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# So Many Choices, So Little Time: Religiosity and the Stress of Making Decisions

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Running Head: RELIGIOSITY AND DECISION-MAKING

So Many Choices, So Little Time:  
Religiosity and the Stress of Making Decisions

A Thesis

Presented to the Department of Psychology

College of Liberal Arts and Sciences

and

The Honors Program

of

Butler University

In Partial Fulfillment

of the Requirements for Graduation Honors

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### Abstract

Numerous studies have appeared in the literature demonstrating that religiosity and mental health are positively related. However, although investigators have identified several variables that partially mediate the effects of religiosity on mental health, much of this relationship remains unexplained. The goal of this survey study was to examine to what extent religious individuals experience better mental health outcomes because they experience less stress when making decisions. Specifically, this study evaluated whether religious individuals reduce the number of decision alternatives they consider when making decisions, which in turn should make decision making easier and reduce decision-making stress. Participants were asked to complete a survey consisting of a variety of previously validated religion and mental health measures. In addition, participants were asked to respond to a series of newly developed decision-making scenarios and to recall decisions made in the past, as well as to complete some ancillary measures. The results of the study did not support the primary hypothesis. Religiosity was shown to correlate significantly with positive aspects of mental health, but general decision-making variables did not mediate this relationship. However, data collected using ancillary measures suggested that religious individuals experience less stress related to a specific type of decision-making, deciding between conflicting goals. Furthermore, amount of goal-conflict was shown to be a significant mediator between religiosity and mental health, suggesting that one of the ways that religion promotes mental health is by reducing stress related to goal-conflict.

So Many Choices, So Little Time: Religiosity and the Stress of Making Decisions

Background

The link that exists between psychological well-being and religious belief has a rich history of philosophical exploration, as exemplified by the well known writings of William James (1902). That being the case, however, this relationship has only recently become a focus of scientific inquiry. Meta-analyses conducted by recently by Harris (2002) and Hackney and Sanders (2003) demonstrated that the bulk of the relevant literature supports a positive relationship between religiosity and mental health outcomes.

However, the complexity of the relationship coupled with inconsistent operationalizations of religiosity has prevented investigators from identifying the causal mechanisms underlying the association (Bergin, 1983). How or why religiosity promotes mental health has yet to be adequately explained.

In 1986, Houts and Graham proposed that religion may in fact provide psychological benefit by acting as a defense mechanism that shields people from the harsh realities that exist in a world largely out of our control. In other words, religion gives people a sense of order in a world that might otherwise seem random and chaotic. The study found that individuals with strong religious convictions were more optimistic and less prone to being diagnosed with psychopathology than individuals who expressed religious doubt. This study, however, focused on the clinical judgments of the patient's therapists and not on the feelings expressed by the religious individuals themselves. This limitation, along with the relatively small sample used to conduct the study, left many question unanswered and many more unasked (Houts & Graham 1986).

More recently, Steger and Frazier (2005) suggested that religion may in fact correlate positively with psychological well-being because religion provides people with a way of finding meaning or purpose in life. Meaning in life, regardless of its source, has consistently been found to bolster mental health and well-being (Frankl, 1984; Chamberlain & Zika, 1992). Steger and Frazier found, by way of daily diaries, that religious people did indeed report feeling more satisfied with life on days when religious activity was taking place. Furthermore, they found that this satisfaction seemed to be linked to a sense of meaning and purpose. Unfortunately, as noted by the investigators themselves, this study failed to account for intrinsic versus extrinsic religiosity differences, a distinction related to the motivation behind the participants religious activities.

Individuals who demonstrate intrinsic religiosity see their faith as something integral to their larger worldview: it influences and informs all aspects of their thinking, whereas extrinsically religious individuals enjoy the external benefits that a religion provides, such as community and belonging, but do not necessarily incorporate the tenants of that religion into their everyday lives (Allport & Ross, 1967). Differences in extrinsic versus intrinsic religiousness have been found to be significant in other studies, with intrinsic measures consistently predicting positive mental health outcomes and extrinsic showing either no effect or even a slight negative effect (e.g., Milevsky & Levitt 2004). One recent meta-analysis even showed a complete reverse in correlational direction when comparing intrinsic/extrinsic religious individuals with measures of depression (Smith et. al., 2003).

