
Spirituality and Psychological Well-Being: The Mediating Role Pessimism

Alexie E. Basileyo

ABSTRACT

Psychological well-being has been widely studied in different areas and contexts. Literature showed its well-knit nexus to spirituality. Researchers, psychologists, and mental health professionals, however, are still puzzled how these two concepts work. To explore more on their nature, studies suggest factors that could explain the relationship between spirituality and psychological well-being. Thus, this research hypothesized that spirituality can influence psychological well-being through pessimism. By utilizing descriptive and explanatory correlational method through Hayes Process Macro 3.0, the researcher examined undergraduate students (n=222). Four vital results were derived from the study. First, it revealed that spirituality acted as a significant positive predictor of psychological well-being ($\beta = 0.64, t = 9.80, p < 0.00$). Second, it showed that spirituality acted as a significant negative predictor of pessimism ($\beta = -0.80, t = -7.66, p < 0.00$). Third, pessimism was found to be a significant negative predictor of psychological well-being ($\beta = -0.17, t = -4.11, p < 0.00$). Fourth and the last, this study showed support that the relationship between spirituality and psychological well-being cannot be fully explained by the influence of pessimism ($\beta = 0.51, t = 7.13, p < 0.00$). Pessimism slightly affects the relationship between spirituality and psychological well-being rendering partial mediation. The results of the present study support previous assumptions on the relationship between spirituality and psychological well-being. Results of this study may be applied in different contexts as well as the implications related to well-being and mental health. Directions for future research are also discussed.

Keywords: spirituality, psychological well-being, mediation, pessimism, Hayes Process Macro 3.0

INTRODUCTION

The multi-dimensional concept of well-being has been in the limelight of various research studies in psychology and other academic arenas. In fact, the research effort of Longo and colleagues (2017) explored and connotated well-being with constructs such as happiness, vitality, calmness, optimism, involvement, self-awareness, self-acceptance, self-worth, competence, development, purpose, significance, congruence, and connection. Its multi-faceted nature still baffles psychologists for two decades now (Joseph, 2017). Psychological well-being generally speaks of “eudaimonia” which means pleasure and personal fulfillment (Ryff, 1989) while subjective well-being speaks of “hedonia” which means positive feeling and functioning (Diener, 1984). These perhaps are the most widely used constructs operationally utilized by psychologists and mental health professionals in their research endeavors. Many theorists, however, have found that psychological well-being serves as the most definitive construct that assesses six dimensions of psychological functioning (Kibret & Tereke, 2017). Since mental health problems are increasing in higher education (Gallagher, 2010), adolescents, especially college students, face stressful emotional and academic situations. There are various documented studies for psychological well-being on adolescents and college students such as the investigation of psychological well-being according to lifestyles (Ozpolat, Isgoq, & Sezer, 2012), difference of psychological well-being vis-à-vis gender (Perez, 2012), psychological well-being via interaction involvement (Carton & Goodboy, 2015), among others (Ludban & Gitimu, 2015; Punia & Malaviya, 2015; Udhayakumar & Illango, 2018). Better understanding of psychological well-being during adolescence could help one prepare himself or herself to stressful emotional and academic situations. Reasons to study the emotional, interpersonal, and cognitive components of psychological well-being should be broadened to seek ways to better help college students adjust and prepare for adulthood. As a left-behind factor, however, spirituality demonstrated importance in exploring psychological well-being. According to the study of Ramos (2007), a Filipino adolescent who

establishes a personal relationship with God, and adheres with the Higher Power by exercising religious practices and living a morally upright life was found to be happy and contented. Therefore, spirituality has a very special role in the psychological well-being of Filipino adolescents.

Like psychological well-being, it is also known that the construct of spirituality underscores a multi-faceted nature. In point of fact, it has been used interchangeably with the concept of religiosity or being religious. Some individuals are seen to be religious and spiritual at the same time while some are seen to be religious but not spiritual or spiritual but not religious (Zinnbauer, et al., 1997). It is a common knowledge that Filipinos are known to be among world's religious people. Filipinos adhere to different rituals, beliefs, traditions, and practices as followers of religion (Fitzpatrick, 2013). Religiosity is deeply rooted in the character of Filipinos in the context of their religious shift during the Spanish colonization. This characteristic has also been subjected to test in times of various natural calamities, emotional and family problems, academic difficulties, workplace issues, and socio-economic struggles. Despite the aforementioned life circumstances, our being religious helps us cope (Pargament, 1997).

Local spirituality researchers (Batara, 2015; Mansukhani & Resurrecion, 2009) argued that there is an overlap between spirituality and religiosity. In order to understand spirituality, however, a need to explore its relationship with religion should be established. Religiosity or religiousness is manifested through the outer (e.g. practices, beliefs, tenets of religion) while spirituality refers to the inner (e.g. subjective experience, search of the sacred). According to Hill and Pargament (2003), the common element that traverses religion and spirituality is the pursuit for the sacred. The sacred are either objects or events that involve the concepts of god, divine being, transcendent, and reality (Mansukhani & Resurrecion, 2009; Menguito & Calleja, 2010).

Spirituality has established association and relationship with religion. These two concepts, however, are defined differently by spirituality researchers and authors. As a result, these concept-variations fueled researchers to empirically explore more on spirituality in relation with other variables. There had been studies that pointed spirituality is related to mental health as well as to well-being (Betton, 2004; Fiorito & Ryan, 2007; Ivtzan, Chan, Gardner, & Prashar, 2011; Koenig, 2009). These studies suggest that the more spiritual the individual is, the more psychologically well the individual will be.

The concept of psychological well-being and its significance to research fuel psychological investigators to walk an extra mile to study the construct. Psychological well-being helps us to understand the purpose and meaning of life. Several studies in the past support how well-being, as reflected on similarities and difference between psychological well-being and subjective well-being, changed the tide in the arena of psychological research. In the same manner, there are researchers who delved to see the similarities between spirituality and religion (Hill & Pargament, 2003), as well as the nature of religion, religiosity, and religiousness (Allport, 1966; Miller & Thoresen, 2003) as well as the differences between the two concepts (Zinnbauer, et al., 1997) and their overlaps (Mansukhani & Resurrecion, 2009; Batara, 2015).

Spirituality and its relationship with other variables have long been established in past and contemporary researches. Spirituality has been explored and established relations with the concept of subjective and psychological well-being (Archana, Kumar, & Singh, 2014; Hill & Pargament, 2003; Holder, Coleman, Krupa, & Krupa, 2016; Row & Elliott, 2009; Temane and Wissing; 2006; Tiliouine & Belgoumidi, 2009). This plethora of research studies support the notion that high spirituality equates to a more psychologically well individual. Spirituality has also been investigated with optimism by Brown, Hanson, Schmotzer, and Webel (2013). Their study established that spirituality and optimism can delay the progression of a disease, specifically HIV, together with the increase in mental and physical health. Optimism and well-being produced a significant array of research studies (Baker, Blacher, & Olsson, 2005; Ferguson & Goodwin, 2010; Ho, Cheung, & Cheung, 2010; Karademas, 2005). Studies confirmed that individuals who think positively may seem to solve problems easily and employ more effective ways of controlling emotions, hence, contribute to better functioning (Taylor & Armor, 1996). Fortunately, according to Vickers & Vogeltanz (2000), optimism was found to be have a negative relationship to depression and linked to better functioning and well-being (Symister & Friend, 2003).

