Multidimensional Measurement of Religiousness/Spirituality for Use in Health Research:

A Report of the Fetzer Institute/ National Institute on Aging Working Group

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Preface

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This project was initially designed to bring together experts interested in addressing measurement issues around religiousness/spirituality and health from a multidimensional perspective. The booklet, which included the Brief Multidimensional Measure of Religiousness/Spirituality (BMMRS), was published as a step to encourage the examination of religion/spirituality and health with sensitivity to the depth and complexity of the topic.

The response to this effort has been much greater than anticipated. We continue to receive daily requests for the booklet. To date, 2,000 copies of the publication have been distributed and another 1,200 have been downloaded from the Internet.

In a recently completed survey of booklet users assisted by the Kercher Center for Social Research at Western Michigan University, more than 80 percent of respondents believed the booklet was useful in enabling researchers to enter, or to conduct better research in the field of religiousness/spirituality and health outcomes. The most popular subscales being used are the Religious/Spiritual Coping and the Daily Spiritual Experiences Scales (DSES). One fourth of respondents have used the booklet in either a course that they teach, in a seminar, or in a symposium. Practitioners in clinical work are also using the booklet and the measurement instruments in addition to researchers.

As BMMRS and subscales are increasingly used in research projects, the number of publications citing the booklet indicates that research projects are beginning to be published.

The journals represented include American Journal of Psychiatry, Annals of Behavioral Medicine, Gerontologist Medical Care, Journal of Health Psychology, Journal of the Scientific Study of Religion, and the Journal of Adult Development.

A paper on the conceptual background to the work and the development of the BMMRS was recently published in the journal *Research on Aging:* "Measuring Multiple Dimensions of Religion and Spirituality for Health Research," Ellen L. Idler, Marc A. Musick, Christopher G. Ellison, Linda K. George, Neal Krause, Marcia G. Ory, Kenneth I. Pargament, Lynda H. Powell, Lynn G. Underwood, David R. Williams, 2003, 25:4.

In a joint request for applications entitled Studying Spirituality and Alcohol, sponsored by the National Institute on Alcohol Abuse and Alcoholism of the National Institutes of Health and the Fetzer Institute, many of the 16 funded research projects used the measures from this booklet.

Please check for additional information regarding the DSES on page 17.

We want to thank all researchers and scholars who have provided us with thoughtful comments and suggestions concerning their projects and the needs of the field. We remain interested in learning about the general dissemination of work that utilizes a multidimensional approach and the BMMRS, as well as learning more about clinical uses of the booklet and BMMRS. Continue to give us feedback on the use and development of this collection of scales by e-mailing us at info@fetzer.org.

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Introduction

This publication is the product of a national working group supported by the Fetzer Institute in collaboration with The National Institute on Aging (NIA), part of the National Institutes of Health (NIH). The working group examined key dimensions of religiousness/spirituality as they relate to physical and mental health outcomes. The 12 papers in this report include brief literature reviews, recommended instruments, and bibliographies for each identified domain. Also included is the current draft of the Brief Multidimensional Measure of Religiousness/ Spirituality: 1999, an instrument developed by the working group, which is substantially based on select questions from each domain.

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Background

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In recent years, a growing body of literature has explored the implications of religion and spirituality for various mental and physical health outcomes (for reviews see Koenig 1994, Levin 1994). While the findings are not univocal, mounting evidence indicates that various dimensions of religiousness and spirituality may enhance subjective states of well-being (Ellison 1991), lower levels of depression and psychological distress (Idler 1987, Williams et al 1991), and reduce morbidity and mortality (for a review see Levin 1996). Such findings have elicited considerable attention from medical researchers in epidemiology, psychology, sociology, gerontology, and other fields.

Health researchers who seek to include religious or spiritual domains in their studies typically confront various problems. Few health researchers have a scholarly background in religiousness/spirituality and most are not acquainted with the long history of attempts to conceptualize and measure multiple dimensions of religiousness (Krause

1993, Williams 1994). It is becoming clear that religious/spiritual variables cannot simply be combined into a single scale that examines the effects of a single variable, "religiosity"; rather, each relevant dimension of religiousness and spirituality should be examined separately for its effects on physical and mental health. Until recently, certain aspects of religiousness and spirituality that are arguably most germane to the study of health outcomes have received minimal empirical attention from social and behavioral scientists. Consequently, we currently have no widely used and validated set of standard measures for key religious/spiritual domains to recommend to interested health researchers.

