
SPIRITUALITY, LIFE STRESS, AND AFFECTIVE WELL-BEING

DAVID V. POWERS

Loyola College in Maryland

ROBERT J. CRAMER

The University of Alabama

JOSHUA M. GRUBKA

Loyola College in Maryland

Recent research has explored many aspects of affective well-being, including depressive symptoms, positive and negative affect. The present study sought to contribute to this line of inquiry by investigating the role of life stress, spiritual life integration (SLI), and social justice commitment (SJC) in predicting affective well-being. Participants were 136 undergraduate students with a mean age of 18.82 ($SD = 1.07$), and age range of 17-22. Participants completed a questionnaire packet including the Undergraduate Stress Questionnaire (USQ), Beck Depression Inventory (BDI), Positive and Negative Affect Scale (PANAS), and Spiritual Involvement Scale which includes SLI and SJC subscales. In line with previous findings, life stress significantly predicted negative affect and depressive symptoms in hierarchical regression analyses. Contrary to previous research, SLI did not predict any aspect of affective well-being. Finally, SJC significantly predicted positive affect, negative affect, and depressive symptoms. Interpretations, implications, limitations, and future research are discussed.

Researchers have examined life stress and negative life events, and their subsequent contribution to negative outcomes in regard to depression and affective well-being (e.g. Friis, Wittchen, Pfister, & Lieb, 2002; Leong & Vaux, 1991; Maciejewski, Prigerson, & Mazure, 2000;

Thomas & Vindya, 2000). Overall, findings have consistently shown increased levels of negative life events to be related to elevated levels of depressive symptoms and negative affect (Kuiper & Martin, 1998; Tesser & Beach, 1998). In the present discussion, we a) survey literature pertaining to stress, spirituality, and affective well-being, b) review of coping model proposed by Park (2005) in which spirituality can be examined, and c) present data examining stress and differing types of spirituality as potential influences on affective outcomes.

The enduring relation of life stress and depressive symptoms has been supported by multiple longitudinal investigations. For instance, Southall and Roberts (2002) conducted a 14 week prospective study investigating the role of attributional style, self-esteem, and life stress on depressive symptoms, and reported that a three-way interaction significantly predicted changes in depressive symptoms. Perhaps more compelling is the evidence found by Mundt and colleagues in a clinical sample (Mundt, Reck, Backenstrass, Kronmuller, & Fiedler, 1998). In comparison to a control sample, clinically depressed patients experienced more stressful life events prior to index hospitalization. Additionally, aggregate totals of negative life events were the best predictors of BDI scores over a 2-year period. Mundt and colleagues also found that patients enduring relapses within three months suffered more negative life events than those patients who did not relapse.

Research has demonstrated the influence of life stress on affective state as well. Tesser and Beach (1998) explored the role of negative life events on negative affect. Results were in accord with the notion that higher levels of negative life events were related to increased negative affect. Fewer studies, however, have examined the relationship between life stress and positive mood. One study by Zautra

This project was conducted due in large part to the funding of a Psi Chi Summer Grant awarded to the first and second authors by the Psi Chi Honor Society. Furthermore, authors would like to thank Dr. Martin Sherman of the Loyola College Department of Psychology, as well as Dr. Ralph Piedmont of the Loyola College Pastoral Counseling Program, for their generous assistance and consultation. Correspondence regarding this article can be sent to David V. Powers, Associate Professor, Department of Psychology, Loyola College in Maryland, 4501 North Charles St., Baltimore, MD 21210-2699, Phone: (410) 617-2093, Fax: (410) 617-5341.

(1983) linked positive and negative affect with availability of resources, a common potential life stressor, especially in urban environments. Outcomes indicated that positive measures of resources were associated with elevated positive affect, and lack of availability of resources was related to increased negative affect. Although the link between life stress and well-being has been supported by research findings, the role of spirituality has received relatively less attention.

