This article was downloaded by: [Randolph-Seng, Brandon]

On: 4 November 2008

Access details: Access Details: [subscription number 905068117]

Publisher Routledge

Informa Ltd Registered in England and Wales Registered Number: 1072954 Registered office: Mortimer House,

37-41 Mortimer Street, London W1T 3JH, UK



# Mental Health, Religion & Culture

Publication details, including instructions for authors and subscription information: http://www.informaworld.com/smpp/title~content=t713437783

# The relationship between ethnicity, Christian orthodoxy, and mental health

Brandon Randolph-Seng <sup>a</sup>; Michael E. Nielsen <sup>b</sup>; Bette L. Bottoms <sup>c</sup>; Henrietta Filipas <sup>c</sup> <sup>a</sup> Texas Tech University, Lubbock, TX, USA <sup>b</sup> Georgia Southern University, Statesboro, GA, USA <sup>c</sup> University of Illinois at Chicago, Chicago, IL, USA

Online Publication Date: 01 December 2008

To cite this Article Randolph-Seng, Brandon, Nielsen, Michael E., Bottoms, Bette L. and Filipas, Henrietta(2008)'The relationship between ethnicity, Christian orthodoxy, and mental health', Mental Health, Religion & Culture, 11:8,795 — 805

To link to this Article: DOI: 10.1080/13674670802084788 URL: http://dx.doi.org/10.1080/13674670802084788

## PLEASE SCROLL DOWN FOR ARTICLE

Full terms and conditions of use: http://www.informaworld.com/terms-and-conditions-of-access.pdf

This article may be used for research, teaching and private study purposes. Any substantial or systematic reproduction, re-distribution, re-selling, loan or sub-licensing, systematic supply or distribution in any form to anyone is expressly forbidden.

The publisher does not give any warranty express or implied or make any representation that the contents will be complete or accurate or up to date. The accuracy of any instructions, formulae and drug doses should be independently verified with primary sources. The publisher shall not be liable for any loss, actions, claims, proceedings, demand or costs or damages whatsoever or howsoever caused arising directly or indirectly in connection with or arising out of the use of this material.



# The relationship between ethnicity, Christian orthodoxy, and mental health

Brandon Randolph-Seng<sup>a\*</sup>, Michael E. Nielsen<sup>b</sup>, Bette L. Bottoms<sup>c</sup> and Henrietta Filipas<sup>c</sup>

<sup>a</sup>Texas Tech University, Lubbock, TX, USA; <sup>b</sup>Georgia Southern University, Statesboro, GA, USA; <sup>c</sup>University of Illinois at Chicago, Chicago, IL, USA

(Received 4 March 2008; final version received 27 March 2008)

Although researchers have noted differences in the role of religiosity in the lives of people from different ethnic backgrounds, the components of religion's influence (i.e., membership and orthodoxy) on mental health have not been previously examined. In the current study, Christian participants' Christian Orthodox Scale (COS) scores were used to predict scores on mental health. As hypothesized, African Americans with higher COS scores exhibited fewer mental-health problems than did all ethnicities studied with lower COS scores. Implications and future directions for understanding the cultural influence of religion on African Americans are discussed.

**Keywords:** Christian orthodoxy; ethnicity; mental health

### Introduction

The psychological study of mental health holds that psychological disorders are affected by past and present life experiences. One important life experience is religion. For highly religious persons, spirituality is not separate from everyday life; it is a way of life, an essential part of their orienting system towards themselves, others, and the world at large (Hill & Pargament, 2003). Nevertheless, despite the growing body of literature investigating a religion—mental health connection, possible influences of religious variables on mental health have received inadequate attention (Seybold & Hill, 2001). In the present research, we extend recent efforts in this area by investigating how specific components of religion (i.e., membership and orthodoxy) can influence mental health, and how this depends on one's ethnicity.