Religion used as a mechanism for coping has also been suggested. In other words, religiosity may provide individuals with effective ways to deal with stressful events when they occur. This would tend to relieve stress, thereby maintaining psychological well-being. To test this hypothesis a group of psychologists conducted a survey based study in which participants were given a structured interview and asked to report on a variety of dimensions. Ayele et al., (1999) found that participants' scores on the Life Satisfaction Index (Neugarten, Havighurst, & Tobin 1961), a commonly used measure of well-being, were positively correlated with specific dimensions of religiosity, including intrinsic religiosity. In addition, greater than 70% of the participants reported using religion as a coping resource. While this outcome was interesting, the researchers were not able to conclude definitively that religious coping was responsible for the correlation between religiosity and life satisfaction. Further attempts to link religious coping with psychological well-being have met with similar problems (Pargament, Ano, and Wachholtz 2005).

The last major factor that received significant attention as an explanatory mechanism for why religiosity promotes mental health is social support. By using religion as a means to provide social support, individuals may see a positive boost in mental health due to feelings of communal belonging as well as the practical advantages provided by membership in a social group. Numerous studies have examined this particular hypothesis in one form or another, (Harris, 2002; McFadden & Levin, 1996; Sherkat & Ellison, 1999) but only a few have found statistically significant correlations between religiosity related social support and mental health outcomes.

Taking a slightly different tact from those that came before them, Obst and Tham (2009) conducted a study that examined several different dimensions of the church community. They examined the interaction between psychological sense of community (PSOC), religiosity, social support, and identification within a church community with measures of well-being. Level of religiosity was a consistent indicator of PSOC, social support, and identification, which were all in turn positively correlated with measures of well-being (Obst & Tham 2009). Other studies have attempted to explain the association between religion and psychological well-being using similar approaches (Boomsma et al., 1999; Ferriss, 2002; George et. al., 2000; Hebert et. al., 2009; Krause, 1998; Oman & Reed, 1998, Strawbridge et. al, 2001, etc.), but as of yet much of the association between religiosity and psychological well-being remains unexplained.

One possible way to explain this link that has yet to be investigated involves the everyday problem of making decisions. We as human creatures face tough decisions on a day-to-day, and sometimes minute-to-minute, basis. The stress experienced when making these decisions can often be immense (Blais, 2002; Schwartz, 2000; Schwartz, 2004; Schwartz & Ward, 2004). I hypothesize that religiosity contributes positively to the relief of this decision-related stress by limiting the possible alternatives from which a choice can be made. Religion provides for people a set of prescriptive ideals that serve to guide behavior. This prescription effectively limits the scope of potential options and, concomitantly, provides relief from much of the stress that too many alternatives can bring.

Though this perspective is novel, it is supported by prior work suggesting that too

much choice can be demotivating and often frustrating. Iyengar and Lepper (2000) conducted three studies examining participants' reactions after participants were given either many alternatives when making a choice or only a few. One of these studies involved participants being asked to choose between a set of either 30 chocolates or a set of only 6 chocolates; a no-choice group was used as a control. The study measured how quickly participants came to a decision, whether or not they felt overwhelmed by the decision, and how satisfied they were with the decision once it had been made. Participants in the limited choice condition recorded faster decisions, reported less frustration, fewer feelings of being overwhelmed, and more satisfaction with their decision once it had been made.

Further, if indirect, evidence for this line of argument can be found in research examining how people use religion to cope with the stress of important decisions. For example, Sood (2005) interviewed family members who had recently made a "do not resuscitate" decision for a relative dealing with a critical medical crisis. Sood found that participants who used positive religious coping strategies experienced less stress than those who did not, suggesting that religiosity facilitates the making of decisions, particularly those involving difficult choices. It is possible that decisions were facilitated because participants relied on their religious beliefs to narrow the options they were considering.

