Scientific Research on the Study of Religion/ Spirituality and Mental Health: Lessons, Positive Affirmations, and Disquieting Questions

David R. Williams

This chapter provides an overview of the scientific research that examines the relationship between aspects of religious or spiritual engagement and mental health status. It begins by outlining some of the serious mental health challenges in contemporary society. Next, it reviews a growing body of scientific research which indicates that although religious involvement has positive effects on multiple indicators of mental health, under some conditions it is adversely related to mental health. The pathways linking religious involvement and mental health are identified and the chapter concludes with lessons and challenges raised by the existing research for the Christian mental health professional.[30]

AMERICA'S MENTAL HEALTH CRISIS

Mental health problems are commonplace in contemporary society. Recent national data document that 46% of adults in the United States have had a psychiatric illness at some point (Kessler, Berglund, Demler, Jin, & Walters, 2005). The lifetime prevalence of two or more disorders is 28%. One in every four (26%) adults in the United States meet criteria for a current psychiatric disorder (past year) with 60% of these disorders rated as severe or moderately severe (Kessler, Chiu, Demler, & Walters, 2005). The 2005 National Health Interview Survey found that 11% of adults reported serious psychological distress in the past year (Pleis & Lethbridge-Cejku, 2005). That distress was associated with substance dependence or abuse. Among adults with serious psychological distress, 21% were dependent on or had abused illicit drugs or alcohol, compared to 8% of adults without serious psychological distress.

30. I wish to thank Gabriel Sirota and Veronic Aghayan for assistance with preparing the manuscript and Manuela Costa for assistance with the research.

Williams D.R. (2011) "Scientific Research on the Study of Religion/Spirituality and Mental Health: Lessons, Positive Affirmations, and Disquieting Questions."

In C. Fayard, B.C. Hernandez, B. Anderson, and G.T. Harding IV (Eds). A Christian Worldview & Mental Health: A Seventh-day Adventist Perspective. Berrien Springs, MI: Andrews University Press, Pp. 185-208.

There are also large drug problems in the United States. In 2005, the national survey on drug use and health documented the magnitude of the problem (Office of Applied Studies, 2006). Some 8.1% of the population ages twelve years old or older, or almost twenty million Americans, had used illicit drugs in the past month. Illicit drugs include marijuana/hashish, cocaine including crack, heroin, hallucinogens, inhalants, or medically prescribed drugs that are used non-medically. Also, there were 10.5 million persons ages twelve or older who reported driving under the influence of an illicit drug during the past year and 29% of Americans ages twelve or older (71.5 million people) had used a tobacco product in the previous month. This survey also documented the problem of alcohol use. In 2005, 52% of Americans ages twelve or older reported being current drinkers of alcohol. One in five persons or 23% of persons ages twelve or older had participated in binge drinking in the past thirty days. Binge drinking is defined as five or more drinks on the same occasion on at least one day in the past thirty days. In 2005, 13% of persons ages twelve or older drove under the influence of alcohol at least once in the past year.

Keyes (2007) outlines some of the serious societal implications of these high levels of mental health problems. He indicates that mental illness is one of the three most costly health conditions in the United States and one of the top five causes of disability days in the world. Other evidence indicates that although the United States leads the world in the prevalence of mental health problems, evidence from the largest coordinated mental health study ever conducted reveals that mental disorders have profound social and economic effects throughout the world (Kessler & Utsun, 2008). Research has also been giving increasing attention to the protective and risk factors that can increase or decrease an individual's chances for enjoying good mental health. Many of these factors are linked to the social contexts in which people live, learn, work, and play. One factor that we now turn our attention to is the role of religion.

RELIGION/SPIRITUALITY AND MENTAL HEALTH

Some early social scientists acknowledged that religion could play a role in mental health. Emile Durkheim (1951) argued that the social regulation, integration, and meaning provided by religious groups could be health enhancing. Durkheim studied religion primarily in terms of its impact on the levels of suicide. William James (1902), an early psychologist, indicated that "healthy-minded religion could prevent certain forms of disease as well as science does, or even better." Sigmund Freud (1961) had decidedly negative views of religion. He viewed religion as an illusion and mass neurosis, but nonetheless indicated that religious ideas could reduce anxiety and serve as a source of consolation without which many could not endure life. Freud argued that a lack of religious belief would lead to chaos and additional mental anguish. Karl Marx (1844) is known for describing religion as the opiate of the people. However, in the very paragraph in which Karl Marx made the famous declaration, he indicated that religion was nonetheless "the heart of a heartless world and the spirit of the spiritless situation" (p. 42). It appears that even Marx conceded some potential health-enhancing effects of religion.

There is growing interest in the role that spirituality or religion can play in the mental health of the population; however, this is a generally neglected topic in studies in psychiatry. A systematic review of 2,348 studies published in the four leading psychiatric journals from 1978 to 1982 found that 2.5% of the studies included a quantified religious or spiritual variable (Larson, Pattison, Blazer, Omran, & Kaplan, 1986). Less than 1% assessed religion or spirituality with minimal standards of acceptability. Only one study had applied a state of the art approach to measuring religion or spirituality. The majority of studies measured religion with the use of religious denomination, which is not regarded as an optimal or comprehensive measure of religiousness. More recent studies continue to document the neglect of religion (Weaver et al., 1998).

