strong association between religious perspectives and social life in the third sub-scale underscores students' beliefs towards ethical and moral issues. The strong undercurrent linking students' ethical mindset with religious perspectives appears to negate an earlier rejection of the relationship between religion and one's ethical view (Parboteeah et al. 2008). The significant relationship given to religious development and moral development among students had been

acknowledged in prior literature (King and Boyatzis 2004; Van Someren 2000). This moral position is also affirmed in a previous study (Baring et al. 2016b) that showed the affinity of students' attitudes towards ethical and moral perspectives (Baring et al. 2017). This significant connection counters previous views which see students' worldview as something that excludes moral or ethical considerations. The third factor presents a counter position to perceptions that regard students' apparent indifference to social issues. If anything, the firmness of the moral stance articulated in Factor 3 complements students' openness towards pro-social values and behaviors (Lee et al. 2016) while studying. Such disposition suggests how students' religious perspectives relate with their prosocial behavior (Batara 2015).

## 8. Conclusions

While most empirical studies on youth inquire religiosity in relation to other variables, the present study has ventured to know the underlying constitution of student attitudes towards "religion" from an unlikely mix of religious and human aspects of belief. Unexpectedly, the results brought us into underlying factors fraught with traditional attitude components towards religion: Belief towards the institution, Affective response to God, and Behavioral aspects of belief. The a priori definition we worked out about their attitudes came out very different from the results. However, shadows of student spirituality/religiosity (Baring et al. 2016a) are gleaned from the results. In our desire to see the contours of the student spiritual and religious mindset, we ended up mining specific conceptual connections between the sacred, moral and institutional dynamics beneath their perspectives. This view can be better appreciated in the bigger context of the ASEAN experience which is tied up with cultural and religious diversity (Baring 2012). On a specific note, the results bespeak of the significant undercurrent of diverse religious experiences (Baring 2011) influencing the young generation.

Overall, the FSAR Scale can provide meaningful profile assessments for educational settings with multi-faith conditions. However, the sample used for the validation of FSARS represented a specific geographic location in northern Philippines within an educational setting for the tertiary level. The present measure did not include students who did not profess some form of religious belief or those that explicitly dissociate themselves from structured belief systems for lack of data. The FSARS measure's analysis for validation did not include religious affiliation since we considered that the sampled population had dominant Catholic populations. Instead, we considered how the measure interacted with gender, age and academic programs. Further enrichment of the scale might be considered to include respondents from other geographic locations. We recommend that FSARS be further examined with respect to religious affiliation in settings where a significant presence of other religious denominations is notable.

**Acknowledgments:** This research is the fruit of the collaborative efforts of the research team. It is not funded by any external agency or funding institution. The team did not receive funds relating to the cost of publishing in open access. We wish to acknowledge the support of the administrations of Holy Angel University and Don Honorio Ventura Technological State University for allowing us to conduct the survey.

**Author Contributions:** The team members agreed to divide work for the completion of this research through the following: Rito Baring, Philip Sarmiento, Nestor Sibug, Paolo Lumanlan, Benita Bonus and Cristina Samia conceived and designed the study, developed the instrument draft, performed the survey and did post-survey work; Baring and Stephen Reysen pursued and wrote analysis and interpretation of data/results until its completion with editing.

**Conflicts of Interest:** The authors declare no conflict of interest.

## References

- Abad, R. 2001. Religion in the Philippines. *Philippine Studies* 49: 337–67.
- Alexander, Hanan, and Terence McLaughlin. 2003. Education in religion and spirituality. In *The Blackwell Guide to the Philosophy of Education*. Edited by Nigel Blake, Paul Smeyers, Richard Smith and Paul Standish. Malden: Blackwell Publishing.