As Sood demonstrated, making decisions about healthcare for others can be difficult, but what about making decisions about one's own care? Katz (1984) found that while 65 percent of people surveyed expressed a desire to control their treatment if

diagnosed with cancer, only 12 percent of individuals diagnosed with cancer actually elect to have a say in their treatment. These findings suggest that people sometimes prefer difficult decisions be made for them, even in matters of personal mortality, and may not want, nor benefit from, having the ability to choose among alternatives.

Religion then, it could reasonably be argued, may serve a similar function by reducing the number of alternatives to be considered. This effect should ease decision making, thus reducing the stress associated with difficult decisions, and may also limit feelings of personal responsibility when making the decision, which could further reduce stress.

The voluntary and deliberate limiting of choices is not a uniquely religious phenomenon and so one would expect to see a certain degree of stress relief in decision-making situations where individuals have simply been able to develop an effective choice limiting strategy. However, because most religions have a built in choice limiting component, this behavior will likely be observed more frequently in religious people. Religious people may experience less stress as a result, and this could help explain why religiosity is correlated positively with psychological well-being.

The goal of this survey study is to examine whether religious individuals report reducing their choices when making decisions, and subsequently if this reduction is associated with the decision related stress in particular, and psychological well-being, in general. Theoretically, participants who describe themselves as very religious, compared to those who are only slightly religious or not religious at all, should consider fewer alternatives when making decisions. As a result, they should experience lower levels of stress associated with decision-making, leading to lower rates of overall stress and higher

levels of mental health.

### Thesis Description

Past research has uncovered a positive link between religiosity and mental health. The goal of this study is to determine if religion provides relief from decision-making related stress by reducing the number of alternatives a decision-maker must consider and if that relief can account for the relationship between religiosity and mental health. Participants varying in level of religiosity will be presented with several decision scenarios and asked to indicate which decision alternatives they would eliminate from further consideration. Amount of reduction of decision alternatives will be tested as a potential mediator of the relationship between religiosity and psychological well-being. More specifically, if my hypothesis is correct, highly religious individuals should indicate considering fewer alternatives when making decisions, and this reduction should, in turn, be associated with less stress and higher psychological well-being.

### Method

#### *Participants*

The participants for this study consisted of 83 individuals. Undergraduate students from Butler University comprised the vast majority of participants.

#### *Procedure*

The current survey study employed a cross-sectional design, using a combination

of previously validated and newly developed scales to measure the study's primary variables, which are: 1) religiosity, 2) mental health, and 3) variables related to decision-making. I obtained Butler Institutional Review Board (IRB) approval for this study before carrying out the investigation. After the IRB approved the study, I administered a questionnaire containing some demographic items and the study's primary dependent measures to a convenience sample of Butler undergraduates as well as friends, family and co-workers.

Religiosity was assessed using the previously validated Intrinsic Religious Motivation Scale (IRMS; Hoge, 1972), which consists of 10 likert-type items designed to establish the level of an individual's religious commitment. Intrinsic religiosity was chosen because this particular dimension has been most consistently related to mental health in past studies. Additionally, because religiosity is a multi-faceted construct, I also assessed this variable using several other approaches. These included a single 10-point, Likert-type item anchored with 'not at all religious' and 'extremely religious', a question assessing how often the respondent attends religious services, and a single 5-point Likert-type item asking how often the respondent prays anchored by 'never' and 'very often'.

Mental health was assessed using a short battery of previously validated measures commonly used to determine participants' psychological well-being and stress levels. These measures included the Positive and Negative Affect Schedule (PANAS; Watson, Clark & Tellegen, 1988), which assesses respondents' general negative and positive affective states, the Perceived Stress Scale (PSS; Cohen, Kamarck, & Mermelstein, 1983), a 10-item measure of recent stress levels, a single 10-point Likert-type item of general

stress anchored by 'not at all' and 'extremely', a single 10-point Likert-type item of perceived overall mental health anchored by 'poor' and 'absolutely perfect', and a 4 item measure of happiness developed specifically for the current investigation (sample item: "How often do you feel completely happy?").

Because of the novel nature of the proposed study, the relationship between religiosity and mental health was examined in two ways. First, associations between religiosity and each measure of mental health were assessed. In addition, data reduction techniques were used to investigate the possibility of combining the proposed measures of mental health and proposed measures of religiosity, respectively, which allowed for the generation of summary scores indicative of the relevant constructs.