Though, there are contradicting studies that showed how spirituality yielded significant (Fukofuka, 2007; Walker & Dixon, 2002; Wood & Hilton, 2012) and non-significant relationships (Flannery, 2012; William & Isaac, 2016) with academic performance and success, it is undeniable to admit that the literature

showed how spirituality has had a positively-knitted relationship with well-being and mental health, especially in students. College is a period where students are offered personal growth and development. To Rocha-Singh (1994), this is also a stage where students face academic stress and difficult life situations, thus, negatively impacting their well-being. Students in this period can be overwhelmed and might cause emotional problems. These problems might negatively affect how they think and perceive their academic and psychological capacities. Negative cognition toward the self, the people and the future tend to harm well-being, thus, make one vulnerable to stress and worse, psychological disorders (Beck, 1976). Few researchers have explored the relationships of spirituality, pessimism, and psychological well-being. Since previous and contemporary research efforts failed to examine these existing connections and how each variable contributes to another, the present study would serve as an attempt to investigate how spirituality influence psychological well-being and if pessimism mediates this relationship.

Theoretical framework

Research efforts on spirituality focused on differentiating its concept to religion as reflected in religiosity and religiousness and possible overlaps (Allport, 1966; Batara, 2015; Hill & Pargament, 2003; Miller & Thoresen, 2003; Mansukhani & Resurrecion, 2009). Zinnbauer and colleagues (1997), however, asserted that there are individuals who claim to be religious and spiritual at the same time while others are found to be religious but not spiritual or seen to be spiritual but not religious. For this reason, the present study espouses the theory of Spiritual Transcendence (ST) in ASPIRES (Assessment of Spirituality and Religious Sentiments) by Piedmont (2004) because the dimension of spiritual experiences is captured by this measure. Piedmont explained spirituality in ASPIRES's theoretical underpinnings, namely: universality, a belief that all is united; prayer fulfillment, a combination of contentment and joy that resulted from personal encounters with the God their understanding; and connectedness, a belief that individuals are part of a larger human reality that traverses across generations and groups. ASPIRES illuminated both spirituality and religiousness as different multi-dimensional concepts. Well-being has been extensively studied in different contexts (Wilson, 1967; Ryff, 1989; Diener, Gohm, Suh, & Oishi, 2000; Gultiano, Hindin, Upadhyay, & Armeccin, 2009; Perez, 2012; Tolentino & Dullas, 2015; Navarez, 2017). Two of the most widely utilized measures of well-being stood out among the rest. The *Subjective well-being* by Diener (1984) and *Psychological well-being* by Ryff (1989). Ryff's eye on well-being is anchored on eudaimonic philosophy. Ryff's concept of psychological well-being is more multi-dimensional in nature than Diener's subjective well-being. Psychological well-being is comprised of seven facets, namely: autonomy (freedom of one's actions and thoughts), self-acceptance, environmental mastery (capacity to adjust in any type of environment), personal growth, positive relations with others, and purpose in life. According to literature (Norem & Cantor, 1986; Seligman & Buchanan, 1995), pessimism has types. It includes pessimistic attributional style and defensive pessimism. To date, however, there are no research studies that delved on exploring pessimism in the context of cognitive triad. The present study utilizes Beck's Negative Cognitive Triad (Beck, 1976) as operationalized by Beckham, Leber, Watkins, Boyer, & Cook (1986) in their Cognitive Triad Inventory (CTI). Beck posited that a negative view of the self, the world, and the future makes an individual vulnerable to psychological disorders. By far, the Cognitive Triad is the most fitting construct that measures pessimism. Hence, this study intends to examine if pessimism can act as a mediator between spirituality and psychological well-being.

Conceptual framework

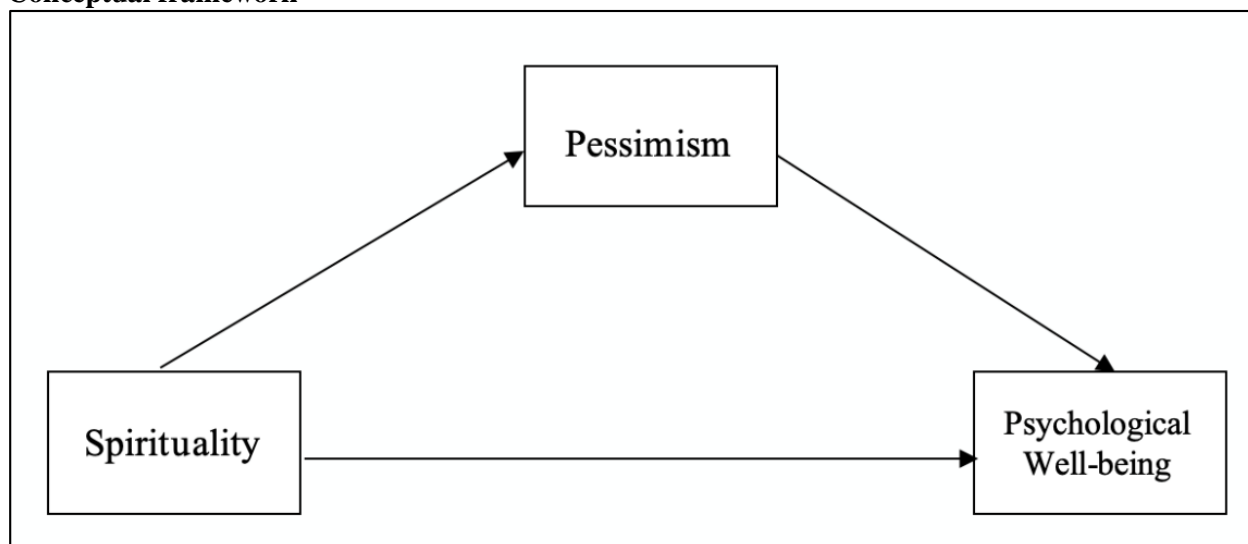


Figure. 1. Mediation model of the effect of spirituality on psychological well-being through pessimism

The conceptual scaffolding in Figure 1 illustrates the proposed mediation pathways of pessimism on spirituality and psychological well-being. Previous studies support the positive relationships between spirituality and well-being (Hill & Pargament, 2003; Ivtzan, Chan, Gardner, & Prashar, 2011; Tiliouine & Belgoumidi, 2009) and spirituality predicts well-being (Archana, Kumar, & Singh, 2014; Temane & Wissing, 2006). Several studies found that pessimism was significantly related to other variables such as death (Schulz, Bookwala, Knapp, Scheier, & Williamson, 1996), physical functioning (Brenes, Rapp, Rejeski, & Miller, 2002), childhood depression (Stark, Schmidt, & Joiner, 1996), anxiety (Wong, 2008), and suicidal ideation (Chang, Lin, & Lin, 2007). Though previous studies established relationships between spirituality and well-being and between pessimism and other variables, to date, there has been no research studies that delved on exploring spirituality, pessimism, and psychological well-being. In this regard, the present study hypothesizes that pessimism mediates the relationship between spirituality and psychological well-being. The specific pathways reflected in the conceptual scaffolding is where pessimism mediates the relationship between spirituality and psychological well-being.

Objectives of the study

The present study aims to understand the mediating effect of pessimism on spirituality and psychological well-being. It aims to answer the following specific objectives:

1. To analyze the relationship between spirituality, pessimism and psychological well-being;
2. To assess if pessimism predicts the relationship between spirituality and psychological well-being;
3. To determine the total and direct effects of spirituality as predictor of psychological well-being through pessimism;
4. To analyze the indirect effect of spirituality on psychological well-being through pessimism; and
5. To determine if pessimism mediates the relationship between spirituality and psychological well-being.

METHODOLOGY

This study adopted the descriptive and correlational research, a quantitative approach (Zechmeister, Zechmeister, & Shaughnessy, 2012). This approach was used because of the study's aim in finding generalizations, not specifications, thus, with the framework being dependent on investigating the patterns

of the data from a broad sample size, a quantifiable measure was considered most appropriate. In addition, due to the study containing multiple variables, a statistical correlational approach was needed to interpret the data. The study explored three variables—spirituality served as the predictor or the independent variable, psychological well-being was the outcome or the dependent variable, and pessimism was used as the mediating variable between the two.