One prominent example of research in the realm of stress and affective well-being by Hammen (1991) outlined the concept of a stress generation hypothesis in which personal predispositions (e.g., personality composition or attitudes) contribute to the manifestation of stressful life events. The resulting stress then induces further negative affective symptoms (e.g., anxiety or depression). It is plausible that spirituality is one attitude that may mitigate the manifestation of negative affective outcomes due to stress in such a model. Indeed, research has demonstrated the potential for spirituality to be psychologically beneficial (e.g., Landis, 1996; Laubmeier, Zakowski, & Bair, 2004; Simoni & Ortiz, 2003). Thus, from a conceptual standpoint, it is an interesting prospect to investigate such relations as those between spirituality, stress, and affective outcomes. Comprehensive basic research must be undertaken in order to clarify whether further, applied research is warranted for spiritual interventions. Specifically, understanding what conceptions of spirituality may be related to, and in turn, prove to be protective factors against, particular negative psychological states has unquestionable clinical and theoretical value.

A "Meaning Making Coping Model" proposed by Park (2005) aids in understanding how different notions of spirituality contribute to psychological well-being, and whether more in-depth research is needed to assess the pathways by which spirituality mediates the impact of life stress (p. 708). At its core, Park's model posits that major life events (e.g., loss by death) trigger cognitive dissonance between situational meaning of a specific event versus our global beliefs that guide our functioning. The model holds that the larger the incongruity between a person's situational explanation of the event (e.g., loss) and his or her global beliefs, the greater the psychological distress the person experiences. Park highlighted religion as a common, pervasive meaning system employed by many people. However, as stated by Park herself, more and more of the population classify themselves as "spiritual" rather than reli-

gious. Therefore, Park's model, while clearly useful with religion, failed to examine spirituality as a meaning-making or coping mechanism. The present study offers basic data examining whether specific conceptions of spirituality may be useful in mitigating psychological adjustment in terms of affective well-being. If strong associations between stress, spirituality, and psychological well-being exist, future work may be undertaken extending meaning-making models to spirituality.

Life Stress, Spirituality, and Affective Well-being

In order to fully establish a rationale for the present investigation, literature documenting a firm inverse association between spirituality (e.g. internal religious orientations) and negative affective symptoms (e.g., Pargament, Cole, Vandecreek, Belavich, Brant, & Perez, 1999; Duncan, 2000) must be reviewed. As reported in numerous studies, adopting any one of several personal spiritual orientations often buffers against negative affective outcomes (Simoni & Ortiz, 2003; Fabricatore, Handal, & Fenzel, 2000). For example, Bush and colleagues (1999) found positive religious coping styles to be associated with improved positive affect.

Previous literature has also pointed to a link between life stress, spirituality, and affective well-being (e.g. Tarakeshwar, & Pargament, 2001, Peltzer, Cherian, & Cherian, 1999). Fehring, Brennan, and Keller (1987) demonstrated the positive impact of spiritual well-being, existential well-being, and spiritual outlook on negative moods in response to life stress. Fabricatore and colleagues (2000) utilized a personal spiritual involvement measure, the Spiritual Involvement Scale (SIS; Fenzel, 1996, 2002) to examine spirituality as a moderator between life stress and portions of affective well-being. The SIS includes measures of both Spiritual Life Integration and Social Justice Commitment. Spiritual Life Integration (SLI) measures the frequency and perceived benefits of concrete spiritual practices such as church attendance and use of prayer. Findings supported the notion of SLI as a buffer between life stress and certain components of life satisfaction, but found no relation between SLI and affect. This was in contrast to an earlier finding by Fenzel (1996) of a relation between depression and SLI.

Fabricatore et al. (2000) did not examine the role of Social Justice Commitment (SJC) in this model.

Social Justice Commitment is the extent to which it is important to improve the welfare of others. Other researchers have examined a similar construct, altruism, and found it to be related to higher levels of life satisfaction (Dulin, Hill, Anderson, & Rasmussen, 2001). Further work (Dulin & Hill, 2003) found altruistic intentions in an older adult population to be positively predictive of positive affect, but unrelated to negative affect. However, these studies did not assess an emerging adult population or include depressive symptoms. Moreover, social justice commitment is differentiated from altruism in that SJC emphasizes the importance of just treatment of everyone, and is specifically tied to spirituality (Fenzel, 2002). Because of the previous findings in the altruism literature in other populations, it may be that SJC is related to positive well-being, and should be examined when considering the interplay between spirituality, life stress and affect.