Research on religion and spirituality is not without debate and controversy. It has been harshly criticized in recent years on both methodological and ethical grounds (Sloan et al., 2001). Methodologically,

many studies have been cross-sectional in design and have utilized inadequate controls for confounding variables and covariates so that the observed associations between religious involvement and health could be overestimated. In addition, failure to control for multiple comparisons could have contributed to some inconsistencies in the empirical findings. Moreover, some researchers argue that the study of religion and health raises a large ethical issue because an individual's religious beliefs and practices are private and personal and should therefore be outside of the purview of medical recommendations. According to this view, applying any findings from research on religiousness and spirituality to clinical practice could be problematic (Sloan et al., 1999). Major researchers in the area indicate that some of the recent criticisms have not been even-handed. Specifically, they point to omitted evidence; erroneous, incorrect, or misleading statements; and arguments about ethics being based on personal opinion and straw men rather than on scientific evidence (Miller & Thoresen, 2003). For example, Koenig et al. (1999) show that Sloan et al. (1999) discuss only twenty-four of the 300+ studies of religion and physical health, none of the 900 studies of religion and mental health, only seventeen of the nearly 100 studies of attendance and mortality, and none of the nine recent high-quality studies that had been identified.

One contributor to the conflict over the study of religion and health is a clash of worldviews. Researchers as a group are markedly less religious than the general population and many feel uncomfortable with the topic. Some researchers have suggested that merely studying religion and health would be an "anti-tenure factor" for a beginning scholar (Sherrill & Larson, 1994). Similarly, Rue (1985) indicated that the study of religion is academia's "most outrageous blind spot."

Research has documented that religious variables can play an important role in physical health. The strongest association exists for measures of religious attendance. A rigorous review of the empirical evidence relating religion to health concluded that the scientific evidence is strongest for the association between religious attendance

and mortality (Powell, Shahabi, & Thoresen, 2003). They indicated that there is a strong, consistent, prospective, and often graded reduction in the risk of mortality that is associated with increasing levels of religious attendance. Even after adjusting for confounders, this association exists, although the reduction approximates 25%. They also indicated that protection of religion or spirituality against cardiovascular disease is where the association is strongest, and is largely mediated through the healthy lifestyle it encourages. An example of the study of religion and health is the study by Hummer and colleagues (Hummer, Rogers, Nam, & Ellison, 1999). This national study of over 21,000 adults followed over eight years found that attendance was associated with mortality. People who never attended religious services had a 1.9 times greater risk of death than people attending more than once a week. This pattern existed for most causes of death. This study found that at age twenty, persons who attended religious services weekly or more lived on average 7 and a half years longer than those who never attended. For blacks, the difference was 13.7 years.

RELIGION AND MENTAL HEALTH

Research has also looked at the association between religion and mental health. A critical review of seventeen studies that assess the association of religion to general indices of anxiety concluded that church attendance and other religious variables are related to decreased anxiety in several populations (Shreve-Neiger & Edelstein, 2004). Some studies find that those who lived their religion (intrinsic religiousness) have less anxiety than those who use their religion (extrinsic religiousness). However, under some conditions, religion may be associated with elevated anxiety. Catholic women, for example, tended to have higher levels of anxiety than others. Sudden religious converts have been shown to have higher anxiety in some studies, and extrinsic religious persons also show anxiety in some studies.

A meta analysis of 147 studies has also examined the association between religiousness and depressive symptoms (Smith, McCullough,

& Poll, 2003). It concluded that high levels of religious involvement were associated with fewer symptoms of depression. This association was robust, but modest in size. The association was stronger for studies of persons under stress. This review also found that an extrinsic religious orientation and negative religious coping were associated with elevated symptoms of depression.

Reviews have also been conducted on the association between religion and substance use. A review of fifty-four studies of religion and drug use found that 87% showed that religious involvement predicted a lower risk of drug abuse (Johnson, 2002). Similarly, 94% of ninety-seven studies that looked at religion and alcohol use found that religious participation was associated with a reduced tendency to initiate alcohol use or have problems with alcohol, if used. These findings exist in both retrospective and prospective studies of children, adolescents, and adults.

Research also shows that religion is associated with reduced risk of delinquency (Johnson, 2002). These studies have found a lower risk of multiple delinquent behaviors, including criminal behavior associated with religious involvement. Similarly, religious involvement has been associated with preventing delinquent behavior in high-risk urban youth. It has also been related to increased pro-social behavior in adolescents that emphasize concern for the welfare of others. In some of these studies, the effect of religious involvement is evident only at the level of the group and not at the level of the individual (Stark, 1985). That is, it is not individual religious behavior that appears to be most important, but whether the individual is in a context of other religious people.

RELIGION/SPIRITUALITY AND MENTAL HEALTH: PATHWAYS

Several mechanisms have been identified by which religion might be associated with health (Williams & Sternthal, 2007). First, religious participation can discourage negative health behaviors such as tobacco,

alcohol, drugs, and risky sexual practices. Second, by encouraging moderation in all things and reducing risk-taking behavior, religious involvement can reduce exposure to stress. Third, religious institutions can provide support, intimacy, a sense of connectedness, and belonging. Fourth, religious organizations and clergy engage in a range of activities that can promote physical and mental health. Other mechanisms by which religion can affect health include the effects of religious beliefs and values in providing systems of meaning that can enable individuals to interpret and re-interpret stress. Religious beliefs can also provide feelings of strength to cope with adversity. And finally, religious institutions can also adversely affect health by generating stress, time demands, role conflicts, social conflicts, and criticism.