The participants utilized were two hundred undergraduate students (66 male, 156 female), 18 years old above ($M = 20.22$; $Mdn = 20.00$; $SD = 2.30$) who belong to different sectarian and non-sectarian universities and colleges. The participants signed a consent form elucidating the brief description of the study, their voluntary will, duration, and potential risks or harm it might do to them. Requests to participate in the present study were done through different mediums such as printed survey questionnaires and online forms shared to different social media platforms.

Spirituality. The Assessment of Spirituality and Religious Sentiments (ASPIRES) by Piedmont (2004) is a self-report inventory comprised of Spiritual Transcendence (ST). It is rated on a 5-point Likert Scale, from 1 being *strongly disagree* to 5 being *strongly agree*. The original scale has shown to have an acceptable reliability of 0.89. Whereas, based on the pre-testing of the questionnaire to 105 samples, it has shown to have acceptable reliability with alpha of 0.95.

Psychological Well-Being. The Psychological Well-Being Scale developed by Ryff (Ryff & Singer, 1998) measures dimensions of psychological well-being, namely: self-acceptance, positive relations with others, autonomy, environmental mastery, purpose in life, and personal growth. It is rated on a 6-point Likert scale, from 1 being *strongly disagree* to 6 being *strongly agree*. The original scale has shown to have internal consistencies ranging from 0.86 to 0.93 while based on the pre-testing of the questionnaire, it has shown to have internal consistency of 0.84.

Pessimism. The Cognitive Triad Inventory (CTI) developed by Beckham, Leber, Watkins, Boyer, & Cook (1986) is a self-report inventory that measures pessimism. It comprises of three subscales, namely: negative view of the self, the world, and the future. It is rated on a 7-point Likert Scale, from 1 being *totally agree* to 7 being *totally disagree*. The original internal reliability of the scale shown an alpha of 0.95 while an over-all alpha of 0.94 was obtained after pre-testing.

Prior to the administration of scales, a cover letter explaining the brief description and nature of the study, their voluntary will, duration, confidentiality and potential risks or harm was attached before the questionnaires. Letters of permission for the conduct of the study were sent to school officials and heads. The questionnaire was comprised of five different scales and items were randomly arranged. After the participants answered all the items in the questionnaires, the researcher gave them tokens for the time they spent to answer the questionnaires. After data gathering, all completed questionnaires and informed consent forms were stored for safekeeping.

Mediation analysis through Hayes' 3.0 Process Macro SPSS (Hayes, 2018) was utilized to explore the effect of spirituality on psychological well-being through pessimism. Path analysis or mediation analysis is one sophisticated statistical technique used to identify a mediator, a variable that is used to explain the correlation between two variables (Zechmeister, Zechmeister, & Shaughnessy, 2012). Mediation was used to elucidate the association between the predictor variable (spirituality) and the criterion variable (psychological well-being) through the mediator variable (pessimism) by studying its indirect effects. To examine the model of the hypothesized conceptual scaffolding, the present study: (1) tested the total, direct, and indirect effects of spirituality on psychological well-being via pessimism using path analysis; (2) calculated the significance of the indirect effects of the predictor variable to the criterion variable through the mediator using bias corrected bootstrap confidence interval; and (3) estimated the effect size of the indirect effects using the index of mediation (complete standardized effect, abcs) in order to represent the magnitude of the indirect effects.

The present study strictly followed ethical considerations. Informed consent forms were given to the participants for their signature and reference prior to the data collection. Participants recruited online were asked to read and affirm the informed consent before proceeding to the questionnaire. First copy was provided to the participants and the other was secured by the researcher for safe-keeping. The objective of the research was elucidated to the participants. Possible risks and benefits in participating in the study were

also discussed. Some participants used their real names and pseudonyms in the demographic information; however, both were withheld to protect their identities. No participant withdrew from the study. The informed consent and three instruments were put in a single structured form. Since the participants came from a defined population of undergraduate students, online and actual data collection were easily done. Data collection and retention were accomplished based on corresponding agreed schedules.

RESULTS AND DISCUSSION

This study aimed to examine four hypotheses: first, if pessimism (PES) negatively mediates the relationship between spirituality (ST) and psychological well-being (PWB); second, if spirituality could serve as a predictor for psychological well-being; third, if spirituality could serve as a predictor for pessimism; and fourth, if pessimism could serve as a predictor for psychological well-being. The total sample was comprised of 222 participants with analyses exploring demographics namely age ($M = 20.22$; $Mdn = 20.00$; $SD = 2.30$), gender (66 male, 156 female), religion (163 Roman Catholic, 14 Iglesia ni Cristo, 5 Born-Again Christian, 4 Seventh-Day Adventist, 3 Islam, 33 Others), year level (13 1st Year, 17 2nd Year, 103 3rd Year, 85 4th Year, 4 5th Year) and various schools in CALABARZON and NCR.

Table 1. Descriptive statistics and correlations of spirituality, psychological well-being, and pessimism

Variable	M	SD	1	2	3
Spirituality	3.82	0.54	.-	0.94*	-0.46*
Psychological well-being	5.98	0.76		-	-0.51*
Pessimism	2.56	0.72			-

*N=222 Correlation is significant at * $p < .01$, two-tailed*

Descriptive statistics and correlations of the variables are summarized in Table 1. The participants' report of spirituality ($r = 0.94$, $p < 0.00$) is positively related to psychological well-being. This result answers objective number 1 claiming that correlational pathway exists between these two variables. Spirituality ($r = -0.46$, $p < 0.00$) and psychological well-being ($r = -0.51$, $p < 0.00$), however, were found to be negatively related to pessimism which answer objectives number 2 and 3 relatively. Confounding variables such as age, gender, religion, year level, and school were not involved in the analysis of these correlations.

Spirituality and Pessimism as Predictors for Psychological Well-being

Using simple linear regression analysis on Hayes' 3.0 PROCESS Macro SPSS (Hayes, 2018), spirituality was shown to be positively related to psychological well-being ($\beta = 0.64$ $t = 9.80$, $p < 0.00$), indicating that spirituality acted as a significant positive predictor of psychological well-being, as reflected in Table 2.

Table 2. Summary of regression analyses

Variable	β	t	p
Total: Spirituality to psychological well-being (without mediator)	0.64	9.80	0.00
Direct: Spirituality to psychological well-being (complete mediation)	0.51	-7.66	0.00
Spirituality	-0.80	-7.66	0.00
Pessimism	-0.17	-4.11	0.00

Spirituality was also found to be a significant negative predictor of mediator, pessimism ($\beta = -0.80$, $t = -7.66$, $p < 0.00$). Likewise, pessimism was found to be a significant negative predictor of psychological well-being ($\beta = -0.17$, $t = -4.11$, $p = 0.00$), as shown in Table 4. Furthermore, as reflected in Table 2, a significant relationship was found between spirituality and psychological well-being when pessimism was present (path c') ($\beta = 0.51$, $t = 7.13$, $p = 0.00$). This may suggest the presence of a potential mediation that would guarantee positive results from a mediation analysis.

Mediation Analysis

A simple mediation analysis revealed that pessimism partially mediated the relationship between spirituality and psychological well-being. Hayes' (2018) PROCESS Macro for SPSS was utilized in performing the analyses. Table 3 presents the total and direct effects while table 4 presents the indirect effect of the mediation model.