After exhaustively researching the current literature, I found it necessary to develop my own decision-making measures as nothing currently available was adequate. Two separate approaches were taken to quantify the number of alternatives that people generally entertain when making decisions, a "scenario" approach and a "recall" approach. The scenario measure consisted of descriptions of decision-making conflicts. Participants were asked to indicate which alternatives they would eliminate from consideration when making the decision described in the scenario. The purpose of this approach was to determine how many alternatives participants are willing to consider when making a decision.

The recall measure included several recall tasks in which participants were asked to recall a specific type of decision they made in the past and then to indicate whether they felt they had to select from too many alternatives or not when making the decision.

In addition, to more fully capture the participants' decision making process, I included exploratory items asking respondents to report ease of decision making as well as how much stress they experienced when making the decision.

As a final exploratory measure, I also developed a goal conflict scale (sample item: "Do you have to spend time deciding which goal to pursue?"), which was intended to assess how often individuals experience conflict resulting from competing goals. The rationale behind including this scale was that it offered a different but related approach to evaluating conflict. Instead of focusing specifically on conflict resulting from too many decision alternatives, this approach was used to evaluate how much conflict individuals might experience from having goals that interfere with one another. Presumably, having highly conflicted goals would often result in having to make difficult decisions involving which goals to pursue, thereby increasing stress. As such, this approach provides a related but different way to address my overarching hypothesis, which is that religious individuals experience less stress related to decision-making, resulting in better mental health.

## RESULTS

### Participants

Participants ranged from ages 18 to 55 with a median age of 23 years ( $SD=8$ ). Seventy percent of the participants were female. The sample demographic identified their religious denominations as follows: 2% Buddhist, 30% Catholic, 56% non-Catholic Christian, 2% Hindu, 2% Jewish, 2% Mormon, 2% Taoist, and 4% identified as other.

### Preliminary Analyses

Preliminary analyses indicated a curvilinear relationship between religiosity and the study's mental health variables, with the most religious and most secular individuals reporting highest levels of mental health. Because the planned mediational analyses assume linearity among the predictor and outcome variables, for the following analyses I excluded individuals who were not at all religious, according to their self-report. This left the greater part of the sample ( $n=57$ ) who could be described as ranging in religiosity from a little to a lot. The primary variables of interest exhibited linear relationships in this group.

**Measuring Religiosity:** Because the four measures of religiosity (i.e., the Intrinsic Religious Motivation Scale, a single 10-point, Likert-type item anchored with 'not at all religious' and 'extremely religious', a question assessing how often the respondent attends religious services, and a single 5-point Likert-type item asking how often the respondent prays, anchored by 'never' and 'very often') were highly correlated, scores from each measure were standardized and averaged together to form a summary measure (Cronbach's  $\alpha = .92$ ).

As explained in the method section, two methods were used to assess measures of decision alternative variables. The first involved averaging the percent of alternatives not considered across the decision scenarios. I hypothesized that highly religious individuals would be more likely to report a greater percentage of alternatives they would not consider. The second method involved calculating how often respondents reported having too many alternatives across the four recall tasks. I hypothesized that highly religious individuals would be less likely to recall having too many alternatives. In

addition to these measures I also included an indication of the average level of stress that a participant would report expecting to experience when grappling with a given scenario, as well as the amount of stress the participant reported actually experiencing when making their decision on the recall task. Furthermore, as previously described, I developed an exploratory measure designed to expose possible goal conflict.

**Measuring Positive and Negative Dimensions of Mental Health:** Consistent with past research, preliminary data analyses indicated that three of the mental health measures tended to correlate with one another (i.e., the Positive Affect Schedule [Watson, Clark & Tellegen, 1988], which assesses respondents' general positive affective states, the single 10-point Likert-type item of perceived overall mental health, and the 4 item measure of happiness). Scores from each measure were standardized and averaged together to form a summary measure of positive mental health (Cronbach's alpha = .80). The other three mental health measures (i.e., the Negative Affect Schedule, the Perceived Stress Scale, and the single item measure of general stress) were also summarized into a single measure of negative mental health (Cronbach's alpha = .80).