- Astley, Jeff, Leslie Francis, and Mandy Robbins. 2012. Assessing attitude towards religion: The Astley–Francis Scale of attitude towards theistic faith. *British Journal of Religious Education* 34: 183–93. [CrossRef]
- Baring, Rito. 2011. Plurality in unity: Challenges towards religious education in the Philippines. *Religious Education* 106: 459–75.
- Baring, Rito. 2012. Children’s Image of God and their parents: explorations in children’s Spirituality. *International Journal of Children’s Spirituality* 17: 277–89. [CrossRef]
- Baring, Rito, and Rebecca Cacho. 2015. Contemporary engagements and challenges for Catholic religious education in Southeast Asia. In *Global Perspectives on Catholic Religious Education in Schools*. Edited by Michael Buchanan and Adrian Gellert. Basel: Springer Publishing, pp. 143–53.
- Baring, Rito, Romeo Lee, Madelene Sta. Maria, and Yan Liu. 2016a. Configurations of student spirituality/religiosity: Evidence from a Philippine university. *International Journal of Children’s Spirituality* 21: 163–76. [CrossRef]
- Baring, Rito, Dennis Erasga, Elenita Garcia, Jeane Peracullo, and Lars Ubaldo. 2016b. The Young and the sacred: an analysis of empirical evidence from the Philippines. *Young* 25: 26–44. [CrossRef]
- Baring, Rito, Romeo Lee, Madelene Sta. Maria, and Yan Liu. 2017. Exploring the Characteristics of Filipino University Students as Concurrent Smokers and Drinkers. *Asia Pacific Social Science Review* 17: 80–87.
- Batara, Jame Bryan. 2015. Overlap of religiosity and spirituality among Filipinos and its implications towards religious prosociality. *International Journal of Research Studies in Psychology* 4: 3–21. [CrossRef]
- Brown, Laurence, and Joseph Forgas. 1980. The structure of religion: A multi-dimensional scaling of informal elements. *Journal for the Scientific Study of Religion* 19: 423–31. [CrossRef]
- Büssing, Arndt. 2017. Measures of Spirituality/Religiosity: Description of Concepts and Validation of Instruments. *Religions* 8: 11. [CrossRef]
- Catholic Bishops Conference of the Philippines-Episcopal Commission on Youth (CBCP-ECY) and Catholic Educational Association of the Philippines (CEAP). 2014. *The National Filipino Catholic Youth Study 2014*. Manila: CBCP-ECY and CEAP.
- Davies, Douglas. 2011. *Emotion, Identity, and Religion: Hope, Reciprocity, and Otherness*. Oxford: Oxford University Press.
- Dy-Liacco, Gabriel, Ralph Piedmont, Nichole Murray-Swank, Thomas Rodgeron, and Martin Sherman. 2009. Spirituality and religiosity as cross-cultural aspects of human experience. *Psychology of Religion and Spirituality* 1: 35–52. [CrossRef]
- David Elkins, James Hedstrom, Lorie Hughes, Andrew Leaf, and Cheryl Saunders. 1988. Toward a humanistic-phenomenological spirituality: Definition, description, and measurement. *Journal of Humanist Psychology* 28: 5–18. [CrossRef]
- Francis, Leslie. 1993. Reliability and validity of a short scale of attitude towards Christianity among adults. *Psychological Reports* 72: 615–18. [CrossRef]
- Francis, Leslie, John Lewis, Ronald Philipchalk, Laurence Brown, and David Lester. 1995. The internal consistency reliability and construct validity of the Francis scale of attitude toward Christianity (adult) among undergraduate students in the U.K., U.S.A., Australia and Canada. *Personality and Individual Differences* 19: 949–53. [CrossRef]
- Giordan, Giuseppe, and William Swatos Jr., eds. 2012. *Religion, Spirituality and Everyday Practice*. New York: Springer.
- Good, Marie, and Teena Willoughby. 2014. Institutional and Personal Spirituality/Religiosity and Psychosocial adjustment in adolescence: Concurrent and Longitudinal associations. *Journal of Youth and Adolescence* 43: 757–74. [CrossRef] [PubMed]
- Hambleton, Ronald. 2005. Issues, Designs and technical guidelines for adapting tests into multiple languages and cultures. In *Adapting Educational and Psychological Tests for Cross-Cultural Assessment*. Edited by Ronald K. Hambleton, Peter Merenda and Charles Spielberger. Mahwah: Lawrence Erlbaum, pp. 3–18.
- Hernandez, Brittany. 2011. The Religiosity and Spirituality Scale for Youth: Development and Initial Validation. Doctoral dissertation, Louisiana State University, Baton Rouge, LA, USA. Available online: [http://etd.lsu.edu/docs/available/etd-10142011-115001/unrestricted/hernandez\\_diss.pdf](http://etd.lsu.edu/docs/available/etd-10142011-115001/unrestricted/hernandez_diss.pdf) (accessed on 20 February 2017).