Table 3. Result of mediation analysis for spirituality as predictor of psychological well-being through pessimism

Predictor	Total Effect	Direct Effect	Mediation by Pessimism		
	<i>C</i>	<i>c'</i>	<i>A</i>	<i>B</i>	<i>a x b</i>
Spirituality	0.64*	0.51*	-0.80*	-0.17*	0.14**

*N=222 * p<.05, ** Bootstrap confidence interval is statistically significant*

The path analyses showed that students who reported higher spirituality conveyed lower pessimism ($\beta = -0.80, p<0.00$), the same with pessimism ($\beta = -0.17, p<0.00$) and psychological well-being.

Table 4. Bootstrap confidence intervals of indirect effect of spirituality on psychological well-being through pessimism

	Indirect Effect	SE	BC 95% CI	
			<i>LLCI</i>	<i>ULCI</i>
Spirituality	0.14	0.05	0.04	0.25

Note: BC 95% CI = Bias Corrected 95% bootstrap confidence interval based on 5000 bootstrap samples; LLCI = Lower Limit Confidence Interval, ULCI = Upper Limit Confidence Interval

Bias corrected bootstrap confidence intervals for the indirect effect based on 5,000 bootstrap samples were entirely above zero as shown in Table 4. Students with higher spirituality reported higher psychological well-being through lower pessimism, supporting objective number 1.

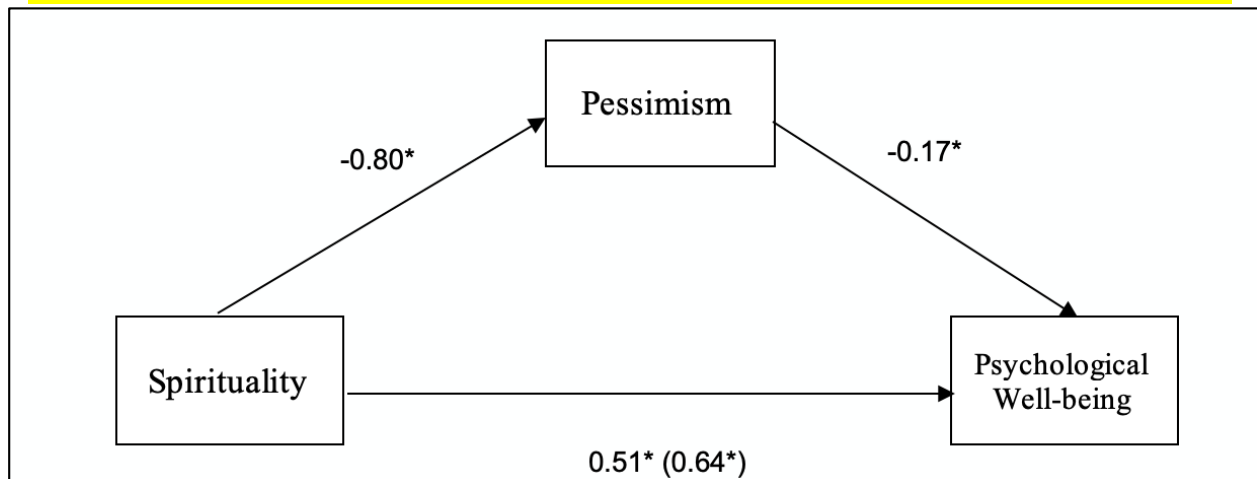
Table 5. Index of mediation as estimates of effect size of spirituality on psychological well-being through pessimism

	<i>abcs</i>	SE	BC 95% CI	
			<i>LLCI</i>	<i>ULCI</i>
Spirituality	0.14	0.05	0.04	0.25

Note: BC 95% CI = Bias Corrected 95% bootstrap confidence interval based on 5000 bootstrap samples; LLCI = Lower Limit Confidence Interval, ULCI = Upper Limit Confidence Interval

In determining the effect size, the complete standardized effect of spirituality on psychological well-being through pessimism was computed as seen in Table 5. The index of mediation *abcs* (Hayes, 2018) for the indirect effect was found to be significant based on confidence intervals which were entirely above zero, hence, defining the practical significance of the said effect, despite the low values seen in the analyses.

The findings of this research effort reveal that pessimism partially mediated the relationship between the students' spirituality and psychological well-being. Figure 2 shows the mediation model using the standardized regression coefficients of the analysis.



* $p < 0.05$

Figure 2. Mediation model with standardized regression coefficients presenting spirituality's nexus to psychological well-being through pessimism

This study aims to assess the process that involves undergraduate students by examining the role of spirituality by path of pessimism to psychological well-being. The results are discussed in light of the problems this research intends to address, while comparing it to the literature reviewed in the previous section. Interpretations of results are provided using spirituality as an overarching framework. Recommendations for future spirituality, pessimism, and psychological well-being research in various settings such as academic, clinical, religious, and governmental vis-à-vis their implications are also discussed based on the results of the study.

Mediation Pathways and Interrelationships between Variables

The results reveal that spirituality was positively related to and an excellent predictor of psychological well-being as supported by previous research efforts (Hill & Pargament, 2003; Temane & Wissing, 2006; Tiliouine & Belgoumidi, 2009; Ivtzan, Chan, Gardner, & Prashar, 2011; Archana, Kumar, & Singh, 2014). It is conclusive to say that undergraduate students' spirituality influences healthier psychological well-being. On the other hand, the relationship between spirituality and pessimism turned out to be negatively related. This would infer that spirituality was a significant negative predictor of pessimism. The result can be interpreted in a way that spirituality fosters positive experiences rather than negative perceptions of self, the surrounding, and future events which contrasted in studies that said spirituality and optimism are positively related (McCullough, Hoyt, Larson, Koenig, & Thoresen, 2000; Rasmussen, Scheier, & Greenhouse, 2009; Schmotzer & Webel, 2013). Hence, increase of spirituality in undergraduate students would mean decrease in pessimism. On the contrary and according to literature, the reason why spirituality does not fit well with pessimism was that it contradicts the behaviors and activities that optimistic individuals do. Spiritual individuals who scored high in optimism, also scored high in well-being scales. Individuals who are found to be spiritual foster positive experiences and meaning in life through psychological well-being. This same result is supported in individuals who also scored high in optimism. To infer, the positive interplay between spirituality and optimism could explain the reason why pessimism does not go well with spirituality. It is categorical to say that increase in pessimism would mean decrease in spirituality.

On the other hand, pessimism was found to be a significant negative predictor of psychological well-being. The path result turned out that pessimism negatively impacted psychological well-being. This significant negative relationship between pessimism and psychological well-being could be explained by the positive relations facet of psychological well-being. To simply put, individuals who follow negative perspective in life experience difficulty to cope and adjust well are not psychologically healthy compared

to optimistic individuals (Karademas, 2005; Ferguson & Goodwin, 2010; Mak, et al., 2011). Studies in the medical settings supported that individuals who have not adhered with behavioral activities in relation with the treatment were found to be pessimistic while individuals who did activities faster were optimistic (Scheier, Matthews, Owens, Magovern, Lefebvre, Abbott, & Carver, 1989). Likewise, in Schulz, Bookwala, Knapp, Scheier, & Williamson's study (1996), individuals who were found to be pessimistic were more likely predicted to die compared to optimistic ones. Hence, it supports the view that an increase in pessimism would mean decrease in psychological well-being and decrease in pessimism would infer increase in psychological well-being.