The findings in regard to Spiritual Life Integration also seem incomplete. It is not yet clear how SLI relates to affect states other than depression. Fabricatore et al. (2000) focused on depressive symptoms and did not examine more normative measures of affective well-being, such as positive and negative affect. Researchers have suggested that measures of depressive symptoms may not accurately capture well being in non-clinical populations (Powers, Gallagher-Thompson, & Kraemer, 2002). Therefore, we included both depressive symptoms and common affective states in the present study in order to gain a more complete picture of affective well-being as it relates to spirituality.

The present study will examine the relationships between spirituality, life stress, and well being in an emerging adult sample. It will extend previous research on affective well-being by examining positive and negative affect as well as depressive symptoms in a nonclinical emerging adult population, and extend research on spirituality by examining social justice commitment as well as spiritual life integration. Both SLI and SJC will be examined along with life stress to examine their relationship to affective well-being. Social justice commitment and life stress are expected to be related to affective well-being. Previous research is mixed in regard to the relationship between spiritual life integration and depression, with no data about other types of affect. This study will therefore examine both depressive and non-depressive affect as criterion variables, and offer initial insight into spirituality as a meaning-making system.

METHOD

Participants

Participants were 136 (105 female, 30 male, 1 unidentified) undergraduate students from a small Catholic liberal arts college in the mid-Atlantic region of the United States. Five additional participants did not complete the entire survey. Participants were self-identified as Caucasian ($N = 126$), African-American ($N = 3$), Asian-American ($N = 1$), and other ($N = 5$). One person failed to mark their race. The mean age was 18.82 ($SD = 1.07$), with a range of 17-22. The composition of religious affiliation was as follows: Catholic ($N = 108$), Protestant ($N = 13$), Athesist/Agnostic ($N = 5$), Other ($N = 10$).

Materials

Demographics. A demographics questionnaire included information regarding the participants' age, gender, year in school, ethnicity, religious orientation, and major.

Depression. The Beck Depression Inventory (BDI; Beck, Ward, Mendelson, Mock & Erbaugh, 1961) is a twenty-one question survey that measures characteristics and symptoms of depression. Each item is scored on a 0-3 scale and asks questions that pertain to depressive symptoms like "sadness," "indecisiveness," "dislike of self," and "suicidal ideation." The reliability of the BDI ranges from .73 to .92 with a mean of .86 (Beck, Steer, & Garbin, 1988), and it is widely accepted as a measure of depressive symptoms (Wei, Heppner, & Mallinckrodt, 2003).

Life Stress. Life stress was measured with the Undergraduate Stress Questionnaire (USQ; Crandall, Priesler, & Aussprung, 1992). The USQ is an 83-item checklist designed to measure stress among college students based on life-events life events they have experienced in the last two weeks. Each check mark is tallied for a total score on the USQ. The checklist includes events such as "death of a family member" and "lack of money." The USQ has been found to correlate positively with physical symptoms and negatively with mood (Crandall et al., 1992). The USQ has shown acceptable internal consistency, split-half reliability, and test-retest reliability. The present study utilized a modified version of the USQ. Due to the concurrent use of the BDI, one item overlapping with symptoms of the BDI was eliminated, such that 82 items remained on the revised version.

Positive and Negative Affect. Positive and negative affect was measured with the Positive and

Negative Affect Schedule (PANAS; Watson, Clark, & Tellegen, 1988). The PANAS contains a 10-item positive affect and a 10-item negative affect subscale. Words such as "interested," "strong," and "inspired" measure positive affect, and words such as "guilty," "afraid," and "hostile" measure negative affect. A five point Likert scale was used where a score of five indicating "extremely" characteristic of me, and one indicating "very slightly or not at all" characteristic of me. Internal consistency was rated as excellent with alpha coefficients ranging from .84 to .90.

