

**Correlation of Psychological Well-being and Christian Spiritual Well-being
at a Small Christian Liberal Arts College in the Urban Midwest**

Rachel J. Richter

Abstract

Results support the hypothesis that a spiritual approach to life is correlated with well-being. Christian spiritual well-being and psychological well-being were correlated with a sample of 62 college-aged, mainly caucasian participants (28 males, 34 females) from a small Christian liberal arts college in the urban Midwest using convenience sampling methods. The instruments used were the Shepherd Scale (Basset, Sadler, Kobischen, Skiff, Merrill, Atwater, & Livermore, 1984), which consisted of the two main components of belief and Christian walk, and the psychological well-being scale, containing the six main categories—self-acceptance, positive relations with others, autonomy, environmental mastery, purpose in life, and personal growth. (Ryff, 1989). Both instruments contained Likert-scale ratings to measure psychological well-being and spiritual well-being aspects.

Christian spiritual well-being and psychological well-being held significant positive correlation. Results yielded a correlation value between psychological well-being and Christian spiritual well-being of $r = .26$, $p = .04$. Two facets of psychological well-being targeted by the researcher for examination, positive relations with others and purpose in life, held no significant positive correlation with spiritual well-being. The researcher controlled for order effects and counter-balanced according to participant's sex using single-blind experimental methodology. Suggestions for improvement of current instrumentation and methodology are included.

Correlation of Psychological Well-being and Christian Spiritual Well-being at a Small Christian
Liberal Arts College in the Urban Midwest

Psychological well-being is a point of much emphasis in society today. Whereas insurance companies and society in general once thought of a person's health mainly in physical terms, in modern society personal wellness has come to refer to a more thorough definition that includes psychological well-being, also. In regard to psychological well-being, within the literature happiness has generally been viewed as the outcome variable (Ryff, 1989). This perspective in psychology stemmed from ancient Greek philosophy, for "...had Aristotle's view of eudaimonia as the highest of all good been translated as realization of one's true potential rather than as happiness, the past 20 years of research on psychological well-being might well have taken different directions," (Ryff, 1989, p. 1070). The earliest literature entailed narrow conceptions of positive functioning, and it placed emphasis on short-term affective well-being (happiness) at the expense of enduring effects. Therefore, the current study recognizes the faulty nature of these approaches and bases psychological well-being upon a mixture of both short and long-term measures. Ryff operationally defined psychological well-being as: self-acceptance, autonomy, environmental mastery, purpose in life, positive relations with others, and personal growth (1989). The theorist behind this view aimed at measuring all aspects of this form of well-being, and created a broader, more accurate definition.

Furthermore, "the ability to love is viewed as a central component of mental health," (Ryff, 1989, p. 1071). The current study hypothesizes that this point creates a positive correlation and crossover of principles between psychological well-being scales and (Christian) spiritual well-being scales, as the key commands of the Bible center around love. The current study holds a subhypothesis that this will be shown in correlation between spiritual well-being and positive

relations with others. In addition, research identified goals and direction in life, in themselves, as the crux of the criteria for psychological well-being. For Christians, the Great Commission provides this automatically, indicating that having spiritual well-being may well put Christians in an advantageous position from the start. Based upon these criteria, the current study holds a (second) subhypothesis that positive correlation will be found between purpose in life and spiritual well-being.

The process of defining and separating psychological well-being from innate value systems stressed in secular society caused and continues to cause much conflict within this realm of study; but within Christian literature, this has not been and is not a “problem,” but a blessing. Christian researchers can understand the fruitlessness of trying to accomplish this feat, for spiritual well-being and psychological well-being are naturally combined. It is only within a secular society that involves citizens who deny this in their repression of their natural knowledge of God as given through conscience and nature that creates this “dilemma.”

Much research within the field of psychology concerns well-being, in general. Approached from numerous angles, this topic encompasses a broad scope of factors related to everyday life. General studies investigated effects of clergy-patient prayer (VandeCreek, 1998), elaboration on definitions of prayer and its use in psychotherapy (Magaletta & Brawer, 1998), and inspection of how emotion was viewed by Christians in light of sin’s effects (Bassett & Hill, 1998). Overall spiritual activity of the nation and belief in God were investigated through various polls. Researchers are currently tightening and streamlining definitions of the terms spirituality, religiosity, psychological well-being, and spiritual well-being. Spirituality itself caused research to branch out in as many directions as religious and spiritual sects and belief systems have. Therefore, the research contains diverse operational definitions of these terms, but the intent of

researchers has been the same: to gain better understanding of well-being, to thoroughly understand what affects it, and to concretely describe ideas and concepts that are purely intangible (related to psychological and spiritual well-being), yet crucial to human life.