- Hill, Peter, and Lauren Maltby. 2009. Measuring religiousness and spirituality: Issues, existing measures, and the implications for education and well-being. In *International Handbook of Education for Spirituality, Care and Wellbeing*. Edited by Marian de Souza, Leslie Francis, James O'Higgins-Norman and Daniel Scott. New York: Springer.
- Hill, Peter, Kenneth Pargament, Ralph Hood Jr., Michael McCullough, James Swyers, David Larson, and Brian Zinnbauer. 2000. Conceptualizing religion and spirituality: Points of communality, points of departure. *Journal for the Theory of Social Behavior* 30: 51–77. [CrossRef]
- King, Pamela Ebstye, and Chris Boyatzis. 2004. Exploring adolescent spiritual and religious development: Current and future theoretical and empirical perspectives. *Applied Developmental Science* 8: 2–6. [CrossRef]
- Koenig, Harold. 2009. Research on religion, spirituality, and mental health: A review. *The Canadian Journal of Psychiatry* 54: 283–92. [CrossRef] [PubMed]
- Koenig, Harold. 2010. Spirituality and mental health. *International Journal of Applied Psychoanalytic Studies* 7: 116–22. [CrossRef]
- Lee, Romeo, Rito Baring, Madelene Sta. Maria, and Stephen Reysen. 2016. Attitude towards technology, social media usage and grade point average as predictors of global citizenship identification in Filipino university students. *International Journal of Psychology* 52: 213–19. [CrossRef] [PubMed]
- Lynch, Gordon. 2007. *The New Spirituality: An Introduction to Progressive Belief in the Twenty-First Century*. London: I.B. Taurus.
- MacDonald, Douglas, Friedman Harris, Brewczynski Jacek, Holland Daniel, Salagame Kiran Kumar, Mohan Krishna, Gubrij Zuzana Ondriasova, and Cheong Hye Wook. 2015. Spirituality as a Scientific Construct: Testing Its Universality across Cultures and Languages. *PLoS ONE* 10: e0117701. [CrossRef] [PubMed]
- Mangahas, Mahar, and Linda Guerrero. 1992. *Religion in the Philippines: The 1991 ISSP Survey*. Manila: SWS Occasional Paper, May.
- Mansukhani, Roseann, and Ron Resurreccion. 2009. Spirituality and the development of positive character among Filipino adolescents. *Philippine Journal of Psychology* 42: 271–90.
- McQuillan, P. 2006. Youth spirituality: A reality in search of expression. *Australian eJournal of Theology* 6: 1–13. [CrossRef]
- Ocampo, Anna Carmella, Roseann Mansukhani, Bernadette Mangrobang, and Alexandra Mae Juan. 2013. Influences and perceived impact of spirituality on Filipino adolescents. *Philippine Journal of Psychology* 46: 89–113.
- Parboteeah, Praveen, Martin Hoegl, and John Cullen. 2008. Ethics and religion: An empirical test of a multidimensional model. *Journal of Business Ethics* 80: 387–98. [CrossRef]
- Prasad, Hari Mohan, and Rajnish Mohan. 2009. *Group Discussion and Interview*, 2nd ed. Victoria: Abe Books.
- Tan, Charlene. 2009. Reflection for spiritual development in Adolescents. In *International Handbook of Education for Spirituality, Care and Wellbeing*. Edited by Marian de Souza, Leslie Francis, James O'Higgins-Norman and Daniel Scott. Dordrecht: Springer.
- Tsang, Jo-Ann, and Michael McCullough. 2003. Measuring religious constructs: A hierarchical approach to construct organization and scale selection. In *Handbook of Positive Psychological Assessment*. Edited by Shane Lopez and Charles Snyder. Washington: American Psychological Association.
- Van Someren, David. 2000. The Relationship between Religiousness and Moral Development: A Critique and Refinement of the Sociomoral Reflection Measure Short-Form of Gibbs, Basinger, and Fuller (John C. Gibbs, Karen S. Basinger, Dick Fuller). Ed.D. thesis, Clark University, Worcester, MA, USA. Available online: <http://youthandreligion.nd.edu/related-resources/bibliography-on-youth-and-religion/faith-and-moral-development/> (accessed on 5 February 2017).
- Voas, David. 2007. Does Religion Belong in Population Studies? *Environment and Planning* 39: 1166–80. [CrossRef]
- Zwingmann, Christian, Klein Constantin, and Büssing Arndt. 2011. Measuring Religiosity/Spirituality: Theoretical Differentiations and Categorization of Instruments. *Religions* 2: 345–57. [CrossRef]