#### Mental health and religion

Despite a tradition in psychology that sometimes argues otherwise, research typically finds that religious people are just as mentally stable as nonreligious people are (Bergin, 1991; Levin & Chatters, 1998; Miller & Kelley, 2005; Spilka, Hood, Hunsberger, & Gorsuch, 2003; Worthington, Kurusu, McCullough, & Sandage, 1996). In fact, greater

<sup>\*</sup>Corresponding author. Email: b.randolph-seng@ttu.edu

church attendance is related to better mental health (Seeman, Dubin, & Seeman, 2003), and religious commitment is positively related to well-being in a wide variety of populations, with consistent negative relationships between religious participation and psychological distress (Gartner, 1996). Therefore, religious activities can mostly be regarded as positive coping techniques with religious involvement generally showing both therapeutic and preventive influences on mental health (Levin & Chatters, 1998; Miller & Thoresen, 2003; Spilka et al., 2003).

Even so, some researchers would disagree with this conclusion, especially those who have treated mental health and religion as unidimensional constructs (see Gartner, 1996; Ventis, 1995). It is now known that the way people choose to use their religious beliefs can influence their mental health in opposite directions depending on how mental health is defined or measured (Gartner, 1996). It is more important to measure how someone is religious rather than if they are religious (Miller & Kelley, 2005; Paloutzian, 1996; Smith & Faris, 2003). For example, Murphy et al. (2000) found religious belief to be a significant predictor of less depression and hopelessness, while Smith, McCullough, and Poll (2003) found this is not always the case. Similarly, Schnittker (2001) found the relationship between religiosity and depression to vary depending on whether it was measured in terms of attendance at services, salience of religion, or spiritual help-seeking. Clearly, the relationship between religiosity and mental health depends on how the question is asked. If religiousness is simply defined as church membership or superficial agreement with religious beliefs, then the more religious the person, the more mental health problems they may have. But if depth of religious commitment is assessed, then the more religious the person, the less mental health problems they may have (Miller & Kelley, 2005). Unless one defines religiosity as including individuals' commitment to actually believe and follow the tenets of their religion, it becomes difficult to determine precisely how religion influences their lives. This failure to fully assess religion as a construct can help explain why certain religious variables have been uncorrelated/negatively correlated with mental health in past research.

In the present research, we attempt to better assess religious commitment beyond mere church membership by examining religious orthodoxy. Orthodox beliefs are defined as those beliefs that are consistent with the traditional doctrines of a religious affiliation. Examining orthodox beliefs fits with arguments by Levin and Chatters (1998) who state that the next step in this area of research is to identify exactly what it is about religion that favorably (or unfavorably) influences mental health. This is an important step because the inherent complexity of mental health, religious variables, and probable mediators of mental health/religion associations make the possibility of interrelationships almost inexhaustible (Wulff, 1997).

As mentioned above, mere church membership as a measure of religiosity has sometimes been associated with poorer mental health; however, church membership is a starting-point for many positive relationships that have been found. A common thread through many of the positive associations between religion and mental health may be orthodoxy of religious beliefs as measured through self-report. For example, certain orthodox beliefs correlate positively with better self-functioning beyond the positive influence of intrinsic religiosity, and participants who have mental-health problems tend to score lower on religious orthodoxy (Stark, 1971; Watson, Hood, Foster, & Morris, 1988). Religious orthodoxy is also associated with greater feelings of love and happiness (Balswick & Balkwell, 1978) and with the rejection of suicide as a viable alternative (Neeleman, Wessely, & Lewis, 1998). Even intensive longitudinal studies have found religious orthodoxy to be associated with positive mental health (Masters & Bergin, 1991).

So, our first purpose in this study was to examine the influence of Christian orthodoxy, among those who claim church membership, on mental health outcomes. Although past research reviewed above found positive relationships between measures of religious orthodoxy and measures of mental health, we know of no direct tests of the relationship between a person's religious orthodoxy (among those who claim church membership to that religion) and measures of mental health. In situations where certain religious variables are uncorrelated/negatively correlated with mental health measures, it may be that those variables fail to capture how much people believe in the religion they claim. Thus, we predicted that better mental health would be found among Christian participants who report higher levels of belief in orthodox Christian doctrine but not among Christians who report lower levels of orthodoxy (see Paloutzian, 1996).