Within the broad base of ideas surrounding psychological well-being, researchers examined the issues of suffering, personal and communal growth, maturity, repression, and other psychoanalytic points. Studies tracked Freud's link between the Oedipal Complex and one's perception of God throughout life, and Rizutto contributed evidence that other relatives play a role in this formation of one's own perceptions of God as well.

In combination, researchers explored trends in behavior and social aspects as affected by both psychological and spiritual well-being. Numerous scales and descriptions appeared to explain both of these terms. Influence of religiosity and spirituality has been investigated according to a person's cognitions, emotions, motivation, and interactions with others. Parents, as well as marital status and marital disruption (Max, Brokaw, & McQueen, 1997), have been shown to greatly influence the general trend of adolescent religiosity (Mosher & Handal, 1997). Studies specifically addressed adolescents from a developmental perspective to determine causation of level of religiosity and spirituality (Mosher & Handal, 1997).

Research pointed to God-image as a possible extraneous variable that affected both psychological well-being and spiritual well-being (Tisdale, Theresa C., Key, Teresa L., Edwards, Keith J., Fletcher Brokaw, Beth, Kemperman, Steven R., Cloud, Henry, Townsend, John, & Okamoto, Thomas, 1997). Researchers theorized that this closely impacted self-esteem and self-image. These, in turn, appeared to affect religious experience and empathy. Within practical application, studies found that as treatment progressed, the core self, other, and God image schemas became more congruent. Research suggested that God-image for children and

adolescents was impacted by parents and the child-parent relationship. “In studies that have compared both intact and disrupted families, greater amounts of child dysfunction are associated with interparental discord than with actual marital disruption,” (Max, Brokaw, & McQueen, 1997, p. 200).

Concerning spiritual well-being, high levels of spirituality were associated with healthy personality characteristics (Tloczynski, Knoll, & Fitch, 1997). Strong support exists for theorists who “...[contend] that a spiritual approach to life fosters well-being” (Tloczynski, et. al., 1997, p. 212). Furthermore, “Moberg (1971) [conceptualized] spiritual well-being as two-faceted, with both *vertical* and *horizontal* components,” (Ellison, 1983, p. 331). The two facets reflected well-being in relation to God and in sense of life purpose and satisfaction. In regard to environmental factors, religious and existential well-being were correlated with population density of one’s surroundings (Ellison, 1983). Doctrinal beliefs, worship orientations, devotional practices, and church attendance are active areas of research, also (Ellison, 1983).

The Shepherd Scale measures spiritual well-being with accuracy. Specifically, researchers have used this scale within a Christian liberal arts college setting (Foster & LaForce, 1999). Results supported the idea that “...students who attend Christian institutions move toward identity achievement and away from less mature identity statuses,” (Foster & LaForce, 1999, p. 63).

The very “dilemma” mentioned earlier—that of separating psychological well-being from spiritual well-being—is addressed and embraced in the furthering of this area of research, within the study at hand. The purpose of the current study is to describe the relationship between Christian spiritual well-being and psychological well-being through applying the Shepherd Scale and a psychological well-being scale to participants from a small, Christian liberal arts college. It

is predicted that the two would hold a moderately strong positive correlation. The scales themselves provide operational definitions for both psychological well-being and spiritual well-being. Due to the fact that very few studies existed between these two areas (Foster & LaForce, 1999), this study provides replication, in a sense; but, it maintains originality in the fact that no other study has correlated these specific scales, or combined them with the intent of measuring Christian spirituality.

Method

Participants

The 62 participants were students from a small, Christian liberal arts college in an urban area of the Midwestern United States. They were chosen through nonprobability, convenience-sampling procedures. Numbers of actual participants from each grade were as follows: 7 males and 11 females (freshman); 6 males and 11 females (sophomores); 7 males and 7 females (juniors); and, 8 males and 5 females (seniors). The total numbers from each sex were: 28 males and 34 females. The ages of the participants were between 18 and 23. Numbers of participants from each age category were: age 18 (n = 6), age 19 (n = 18), age 20 (n = 12), age 21 (n = 15), age 22 (n = 9), and age 23 (n = 2). Average participant age was: $M = 20.15$ years.