HEALTH PRACTICES

There is striking evidence of the role of religion in enhancing healthy behaviors. A national study of high school seniors, persons in both public and private schools, found that religious high school seniors were less likely than their non-religious peers to carry a weapon such as a gun or knife to school, to get into fights or hurt someone, to drive after drinking, to ride with a driver who had been drinking, to smoke cigarettes, and to engage in binge drinking or use marijuana (Wallace & Forman, 1998). Similarly, religious seniors were more likely to wear seatbelts; eat breakfast, green vegetables, and fruit; get regular exercise; and sleep at least seven hours per night. Similarly, in the Alameda County Study an association was documented over time with levels of religious behavior (Strawbridge, Shema, Cohen, & Kaplan, 2001). This study examined the association of frequency of attendance in 1965 with improvements or changes with healthy behaviors by 1994. Adjusted for age, sex, education, and self-rated health, there were improved healthy behaviors among persons who attended religious services weekly. They were more likely over this time period to quit smoking, to start physical activity, to stop being depressed, to get and stay married, to increase social relationships, and to stop heavy drinking. There was no

association between religion and starting medical checkups. Religious individuals were also more likely to continue to not smoke, not be depressed, not get divorced or separate, keep up personal relationships, and maintain medical checkups. There was no significant association between frequency of attendance and continuing physical activity or continuing to not drink heavily.

RELIGIOUS SERVICE ATTENDANCE AS THERAPY?

Research by Ezra Griffith and colleagues (Griffith, English, & Mayfield, 1980; Griffith & Mathewson, 1981; Griffith, Young, & Smith, 1984) has also documented the potential therapeutic benefits of at least some religious services. In a study of church services in New Haven, Connecticut, these researchers documented that there were several therapeutic aspects of groups that are present within the liturgy or ritual of these services. These include providing the installation of hope, group cohesiveness, altruism, social learning, and universality. These researchers argued that several major rituals could be therapeutic. For example, testimony can provide an opportunity to talk about offenders, what to do when offended, identify with the oppressed, and provide validation for the experiences described. Other rituals within the church services also provide security, renewal, installation of hope, positive sensations (feeling good, happy, and light), and reduction of tension and catharsis. Other researchers have noted that several aspects of religious services are distinctive in the provision of opportunities to articulate and manage personal and collective suffering (Gilkes, 1980). The expression of emotion and active congregational participation can promote "collective catharsis" in ways that can facilitate the reduction of tension and the release of emotional distress.

De Sousa (2005) has summarized research on the role that songs and music can play in enabling individuals to allay anxiety. Music has been shown to relax patients in critical care units and other contexts. Music has been used to alleviate grief and sadness and to combat bouts of sadness. Music therapy has also been shown to modify the behavior

of children with autism and other developmental disorders and reduce agitation in patients with dementia. De Sousa (2005) argues that music can instill joy and hope and help people maintain or regain inner peace.

RELIGIOUS INSTITUTIONS: HEALTHY OR UNHEALTHY ENVIRONMENTS?

Limited research evidence also indicates that religious congregations have psychosocial environments that can vary in their health enhancing potential. Ken Pargament and colleagues (1993) studied 352 church members in thirteen congregations and found that congregational attributes were related to psychosocial well-being. There were multiple aspects of congregations examined. They included the clergy, weekly services, education programs, facilities, policies, and social programs. Leaders and members were ranked on dimensions of congregational climate (Pargament, Silverman, Johnson, Echemendia, & Snyder, 1983). Pargament and his colleagues used a congregational climate scale that rates congregations on ten different dimensions. They were openness to change, stability, social concern, autonomy, level of activity, order/clarity, sense of community, intrinsic religious orientation, extrinsic religious orientation, and expressiveness.

These researchers found that the environments of churches varied. Small black Protestant congregations had greater expressiveness, social concern, and extrinsic climate scores. Small white Protestant congregations had higher levels of a sense of community and expressiveness, but, unlike black ones, lower levels of stability and social concern. Large white Catholic parishes had lower expressiveness and sense of community scores, but a higher activity score. Importantly, the well-being of members was related to the psychosocial environment of their congregation. For example, members who perceive more autonomy in their congregations reported higher levels of self-esteem and life satisfaction. Climate may be reciprocally determined and could reflect the role of member preferences. For example, expressiveness was negatively related to well-being in some congregations, but positively

related in others. This illustrates the importance of paying attention to organizational aspects of religious spiritual environments and assessing their consequences for health.

THE CLERGY: A BRIDGE OR BARRIER TO TREATMENT?

The National Comorbidity Study (NCS) documented that clergy play a major role in the treatment of mental illness in the United States (Wang, Berglund, & Kessler, 2003). This study of 8,098 individuals from a nationally representative population study in the United States found that among individuals who sought treatment for mental disorders 25% contacted the clergy, 16% contacted psychiatrists, and 16.7% contacted general medical doctors. Nearly one quarter of those seeking help from clergy had the most seriously impairing mental disorders. The majority of persons who sought help from the clergy sought help from the clergy only. Another national study found that the clergy play an important role in helping individuals cope with serious personal crises (Neighbors, Musick, & Williams, 1998). This study found that women were more likely than men to seek help from ministers and that people with economic problems were less likely than those with death and bereavement problems to seek help from clergy. Across problem types, persons who sought help from the clergy first were less likely to seek help from other professionals. Among persons seeking help from only one source, those who use the clergy were more satisfied with the support received.