Spiritual Involvement. The Spiritual Involvement Scale (Fenzel, 1996, 2002) is an 18-item measure that assesses two forms of spirituality: Spiritual Life Integration (SLI) and Social Justice Commitment (SJC). Items are measured using a 5-point Likert scale ranging from 0 ("Not at all true of me") to 4 ("Definitely true of me"). Alpha coefficients for SLI and SJC have been reported as .95 and .75 respectively (Fenzel, 2002). SLI items pertain to statements centering on a direct relationship with God and personal faith. These include "I feel God's love for me" and "My faith is an important part of everyday life." SJC is characterized by more active, altruistic-oriented statements such as "I desire to help other people" and "I try to change things that are unjust in the world."

Fenzel (2002) demonstrated the validity of SLI. Specifically, SLI was shown to be significantly positively correlated with Faith Maturity ($r = .76, p < .001$), significantly negatively correlated with depression ($r = -.32, p < .01$) and hostility ($r = -.33, p < .01$), and to be unrelated to self-worth ($r = .00, p = ns$) and self-efficacy ($r = .17, p = ns$). Similarly, Fenzel showed the validity of SJC. Specifically, SJC had a significant positive correlation with Faith Maturity ($r = .36, p < .01$) and significant negative correlation with depression ($r = .18, p < .01$). Concerning discriminant data, SJC was unrelated to self-worth ($r = -.10, p = ns$) and self-efficacy ($r = .08, p = ns$).

Procedure

Participants were recruited through introductory and upper level psychology classes. In addition to the measures of interest in the present study, the participants also completed the NEO Personality Inventory-Revised (Costa & McCrae, 1992) as part of a larger study (Cramer, Grubka & Powers, manuscript under submission). Investigators administered the survey packet to the participants in a classroom setting, and all responses were anonymous. Hierarchical

regression was used to analyze the role of life stress and spirituality in predicting affective well-being.

RESULTS

Descriptive statistics for all variables are reported in Table 1, and zero-order correlations are reported in Table 2. Among the zero order correlations, the USQ was significantly correlated with negative affect and depressive symptoms, SLI was significantly correlated with SJC and positive affect, and SJC was also significantly correlated with positive affect, negative affect and depressive symptoms.

For each regression analysis, step one consisted of the USQ, followed by the spirituality subscales SLI and SJC entered together in step 2. The reason for this was to assess the ability of spirituality to predict variance in affect above and beyond the impact of life stress. For both depressive symptoms and negative affect, life stress was a significant predictor in step 1, and life stress and social justice commitment were significant predictors in step 2 (see Tables 3 and 4). Only social justice commitment was a significant predictor of positive affect in step 2 (see table 5). Addition of the spirituality variables in step 2 only produced R^2 change values ranging from 5-9 percent (see Tables 3-5).

DISCUSSION

Results replicated previous findings (e.g., Hammen, 1991; Tesser and Beach, 1998) that life stress predicts both depressive symptoms and negative affect. In fact, life stress accounted for the majority of variance the model predicted in negative affective outcomes. This is not surprising in light of a well documented stress generation relationship in which there is a reciprocal pathway between life stress and negative affective states. On the other hand, the present study failed to show an association between life stress and positive affect. Little attention had been afforded to this relation previously. On the whole, it seems that normal positive moods or affect are relatively unaffected by negative life events. Because positive affect and negative are separate constructs (discussed in more detail below), and negative affect and negative life events are related, it stands to reason that the opposite may also be true: A measure of positive life events or positive life stressors may relate to positive affect. Stress as measured in the present study was defined only by *negative* events (e.g., loss of a job, traffic jam). Stress can also

TABLE 1

Descriptive statistics for measures

Variable	Range	M	SD	Skew
USQ	4-60	24.11	8.25	.667
SLI	0-48	24.58	13.06	-.094
SJC	7-24	16.86	3.87	-.286
BDI	0-33	8.98	6.46	1.187
PA	17-50	33.04	6.29	.087
NA	10-46	21.86	6.79	1.055

Note: USQ = Undergraduate stress questionnaire, SLI = Spiritual Life Integration, SJC = Social Justice Commitment, BDI = Beck Depression Inventory, PA = Positive Affect, and NA = Negative Affect.