Ethnicity of participants was: caucasian (n = 53), Hispanic (n = 1), Asian (n = 1), Black (n = 1), and other (n = 3). Socioeconomic status of participants' parents (or those who raised them) was: upper-class (n = 1), middle-class (n = 54), and working-class (n = 7). Living circumstances of participants was as follows: with biological parent (n = 4), with biological parents (n = 49), with one parent and one step-parent (n = 3), with grandparent(s) (n = 1), and those living in other situations (n = 5). Those living in other situations were as follows: with uncle (n = 1), with biological parents and a parent and step-parent (n = 1), and alone (n = 3). In

regard to home environment, participants reported that their parents or the person(s) that they lived with for most of their lives get along: well (n = 33), moderately well (n = 18), moderately poorly (n = 5), and poorly (n = 6). Furthermore, participants regarded their parents or the person(s) they lived with for most of their lives to be: cheerful (n = 4), depressed (n = 1), strict/angry (n = 3), loving (n = 40), removed/unemotional (n = 5), and other adjectives (n = 4). The other adjectives written in to answer this question were: “Dad—dumb; Mom—loving” (n = 1), “strict/loving/cheerful” (n = 1), “reliable” (n = 1), and “cheerful/loving/responsible” (n = 1). Five participants indicated that they did not know the answer.

Participants viewed God, in their personal perspectives, as: loving (n = 53), emotionless (n = 1), and other adjectives (n = 6). The other adjectives used to answer this question are: “all” (n = 2), “just” (n = 1), “tortoise” (n = 1), “loving and to be feared” (n = 1), and no answer (n = 1). The no answer and “tortoise” answers were due to the fact that these individuals marked “atheist” for religious affiliation. Religious affiliation of participants was: Wisconsin Evangelical Lutheran Synod (n = 50), Evangelical Lutheran Church of America (n = 1), Catholic (n = 2), Evangelical Lutheran Synod (n = 3), unaffiliated Christian (n = 4), and atheist (n = 2). Participants reported their church attendance as: more than once a week (n = 9), once a week (n = 38), every other week (n = 6), once a month (n = 2), once every few months (n = 2), and once a year (n = 2). Two participants failed to answer this question (as it was on the back page), and one participant wrote in “once a week/once every other week.” Participants reported prayer activity as follows: several times a day (n = 36), a few times a week (n = 20), a few times a month (n = 1), and never (n = 2).

Participants were assured of the anonymity of their data. They were each given the promise of a small, edible reward for participation in any portion of the study.

Instruments

Instruments consisted of the Shepherd Scale (a test for measuring spiritual well-being) and a psychological well-being scale. The Shepherd scale (Basset, Sadler, Kobischen, Skiff, Merrill, Atwater, & Livermore, 1984) consisted of two components—belief and Christian walk. The belief component was first in order and contained 13 questions. The Christian walk component contained 25 questions. The test contained questions such as “I believe that it is possible to have a personal relationship with God through Christ,” and “It is important to me to conform to Christian standards of behavior” (Basset, et. al., 1984). Participants responded to all questions with “true,” “generally true,” “generally not true,” or “not true.” The experimenter took all references to Bible passages out of the testing format and also edited the headings between the belief and Christian walk sections from the test.

In early literature, not one of the instruments used to measure spiritual well-being facilitated the Bible in operationally defining Christianity, and therefore, the Shepherd Scale pointedly uses the New Testament in “separating the sheep from the goats. The authors of this scale “...believe that there is, to some degree, an observable and measurable life pattern which is distinctly Christian” (Basset, et. al., 1984, p. 342), while making the point that Christians must be careful not to judge lest they be judged themselves (Matthew 7:1-5). The authors admitted possible biases and flaws, but nevertheless, the scale has produced statistically significant results. Test-retest reliability was found to be $r = .82, p < .001$; split-half reliability was found to be $r(61) = .83, p < .001$, and after it was corrected using the Spearman-Brown procedure, $r(61) = .91, p < .001$. Cronbach’s alpha was calculated, as well, and again a significant correlation coefficient was yielded, $\alpha = .86, p < .001$. (Basset, et. al., 1984).