The results of the study supported that pessimism partially mediated the relationship between spirituality and psychological well-being. This means pessimism slightly affects spirituality, and in turn, affects psychological well-being. Filipinos are known to be spiritual and religious people because of our culture (Fitzpatrick, 2013). Religious practices and beliefs are deeply rooted in the character of Filipinos. The scope of being very spiritual and religious of Filipinos extend even in higher education institutions. Faculty, staff, and most especially undergraduate students freely exercise their religion in these institutions. It is important to note that individuals with higher religious involvement and commitment more likely report better emotional and mental health (Astin & Astin, 2004). Being spiritual, however, is not always an assurance to cope with stressful situations in the academe. Levels of stress are on the increase among undergraduate students (Robotham, 2008) and adverse effects of stress on students' well-being are documented (Hussain, Kumar, & Husain, 2008; Agolla & Ongori, 2009). Possible reasons on how pessimism slightly hinders spirituality could be explained by circumstances when students begin to think negatively toward the academic difficulty of the subject matter, workload needed to complete the requirements for the subject, and time management for subjects and affiliations. Students experience affective stress (emotional) and cognitive stress (academic) during these situations (Dy, Espiritu-Santo, Ferido, & Sanchez, 2015). In this regard, spirituality can be affected by pessimism when students experience emotional problems and academic difficulties, thus affecting their psychological well-being. In addition, students, when faced by these difficult situations, tend to think negatively about themselves. They think they do not perform well academically and eventually, or worst, they would think they are worthless for not doing their best efforts. Students under said situations would more likely entertain a myriad of problems that might interfere with their ability to cope and adjust at the critical transitory stage of adolescence. Hence, aforementioned difficult situations that are negatively perceived by the self might in turn affect the view of the world and view of the future.

With the findings consistent with the theory and previous research outcomes, it is interesting to note that the pathways of relationship among spirituality, pessimism, and psychological well-being play a significant understanding of how pessimism operates given its negative relationship to spirituality and psychological well-being. Pessimism, as expressed in cognitive triad, explains that individuals who negatively think about themselves, the world, and the future increase the likelihood of depression and other related psychological disorders.

Students experience a lot of problems nowadays. Most students cannot handle pressure and stress; thus, lead to weakening of well-being. The present study revealed that pessimism might be a factor that contribute to influence the relationship between spirituality and psychological well-being. Positive thinking may be taught by teachers and counselors in class and during counseling sessions. This may serve as a preventive measure for students to learn positive attitudes toward self, others, and their outlook of the future. Positive thinking promotes greater sense of self and well-being. Programs about positive thinking as expressed in talks, seminars, and workshops may be injected during freshman orientation or college assemblies. These would help students prepare and equip them with positive thinking skills prior to facing the stressful academic life. These programs may also be adopted by counselors, school psychologists, and other mental health professionals through accredited seminars and talk facilitators. Students who would undergo these different programs may be armed with necessary information to learn to adjust well and face academic challenges easily.

Equipped with these results, this study may aid in spreading necessary information to help undergraduate students, researchers, schools, industries, clinics, and the public gain significant understanding of the real nature of negative cognition.

CONCLUSION AND RECOMMENDATION

This part presents four important conclusions derived from the results of the present study. First, spirituality was found to be a significant positive predictor of psychological well-being. This means that individuals who are spiritual are more likely to be psychologically well. Second, it showed that spirituality acted as a significant negative predictor of pessimism. This suggests that people who are spiritual tend not to look at themselves negatively. It would imply that individuals who have high spiritual levels foster positive thinking toward oneself, their surroundings, and their outlook of the future. Third, pessimism was found to be a significant negative predictor of psychological well-being. This suggests that individuals who are psychologically well do not get affected easily by negative thinking. This denotes that individuals with greater well-being show satisfaction with themselves and most importantly, exhibit positive relations to others. Fourth, this study showed support that the relationship between spirituality and psychological well-being cannot be fully explained by the influence of pessimism. This would imply that pessimism slightly affects the relationship between spirituality and psychological well-being. Possible explanation to look at would be individuals' spirituality is slightly affected by pessimism in times of stressful situations that might give them time to think negatively about oneself which affects the view of the world and the future, and in turn, affect psychological well-being. The results of the present study support previous assumptions on the relationship between spirituality and psychological well-being. It provided, too, an evidence that cognitive triad was a good measure to quantify pessimism. Data from the results of this study may be applied in different contexts as well as implications related to the aforementioned variables.

The present study would be instrumental to augment the limited studies on pessimism in relation with spirituality and psychological well-being. This study is an attempt to understand how pessimism can explain the process happening on the relationship between spirituality and psychological well-being. The study was able to find out how pessimism influence the relationship between the aforementioned variables. The results, however, turned out that spirituality is negatively related to pessimism as well as the same is negatively related to psychological well-being. The findings of this study reveal that pessimism partially mediated relationship between spirituality and psychological well-being. Given the implications, the scope of this research can be improved in the future. Researchers may expand the sample size of this study and explore other related variables such as happiness, hope, EQ, and resilience that might play important roles to the well-being of individuals.

Furthermore, it is also encouraged for future researchers to explore other samples from different settings such as industries, rehabilitation centers, hospitals, and government agencies. Researches that will be conducted in the said settings would uncover other forms of dynamics in relation to psychological well-being and to well-being in general. Another recommendation would be to fine tune the methodology of this study. Researchers are also encouraged to pursue experimental and mixed method designs. In the given methods, cause-and-effect can be derived from the results, and triangulation can be utilized as a method of analyzing both quantitative and qualitative data.

REFERENCES

- Abbott, R. A., Ploubidis, G. B., Huppert, F. A., Kuh, D., & Croudace, T. J. (2010). An evaluation of the precision of measurement of Ryff's psychological well-being scales in a population sample. *Social Indicators Research*, 97, 357–373. doi: 10.1007/s11205-009-9506-x
- Agolla, J. E. & Ongori, H. (2009). An assessment of academic stress among undergraduate students: The case of University of Botswana. *Educational Research and Review*, 4 (2), 63-70
- Alloy, L. B., Abramson, L. Y., Whitehouse, W. G., Hogan, M. E., Panzarella, C., & Rose, D. T. (2006). Prospective incidence of first onsets and recurrences of depression in individuals at high and low