#### Primary Analyses

To determine whether decision related variables mediate the hypothesized relationship between religiosity and mental health, I first computed bivariate correlations between the variables of interest. For these and all following analyses, a p-value of .05 or lower was considered significant unless otherwise noted.

As hypothesized, religiosity and positive mental health were positively correlated,  $r(54) = .28, p = .04$ , although religiosity and negative mental health were not correlated,

$r(54) = -.07, p = .60$ . Thus, I focused on positive mental health as the primary outcome variable in all subsequent analyses. The percentage of alternatives that participants reported not considering in the decision scenarios did correlate positively with measures of religiosity,  $r(54) = .27, p = .05$ , which was consistent with my hypothesis. However, the variable failed to show any significant link with either positive mental health,  $r(54) = .13, p = .34$ , or negative mental health,  $r(54) = .04, p = .76$ , which indicates that alternatives not considered could not possibly mediate the relationship between religiosity and mental health. Unfortunately, none of the decision related variables correlated significantly with both religiosity and positive mental health, a requirement for the decision related variables to act as mediating variables. However, the goal conflict variable correlated with positive mental health,  $r(54) = -.50, p = .00$ , and, albeit marginally, with religiosity,  $r(54) = -.25, p = .06$ . Thus, I focused on goal conflict as a possible mediator of the religiosity and positive mental health relationship.

Goal conflict was tested as a mediator using procedures described by Baron and Kenny (1986). First, I regressed positive mental health onto religiosity. Consistent with the correlational findings, religiosity was a significant ( $b = .34, p = .04$ ) predictor of positive mental health.

Next, I added goal conflict to the model, regressing positive mental health onto religiosity and goal conflict. Consistent with its hypothesized mediational function, goal conflict was a significant predictor of positive mental health ( $b = -.41, p = .00$ ). Just as importantly, religiosity became a non-significant predictor ( $b = .20, p = .20$ ) of positive mental health when goal conflict was added, suggesting that religiosity at least partially

affects mental health by reducing goal conflict.

## Discussion

*Evaluation of Findings.* Contrary to the primary hypothesis, religiosity was unrelated to most of the decision making measures I devised, with the one exception being the decision scenario variable assessing number of alternatives that would not be considered. As indicated by the significant correlation, participants who were more religious reported they would consider fewer alternatives when making a decision relative to less religious participants. However, neither the number of alternatives considered nor any of the other decision making measures were related to mental health. Thus, my primary hypothesis that religiosity promotes mental health by making decision-making easier and less stressful was not supported.

Though the ultimate reason for this failure cannot be definitively established, shortcomings in the study's design could be at least partially to blame. Creating novel measures of psychological variables is far from an exact science, and it is entirely possible that the methods I created for measuring the decision variables were simply inadequate. The scenario task could have incorporated a larger breadth of situations for participants to consider, which in turn might have increased the likelihood of detecting associations between this decision-making and mental health. Alternatively, focusing the scenarios solely on more important decisions instead of more 'every day' decisions might have also been beneficial. That being said, the scenario measure was not completely without merit, as there was in fact a significant correlation found between religiosity and

the number of alternatives considered by participants.

The recall task, on the other hand, yielded little. This particular measure failed to correlate significantly with either religiosity or mental health. One possible explanation for this concerns the question of individuals' actual versus stated preferences for number of alternatives. Research has shown an important difference between the number of alternatives that people claim to want and the actual effect that an abundance of alternatives has. Individuals generally believe that more options are always better, but what most fail to realize is that the fear of making the wrong choice only increases with each new alternative that is introduced, and thus, ultimately, makes the decision all the more difficult (Iyengar & Lepper, 2000). As demonstrated by Iyengar and Lepper (2000), people find it much easier to choose between six flavors of jelly compared to twenty flavors. Not only do participants in the former condition experience less stress, but once having made their choice, participants report being happier with it. My recall task, then, which asked participants to report whether they had too many alternatives or not across a series of decisions they had made in the past, may have been doomed from the start. If our participants believed that more options are always better, this measure would not have functioned in the way it was intended; it essentially asked participants to identify a feeling they might not have even realized they had. Other problems with the recall task included its retrospective nature. Expecting participants to accurately recall the stress of a decision made months, and in some cases even years previously, was probably, in hindsight, a misguided venture.