There has been considerable interest in exactly what the clergy do for persons seeking help. A study of ministers in the greater New Haven area in Connecticut provides some information (Young, Griffith, & Williams, 2003). This study found that clergy on average spend 6.2 hours per week in counseling. One third indicated that they spent less time than they wanted to and more than half indicated that they had a regular schedule for counseling sessions, with a weekly schedule being the most common. In this study most of the counseling reported by clergy was short term. Two thirds reported that the duration of their

typical counseling session was three months or less. Forty percent of the clergy reported that they had seen people with severe mental illness, and two thirds reported that they had dealt with substance abuse in their congregation. Two thirds of the clergy also counseled suicidal persons, and over 60% had counseled persons they considered dangerous.

RELIGION, SOCIAL SUPPORT, AND COPING WITH STRESS

The life stress paradigm is an important perspective in assessing a potential way in which religion can affect health. Research shows that exposure to psychosocial stressors is a strong predictor of the onset and the course of some mental health problems. Social resources can improve health and reduce stress in at least three ways. Social ties can directly improve health by meeting basic needs for affection, social contact, and security. Supportive social ties can also reduce social conflict and tensions, thereby reducing stress. Social ties can also buffer the negative effect of stress on health. That is, in the face of stress, social ties can reduce at least some of the negative consequences of stress on health.

Research has found that religious institutions can serve as important sources of social support (Taylor & Chatters, 1988). Taylor and Chatters (1988) report that congregation-based friendship networks can serve as a type of extended family. Another study found that church-related friends are strongly related to life satisfaction for elderly blacks and account for the advantage and subjective well-being for older blacks (Ortega, Crutchfield, & Rushing, 1983). Religious support has also been shown to provide important benefits to both blacks and whites (Ferraro & Koch, 1994). An example of a buffering effect is a study conducted in New Haven, Connecticut, of 720 adults (Williams, Larson, Buckler, Heckmann, & Pyle, 1991). This study found that attendance at religious services did not directly reduce psychological distress. However, when followed for two years, religious attendance reduced the negative effects of the stressors (28 undesirable life events and 16 health problems) on mental health.

RELIGIOUS COPING AND MENTAL HEALTH: BELIEFS MATTER

There has also been considerable interest in the ways in which religious coping can be a resource that has health consequences. Tix and Frazier (1998) studied religious coping among patients dealing with kidney transplant surgery. They found that religious coping (for example, seeking God's help in dealing with the situation, trusting God to handle the situation, and trying to find a lesson from God in the situation) was associated with higher life satisfaction and less psychological distress both cross-sectionally and when the patients were followed prospectively. Particular religious belief systems may also create expectations and anxieties that can have consequences for mental health. The role of specific religious beliefs has been understudied in the research on religion and mental health. A study of 1,139 adults in the Detroit metropolitan area found that the belief in eternal life was positively associated with psychological well-being (Ellison, Boardman, Williams, & Jackson, 2001). This study also found a buffering effect for belief in eternal life. Belief in eternal life reduced the negative effect of some stressors (such as chronic health problems and financial problems) on psychological well-being and reduced the negative effects of work-related stress on psychological distress.

The work of Ken Pargament has also highlighted the role of positive and negative religious coping. For example, a study of 296 members of two churches coping with the Oklahoma City bombing assessed both positive religious coping and negative religious coping (Pargament, Smith, Koenig, & Perez, 1998). Negative religious coping included items like wondering whether God had abandoned them, feeling that God was punishing the victims of the bombing for their sins and lack of spirituality, and questioning whether God really exists. Pargament found that positive religious coping was associated with growth and recovery over time while negative coping was strongly predictive of symptoms of post-traumatic stress disorder (PTSD) and higher levels of callousness and insensitivity to the distress of others.

LESSONS FOR CHRISTIAN MENTAL HEALTH PROFESSIONALS

The research reviewed affirms that supportive communities, health behaviors, and positive belief systems have the potential to enhance mental health. These findings are consistent with core values of the Christian faith and provide affirmation of many tenets of Scripture. At the same time, the extant research also raises some sobering questions.

WHY STAND YE IDLE?

The high levels of psychiatric disorders in the population have important implications for the work of religious congregations. Recent research consistently finds that psychiatric disorders are more disabling than physical disorders. Depression, for example, one of the more common mental disorders, is a very disabling condition. Recent analyses of data from the World Health Surveys which examined 245,000 participants from over sixty countries found that depression is one of the leading causes of disease burden worldwide (Moussavi et al., 2007). This study found that depression produces the greatest detriment in health impairment compared with the chronic diseases like angina, arthritis, asthma, and diabetes. Thus, the high levels of stress, mental disorder, and disability raise a question of the role of the clergy and religious organizations being trained to appropriately detect, screen, and refer individuals to receive help for their mental health challenges. Failure to do this will leave considerable pain and human suffering unaddressed and will leave the church with a very impaired workforce. Attention also needs to be given to the mental health needs of clergy and their families. Although the work of the clergy can be rewarding, it is also demanding and stressful and many clergy face challenges in obtaining desired levels of social support (Weaver et al., 2002).

Some research suggests that certain religious beliefs can discourage individuals from seeking help for mental help problems. In particular, persons who regard their spirituality and faith as the most effective cure for mental illness are less likely to seek treatment (Trice & Bjorck,

2006). The challenge for Christian leaders is to identify how to find the right balance in depending on God as the source of all true healing while at the same time using all of the instruments that He has provided to accomplish this.

RELIGIOUS INSTITUTIONS: MENTAL HEALTH PROMOTION CENTERS?