- cognitive risk for depression. *Journal of Abnormal Psychology*, 115, 145–156. doi: 10.1037/0021-843X.115.1.145
- Allport, G. W. (1966). Traits revisited. *American Psychologist*, 21(1), 1-10. doi: 10.1037/h0023295
- Andrews, F. M. & Withey, S. B. (1976). *Social indicators of well-being*. New York: Plenum.
- Archana, Kumar, U., & Singh, R. (2014). Resilience and spirituality as predictors of psychological well-being among university students. *Journal of Psychosocial Research*, 9(2), 227-235. doi: 10.4236/psych.2018.93030
- Armstrong, T. D. (1995). Exploring spirituality: The development of the Armstrong Measure of Spirituality. Paper presented at the annual convention of the *American Psychological Association*, New York, NY.
- Aronson, E., Wilson, T. D., Akert, R. M., & Sommers, S. R. (2016). *Social psychology* (9th ed.). Pearson.
- Astin, A. & Astin, H. (2004). *Spirituality in higher education: A national study of college students' search for meaning and purpose*. Retrieved on November 9, 2011 from http://spirituality.ucla.edu/docs/news/release_health.pdf
- Baker, B. L., Blacher, J., & Olsson, M. B. (2005). Preschool children with and without developmental delay: Behavior problems, parents' optimism, and well-being. *Journal of Intellectual Disability Research*, 49(8), 575-590. doi: 10.1111/j.1365-2788.2005.00691.x
- Batara, J. B. L. (2015). Overlap of religiosity and spirituality among Filipinos and its implications towards religious prosociality. *International Journal of Research Studies in Psychology*, 4(3), 3-21. doi: 10.5861/ijrsp.2015.1090
- Beck, A. T. (1976). *Cognitive therapy and the emotional disorders*. Oxford, England: International Universities Press.
- Beckham, E. E., Leber, W. R., Watkins, J. T., Boyer, J. L., & Cook, J. B. (1986). Development of an instrument to measure Beck's cognitive triad: The Cognitive Triad Inventory. *Journal of Consulting and Clinical Psychology*, 54, 566–567. doi:10.1037/0022-006X.54.4.566
- Benner, D. G. (1989). Toward a psychology of spirituality: Implications for personality and psychotherapy. *Journal of Psychology and Christianity*, 5, 19–30.
- Betton, A. L. (2004). *Psychological well-being and spirituality among African American and European American College Students* (Unpublished doctoral dissertation). Ohio State University, OH.
- Bradburn N. M. (1969). *The Structure of Psychological Well-being*. Chicago: Aldine.
- Brenes, G. A., Rapp, S. R., Rejeski, W. J., & Miller, M. E. (2002). Do optimism and pessimism predict physical functioning? *Journal of Behavioral Medicine*, 25, 219–231. doi: 10.1023/A:1015376510466
- Brickman, P. & Campbell, D. (1971). Hedonic relativism and planning the good society. In M. H. Apley (Ed.), *Adaptation-level Theory: A symposium* (pp. 287–302). New York: Academic Press.
- Brown, J., Hanson, J. E., Schmotzer, B., & Webel, A. R. (2013). Spirituality and optimism: A holistic approach to component-based, self-management treatment for HIV. *Journal of Religion and Health*, 1-12. doi: 10.1007/s10943-013-9722-1
- Buchanan, G. M. & Seligman, M. E. P. (Eds.). (1995). *Explanatory style*. Hillsdale, NJ, US: Lawrence Erlbaum Associates, Inc.
- Campbell A., Converse, P.E., & Rodgers, W. L. (1976). *The Quality of American Life*. New York: Sage Found.
- Carton, S. T. & Goodboy, A. K. (2015). College students' psychological well-being and interaction involvement in class. *Communication Research Reports*, 32(2), 180-184. doi: 10.1080/08824096.2015.1016145
- Carver, C. S., Pozo, C., Harris, S. D., Noriega, V., Scheier, M. F., & Robinson, D. S. (1993). How coping mediates the effect of optimism on distress: A study of women with early stage breast cancer. *Journal of Personality and Social Psychology*, 65, 375–390. doi: 10.1037/0022-3514.65.2.375
- Carver, S. C., Scheier, M. F., & Segerstrom, S. C. (2010). Optimism. *Clinical Psychology Review*, 30, 879–889. doi: 10.1016/j.cpr.2010.01.006
- Chan, D. W., Chan, L.-K., & Sun, X. (2017). Developing a brief version of Ryff's scale to assess the psychological well-being of adolescents in Hong Kong. *European Journal of Psychological Assessment*, 1-9. doi: 10.1027/1015-5759/a000403
-

- Chang, H.-J., Lin, M. F., & Lin, K. C. (2007). The mediating and moderating roles of the cognitive triad on adolescent suicidal ideation. *Nursing Research, 56*(4), 252-259. doi:10.1097/01.NNR.0000280611.00997.0e
- Diener, E. (1984). Subjective well-being. *Psychological Bulletin, 95*, 542-75.
- Diener, E., Gohm, C., Suh, E., & Oishi, S. (2000). Similarity of the relations between marital status and subjective well-being across cultures. *Journal of Cross-Cultural Psychology, 31*(4), 419-436. doi: 10.1177/0022022100031004001
- Diener, E., Oishi, S., & Lucas, R. E. (2003). Personality, culture, and subjective well-being: Emotional and cognitive evaluations of life. *Annual Review of Psychology, 54*, 403-425. doi: 10.1146/annurev.psych.54.101601.145056
- Doyle, D. (1992). Have we looked beyond the physical and psychosocial? *Journal of Pain and Symptom Management, 7*, 302-311. doi: 10.1016/0885-3924(92)90063-N
- Dy, M., Espiritu-Santo, K., Ferido, M., & Sanchez, R. (2015). Stressors and stress responses of Filipino college students. *Asia Life Sciences, 24*(2), 737-759.
- Elkins, D. N., Hedstrom, L. J., Hughes, L. L., Leaf, J. A., & Saunders, C. (1988). Toward a humanistic-phenomenological spirituality: Definition, description, and measurement. *Journal of Humanistic Psychology, 28*, 5-18. doi: 10.1177/0022167888284002
- Fahlberg, L. L. & Fahlberg, L. A. (1991). Exploring spirituality and consciousness with an expanded science: Beyond the ego with empiricism, phenomenology, and contemplation. *American Journal of Health Promotion, 5*, 273-281. doi: 10.4278/0890-1171-5.4.273
- Ferguson, S. J. & Goodwin, A. D. (2010). Optimism and well-being in older adults: The mediating role of social support and perceived control. *International Journal of Aging and Human Development, 71*(1), 43-68. doi: 10.2190/AG.71.1.c
- Fiorito, B. & Ryan, K. (2007). Spirituality and psychological well-being: A mediator-moderator study. *Review of Religious Research, 48*(4), 341-368.
- Fitzpatrick, K. (2013). *Religion and Spanish colonialization in the Philippines*. (Unpublished undergraduate thesis). University of Wisconsin, La Crosse, WI.
- Flannery, D. A. (2012). *A correlational study of the relationship of spirituality on college students' academic performance and demographic characteristics*. Doctoral dissertation. Capella University, Minneapolis, Minnesota: USA. Retrieved from <https://eric.ed.gov/?id=ED540840>
- Frey, B. B., Daaleman, T. P., & Peyton, V. (2005). Measuring a dimension of spirituality for health research: Validity of the spirituality index of well-being. *Research on Aging, 27*, 556-577. doi: 10.1177/0164027505277847
- Fukofuka, S. (2007). The impact of spirituality on academic performance. *Interdisciplinary Research Journal of the AIIAS Graduate School, 10*(2), 35-47.
- Gallagher, R. P. (2010). National survey of counseling center directors. Monograph Series No. 85. Alexandria, VA: International Association of Counseling Services, Inc.
- Gultiano, S. A., Hindin, M., Upadhyay, U., & Armecin, G. D. (2009). Marital status and psychological well-being of Filipino women. *Philippine Population Review, 8*(1), 16-33.
- Hart, T. (1994). *The hidden spring: The spiritual dimension of therapy*. New York: Paulist Press.
- Hayes, A. F. (2018). *Introduction to mediation, moderation and conditional process analysis: A regression-based approach*. (2nd ed.). New York: The Guildford Press.
- Hill, P. C. & Pargament, K. I. (2003). Advances in the conceptualization and measurement of religion and spirituality. Implications for physical and mental health research. *American Psychologist, 58*, 64-74. doi: 10.1037/0003-066X.58.1.64
- Ho, M. Y., Cheung, F. M., & Cheung, S. F. (2010). The role of meaning in life and optimism in promoting well-being. *Personality and Individual Differences, 48*, 658-663. doi: 10.1016/j.paid.2010.01.008
- Hodge, D. R. (2003). The intrinsic spirituality scale: A new six-item instrument for assessing the salience of spirituality as a motivating construct. *Journal of Social Service Research, 30*, 41-61. doi:10.1300/J079v30n01_03