The psychological well-being scale (Ryff, 1989) consisted of 84 questions and participants responded with a six-point Likert scale ranging from “very strongly disagree” to “very strongly agree.” Questions consisted of statements such as “I like most aspects of my personality” and “The past had it’s ups and downs, but in general, I wouldn’t want to change it” (Ryff, 1989). There were six main dimensions that were examined through use of this test. The six main categories of the test were: self-acceptance, positive relations with others, autonomy, environmental mastery, purpose in life, and personal growth (Ryff, 1989). These categories were found in this exact order in the test itself, and there were 14 questions per category.

A self-report, paper and pencil forced-choice questionnaire was designed to assess both general and some specific background information about the participants that is related to ideas within the spiritual well-being research. The survey included 18 questions consisting of items such as “I am a: FRESHMAN, SOPHOMORE, JUNIOR, SENIOR” and “My parents/guardians that I live with (or lived with most of my life) get along: WELL (rarely fight), MODERATELY WELL (fight sometimes), MODERATELY POORLY (fight often), POORLY (fight constantly.” This questionnaire was created by the author of the current study and does not have any reliability or validity estimates available.

Procedure

Participants were contacted in convenience sampling style by the researcher. The researcher asked students if they would be willing to participate in the study as the researcher spoke to individuals in various locales around campus, called students over the telephone, or e-mailed students. If they agreed, they were each sent three reminder e-mails and reminded as the researcher saw them around campus before the testing date. Then, the students were gathered on

a weekday evening in a lecture hall classroom for testing procedures. (The researcher explained to the students that the study was a correlational examination of psychological well-being and (Christian) spiritual well-being through her e-mail messages before the testing date.) A small number of participants took the testing packets in the library computer lab ($n = 2$), at the fine arts building security/information desk ($n = 1$), in the library itself at a later time ($n = 4$), and in the cafeteria ($n = 6$) at a later time. The researcher allowed certain individuals to take the testing packets at later times due to scheduling difficulties or work commitments, under the assumption that time taken for tests would not affect results/responses.

Participants were split into two groups to avoid order effects, unbeknownst to them, counterbalancing half of the testing packets so that one group took the spiritual test first and the other took the psychological test first. This was a significant attribute of the current researcher's methodology because confounding of results may have occurred and remained unaccounted for based upon order effects. The researcher wanted to ensure that one test would not prime participants in such a manner that the answers on the second test would be effected by the "practice" they obtained while taking the first one. Furthermore, the researcher had a pile for males and a pile for females in order to ensure that the sexes were counterbalanced according to order within testing format. The researcher kept participants blind from this control by keeping all tests in one pile, separated by a pink sheet of paper in the middle, and grabbing tests from the bottom of the pile for males and the top of the pile for females, with tests stacked every-other-one according to the the varying format.

Upon entrance to the testing site, all participants were spoken to by the researcher. The researcher thanked them for participation, hushing students as needed at times, and assured participants of their anonymity, confidentiality, and option to ask questions at any time

throughout the testing process. The researcher also reminded participants to answer honestly, remembering that “there are no right or wrong answers—just your honest assessment of yourself.”

Packets were arranged with all packets containing the informed consent form first. Half of each of the male and female test packets contained the Shepherd Scale second and the psychological well-being test third, and half of each of the male and female test packets contained the psychological well-being test second and the Shepherd Scale third in order. All packets contained the general survey as the last item of the testing packet.

The researcher was present throughout the entire length of the test in order to be available for questioning, yet maintained at least 15 feet from the participants unless answering questions to avoid incurring undue pressure to perform. Upon completion of the test, participants were instructed to leave after receiving their small, edible rewards for participation. The researcher compiled data and worked out the statistical information within one month of testing. The participants who participated in any form of the study were then given a written debriefing over e-mail that included the overall statistical information and trends found from the result compilations.

Scoring

Scoring of the spiritual well-being and psychological well-being scales varied. The Shepherd Scale was scored as had been done in previous research (Basset, et. al., 1984) according to the following point values of responses: “true” (4 points), “generally true” (3 points), “generally not true” (2 points), and “not true” (1 point). With previous research methodology providing the model, the current researcher scored tests in which participants had questions unanswered by adding up all responses within that section of the Shepherd Scale,

calculating the average response for the section, and substituting that for the response to the unanswered question. Numerical equivalents for responses were then totaled to find participants' final scores.