Churches have also been used as centers for health promotion activities. A broad range of health screenings and health inventions have been conducted at churches. These include increased fruit and vegetable consumption; reduced outdoor advertising for alcohol and tobacco; increased weight loss; lower blood pressure; reduced energy intake, dietary intake, and sodium intake; and increased screening for breast, cervical, colon, and prostate cancer. All of these things have been done by church-based interventions. At the same time, few church-based interventions have focused heavily on mental health. For example, there have been few interventions that address stress and stress management or that explicitly deal with mental health support and recovery.

Levels of stress are high and increasing in the population. The American Psychological Association (APA, 2007) conducted a survey that documented the high levels of stress within the American population. This survey found that 79% of adults in the United States reported that they live under higher than healthy levels of stress. Thirty-two percent indicated that they are living under extreme stress and 48% believe that their stress level had increased in the last five years. Almost one half (49%) also said that stress had a negative impact on both their personal and professional lives. The leading causes of stress reported by adults in the United States were work (74%), money (73%), workload (66%), children (64%), family responsibilities (60%), and health concerns (55%). These high levels of stress suggest that there is a great need within the population for strategies to effectively cope and address stressful life situations.

HOW DO WE CREATE TRUE HEALING COMMUNITIES?

Religious communities can be a source of social networks that improve health, but they can also be a source of conflict, criticism, and stress. How can our organizational structures and processes promote psychological well-being and minimize interpersonal tensions? There is some evidence in the literature that mental health varies by religious denomination, at least for some small conservative denominations. A large population-based study in North Carolina found that even after adjustment for psychosocial variables, socio-demographic factors, life events, and social support, the levels of major depression were three times higher among Pentecostals than among persons with other religious affiliations (Meador et al., 1992). How do Seventh-day Adventists fare on mental health? Some limited evidence indicates that small Christian sects that tend to follow a strict lifestyle and live apart from the world tend to have an elevated risk of psychoses but a lower risk of neuroses (Dalgalarrondo, 1993).

HOW DO WE PREPARE OUR CONGREGANTS TO COPE WITH ADVERSITY?

Religion is a widely used coping strategy by the American population in dealing with life's stressors. Some ways of using religious beliefs can lead to adaptation and adjustment over time, while other ways can lead to worsening mental health. The Alameda County Study also provides examples of how religion can have both positive and negative buffering effects (Strawbridge, Shema, Cohen, Roberts, & Kaplan, 1998). This study found that both organizational and non-organizational religiosity reduced the negative effects of non-family stressors (such as financial problems, neighborhood stress, and chronic illness) on depression. However, non-organizational religiosity exacerbated the effects of child problems on depression. And organizational religiosity exacerbated the effects of family stressors (such as marital stress, abuse, and care-giving problems) on depression. Strawbridge suggests life's problems that raise conflicts with values emphasized by religious

organizations (unruly children, difficult marriages, problems caring for older parents) may be perceived as unlikely to occur, such that when they happen they can lead to feelings of stigmatization and low levels of active conflict resolution.

WHAT IS SPIRITUALITY?

A major issue in the study of religion in health has been the problem of defining and distinguishing religion from spirituality. Harold Koenig (2008) has argued that the definition of spirituality has changed in recent decades. He indicates that although historically the language of spirituality was grounded in the practice of religious beliefs and behavior, spirituality has been redefined by some more recently in terms of subjective self-fulfillment. Importantly, he argues that some of the current definitions of spirituality, which include positive mental health and human values as part of its definition, are tautological. If one defines spirituality as positive human traits, including those that reflect good mental health, one eliminates the possibility of examining the association of spirituality with mental health. Accordingly, he argues that the growing inclusion of positive psychological factors in definitions of spirituality is a troublesome development. This problem is true of the FACIT-Sp (Functional Assessment of Chronic Illness Therapy—Spiritual Well-Being) which is one of the most commonly used measures of spirituality in studies involving cancer patients. The FACIT-Sp consists of twelve statements asking respondents to indicate their agreement. These statements include, among others, these: "I feel peaceful." "I have a reason for living." "I feel a sense of purpose in my life." "I am able to reach deep down within myself for comfort." "I feel a sense of harmony within myself." "I know that whatever happens with my illness, things will be okay." Not surprisingly, studies have found that spirituality measured in this way is related with good mental health.

A national study in the United States suggests that the relationship between religion and spirituality is quite complex (Shahabi et al., 2002). The 1998 General Social Survey found that 52% of American

adults rate themselves as religious and spiritual. Ten percent rated themselves as spiritual only, 9% as religious only, and 29% as neither religious nor spiritual. Self perceptions of spirituality were associated with being younger, female, and highly educated. Self perceptions of religiosity were associated with being older, an ethnic minority, less educated, and a resident of a southern state. Importantly, individuals' self perceptions of religiousness and spirituality were related to a broad range of characteristics. Spiritual and religious adults attended religious services, prayed, meditated, read the Bible, and had more daily spiritual experiences than persons in any of the other three groups. They were less distressed and less mistrusting than the religious-only group, but they (and the religious-only group) had high levels of intolerance. The spiritual-only group was politically liberal, tolerant of diverse points of view, and unwilling to claim a denominational affiliation.

CAN CERTAIN RELIGIOUS BELIEFS AND THE CERTAINTY OF BELIEF BREED INTOLERANCE?