### Ethnicity, religious orthodoxy, and mental health

Another purpose of the present research was to determine if relations among religious orthodoxy and mental health are qualified by a person's ethnicity. Some research has found that psychological well-being and religious belief are positively correlated only among African American participants (Blaine & Crocker, 1995; St. George & McNamera, 1984), and that African American religiosity tends to support positive self-feeling separate from current levels of life stress (Levin & Chatters, 1998). Similarly, Cacioppo and colleagues have demonstrated that African Americans show greater benefits from religious involvement than do Hispanics or Caucasians (Hawkley, Browne, & Cacioppo, 2005), which may be due to religion's powerful benefits for the disenfranchised (Cacioppo & Brandon, 2002; Pargament, 2002a, 2002b), and the important cultural role religion plays in the life of many African Americans (McRoberts, 2003). We therefore predicted that positive relations between mental health and religious orthodoxy would be moderated by ethnicity, with the effect holding for African Americans, but not other ethnicities.

### Overview and predictions

To test our hypotheses, self-identified Christians' scores on a measure of belief orthodoxy were used to predict their mental health. To review, we predicted that among this select sample, greater Christian orthodoxy would be associated with better mental health, particularly for African Americans. Specifically, we predicted that African American participants who consider themselves Christian and believe in their faith's orthodox doctrine will have better mental health than African American participants who consider themselves Christian and fail to fully believe in their faith's orthodox doctrine.

Of course, there are a number of other variables that have consistently been identified as moderating the relationship between religion and mental health (for a review, see Koenig, McCullough, & Larson, 2001). In addition to church attendance and religious belief and importance mentioned above, other variables like church affiliation (e.g., Tix & Frazier, 2005), gender (e.g., Mattis, 2002), frequency of prayer (e.g., El-Khoury et al., 2004), and social economic status (Spilka et al., 2003) have also been identified. Therefore, we statistically controlled for church attendance, religious belief and importance, church affiliation, gender, frequency of prayer, and social economic status.

#### Method

### **Participants**

The data set included a total of 358 Christian-identified students from the University of Illinois at Chicago who participated in exchange for course credit.<sup>2</sup> The sample was 70% women and ethnically diverse (39% Caucasian, 22% Hispanic, 21% Asian American, 14% African American, and 4% other), and averaged 19.37 years of age (SD = 2.29). Sixty-four percent of participants reported being Catholic, while 36% reported being Protestant. The median estimated parental income was in the \$50,000–59,999 range, on an 8-point scale ranging from \$0 to \$80,000+ in increments of \$10,000.

#### Materials

### Demographic questionnaire

A demographic questionnaire requested the information reported in the "participants" section above except for the religious affiliation information, which was collected as described below.

#### Religiosity measures

First, participants indicated their religious affiliation, and then rated the importance of their religious beliefs on a scale ranging from 1 (not at all important) to 5 (extremely important). Participants who considered themselves "spiritual" without believing in a specific deity were asked to frame this and the other religious items in terms of spirituality rather than religion. Another item asked participants to rate the importance of religion to their self-concept using a 1 (not at all) to 5 (extremely) scale. The frequency with which participants attended religious services, and the frequency of their prayers, were rated on separate scales ranging from 1 (less than once a year) to 8 (once a day).

Christian orthodoxy was measured with the short version of the Christian Orthodoxy Scale (COS; Hunsberger, 1989). This scale has three items that address foundational Christian doctrines such as "Jesus Christ is the divine Son of God," and three that reject those doctrines such as "Despite what many people believe, there is no such thing as a God who is aware of our actions." Participants responded on a 7-point scale, ranging from –3 (strongly disagree) to +3 (strongly agree). Responses were recoded into the range of 1–7, and negatively worded items were reverse-scored. Summed items produced a possible range of 6–42, with higher scores reflecting greater orthodoxy.

#### Center for Epidemiological Studies Depression Scale (CESD)

The CESD consists of 20 questions used to measure recent depression (Radloff, 1977). Participants responded to each question by indicating the extent to which the statement represents their experience during the past week in a Likert-scale fashion. A score of 16 indicates the possibility of depression, and a score of 23 or higher indicates clinically significant levels of depression.