In regard to the psychological well-being test, the researcher used a special scoring system, as indicated along with the appendix of the test itself (Ryff, 1989). Various questions were placed on a reverse scale (as they were worded negatively to gauge responses to both types of questions formats). The reverse scale converts numbers as follows: 1 = 6, 2 = 5, 3 = 4, 4 = 3, 5 = 2, and 6 = 1. Unanswered questions on the psychological well-being test were handled in the same manner as questions unanswered on the Shepherd Scale—the section of the test where the unanswered question occurred was added and averaged, and the average response was substituted for the unanswered item. Subsections were then added up individually to obtain the six subcategory scores, and then the researcher added up subsections in order to obtain numbers for overall psychological well-being. Two subsections the researcher took note of were positive relations with others and purpose in life.

Results

The descriptive statistics found in relation to the current study's hypothesis were as follows:

Table 1 Descriptive Statistics about Spiritual Well-being, Psychological Well-being, and Two Subcategories of Psychological Well-being

	N	Minimum	Maximum	Mean	St. Deviation
Spiritual	62	66.00	152.00	130.73	14.28
Psychological	62	278.00	319.00	295.01	7.68
Purpose	62	35.00	55.00	45.04	4.14
Relations	62	41.00	58.00	47.70	3.38

Correlations found in regard to the current research hypothesis were as follows:

Table 2 Correlational Statistics Between Psychological Well-being and Spiritual Well-being

	Psychological Well-being	Spiritual Well-being/Shepherd
Psychological Well-being		
Pearson Correlation	1.00	.26*
Significance (2-tailed)	.	.04
Spiritual Well-being/Shepherd		
Pearson Correlation	.26*	1.00
Significance (2-tailed)	.04	.

*Correlation is significant at the 0.05 level (2-tailed).

Based upon these statistics, results indicated that there is a correlation ($r = .26$) between psychological well-being and spiritual well-being between the Shepherd Scale and Ryff's

psychological well-being scale (1989), confirming the researcher's hypothesis. This is supported by the significance level of .04 on a 2-tailed test, showing strong positive correlation at the 0.05 level. In regard to specific subcategory correlations between the psychological well-being subcategories and the Shepherd Scale (spiritual well-being test), there were no significant correlations found. The correlation between purpose in life and the Shepherd Scale had a Pearson $r = -.05$ and obtained a significance value (at the 0.05 level) of $p = .70$ on a 2-tailed test. Therefore, this correlation was insignificant. In addition, the correlation between positive relations with others and the Shepherd Scale had a Pearson $r = .07$ and obtained a significance value (at the 0.05 level) of .61 on a 2-tailed test. Although this correlation value was .09 greater than that of the other subtest, this subtest correlation was also insignificant.

Discussion

The hypothesis of this study was that there would be a positive correlation found between psychological well-being as measured by Ryff's psychological well-being test (1989) and spiritual well-being as measured by the Shepherd Scale (Basset, Sadler, Kobischen, Skiff, Merrill, Atwater, & Livermore, 1984). A subhypothesis of the current researcher was that there would specifically be positive correlations between the Shepherd Scale and the purpose in life subcategory of the psychological well-being test and between the Shepherd Scale and the positive relations with others subcategory of the psychological well-being test. Although the subhypotheses were not found to have significant correlations, the overall hypothesis was strongly supported by the current study with a correlation value of $r = .26$ and a significance value of $p = .04$ on a 2-tailed test, with strong positive correlation at the 0.05 level.

These results lend support to the previous research by Tloczynski, Knoll, & Fitch that stated "...that a spiritual approach to life fosters well-being" (1997, p. 212). They found that high

levels of spirituality were associated with healthy personality characteristics. If these ideas are accurately reflected in the current testing procedures, then the strong positive correlation found between the psychological well-being test and the spiritual well-being test within the current study lend significant support to this hypothesis.

In regard to environmental factors, religious and existential well-being correlated with population density of one's surroundings in previous research (Ellison, 1983). Based upon this, further research should be done in order to determine if there are significant changes in correlation values based upon population size. As the current population lives in a relatively "dense" environment (college residence halls, small apartments, etc.), it would be interesting to see whether or not correlation values would be significantly different if participants were taken from a rural environment in which participants live in more spacious conditions and are separated from neighbors by great distances.