Some types of religious beliefs and orientations can lead to rigidity in thinking, prejudice, and intolerance. There has been a long history of interest in the relationship between religion and racial prejudice. Some of the early research found that religious people were more likely to be prejudiced than non-religious people. The more religious people were on traditional indicators of theological orthodoxy the more prejudiced they were. Subsequent research indicated that the association between religion and prejudice varied by the type of underlying religious orientation (Donahue, 1985). Among persons who were intrinsically religious, there was no association between religion and prejudice, while there was a strong relationship between religion and prejudice among the extrinsically religious. How do we train our leaders and members to rise above the normal human tendencies of in-group favoritism and out-group discrimination? How can we through our individual and institutional practices create a culture that reinforces viewing every child of humanity through heaven's eyes?

Research on the relationship between religious beliefs and domestic violence provides another window on the potential negative consequences of some religious beliefs. Some evidence suggests that conservative Christians, especially women, report elevated rates of perpetrating interpersonal violence (Drumm et al., 2006). A study in the North Pacific region of the United States found high levels of intimate partner violence among Adventists. For example, 65% of respondents reported that they had experienced controlling and demeaning behavior at least once in their lifetime (Drumm et al., 2006). These researchers suggested that theological beliefs about the headship of men and the submission of women can provide the justification for some men to perpetrate violence and the rationalization for some women to accept it. Some observers have also raised the question of whether certain eschatological beliefs can have negative consequences. Newport (2006), for example, argued that Adventism's distinctive eschatology provided the seeds that led to the development of David Koresh's theology and the tragedy of the Branch Davidians in Waco, Texas. This highlights the importance of paying greater attention to the content of religious beliefs and their potential positive and negative consequences.

HOW TO IMPROVE THE ASSESSMENT OF RELIGION IN FUTURE RESEARCH

Religious rituals and symbols have been neglected in the study of religion and health (Williams, 1994). For example, the role that Sabbath observance—a weekly mini-vacation of rest and religious activity—can have in reducing stress has not been systematically examined. The promise of thinking broadly about the pervasive ways religion can affect health is illustrated in research done by Idler and Kasl (1992). In a large study of elderly persons, research found that fewer deaths occurred immediately before or during religious holidays than in the month after religious holidays. This effect existed for both Christians and Jews and was stronger among the more observant members of religious congregations. The effects for Christians were seen only for Christian holidays and

effects for Jews were evident only for Jewish holidays. The ways in which religious architecture can express ideology and facilitate social support and social control has also not been explored (Williams, 1994).

IS MENTAL HEALTH MORE THAN THE ABSENCE OF MENTAL PROBLEMS?

An important direction for future research and consideration is an expansion of the concept of mental health. Keyes (2007) indicates that mental health is more than merely the absence of psychiatric disorders. He divides the United States population in terms of mental health into individuals who are languishing, moderately mentally healthy, and flourishing. In order to be flourishing, individuals have to be characterized with both the absence of mental disorders *and* the presence of positive mental health dimensions. These dimensions include positive emotions (such as being regularly cheerful, interested in life, in good spirits, happy, calm, and peaceful), positive psychological functioning (the presence of self acceptance, personal growth, purpose in life, autonomy, and positive relations with others), and positive social functioning (social acceptance, social actualization, social contributions, and social integration). Research conducted by Keyes using national data indicates that persons who are flourishing (mentally healthy) are more productive citizens and enjoy better health on multiple dimensions. Mentally healthy adults function better than adults with moderate mental health who in turn function better than adults who are languishing. Compared to their less healthy peers, the mentally healthy have fewer disability days, lower levels of health limitations, fewer chronic physical diseases and conditions, and lower levels of health care utilization. They also have highest levels of psychosocial functioning. That is, they reported the lowest level of perceived helplessness, the highest level of functional goals (knowing what they want from life), the highest level of self-reported resilience (learning from adversities), and the highest level of intimacy (feeling very close with family and friends).

RETURNING TO A WHOLISTIC VIEW OF MENTAL HEALTH

There is increasing evidence also of the intimate connections between the physical and the mental and of the importance of good physical habits to support positive psychological well-being. One recent study found that a vegetarian diet can lead to lower levels of stress and reduced exposure to the negative mental health sequelae from exposure to stress (Varshney, Bedi, & Bhandari, 2005). Other recent research has documented the negative effects of sleep deprivation on moral judgment. One study found that two nights of sleep deprivation increases willingness of adults to agree with solutions that violate their personal normal beliefs (Kilgore et al., 2007). Another study found that after two nights of sleep deprivation, adults had difficulty in withholding an inappropriate response, even when they were able to attend to stimuli and respond accurately to stimuli (Drummond, 2006). Other research reveals that physical exercise is effective in treating depression and anxiety disorders. There appears to a dose-response relation with depression and anxiety disorders, and exercise is also associated with lower relapse rates among depressed patients (Dunn & Bettinghaus, 2006). A study of faculty at three Adventist colleges and universities found that those following good health practices reported lower levels of stress (Ashley & Cort, 2007). Thus, effective mental health interventions should be wholistic and seek more than just the recovery of illness—they should seek to promote a good life.

The Bible is clear that God wants His children to enjoy abundant health. Jesus indicated that He had come to ensure that we have an abundant life. This paper indicates that a growing body of scientific research confirms that many secrets of good mental health are found in God's revealed will in Scripture. At the same time, scientific research also indicates that distortions of God's principles can lead to untold harm, physically and mentally.

REFERENCES

American Psychological Association. (2007). Stress in America. In A. P. Association (Ed.), *Mind/body health: For a healthy mind and body, talk*

to a psychologist. Washington, D.C.: American Psychological Association.