### Brief Symptom Inventory (BSI)

The well-validated BSI is a 53-item brief form of the SCL-90-R used to assess patterns of psychological symptoms (Derogatis & Spencer, 1982). Participants use a 5-point Likert

scale to rate the extent to which the items apply to themselves. The BSI provides a Global Severity Index (BSI-GSI; average response per item) based on measures of nine primary symptom dimensions: hostility, depression, somatization, obsessive—compulsive tendencies, phobic anxiety, interpersonal sensitivity, anxiety, paranoid ideation, and psychoticism. Higher scores indicate greater symptomatology with an end-point of zero.

#### Procedure

All survey measures were randomly ordered within a stapled packet, with a demographics form always appearing first. Participants completed the packet in small groups spread-out in a large room. Participants gave no identifying information, and signed informed consent statements were collected separately from surveys to ensure complete anonymity.

#### Results

For descriptive statistics, please see Table 1.<sup>3</sup> After centering and dummy-coding the predictor variables (ethnicity and orthodoxy), two separate hierarchical regressions were conducted for the dependent variables CESD and BSI-GSI.<sup>4</sup> For both the CESD and BSI-GSI models, religious affiliation (scored Catholic vs. Protestant), gender, religious importance, personal religiosity, church attendance, frequency of prayer, and parental income served as control variables (step 1). Subsequent variables were entered as follows: main effects of ethnicity and Christian orthodoxy (COS, step 2), then two-way interactions between ethnicity and COS (step 3).<sup>5</sup>

For the CESD model, the control variables accounted for 5.2% of the variance in CESD scores, F(7, 287) = 2.28, p = 0.03. Adding the main effects into the model did not create a significant improvement in the model, F < 1. The addition of the two-way interactions in the model created a significant improvement, accounting for an additional 2.5% of the variance in CESD scores, F(3, 280) = 2.60, p = 0.05.

Specifically, at step 1, a significant effect for gender (B = 2.76, p = 0.04) and religious affiliation ( $\beta = 2.76$ , p = 0.04) emerged such that women (M = 16.79, SD = 10) and

Table 1. Means and standard deviations for each continuous predictor variable as a function of the dependent variables CESD and BSI-GSI.

Variable	M	SD
$\overline{\text{CESD } N = 287}$	16.75	10.31
Religious Importance	3.62	1.0
Personal Religiousness	2.98	0.81
Church Attendance	4.29	1.79
Prayer Frequency	6.28	1.96
COS	36.22	7.12
Parental Income	5.81	2.43
BSI-GSI $N = 286$	0.89	0.61
Religious Importance	3.60	0.98
Personal Religiousness	2.97	0.80
Church Attendance	4.28	1.80
Prayer Frequency	6.25	1.97
COS	36.23	6.98
Parental Income	5.84	2.46

Catholics (M = 17.34, SD = 10.92) reported more depression than males (M = 14.87, SD = 10.03) and Protestants (M = 14.51, SD = 7.90). At step 2, no significant main effects were found; however, at step 3, the predicted two-way interaction between African American and COS score was obtained ( $\beta = 2.76$ , p = 0.04). Asian, Hispanic, and Caucasian (after recoding) participants showed a nonsignificant interaction with COS scores.

In other words, Asian, Hispanic, and Caucasian participants reported a similar level of depression regardless of their level of orthodoxy, but African Americans who endorsed orthodoxy the most reported the lowest levels of depression among all ethnic groups studied. In Figure 1, points along each regression line were graphed in order to visually represent this interaction.

For the BSI-GSI model, the control variables accounted for 6.3% of the variance in CESD scores, F(7, 286) = 2.77, p = 0.009. Adding the main effects into the model did not create a significant improvement in the model, F < 2. The addition of the two-way interactions in the model created a marginally significant improvement, accounting for an additional 2.2% of the variance in CESD scores, F(3, 279) = 2.32, p = 0.07.