Doctrinal beliefs, worship orientations, devotional practices, and church attendance have been active areas of research, also (Ellison, 1983). These areas should continue to be researched and analyzed, based upon the current study, in order to obtain correlation values of populations that are much more diverse in religious background. Also, samples of various religious populations could be taken (as this population was mainly Wisconsin Evangelical Lutheran Synod Christians) and then correlated with one another in an attempt to obtain an idea of the affects of religious affiliation upon spirituality and psychological well-being.

Parents, as well as marital status and marital disruption (Max, Brokaw, & McQueen, 1997), have been found to greatly influence the general trend of adolescent religiosity (Mosher & Handal, 1997). Based upon numbers given in the general survey, further research could be done in regard to these areas, as well. The majority of participants in this study lived with a biological

parent(s) and the parents or individuals that the majority of the participants were raised by got along (on average) very well or moderately well. And thus, the high positive correlation between spiritual well-being and psychological well-being lends weight to the idea, as well, that this type of home environment correlates with positive levels of adolescent religiosity. The current study is specifically aimed at religiosity as defined on a Christian standard.

In regard to both variables of the current study, past research pointed to God-image as a possible extraneous variable that affected both psychological well-being and spiritual well-being (Tisdale, Theresa C., Key, Teresa L., Edwards, Keith J., Fletcher Brokaw, Beth, Kemperman, Steven R., Cloud, Henry, Townsend, John, & Okamoto, Thomas, 1997). Researchers theorized that God-image closely impacted self-esteem and self-image. These, in turn, appeared to affect religious experience and empathy. Within practical application, studies found that as psychological treatment progressed, the core self, other, and God image schemas become more congruent. The current study's findings support connection of God-image to psychological well-being and spiritual well-being, as well, due to the fact that the majority of participants viewed God in a positive or loving perspective, the majority of participants scored well on both the psychological and spiritual well-being tests, and the majority of participants pray and attend church often. Although this cannot lead to any conclusive evidence or support, the current study's findings suggest that this area of research should be expounded upon through future study, as well.

Furthermore, research suggested that God-image for children and adolescents was impacted by parents and the child-parent relationship. "In studies that have compared both intact and disrupted families, greater amounts of child dysfunction are associated with interparental discord than with actual marital disruption," (Max, Brokaw, & McQueen, 1997). The current

study contained a very small number of participants that lived in homes with interparental discord, and therefore, further study should be done in this area, as well, in order to determine affects upon both psychological and spiritual well-being. The current study did not contain an adequate sample of participants from disrupted homes to make a significant comparison with participants from nondisruptive homes.

Specifically in regard to the Shepherd Scale, this scale was applied by certain research within a Christian liberal arts college (Foster & LaForce, 1999). Results supported the idea that "...students who [attended] Christian institutions [moved] toward identity achievement and away from less mature identity statuses," (Foster & LaForce, 1999, p. 63). Clear gender differences existed, as the results pointed out, also. In general, identity achievement is thought of to be associated with psychological well-being, and therefore, this facet of well-being should be examined in-depth in order to more closely view its affects upon psychological well-being and possible repercussions upon spiritual well-being. Concerning gender differences, the current study did not examine such differences. However, one of the major directions the researcher would like future research to cover is gender differences as related to both psychological and spiritual well-being.

Possible drawbacks contained within the current study are limited external validity due to sampling method and lack of adequate sampling diversity of religious background. Future studies should be done containing greater variety of religious backgrounds of students (or lack of religion), in order to better examine the root issue of relationship between psychological well-being and spiritual well-being. In addition, specific test questions on the Shepherd Scale may need to be reworded or reformatted to better fit the understanding within each religion that the test is administered to in order to best gauge what the questions are asking. As the original test

writers of the Shepherd Scale represented a variety of evangelical religious backgrounds, the test appears to a more conservative Lutheran sample to be very merit-based in regard to salvation. This, in turn, highly affects how participants answer questions.

This is reflected in student responses and questions within the final question of the general survey. For example, comments made by participants under the “comments/questions” portion were as follows: “The religious section had statements that were worded poorly. One has faith given to them, it isn’t something they can just choose,” “#5, #11, & #12 were unclear on the spiritual well-being test,” and “Some of Christian questions could go either way depending on how you read them; #11 & #12—He chose me, I did not choose Him, etc.; #1—Yes, on Judgment Day.”