*Additional Findings.* As noted, the primary hypothesis of this study was not

directly supported, but, interestingly, some of the results suggest that perhaps the underlying concept is not entirely without merit. Goal conflict was highly correlated, with our positive mental health measure ( $r = -.50$ ). Perhaps more interesting, however, was the fact that goal conflict also showed a negative correlation with our measures of religiosity ( $r = -.25$ ). Taken together, these findings point to the possibility that religiosity does in fact provide relief from the stress generated by some types of intrapsychic conflict. Instead of reducing conflict by reducing the number of decision alternatives a person is willing to consider when making a decision, perhaps religiosity exerts its effects by reducing conflict caused by an individual's competing goals. How this reduction of goal conflict is accomplished remains unknown.

*Suggestions for Future Directions.* A novel undertaking, while potentially rewarding, is fraught with challenges and missteps. The shortcomings of this particular study, as previously outlined, are numerous, but in those shortcomings opportunities for refinement and revision arise. Future research might focus on developing better, more creative, and more effective methods of measuring and quantifying the decision making process. As this study showed, surveys are limited by the participant's ability to know his or her own mind, not only as it exists now, but also in the past. Experimental designs could potentially be used to overcome many of these flaws. Participants' cognitions and affect could be monitored as they make actual decisions, providing data that could help clarify the mechanisms involved in the decision making process, and in so doing shine light on how, or if, religion might interact with or override those mechanisms.

Additionally, because goal conflict was found to at least partially mediate the

relationship between religiosity and mental health, this variable deserves further consideration. Future investigations should be undertaken in order to replicate and explain this effect. It could be that religiosity exerts effects by causing individuals to consciously decide to pursue one goal over another whenever conflict occurs. As noted earlier, because most religions provide a set of prescriptive ideals, it could be that religious individuals turn to their faith whenever they experience goal conflict. If one's religion clearly delineates 'good' versus 'evil' goals, conflict involving those specific types of goals may prove particularly easy to resolve for individuals highly committed to their faith.

*Summary.* The goal of this study was to determine if religion provides relief from decision-making related stress by reducing the number of alternatives a decision-maker must consider and if that relief can account for the relationship between religiosity and mental health. While this hypothesis was not supported by the study's findings, the results did lend support to the notion that religion may function in some fashion to limit intrapsychic conflict, and thus lower the amount of stress that individual experiences. Future research is needed to identify the specific mechanisms that may allow religion to reduce intrapsychic stress, thereby improving mental health.

Bibliography

- Allport, G. W., & Ross, J. M. (1967). Personal religious orientation and prejudice. *Journal of Personality and Social Psychology*, 5, 432–443
- Ayele, H., Mulligan, T., Gheorghiu, S., & Reyes-Ortiz, C. (1999). Religious activity improves life satisfaction for some physicians and older patients. *Journal of the American Geriatrics Society*
- Baron, R., & Kenny, D. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology*, 51, 1173-1182
- Bergin, A. (1983). Religiosity and mental health: A critical reevaluation and meta-analysis. *Professional Psychology: Research and Practice*, 14, 170-184.
- Blais, A. (2002). Coping with stressful decisions: Individual differences, appraisals, and choice.
- Boomsma, D. I., de Geus, E. J., van Baal, G. C., & Koopmans, J. R. (1999). A religious upbringing reduces the influence of genetic factors on disinhibition: Evidence for interaction between genotype and environment on personality. *Twin Research*, 2, 115-125.
- Chamberlain, K., & Zika, S. (1992). Religiosity, meaning in life, and psychological well-being. *Religion and mental health* (pp. 138-148). New York, NY US: Oxford University Press.
- Diener, E., Emmons, R., Larsen, R., & Griffin, S. (1985). The Satisfaction With Life Scale. *Journal of Personality Assessment*, 49, 71-75.
- Ferriss, A. L. (2002). Religion and the quality of life. *Journal of Happiness Studies*, 3, 199-215.
- Frankl, V. E. (1984). *Man's search for meaning*. New York: Washington Square Press.
- George, L. K., Larson, D. B., Koenig, H. G., & McCullough, M. E. (2000). Spirituality and health: What we know, what we need to know. *Journal of Social and Clinical Psychology*, 19, 102–116.
- Hackney, C., & Sanders, G. (2003). Religiosity and mental health: A meta-analysis of recent studies. *Journal for the Scientific Study of Religion*, 42, 43-55.
- Hebert, R., Zdaniuk, B., Schulz, R., & Scheier, M. (2009). Positive and negative religious coping and well-being in women with breast cancer. *Journal of Palliative*