Specifically, at step 1, a significant effect for religious affiliation (B=0.27, p<0.001) emerged such that Catholics (M=0.96, SD=0.64) reported more symptoms than did Protestants (M=0.70, SD=0.46). At step 2, a significant main effect for Asian ethnicity was found ( $\beta=0.22$ , p=0.02) such that Asians (M=1.03, SD=0.61) reported more symptomology than did African Americans (M=0.63, SD=0.64), Caucasians (M=0.83, SD=0.60), and Latinos (M=0.93, SD=0.50). At step 3, once again the predicted significant two-way interaction between African American and COS score was obtained ( $\beta=0.06$ , p=0.01). African Americans, but not Asian, Hispanic, or Caucasian participants, differed in BSI-GSI scores as a function of COS endorsement.

Replicating the CESD model and extending it to other psychological disorders, Asian, Hispanic, and Caucasian participants reported similar levels of symptomology regardless of their level of orthodoxy, but African Americans who endorsed orthodoxy the most reported the lowest levels of psychological problems among all ethnic groups studied. As with Figure 1, for Figure 2 points along each regression line were graphed in order to depict this interaction.

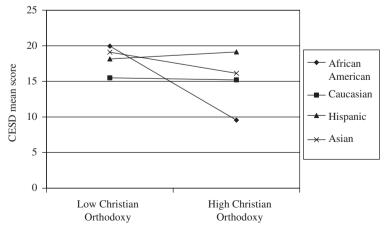


Figure 1. Mean CESD scores as a function of ethnicity and Christian orthodoxy.

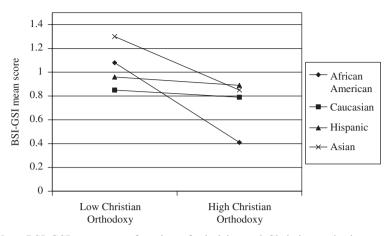


Figure 2. Mean BSI-GSI scores as a function of ethnicity and Christian orthodoxy.

#### Discussion

As predicted, the results demonstrated that even after controlling for church attendance, religious belief and importance, church affiliation, gender, frequency of prayer, and socioeconomic status, better mental health was found for Christian African Americans who showed higher levels of Christian orthodox beliefs, but not for Hispanic, Asian, or Caucasian participants. However, we did not find main effects of Christian orthodoxy beliefs, failing to support past results (e.g., Paloutzian, 1996; Stark, 1971). Therefore, it seems that among participants who self-identify as Christians, having higher levels of orthodox beliefs specifically relates only to African Americans' mental health. This result was found despite the use of "soft variables" or self-report techniques to measure mental health and religiosity, adding to the reliability of the results (Gartner, 1996; Paloutzian, 1996).

But why do Christian African Americans show mental-health benefits from higher levels of orthodox belief? Despite the possible alienation of being highly orthodox among the perceived secular norm, greater integration into society has been found among the highly orthodox by their feelings of having a purpose in society (Petersen, 1988). For African Americans, this may be especially true, perhaps because compared with other ethnicities, African Americans generally still face negative stereotypes and prejudices (Cacioppo & Brandon, 2002; Pargament, 2002a, 2002b). As a result, it seems reasonable that having a purpose in society may be particularly beneficial for African Americans. Nevertheless, the results of the current study suggest that there is something more than just simply being orthodox leading to mental health benefits. African Americans who scored lower on the measure of orthodoxy had mental health scores very similar to those of the other ethnicities studied. Instead, it seems that among self-identified Christian African Americans, having a high belief orthodoxy is associated with some type of mental health boost.

A more likely reason for this finding may be the unique cultural role of religion in the lives of African Americans. McRoberts (2003) documents this in his examination of church life in a Boston community. Churches were critical to the community's function as "social havens for Blacks of particular class, regional, and national backgrounds" (p. 25). Because of their unique position in American life, Black churches evidently serve as

more effective resources for their congregants than do churches for other racial groups. Consistent with this cultural interpretation, Chaney (2008) argues that African-Americans find at their churches strong extended kin networks; material and emotional assistance; and resources where their children can find instruction and be socialized regarding their heritage. It may be that religion yields greater cultural capital (Smith, 2003) as a result of religion's unique role in African-American life. Future research should specifically compare disfranchised (e.g., Cacioppo & Brandon, 2002) vs. cultural (e.g., McRoberts, 2003) explanations of the positive relationships between religion and mental health found for African Americans. One way this may be accomplished is by measuring positive mental health states in addition to the absence of negative states.