TABLE 2

Zero-order correlations among measures

Variable	1	2	3	4	5	6
1. USQ	—	-.091	.007	.402**	-.094	.529**
2. SLI		—	.474**	-.158	.190*	-.107
3. SJC			—	-.242**	.305**	-.216*
4. BDI				—	-.559**	.743**
5. PA					—	-.354**
6. NA						—

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Note: USQ = Undergraduate stress questionnaire, SLI = Spiritual Life Integration, SJC = Social Justice Commitment, BDI = Beck Depression Inventory, PA = Positive Affect, and NA = Negative Affect.

TABLE 3

Hierarchical regression analysis for variables predicting depressive symptoms (n=135)

Variable	B	SE B	β
Step 1			
USQ	.315	.062	.402***
Step 2			
USQ	.316	.060	.401***
SJC	-.404	.146	-.242**
SLI	-.003	.043	-.006

Step 1 $R^2 = .162$, Step 2 R^2 Change = .060

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Note: USQ = Undergraduate stress questionnaire, SLI = Spiritual Life Integration, and SJC = Social Justice Commitment.

TABLE 4

Hierarchical regression analysis for variables predicting negative affect (n=135)

Variable	B	SE B	β
Step 1			
USQ	.436	.061	.529***
Step 2			
USQ	.442	.059	.537***
SJC	-.436	.142	-.249**
SLI	.031	.042	.060

Step 1 $R^2 = .280$, Step 2 R^2 Change = .051* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Note: USQ = Undergraduate stress questionnaire, SLI = Spiritual Life Integration, and SJC = Social Justice Commitment.

TABLE 5

Hierarchical regression analysis for variables predicting positive affect (n=135)

Variable	B	SE B	β
Step 1			
USQ	-.071	.066	-.094
Step 2			
USQ	-.070	.063	-.092
SJC	.460	.152	.284**
SLI	.022	.045	.046

Step 1 $R^2 = .009$, Step 2 R^2 Change = .095* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Note: USQ = Undergraduate stress questionnaire, SLI = Spiritual Life Integration, and SJC = Social Justice Commitment.

emanate from positive experiences and/or events such as a job promotion. Although potentially stressful because of increased responsibility to energy required, such events may be the precursor for positive affective states of pleasantness due to the sense of accomplishment or good fortune. This hypothesis is worthy of empirical attention.

Present findings help clarify the complex picture of spirituality and affect. The present study found social justice commitment (SJC) to be a significantly related to all three aspects of affective well-being that were examined. Altruism, admittedly similar to SJC, was associated with positive affective states, but not negative affective states (Dulin et al., 2001; Dulin & Hill, 2003). Like altruistic motives, spiritually-based motives

to help others are therefore associated with positive feelings. However, the sense of serving both God and others appears to buffer negative emotions (e.g., negative affect, depressive symptoms). This is one empirical characteristic that distinguishes SJC from altruism. SLI was related only to positive affect when considered alone (bivariate correlation), and this relationship did not hold when SJC was also considered. The present study replicated the findings of Fabricatore et al. (2000) regarding the relation between SLI and affective well-being. Apparently, engaging in prayer, attending church, and reading scripture is not indicative of affective state in the present sample. In essence, affective state seems to be influenced by proactive spiritual outlets above mere ritualistic methods.

In interpreting the results of the present findings, several plausible explanations exist. Life stress, composed of both daily hassles (e.g., tests) and major life events (e.g., death of a loved one), has been shown to be related to negative affective states. The relation between life stress and positive affect is different, however. The results of the present study seem to imply that the presence of stressful events, while related to negative affect, is unrelated to positive affect, at least in regard to the events measured by the USQ, or that results are due to error variance.