- Holder, M. D., Coleman, B., & Wallace, J. M. (2010). Spirituality, religiousness, and happiness in children aged 8–12 years. *Journal of Happiness Studies*, 11, 131–150. doi: 10.1007/s10902-008-9126-1
- Holder, M. D., Coleman, B., Krupa, T., & Krupa, E. (2016). Well-being's relation to religiosity and spirituality in children and adolescents in Zambia. *Journal of Happiness Studies*, 17, 1235–1253. doi: 10.1007/s10902-015-9640-x
- Hu, E., Loares, V. J., & Nadres, P. (2013). *The mediating relationship of optimism between spiritual meaning-making and subjective well-being*. (unpublished undergraduate thesis). De La Salle University, Manila, Philippines.
- Hussain, A., Kumar, A. & Husain A. (2008). Academic stress and adjustment among high school students. *Journal of the Indian Academy of Applied Psychology*, 34, 70-73.
- Ivtzan, I., Chan, C. P. L., Gardner, H. E., & Prashar, K. (2013). Linking religion and spirituality with psychological well-being: Examining self-actualization, meaning in life, and personal growth initiative. *Journal of Religion and Health*, 52, 915–929. doi: 10.1007/s10943-011-9540-2
- Jansen, L. A. (2011). Two concepts of therapeutic optimism. *Journal of Medical Ethics*, 37(9), 563–566. doi:10.1136/jme.2010.038943
- Jahoda, M. (1958). *Current Concepts of Positive Mental Health*. New York: Basic Books.
- Joseph, S. (2017). *What exactly is well-being? New research lists the fourteen components of well-being*. Retrieved on August 21, 2017, from <https://www.psychologytoday.com/intl/blog/what-doesnt-kill-us/201708/what-exactly-is-well-being>
- Karademas, E. C. (2006). Self-efficacy, social support, and well-being: The mediating role of optimism. *Personality and Individual Differences*, 40, 1281–1290. doi: 10.1016/j.paid.2005.10.019
- Kibret, B. T. & Tareke, G. (2017). Psychological well-being of elders as a function of religious involvement, spirituality, and personal meaning in life. *Clinical and Experimental Psychology*, 3(2), 1-8. doi: 10.4172/2471-2701.1000153
- LaPierre, L. L. (1994). A model for describing spirituality. *Journal of Religion and Health*, 33, 153-161. <http://dx.doi.org/10.1007/BF02354535>
- Longo, Y., Coyne, I., & Joseph, S. (2017). The scales of general well-being. *Personality and Individual Differences*, 109, 148-159. doi: 10.1016/j.paid.2017.01.005
- Lucas, R. E., Diener, E., Grob, A., Suh, E., & Shao, L. (1998). Cross-cultural evidence for the fundamental features of extraversion: The case against sociability. *Journal of Personality & Social Psychology*, 79(3), 452-468. doi: 10.1037/0022-3514.79.3.452
- Ludban, M. & Gitimu, P. N. (2015). Psychological well-being of college students. *Undergraduate Research Journal for the Human Sciences*, 14. Retrieved from <http://www.kon.org/urc/v14/ludban.html>
- Lun, V. M.-C. & Bond, M. H. (2013). Examining the relation of religion and spirituality to subjective well-being across national cultures. *Psychology of Religion and Spirituality*, 5(4), 304-315. doi: 10.1007/s10943-017-0481-2
- Mak, W. W. S., Ng, I. S. W., & Wong, C. C. Y. (2011). Resilience: Enhancing well-being through the positive cognitive triad. *Journal of Counseling Psychology*, 58(4), 610-617. doi: 10.1037/a0025195
- Mansukhani, R. and Resurreccion, R. (2009). Spirituality and the development of positive character among Filipino adolescents. *Philippine Journal of Psychology*, 42(2), 271-290.
- Menguito, M. L. & Calleja, M. (2010). *Bahala na* as an expression of the Filipino's courage, hope, optimism, self-efficacy, and search for the sacred. *Philippine Journal of Psychology*, 43(1), 1-26.
- McCullough, M. E., Hoyt, W. T., Larson, D. B., Koenig, H. G., & Thoresen, C. (2000). Religious involvement and mortality: A meta-analytic review. *Health Psychology*, 19(3), 211–222. doi:10.1037/0278-6133.19.3.211.
- Miller, W. R. & Thoresen, C. E. (2003). Spirituality, religion, and health: An emerging research field. *American Psychologist*, 58, 24-35. doi: 10.1037/0003-066X.58.1.24
- Navarez, J. C. (2017). Presence of meaning, search for meaning, and happiness among Filipino college students. *A paper presented at the DLSU Research Congress 2017*. De La Salle University, Manila.
- Norem, J. K., & Cantor, N. (1986). Defensive pessimism: Harnessing anxiety as motivation. *Journal of Personality and Social Psychology*, 51(6), 1208-1217. doi: 10.1037/0022-3514.51.6.1208

- Ozpolat, A. R., Isgor, I. Y., & Sezer, F. (2012). Investigating psychological well-being of university students according to lifestyles. *Procedia – Social and Behavioral Sciences*, 47, 256-262. doi: 10.1016/j.sbspro.2012.06.648
- Paloutzian, F. R. & Park, C. L. (2005). *Handbook of the psychology of religion and spirituality*. New York: Guilford Press.
- Pargament, K. I. (1997). *The psychology of religion and coping: Theory, research, practice*. New York: Guilford Press.
- Perez, J. A. (2012). Gender difference in psychological well-being among Filipino college student samples. *International Journal of Humanities and Social Science*, 2(13), 84-93.
- Piedmont, R. L. (1999). Does spirituality represent the sixth factor of personality? Spiritual transcendence and the five-factor model. *Journal of Personality*, 67, 985–1013. doi: 10.1111/1467-6494.00080
- Piedmont, R. L. (2001). Spiritual transcendence and the scientific study of spirituality. *Journal of Rehabilitation*, 67, 4–14.
- Piedmont, R. L. (2004). *Assessment of spirituality and religious sentiments, technical manual*. Baltimore, Author.
- Piedmont, R. L. (2007). Cross-cultural generalizability of the spiritual transcendence scale to the Philippines: Spirituality as a human universal. *Mental Health, Religion & Culture*, 10(2), 89-107. doi: 10.1080/13694670500275494
- Piedmont, R. L. (2012). Overview and development of a trait-based measure of numinous constructs: The Assessment of Spirituality and Religious Sentiments (ASPIRES) Scale. In Miller, L. J. (Ed.), *Oxford library of psychology. The Oxford handbook of psychology and spirituality* (pp. 104-122). New York, NY, US: Oxford University Press.
- Piedmont, R. L. & Leach, M. M. (2002). Cross-cultural generalizability of the spiritual transcendence scale in India: Spirituality as a universal aspect of human experience. *American Behavioral Scientist*, 45, 1888–1901. doi: 0.1177/0002764202045012011
- Punia N. & Malaviya, R. (2015). Psychological well-being of first year college students. *Indian Journal of Educational Studies: An Interdisciplinary Journal*, 2(1), 60-68.
- Radcliffe, N. M. & Klein, W. M. P. (2002). Dispositional, unrealistic and comparative optimism: Differential relations with the knowledge and processing of risk information and beliefs about personal risk. *Personality and Social Psychology Bulletin*, 28(6), 836-846. doi: 10.1177/0146167202289012
- Ramos, R. L. (2007). In the eye of the beholder: Implicit theories of happiness among Filipino adolescents. *Philippine Journal of Counseling Psychology*, 9 (1), 96- 127.
- Rasmussen, H., Scheier, M., & Greenhouse, J. (2009). Optimism and physical health: A meta-analytic review. *Annals of Behavioral Medicine*, 37(3), 239–256. doi: 10.1007/s12160-009-9111-x
- Reivich, K. (2010). Optimism: A key ingredient in to happiness. *Communique*, 38(7), 1-2.
- Robotham, D. (2008). Stress among higher education students: Towards a research agenda. *Higher Education*, 56, 735-746. doi 10.1007/s10734-008-9137-1.
- Rocha-Singh, I. A. (1994). Perceived stress among graduate students: Development and validation of the graduate stress inventory. *Educational and Psychological Measurement*, 54, 714–727. doi: 10.1177/0013164494054003018
- Row, K.A. & Elliott, J. (2009). The role of religious activity and spirituality in the health and well-being of older adults. *Journal of Health Psychology*, 14(1), 43–52. doi: 10.1177/1359105308097944
- Ruthig, J. C., Chipperfield, J. G., Perry, R. P., Newall, N. E., & Swift, A. (2007). Comparative risk and perceived control: Implications for health and well-being among older adults. *Journal of Social Psychology*, 147, 345-369. doi: 10.3200/SOCP.147.4.345-369
- Ryff, C. D. (1989). Happiness is everything, or is it? Explorations on the meaning of psychological well-being. *Journal of Personality and Social Psychology*, 57, 1069–1081. doi: 10.1037/0022-3514.57.6.1069
- Ryff, C. D. (1995). Psychological well-being in adult life. *Current Directions in Psychological Science*, 4, 99-104. doi: 10.1111/1467-8721.ep10772395