Another area that deserves attention in future research is the operationalization of religiosity. Almost by default, researchers in the psychology of religion include measures of intrinsic and extrinsic religious orientation (Allport & Ross, 1967) in order to illuminate the effects of religion on various aspects of behavior. In part, this is due to the extensive attention the constructs have been given in studies of mental health and other psychological constructs (Wulff, 1997). For example, higher extrinsic scores tend to be associated with pathology, while higher intrinsic scores show the opposite pattern (Bergin, 1991; Miller & Kelley, 2005). Given the correlation between racial identity and religious orientation among African Americans (Sanchez & Carter, 2005), it could be that African American participants who rate themselves as Christian but fail to score high on the COS are more extrinsic in their religious orientation (e.g., Ventis, 1995). Although it has been suggested that use of religious orientation may be a marker of mediocrity in research (Kirkpatrick & Hood, 1990), research using the constructs continues nonetheless (Donahue & Nielsen, 2005). The intrinsic-extrinsic distinction may enable researchers to better understand the complex relationship between religion and mental health (Pargament, 2002b; see Salsman, Brown, Brechting, & Carlson, 2005, for a recent example), or at least serve to maintain continuity between previous and future studies. Should religious orientation be employed in studies of mental health, Miller and Kelley (2005) recommend including measures of the Quest religious orientation (Batson, Schoenrade, & Ventis, 1993) in order to investigate the possibility that the uncertainty and tentativeness in belief conveyed by Quest might account for variance in the religion-mental health relationship.

Given the present results, however, a better alternative might be to focus on measures that address beliefs more coherently, rather than to rely on the mix of belief and motivation that characterize religious orientation. This line of thinking is buttressed by the findings of Smith et al. (2003), who found that religious motivation and ethnicity did not interact to affect depression scores. It may be more profitable to examine the interactive effect of ethnicity and beliefs, operationalized multidimensionally with an instrument such as Hunt's (1972) literal-, antiliteral-, mythological conceptualization of belief. This would appear to augment the construct of orthodoxy used in the present study.

In summary, African American Christians who have higher levels of Christian orthodox beliefs have significantly better mental health than Christian African Americans with less orthodox beliefs, who do not differ from other ethnicities in terms of mental health. A great strength of this study is that it accounts for ethnic variables rather than relying on a one-size-fits-all model that ignores the important role that ethnicity and culture play in religion's influence on mental health. This study also provides another example of the complexity between religion and mental health variables (Bergin, 1991;

Gartner, 1996; Wulff, 1997). Overall, religion is an important variable in understanding what contributes to people's mental health and can provide additional answers that other psychological and social constructs cannot.

#### **Author Note**

Partial reports of these data were presented at the April 2005 Reflections on the Relationship between Science and Spirituality: A Multi-disciplinary Colloquium, Lubbock.

#### **Notes**

- One common way to scientifically separate superficial vs. depth of religious commitment is by using the extrinsic vs. intrinsic religious orientation constructs (Allport & Ross, 1967).
  A discussion of these constructs can be found in the Discussion.
- Data from 153 additional participants were excluded because they did not indicate a Christian religious affiliation.
- Participants who failed to complete specific survey measures were dropped from analyses in a pairwise fashion creating slightly different samples for the CESD and BSI-GSI dependent variables.
- 4. Each ethnicity was individually dummy-coded (Other was dropped from the analysis) with Caucasian always being used as the control (0). Subsequently, Caucasian was recoded in order to be included in the analysis.
- 5. Interactions terms were computed for each ethnicity by multiplying the dummy-coded ethnicity variable by the centered COS scores.