In order to understand the disparities between results of positive and negative affect with spirituality, it is worth noting that these two constructs are empirically and conceptually distinct from one another. It may seem intuitively that "positive" and "negative" affect are extremes of a bi-polar continuum. However, as empirically demonstrated by Watson and colleagues (1988), positive and negative affect are two orthogonally differentiated factors. Conceptually, the authors state that positive affect reflects the degree to which someone is vigilant and pleasant, whereas negative affect is indicative of a broader representation of maladaptive affective states including guilt, anger, and anxiety. Indeed, these constructs also show different construct validity relations (Watson et al., 1988). The present investigation further contributes to the assertion that positive and negative affect are in fact conceptually distinct because they demonstrate some dissimilar relations with stress and spirituality. The notion of separate constructs of positive and negative affect is empirically supported (Crawford & Henry, 2004) and commonly employed in the affect and coping literature (e.g., Giacobbi, Tuccitto, & Frye, 2007; Molnar, Reker, Culp, Sadava, & DeCourville, 2006).

The fact that SJC significantly predicted positive affect is not entirely surprising. Performing acts of kindness likely facilitates a sense of satisfaction or positive feelings, and, in turn, this positive mood also promotes people to engage in further benevolent acts. The opposite explanation may account for the fact that SJC negatively was related to negative affect and depressive symptoms. Also, due to a lack of kind acts, these people do not receive the internal sense of happiness gained through helping others. Implications of these findings suggest that adoption of spiritual activities and attitudes in terms of SJC may act as a protective factor against negative affective states for Christian young adults.

Present findings have both theoretical and clinical implications. Concerning spirituality as a pathway to a meaning-making coping style, SLI appears to have no potential value because it was unrelated to affective outcomes. Therefore, turning to prayer, church, and scripture, components of SLI, likely would not reduce cognitive dissonance between meaning ascribed to a negative life event and more global personal belief systems. SJC, on the other hand, may present a viable option through which young adults can cope. Although only a hypothesis, young adults may turn to spiritually-based service projects in service of God (the definition of SJC) and the community at large in order to cope. They may experience thoughts and feelings that either alleviate negative outcomes, or help resolve dissonance in their situational and more overarching meaning systems. In the broad scope of spirituality and coping, these differences are quite important. It appears that, for spirituality to serve an effective coping function for Christian young adults, spiritual beliefs and values should be expressed in a proactive manner of service instead of solely through ritualistic methods.

From a clinical standpoint, pastoral counselors utilize spirituality as a framework for therapy and other forms of clinicians (e.g., clinical psychologists) continue to incorporate spirituality as a vital piece of treatment if deemed appropriate by the client. The fact that SJC seems to bolster psychological well-being offers therapists of all theoretical orientations an avenue for treatment, namely serving others. This seems particularly appropriate for young adults in search of identity and meaning in the whirlwind adjustment to college or professional life. Young adults often endure adjustment and mood difficulties due to these major life changes. Including spiritual-based service can help these clients find social support, a sense of belonging, and positive feelings/experiences at a crucial time.

One limitation of the present study is the small, relatively homogenous sample. Generalizability may be limited given that the sample came from a private, Catholic university. The self-report and checklist nature of the measurement instruments may also result in bias due to self-report.

As stated earlier, conclusions about SJC in the context of coping are strictly speculative due to the correlational nature of the present investigation. Thus, future research should seek to replicate and extend results regarding the SJC type of spirituality being related to aspects of affective well-being.

Longitudinal and qualitative data would be beneficial in assessing how SJC is related to affective well-being. Furthermore, the differences between the constructs of social justice commitment and altruism merit examination. Future exploration of the nature of social justice commitment may also benefit from extending research to other elements of affective well-being such as anxiety and overall satisfaction with life. To the extent that causal associations exist between social justice commitment and affective well-being, understanding of these links may provide a tool for enhancing well-being through both an increase in positive affect and a decrease in negative affect, particularly in the emerging adult age group examined in the present study.