In addition, the psychological well-being test contains several spelling errors, and for the mere purpose of producing a professional test, these errors should be corrected. In addition, this test is much too long when used in combination with any other tests, and a shortened form of this test would be highly desirable when constructing correlational studies. Participants seemed to feel that the test needed greater variability in response choices, also. These drawbacks were reflected in participants' comments. For example, students commented: “Good—though a bit assuming on what makes psychological well-being; tough; needs to be worded better throughout,” “psychological well-being test should have ‘agree somewhat’ and ‘disagree somewhat’ instead of ‘agree’ and ‘disagree,’” “Very long, but also interesting,” and “This is very...long.”

Due to the fact that all questions are asked in both a negative and positive format, the current researcher suggests providing a “test A” and a “test B” format of this test. One test would contain negative wording of questions, and one would contain positive wording of questions, in

order that both methods of questioning would be used within the same test while still cutting down on test length. The researcher could then ensure that even numbers of participants took the negatively worded test and the positively worded test on psychological well-being. This would better control for participants' fatigue effects, as well, as the overall time would decrease significantly.

Obviously, this area of study contains little existing research, and therefore, much more research within this field should be done. Replication is a definite need in regard to correlative studies between psychological well-being and Christian spiritual well-being, and further examination of operational definitions within the research should be done. Research should continue to work toward more concise, accurate, descriptive definitions of psychological well-being, spiritual well-being, and subcategories of each of these terms. Although this field contains little research, it is the true hope of the researcher that this field will begin to gain recognition and replication, producing credible and valid results. Testing methods and procedures should be examined and improved, as well, as past studies have allowed participants to take "group tests" on the subject, thereby biasing and confounding results.

Better methodology, more accurate terminology, replication, and a true desire to add to knowledge in this field for researchers and the public alike will improve the status of this area of study greatly. This is an extremely important area of research due to the fact that the issues of psychological well-being and spiritual well-being (even if categorized as lack of spirituality) touch literally every human life and are core issues of human existence. Therefore, the current researcher sincerely hopes this area of research will move from the psychology field's "backburner" into the forefront of study.

References

- Basset, R. J. & Hill, P. C. (1998). The ACE model of emotion: Living Jesus Christ while experiencing emotions. Journal of Psychology and Theology, *26*, 232-246.
- Basset, R. L., Sadler, R. D., Kobischen, E. E., Skiff, D. M., Merrill, I. J., Atwater, B. J., & Livermore, P. W. (1984). The shepherd scale: Separating the sheep from the goats. Journal of Psychology and Theology, *9*, 335-354.
- Ellison, C. W. (1983). Spiritual well-being: Conceptualization and measurement. Journal of Psychology and Theology, *14*, 330-340.
- Foster, J. D. & LaForce, B. (1999). A longitudinal study of moral, religious, and identity development in a Christian liberal arts environment. Journal of Psychology and Theology, *27*, 52-68.
- Magaletta, P. R. & Brawer, P. A. (1998). Prayer in Psychotherapy: A model for its use, ethical considerations, and guidelines for practice. Journal of Psychology and Theology, *26*, 322-330.
- Max, D. A., Fletcher Brokaw, B., & McQueen, W. M. (1997). The effects of marital disruption on the intergenerational transmission of religious values. Journal of Psychology and Theology, *25*, 199-207.
- Mosher, J. M. & Handal, P. J. (1997). The relationship between religion and psychological distress in adolescents. Journal of Psychology and Theology, *25*, 449-457.
- 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.

Tisdale, T. C., Key, T. L., Edwards, K. J., Fletcher Brokaw, B., Kemperman, S. R., Cloud, H., Townsend, J., & Okamoto, T. (1997). Impact of treatment on God image and personal adjustment, and correlations of God image to personal adjustment and object relations development. Journal of Psychology and Theology, 25, 227-239.

Tloczynski, J., Knoll, C., & Fitch, A. (1997). The relationship among spirituality, religious ideology, and personality. Journal of Psychology and Theology, 25, 208-213.

VandeCreek, L. (1998). The parish clergy's ministry of prayer with hospitalized parishioners. Journal of Psychology and Theology, 26, 197-203.