Ashley, G., & Cort, M. (2007). The effects of the practice of the Newstart health regimen on faculty stress among faculty at Seventh-day Adventist colleges and universities. *Christian Higher Education, 6*, 131–142.

Dalgalarrondo, P. L. M. (1993). Religious affiliation and psychiatric diagnosis: The influence of Christian sect membership on diagnosis distribution. *European Archives of Psychiatry and Clinical Neuroscience, 243*, 47–53.

De Sousa, A. (2005). The role of music therapy in psychiatry. *Alternative Therapy Health Medicine, 11*(6), 52–53.

Donahue, M. J. (1985). Intrinsic and extrinsic religiousness: Review and meta-analysis. *Journal of Personality and Social Psychology, 48*, 400–419.

Drumm, R., McBride, D., Hopkins, G., Thayer, J., Popescu, M., & Wrenn, J. (2006). Intimate partner violence in a conservative Christian denomination: Prevalence and types. *Social Work & Christianity, 33*, 233–251.

Drummond, S. P. (2006). Searching for the brain bases of insomnia. *Journal of Clinical Sleep Medicine, 2*, 323–324.

Dunn, A. L., & Bettinghaus, E. P. (2006). Diffusion and dissemination for increasing physical activity in world populations. *American Journal of Preventive Medicine, 31*(4 Suppl.), S94–96.

Durkheim, E. (1951). *Suicide: A Study in Sociology.* Seattle, WA: The Free Press.

Ellison, C. G., Boardman, J. D., Williams, D. R., & Jackson, J. S. (2001). Religious involvement, stress, and mental health:. *Social Forces, 80*, 215–249.

Ferraro, K. F., & Koch, J. R. (1994). Religion and health among black and white adults. *Journal for the Scientific Study of Religion, 33*, 362–375.

Freud, S. (1961). *The Future of an Illusion: Civilization and Its Discontents, and Other Works.* London: Hogarth Press and the Institute of Psycho-Analysis.

Gilkes, C. (1980). The black church as a therapeutic community. *Journal of Interdenominational Theological Center, 8*, 29–44.

Griffith, E. E. H., English, T., & Mayfield, V. (1980). Possession, prayer and testimony. *Psychiatry, 43*, 120–128.

Griffith, E. E. H., & Mathewson, M. A. (1981). Original communications: Communitas and charisma in a black church service. *Journal of the National Medical Association, 73*, 1023–1027.

Griffith, E. E. H., Young, J. L., & Smith, D. L. (1984). Therapeutic elements in a black church service. *Hospital and Community Psychiatry, 35*, 464–469.

Hummer, R. A., Rogers, R. G., Nam, C. B., & Ellison, C. G. (1999). Religious involvement and U.S. adult mortality. *Demography, 36*, 273–285.

Idler, E. L., & Kasl, S. U. (1992). Religion, disability, depression, and the timing

of death. *The American Journal of Sociology, 97,* 1052–1079.

James, W. (1902). *The Varieties of Religious Experience: A Study in Human Nature.* New York: Longmans, Green and Co.

Johnson, M. E., Brems, C., & Burke, S. (2002). Recognizing comorbidity among drug users in treatment. *The American Journal of Drug Abuse and Alcohol Abuse, 28*(2), 243–261.

Kessler, R. C., et al. (2005). Lifetime prevalence and age-of-onset distributions of DSM-IV disorders in the National Comorbidity Survey replication. *Archives of General Psychiatry, 62,* 593–602.

Kessler, R. C., Chiu, W. T., Demler, O., & Walters, E. E. (2005). Prevalence, severity, and comorbidity of 12-month DSM-IV disorders in the National Comorbidity Survey replication. *Archives of General Psychiatry, 62,* 617–627.

Kessler, R. G., Gruber, M. J., Sampson, N. A., Ursano, R. J., & Wessely, S. (2008). Trends in mental illness and suicidality after Hurricane Katrina. *Journal of Molecular Psychiatry, 13,* 374–384.

Keyes, C. (2007). Promoting and protecting mental health as flourishing. *American Psychologist, 62,* 95–108.

Kilgore, W. D., Kilgore, D. B., Day, L. M., Li, C., Kamimori, G. H., & Balkin, T. J. (2007). The effects of 53 hours of sleep deprivation on moral judgment. *Sleep, 30*(3), 345–352.

Koenig, H. G., Hays, J. C., Larson, D. B., George, L. K., Cohen, H. J., McCullough, M., Meador, K., Blazer, D. G. (1999). Does religious attendance prolong survival?: A six-year follow-up study of 3,968 older adults. *Journal of Gerontology: Medical Sciences, 54A,* M370-M377.

Koenig, H. G. (2008). Concerns about measuring "spirituality" in research. *Journal of Nervous and Mental Disease, 196,* 349–355.

Larson, D. B., Pattison, E. M., Blazer, D. G., Omran, A. R., & Kaplan, B. H. (1986). Research on religious variables in four major psychiatric journals, 1978–1982. *American Journal of Psychiatry, 143,* 329–334.

Marx, K. (1844). *Deutsch-Französische Jahrbücher,* Paris, 7 & 10 February 1844. Retrieved from http://www.marxists.org/archive/marx/works/1843/critique-hpr/intro.htm

Meador, K., Koenig, H., Hughes, D., Blazer, D., Turnbull, J., & George, L. (1992). Religious affiliation and major depression. *Hospital and Community Psychiatry, 43,* 1204–1208.