REFERENCES

- Beck, A. T., Steer, R. A., Garbin, M. G., (1988) Psychometric properties of the Beck Depression Inventory: Twenty-five years of evaluation. *Clinical Psychology Review*, 8, 77-100.
- Beck, A. T., Ward, C. H., Mendelson, M., Mock, J., & Erbaugh, J. (1961) An inventory for measuring depression. *Archives of General Psychiatry*, 4, 561-571.
- Bush, E. G., Rye, M. S., Brant, C. R., Emery, E., Pargament, K. I., & Reissinger, C. A. (1999). Religious coping with chronic pain. *Applied Psychophysiology and Biofeedback*, 24, 249-260.
- Crandall, C. S., Preisler, J. J., & Ausprung, J. (1992). Measuring Life Events in the Lives of College Students: The Undergraduate Stress Questionnaire. *Journal of Behavioral Medicine*, 15, 627-662.
- Crawford, J. R., & Henry, J. D. (2004). The Positive and Negative Affect Schedule (PANAS): Construct validity, measurement, properties, and normative data in a large non-clinical sample. *British Journal of Clinical Psychology*, 43, 245-265.
- Dulin, P., & Hill, R. D. (2003). Relationships between altruistic activity and positive and negative affect among low-income older adult service providers. *Aging and Mental Health*, 7, 294-299.
- Dulin, P., Hill, R. D., Anderson, J., & Rasmussen, D. (2001). Altruism as a predictor of life satisfaction in a sample of low-income older adult service providers. *Journal of Mental Health and Aging*, 7, 349-360.
- Duncan, R. L. (2000). The relationship between stressful life events, coping styles, religious orientation, and self-reported depressive symptomatology in African American college students. *Dissertation Abstracts International: Section B: Sciences and Engineering*, 61(3-B), 1631.
- Fabricatore, A. N., Handal, P. J., & Fenzel, L. M. (2000). Personal spirituality as a moderator of the relationship between stressors and subjective well-being. *Journal of Psychology and Theology*, 28, 221-228.
- Fehring, R. J., Brennan, P. F., & Keller, M. L. (1987). Psychological and spiritual well-being in college students. *Research in Nursing and Health*, 10, 391-398.
- Fenzel, F. M. (1996). *Spiritual Involvement Scale*. Unpublished Document, Loyola College in Maryland. Baltimore, MD.
- Fenzel, L. M. (April, 2002). The development of the Spiritual Involvement Scale: Examining the spiritual lives of late adolescents. Poster presented at the Biennial Conference of the Society for Research on Adolescence, New Orleans.
- Friis, R. H., Wittchen, H. U., Pfister, H., & Lieb, R. (2002). Life events and changes in the course of depression in young adults. *European Psychiatry*, 17, 241-253.
- Giacobbi, P. R., Tuccitto, D. E., & Frye, N. (2007). Exercise, affect, and university students' appraisals of academic events prior to the final examination period. *Psychology of Sport and Exercise*, 8, 261-274.
- Hammen, C. L. (1991). Generation of stress in the course of unipolar depression. *Journal of Abnormal Psychology*, 100, 555-561.
- Kuiper, N. A., & Martin, R. A. (1998). Laughter and stress in daily life: Relation to positive and negative affect. *Motivation and Emotion*, 22, 133-153.
- Landis, B. J. (1996). Uncertainty, spiritual well-being, and psychosocial adjustment to chronic illness. *Issues in Mental Health Nursing*, 17, 217-231.
- Laubmeier, K. K., Zakowski, S. G., & Bair, J. P. (2004). The role of spirituality in the psychological adjustment to cancer: A test of the transactional model of stress and coping. *International Journal of Behavioral Medicine*, 11, 48-55.
- Leong, F., & Vaux, A. (1991). The relationship between stressful life events, psychological distress, and social desirability. *Measurement and Evaluation in Counseling & Development*, 23, 171-179.
- Maciejewski, P. K., Prigerson, H. G., & Mazure, C. M. (2000). Self-efficacy as a mediator between stressful life events and depressive symptoms. *The British Journal of Psychiatry*, 176, 373-378.
- Molnar, D. S., Reker, D. L., Culp, N. A., Sadava, S. W., & DeCourville, N. H. (2006). A mediated model of perfectionism, affect, and physical health. *Journal of Research in Personality*, 40, 482-500.
- Mundt, C., Reck, C., Backenstrass, M., Kronmuller, K., & Fiedler, P. (1998). Reconfirming the role of life events for the timing of depressive episodes: A two-year prospective follow-up. *Journal of Affective Disorders*, 59, 23-30.
- Pargament, K. I., Cole, B., Vandecreek, L., Belavich, T., Brant, C., & Perez, L. (1999). The vigil: Religion and the search for control in the hospital waiting room. *Journal of Health Psychology*, 4, 327-341.
- Park, C. L. (2005). Religion as a meaning-making framework in coping with life stress. *Journal of Social Issues*, 61, 707-729.
- Peltzer, K., Cherian, V. I., & Cherian, L. (1999). Minor psychiatric morbidity in South African secondary school pupils. *Psychological Reports*, 85, 397-402.
- Powers, D. V., Gallagher-Thompson, D., & Kraemer, H. C. (2002). A longitudinal examination of coping and depression in Alzheimer's caregivers. *Journals of Gerontology: Psychological Sciences*, 57, 205-211.