## References

- Allport, G.W., & Ross, J.M. (1967). Personal religious orientation and prejudice. *Journal of Personality and Social Psychology*, 5, 423–443.
- Balswick, J.O., & Balkwell, J.W. (1978). Religious orthodoxy and emotionality. *Review of Religious Research*, 19, 308–319.
- Batson, C.D., Schoenrade, P., & Ventis, W.L. (1993). Religion and the individual: A social psychological perspective. London: Oxford.
- Bergin, A.E. (1991). Values and religious issues in psychotherapy and mental health. *American Psychologist*, 46, 394–403.
- Blaine, B., & Crocker, J. (1995). Religiousness, race, and psychological well-being: Exploring social psychological mediators. *Personality and Social Psychology Bulletin*, 21, 1031–1041.
- Cacioppo, J.T., & Brandon, M.E. (2002). Religious involvement and health: Complex determinism. Psychological Inquiry, 13, 204–206.
- Chaney, C. (2008). The benefits of church involvement for African-Americans. *Journal of Religion and Society*, 10, 1–23.
- Derogatis, L.R., & Spencer, P.M. (1982). *The Brief Symptom Inventory (BSI): Administration, scoring, & procedures manual—I.* Baltimore, MD: John Hopkins University School of Medicine.
- Donahue, M.J., & Nielsen, M.E. (2005). Religion, attitudes, and social behavior. In R.F. Paloutzian, & C.L. Park (Eds.), *Handbook of the psychology of religion and spirituality* (pp. 274–291). New York: Guilford.
- El-Khoury, M.Y., Dutton, M.A., Goodman, L.A., Engel, L., Belamaric, R.J., et al. (2004). Ethnic differences in battered women's formal help-seeking strategies: A focus on health, mental health and spirituality. *Cultural Diversity & Ethnic Minority Psychology*, 10, 383–393.

- Gartner, J. (1996). Religious commitment, mental health, and prosocial behavior: A review of the empirical literature. In E.P. Shafranske (Ed.), *Religion and the clinical practice of psychology* (pp. 187–214). Washington, DC: APA.
- Hawkley, L.C., Browne, M.W., & Cacioppo, J.T. (2005). How can I connect with thee? Let me count the ways. *Psychological Science*, 16, 798–804.
- Hill, P.C., & Pargament, K.I. (2003). Advances in the conceptualization and measurement of religion and spirituality. *American Psychologist*, 58, 64–74.
- Hunsberger, B. (1989). A short version of the Christian orthodoxy scale. *Journal for the Scientific Study of Religion*, 28, 360–365.
- Hunt, R.A. (1972). Mythological-symbolical religious commitment: The L.A.M.-scales. *Journal for the Scientific Study of Religion*, 11, 42–52.
- Kirkpatrick, L.A., & Hood Jr, R.W. (1990). Intrinsic–extrinsic religious orientation: The boon or bane of contemporary psychology of religion?. *Journal for the Scientific Study of Religion*, 29, 442–462.
- Koenig, H.G., McCullough, M.E., & Larson, D.B. (2001). Handbook of religion and health. New York: Oxford University Press.
- Levin, J.S., & Chatters, L.M. (1998). Research on religion and mental health: An overview of empirical findings and theoretical issues. In H.G. Koenig (Ed.), *Handbook of religion and mental health* (pp. 33–50). London: Academic Press.
- Masters, K.S., & Bergin, A.E. (1991). Religious life-styles and mental health: A follow-up study. *Counseling & Values*, 35, 211–224.
- Mattis, J.S. (2002). Religion and spirituality in the meaning-making and coping experiences of African American women: A qualitative analysis. *Psychology of Women Quarterly*, 26, 309–321.
- McRoberts, O.M. (2003). Streets of glory: Church and community in a black urban neighborhood. Chicago: University of Chicago.
- Miller, L., & Kelley, B.S. (2005). Relationships of religiosity and spirituality with mental health and psychopathology. In R.F. Paloutzian, & C.L. Park (Eds.), *Handbook of the psychology of religion and spirituality* (pp. 460–478). New York: Guilford.
- Miller, W.R., & Thoresen, C.E. (2003). Spirituality, religion, and health: An emerging research field. *American Psychologist*, *58*, 24–35.
- Murphy, P.E., Ciarrocchi, J.W., Piedmont, R.L., Cheston, S., Peyrot, M., & Fitchett, G. (2000). The relation of religious belief and practices, depression, and hopelessness in persons with clinical depression. *Journal of Consulting and Clinical Psychology*, 68, 1102–1106.
- Neeleman, J., Wessely, S., & Lewis, G. (1998). Suicide acceptability in African- and White Americans: The role of religion. *Journal of Nervous and Mental Disease*, 186, 12–16.
- Paloutzian, R.F. (1996). *Invitation to the psychology of religion*. Needham Heights, MA: Simon & Schuster.
- Pargament, K.I. (2002a). The bitter and the sweet: An evaluation of the costs and benefits of religiousness. *Psychological Inquiry*, 13, 168–181.
- Pargament, K.I. (2002b). Is religion nothing but ...? Explaining religion verses explaining religion away. *Psychological Inquiry*, 13, 239–244.
- Petersen, L.R. (1988). Orthodoxy, religious discordance and alienation. *Journal for the Scientific Study of Religion*, 27, 362–377.
- Radloff, L.S. (1977). The CES-D Scale: A self-report depression scale for research in the general population. *Journal of Applied Psychological Measurement*, 1, 385–401.
- Salsman, J.M., Brown, T.L., Brechting, E.H., & Carlson, C.R. (2005). The link between religion and spirituality and psychological adjustment: The mediating role of optimism and social support. *Personality and Social Psychology Bulletin*, 31, 522–535.
- Sanchez, D., & Carter, R.T. (2005). Exploring the relationship between racial identity and religious orientation among African American college students. *Journal of College Student Development*, 46, 280–295.
- Schnittker, J. (2001). When is faith enough? The effects of religious involvement on depression. The Journal for the Scientific Study of Religion, 40, 393–411.