Moussavi, S., Chatterji, S., Verdes, E., Tandon, A., Patel, V., & Sustun, B. (2007). Depression, chronic diseases, and decrements in health: Results from the World Health Surveys. *Lancet, 370,* 851–858.

Neighbors, H. W., Musick, M. A., & Williams, D. R. (1998). The African American minister as a source of help for serious personal crises: Bridge or barrier to mental health care? *Health Education and Behavior, 25*, 759–777.

Newport, K. G. C. (2006). *The Branch Davidians of Waco: The history and beliefs of an apocalyptic sect.* Newport, Oxford: Oxford University Press.

Office of Applied Studies. (2006). Results from the 2005 National Survey on Drug Use and Health: National Findings. *DHHS Publication No. SMA 06-4194, NSDUH Series H-30.* Rockville, MD: Substance Abuse and Mental Health Services Administration.

Ortega, S. T., Crutchfield, R. D., & Rushing, W. A. (1983). Race differences in elderly personal well-being. *Research on Aging, 5*, 101–118.

Pargament, K., et al. (1983). The psychosocial climate of religious congregations. *American Journal of Community Psychology, 11*, 351–381.

Pargament, K., Smith, B., Koenig, H., & Perez, L. (1998). Patterns of positive and negative religious coping with major life stressors. *Journal for the Scientific Study of Religion, 37*, 711–725.

Pleis, J., & Lethbridge-Cejku, M. (2005). *Summary health statistics for U.S. adults: National Health Interview Survey, 2005.* Hyattsville, MD: National Center for Health Statistics.

Powell, L. H., Shahabi, L., & Thoresen, C. E. (2003). Religion and spirituality: Linkages to physical health. *The American Psychologist, 58*, 36–52.

Rue, L. D. (1985). Our most outrageous blind spot: The academic study of religion. *The Chronicle of Higher Education, 29*, 40.

Shahabi, L., Powell, L. H., Musick, M. A., Pargament, K. I., Thoresen, C. E., Williams, D. R., et al. (2002). Correlates of self-perceptions of spirituality in American adults. *Annals of Behavioral Medicine, 24*, 59–69.

Sherrill, K. A., & Larson, D. B. (1994). The anti-tenure factors in religious research in clinical epidemiology and aging. In J. S. Levin (Ed.), *Religion in aging and health: Theoretical foundations and methodological frontiers* (pp. 149–177). Thousand Oaks, CA: SAGE Publications, Inc.

Shreve-Neiger, A. K., & Edelstein, B. A. (2004). Religion and anxiety: A critical review of the literature. *Clinical Psychological Review, 24*(4), 379–397.

Sloan, R P., Bagiella, E., & Powell, T. (2001). Without a prayer: methodological problems, ethical challenges, and misrepresentations in the study of religion, spirituality and medicine. In: T. G. Plante & A. C. Sherman, eds., *Faith and health: Psychological perspectives.* New York: Guilford Press, pp. 339–354.

Smith, T., 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.

Stark, R., & Bainbridge, W. S. (1985). *The Future of Religion: Secularization, Revival, and Cult Formation.* Berkeley: University of California Press.

Strawbridge, W. J., Shema, S. J., Cohen, R. D., & Kaplan, G. A. (2001). Religious attendance increases survival by improving and maintaining good health behaviors, mental health, and social relationships. *Annals of Behavioral Medicine, 23*, 68–74.

Strawbridge, W. J., Shema, S. J., Cohen, R. D., Roberts, R. E., & Kaplan, G. A. (1998). Religiosity buffers effects of some stressors on depression but exacerbates others. *Journal of Gerontology, 53B*(3), S118–126.

Taylor, R. J., & Chatters, L. M. (1988). Church members as a source of informal social support. *Review of Religious Research, 30*, 193–203.

Tix, A. P., & Frazier, P. A. (1998). The use of religious coping during stressful life events. *Journal of Consulting and Clinical Psychology*, 411–422.

Trice, P., & Bjorck, J. (2006). Pentecostal perspectives on causes of depression. *Professional Psychology, 37*, 283–294.

Varshney, V. P., Bedi, M., & Bhandari, B. (2005). Effect of non-vegetarian diet on cardiovascular reactivity to mental stress in young adults. *Vascular Disease Prevention, 2*, 293–298.

Wallace, J. M., & Forman, T. A. (1998). Religion's role in promoting health and reducing risk among American youth. *Health Education & Behavior, 25*, 721–741.

Wang, P., Berglund, P., & Kessler, R. (2003). Patterns and correlates of contacting clergy for mental disorders in the United States. *Health Services Research, 38*, 647–673.

Weaver, A. J., Larson, D. B., Flannelly, K. J., Stapleton, C. L., & Koenig, H. G. (2002). Mental health issues among clergy and other religious professionals: A review of research. *Journal of Pastoral Care & Counseling, 56*, 393–403.

Williams, D. R. (1994). The concept of race in health services research: 1966 to 1990. *Health Services Research, 29*, 261–274.

Williams, D. R., Larson, D. B., Buckler, R. E., Heckmann, R. C., & Pyle, C. M. (1991). Religion and psychological distress in a community sample. *Social Science and Medicine, 32*, 1257–1262.

Williams, D. R., & Sternthal, M. (2007). Spirituality, religion and health: Evidence and research directions. *Medical Journal of Australia, 186*(10), 47–50.

Young, J. L., Griffith, E. E., & Williams, D. R. (2003). The integral role of pastoral counseling by African-American clergy in community mental health. *Psychiatric Services, 54*, 688–692.