-
- Ryff, C. D. & Keyes, C. L. M. (1995). The structure of psychological well-being revisited. *Journal of Personality and Social Psychology*, 69, 719–727. <http://dx.doi.org/10.1037/0022-3514.69.4.719>
- Ryff, C. D. & Singer, B. (1998). The contours of positive human health. *Psychological Inquiry*, 9, 1-28. doi: 10.1207/s15327965pli0901_1
- Scales, P. C., Syvertsen, A. K., Benson, P. L., Roehlkepartain, E. C., & Sesma, A, Jr. (2014). Relation of spiritual development to youth health and well-being: Evidence from a global study. In A. Ben-Arieh, F. Casas, I. Frones, & J. E. Korbin (Eds.), *Handbook of child well-being* (pp. 1101–1135). Amsterdam: Spring.
- Scheier, M. F. & Carver, C. S. (1985). Optimism, coping, and health: Assessment and implications of generalized outcome expectancies. *Health Psychology*, 4, 219-247. doi: 10.1037/0278-6133.4.3.219
- Scheier, M. F. & Carver, C. S. (1992). Effects of optimism on psychological and physical well-being: Theoretical overview and empirical update. *Cognitive Therapy and Research*, 16, 201–228. doi: 10.1007/BF01173489
- Scheier, M. F., Matthews, K. A., Owens, J. F., Magovern, G. J., Lefebvre, R. C., Abbott, R. A., & Carver, C. S. (1989). Dispositional optimism and recovery from coronary artery bypass surgery: The beneficial effects on physical and psychological well-being. *Journal of Personality and Social Psychology*, 57(6), 1024-1040. doi: 10.1037/0022-3514.57.6.1024
- Schulz, R., Bookwala, J., Knapp, J. E., Scheier, M., & Williamson, G. M. (1996). Pessimism, age, and cancer mortality. *Psychology and Aging*, 11(2), 304-309. doi: 10.1037/0882-7974.11.2.304
- Schunk, D. (2011). *Learning theories: An educational perspective* (6th ed.). Boston, MA: Pearson.
- Shafranske, E. P. & Gorsuch, R. L. (1984). Factors associated with the perception of spirituality in psychotherapy. *Journal of Transpersonal Psychology*, 16, 231–241.
- Stark, K. D., Schmidt, K. L., & Joiner, T. E., Jr. (1996). Cognitive triad: Relationship to depressive symptoms, parents' cognitive triad, and perceived parental messages. *Journal of Abnormal Child Psychology*, 24(5), 615-631. doi: 10.1007/BF01670103
- Symister, P. & Friend, R. (2003). The influence of social support and problematic support on optimism and depression in chronic illness: A prospective study evaluating self-esteem as a mediator. *Health Psychology*, 22, 123–129. doi: 10.1037/0278-6133.22.2.123
- Tart, C. (1975). Introduction. In C. T. Tart (Ed.), *Transpersonal psychologies* (pp. 3–7). New York: Harper & Row.
- Taylor, S. E. & Armor, D. A. (1996). Positive illusions and coping with adversity. *Journal of Personality*, 64, 873– 898. doi: 10.1111/j.1467-6494.1996.tb00947.x
- Temane, Q.M. & Wissing, M.P. (2006). The role of subjective perceptions of health in the dynamics of context and psychological well-being. *South African Journal of Psychology*, 36(3), 564–581. doi: 10.1177/008124630603600308
- Tiliouine, H. & Belgoumidi, A. (2009). An exploratory study of religiosity, meaning in life and subjective well-being in Muslim students from Algeria. *Applied Research Quality Life*, 4, 109-127. doi: 10.1007/s11482-009-9076-8
- Tolentino, M. N. & Dullas, A. R. (2015). Subjective well-being of Filipino farm children. *International Journal of Research Studies in Psychology*, 4(4), 47-60. doi: 10.5861/ijrsp.2015.1265
- Udhayakumar, P. & Illango, P. (2018). Psychological well-being among college students. *Journal of Social Work Education and Practice*, 3(2), 79-89.
- Underwood, L. G., & Teresi, J. A. (2002). The daily spiritual experience scale: Development, theoretical description, reliability, exploratory factor analysis, and preliminary construct validity using health related data. *Annals of Behavioral Medicine*, 24, 22-33. doi:10.1207/S15324796ABM2401_04
- Vaughan, F. (1991). Spiritual issues in psychotherapy. *Journal of Transpersonal Psychology*, 23, 105–119.
- Vickers, K. S. & Vogeltanz, N. D. (2000). Dispositional optimism as a predictor of depressive symptoms over time. *Personality and Individual Differences*, 28, 259–272. doi: 10.1016/S0191-8869(99)00095-1
- Walker, K. L. & Dixon, V. (2002). Spirituality and academic performance among African American college students. *Journal of Black Psychology*, 28(2), 107-121. doi: /10.1177/0095798402028002003
-

- Weinstein, N. D. (1989). Optimistic biases about personal risks. *Science*, 246, 1232.
- Wessman, A. E. & Ricks, D. F. (1966). *Mood and personality*. Oxford, England: Holt, Rinehart, & Winston.
- William, O. B. & Isaac, O. O. (2016). Student spirituality and academic performance: A case study of Kwame Nkrumah University of Science and Technology (KNUST), Ghana. *British Journal of Education, Society & Behavioural Science*, 17(4), 1-13.
- Wilner, J. (2011). Flip your script: Use the “positive” cognitive triad to enhance resiliency. *Psychology Central*. Retrieved on November 27, 2017, from <https://blogs.psychcentral.com/positive-psychology/2011/10/flip-your-script-use-the-positive-cognitive-triad-to-enhance-resiliency/>
- Wilson, W. R. (1967). Correlates of avowed happiness. *Psychological Bulletin*, 67, 294-306. doi: 10.1037/h0024431
- Wood, J. L. & Hilton, A. A. (2012). Spirituality and academic success: Perceptions of African American males in the community college. *Religion & Education*, 39, 28-47. doi: 10.1080/15507394.2012.648576
- Yabut, H. J. (2013). Isang paglilinaw sa mga paniniwala at pagpapakahulugan sa ispiritwalidad at relihiyon ng mga Pilipino. *Diwa E-Journal*, 1,162- 179.
- Zechmeister, J. S., Zechmeister, E. B., & Shaughnessy, J. J. (2012). *Research methods in psychology* (9th ed.). New York: McGraw-Hill.
- Zinnbauer, B. J. & Pargament, K. I. (2005). Religiousness and spirituality. In R. F. Paloutzian & C. L. Park (Eds.), *Handbook of the psychology of religion and spirituality* (pp.21-42). New York: Guilford Press.
- Zinnbauer, B. J., Pargament, K. I., Cole, B., Rye, M. S., Butter, E. M., Belavich, T. G., Hipp, K. M., Scott, A. B., & Kadar, J. L. (1997). Religion and spirituality: Unfuzzifying the fuzzy. *Journal for the Scientific Study of Religion*, 36, 549–564. doi: 10.2307/1387689