- Seeman, T.S., Dubin, L.F., & Seeman, M. (2003). Religiosity/spirituality and health: A critical review of the evidence for biological pathways. *American Psychologist*, 58, 53–63.
- Seybold, K.S., & Hill, P.C. (2001). The role of religion and spirituality in mental health and physical health. *Current Directions in Psychological Science*, 10, 21–24.
- Smith, C. (2003). Theorizing religious effects among American adolescents. *Journal for the Scientific Study of Religion*, 42, 17–30.
- Smith, C., & Faris, R. (2003). *Religion and American adolescent delinquency, risk behaviors and constructive social activities*. Chapel Hill, NC: National Study of Youth and Religion.
- Smith, T.B., McCullough, M.E., & Poll, J. (2003). Religiousness and depression: Evidence for a main effect and the moderating influence of stressful life events. *Psychological Bulletin*, 129, 614–636.
- Spilka, B., Hood Jr, R.W., Hunsberger, B., & Gorsuch, R.L. (2003). *The Psychology of Religion: An empirical approach* (3rd ed.). New York: Gilford Press.
- Stark, R. (1971). Psychopathology and religious commitment. *Review of Religious Research*, 12, 165–176.
- St. George, A., & McNamera, P.H. (1984). Religion, race, and psychological well-being. *Journal for the Scientific Study of religion*, 23, 351–363.
- Tix, A.P., & Frazier, P.A. (2005). Mediation and moderation of the relationship between intrinsic religiousness and mental health. *Personality and Social Psychology Bulletin*, 31, 295–306.
- Ventis, W.L. (1995). The relationship between religion and mental health. *Journal of Social Issues*, 51, 33–48.
- Watson, P.J., Hood Jr, R.W., Foster, S.G., & Morris, R.J. (1988). Sin, depression, and narcissism. *Review of Religious Research*, 29, 295–305.
- Worthington Jr, E.L., Kurusu, T.A., McCullough, M.E., & Sandage, S.J. (1996). Empirical research on religion and psychotherapeutic processes and outcomes: A 10-year review and research prospectus. *Psychological Bulletin*, 119, 448–487.
- Wulff, D.M. (1997). Psychology of religion: Classic and contemporary. New York: Wiley.