Simoni, J. M., & Ortiz, M. Z. (2003). Meditational models of spirituality and depressive symptomatology among HIV-positive Puerto Rican women. *Cultural Diversity and Ethnic Minority Psychology, 9*, 3-15.

Southall, D. & Roberts, J. E. (2002). Attributional style and self-esteem in vulnerability to adolescent depressive symptoms following life stress: A 14-week prospective study. *Cognitive Therapy and Research, 26*, 563-579.

Tarakeshwar, N., & Pargament, K. I. (2001). Religious coping in families of children with autism. *Focus on Autism & Other Developmental Disabilities, 16*, 247-261.

Tesser, A., & Beach, S. R. (1998). Life events, relationship quality, and depression: An investigation of judgment discontinuity in vivo. *Journal of Personality & Social Psychology, 74*, 923-938.

Thomas, S. A., & Vindya, U. (2000). Women and stress: A study of stressful life events, depression, and the moderating influence of self-esteem. *Journal of Indian Psychology, 18*, 38-51.

Watson, D., Clark, L. A., & Tellegen, A. (1988). Development and validation of Brief Measures of Positive and Negative Affect: The PANAS scales. *Journal of Personality and Social Psychology, 54*, 1063-1070.

Wei, M., Heppner, P., & Mallinckrodt, B. (2003) Perceived coping as a mediator between attachment and psychological distress: A structural equation modeling approach. *Journal of Counseling Psychology, 50*, 438-447.

Zautra, A. J. (1983). Social resources and the quality of life. *American Journal of Community Psychology, 11*, 275-289.

AUTHORS

POWERS, DAVID V. *Address:* Department of Psychology, Loyola College in Maryland, 4501 North Charles St., Baltimore, MD 21210-2699. *Title:* Associate Professor. *Degrees:* B.S., 1989, Louisiana State University; M.A., Psychology, 1993, Washington University in St. Louis; Ph.D., Clinical Psychology, 1995, Washington University in St. Louis. *Specialization:* Geropsychology.

CRAMER, ROBERT J. *Address:* The University of Alabama, 348 Gordon Palmer Hall, Box 870348, Tuscaloosa, AL 35487-0348. *Title:* Graduate Student. *Degrees:* B.A., Loyola College in Maryland; M.A., Clinical Psychology, The University of Alabama. *Specializations:* Psychology-law, Personality.

GRUBKA, JOSHUA M. *Address:* Loyola College in Maryland, 4501 N. Charles St., Baltimore, MD 21210-2699. *Title:* Graduate Student. *Degrees:* B.A., Loyola College in Maryland; M.A., Currently Attending Loyola College in Maryland. *Specialization:* School Counseling.

Copyright of Journal of Psychology & Theology is the property of BIOLA University and its content may not be copied or emailed to multiple sites or posted to a listserv without the copyright holder's express written permission. However, users may print, download, or email articles for individual use.