- Medicine*, 12(6), 537-545.
- Harris, S. (2002). Religiosity and psychological well-being among older adults: A meta-analysis.
- Hoge, D. (1972). A validated intrinsic religious motivation scale. *Journal for the Scientific Study of Religion*, 11, 369-376.
- Houts, A., & Graham, K. (1986). Can religion make you crazy? Impact of client and therapist religious values on clinical judgments. *Journal of Consulting and Clinical Psychology*, 54, 267-271.
- Hutsebaut, D. (2006). Review of Centrality and content: A new multidimensional model for measuring religiosity. *International Journal for the Psychology of Religion*, 16(1), 77-78.
- Iyengar, S., & Lepper, M. (2000). When choice is demotivating: Can one desire too much of a good thing?. *Journal of Personality and Social Psychology*, 79, 995-1006.
- James, W. (1902). *The varieties of religious experience: A study in human nature*. New York: Barnes & Noble Classics.
- Katz, J. (1984). *The Silent World of Doctor and Patient*. New York: Free Press.
- Krause, N. (1998). Stressors in highly valued roles, religious coping, and mortality. *Psychology and Aging*, 13(2), 242-255
- McFadden, S., & Levin, J. (1996). Religion, emotions, and health. *Handbook of emotion, adult development, and aging* (pp. 349-365). San Diego, CA US: Academic Press.
- Milevsky, A., & Levitt, M. (2004). Intrinsic and extrinsic religiosity in preadolescence and adolescence: Effect on psychological adjustment. *Mental Health, Religion & Culture*
- Neugarten, B., Havighurst, R., & Tobin, S. (1961). The measurement of life satisfaction. *Journal of Gerontology*
- Oman, D., & Reed, D. (1998). Religion and mortality among the community-dwelling elderly. *American Journal of Public Health*, 88(10), 1469-1475.
- Pargament, K., Ano, G., & Wachholtz, A. (2005). The Religious Dimension of Coping: Advances in Theory, Research, and Practice. *Handbook of the psychology of religion and spirituality* (pp. 479-495). New York, NY, US: Guilford Press.

- Schwartz, B. (2000). Self-determination: The tyranny of freedom. *American Psychologist, 55*, 79-88.
- Schwartz, B. (2004). *The paradox of choice: Why more is less*. New York, NY US: HarperCollins Publishers
- Schwartz, B., & Ward, A. (2004). Doing Better but Feeling Worse: The Paradox of Choice. *Positive psychology in practice* (pp. 86-104). Hoboken, NJ US: John Wiley & Sons Inc.
- Sherkat, D., & Ellison, C. (1999). Recent developments and current controversies in the sociology of religion. *Annual Review of Sociology, 25*, 363-394.
- Sood, J. (2005). Religious coping and mental health outcomes in family members making DNR decisions. Dissertation.
- Steger, M., & Frazier, P. (2005). Meaning in Life: One Link in the Chain From Religiousness to Well-Being. *Journal of Counseling Psychology, 52*, 574-582.
- Strawbridge, W., Shema, S., Cohen, R., & Kaplan, G. (2001). Religious attendance increases survival by improving and maintaining good health behaviors, mental health, and social relationships. *Annals of Behavioral Medicine, 23*(1), 68-74.
- Watson, D., Clark, L., & 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.