To address these issues and the growing body of evidence demonstrating links between religious and spiritual variables and health outcomes, the NIA and the Fetzer Institute convened a panel of scholars with expertise in religiousness/spirituality and health/wellbeing. The initiative began with a large conference held at the NIH in March 1995. Participants agreed that collecting abundant data on religiousness is not feasible for many health researchers because they have limited time in which to inquire about a wide range of topics germane to health outcomes. One primary recommendation from the conference was that future studies focus on isolating mechanisms that relate religiousness/spirituality to health over a lifetime. Isolating such mechanisms could aid researchers in selecting specific measures that best explicate the association between religiousness/spirituality and health.

Subsequent to the conference, the NIA and the Fetzer Institute established a core working group to:

- Identify those domains of religiousness/ spirituality most likely to impact health;
- Suggest potential mechanisms whereby these variables might operate; and
- Provide a short multidimensional survey for use in clinical research.

In their work to conceptualize and measure key health-relevant domains of religiousness/spirituality, the working group identified 3 important considerations.

- It became important to articulate the distinction between religiousness and spirituality. While some may regard the 2 as indistinguishable, others believe religiousness has specific behavioral. social, doctrinal, and denominational characteristics because it involves a system of worship and doctrine that is shared within a group. Spirituality is concerned with the transcendent, addressing ultimate questions about life's meaning, with the assumption that there is more to life than what we see or fully understand. Spirituality can call us beyond self to concern and compassion for others. While religions aim to foster and nourish the spiritual lifeand spirituality is often a salient aspect of religious participation—it is possible to adopt the outward forms of religious worship and doctrine without having a strong relationship to the transcendent. Combining the 2 areas—religiousness and spirituality—in 1 instrument was a goal that realized this distinction.
- Although much of the existing literature addresses salutary effects of religious involvement on health outcomes, some types of religious belief and experience may undermine health and well-being. Thus, the group also included measures to gauge potentially unhealthy attitudes or behaviors.
- The project's focus was to identify and measure domains believed to be significant for health outcomes, not to reinvent previous work. Many of the domains included in this publication have been largely ignored in health research. Furthermore, the measure-

ment instruments were to address spirituality and health in a unified or bi-dimensional framework.

The working group's primary mission was to develop items for assessing health-relevant domains of religiousness and spirituality as they are broadly understood. While many of the items have a strong Judeo-Christian focus (appropriately so, given the current distribution of religious preferences in the US), the group also proposed a number of items relevant to the growing proportion of Americans who engage in spiritual activities outside the context of churches and synagogues.

Potential Mechanisms for Health Outcomes

The working group began with the assumption that there are many ways religiousness and spirituality may be connected to health outcomes. Behavioral, social, psychological, and even directly physiological causal pathways were considered. The net was cast broadly to link dimensions of religiousness and spirituality to as many of these potential mechanisms as possible.

Behavioral Mechanisms: Religiousness/ spirituality may protect against disease indirectly by association with healthy lifestyles. Certain religious denominations advocate healthy diets and advise against smoking (Cochran, Beeghley, and Bock 1988). The association between less alcohol or drug use and religiousness is relatively wellestablished: highly religious people are consistently less likely to abuse drugs or alcohol than less religious people. Social connectedness—a concomitant of participation in organized religion—and absence of depression have been associated with improved information about health care resources, better compliance with health care regimens, and quicker response to acute

health crises (Umberson 1987, Doherty et al 1983, Blumenthal et al 1982). While not all religions have specific teaching regarding these health-risk behaviors, theologians have argued that "purity of life" is a "generic religious value" and that most religious and spiritual traditions have beliefs about maintaining the health of mind, body, and soul.

Social Mechanisms: Religious and spiritual groups may also provide supportive, integrative communities for their members. Religious group membership is considered 1 of the major social ties, along with family, friends, and other social groups. In a number of epidemiological studies, such ties, including religious group membership, have reduced mortality in a linear fashion as the number of ties increases (Berkman and Syme 1979, House et al 1988). The support offered by these social ties is often conceptualized as either emotional (sharing feelings, sympathy, or encouragement) or instrumental (tangible offers to assist with tasks, materials, or money). Religious congregations are potential sources of many types of support, both between members who know one another and those who may not. In 1 North Carolina study, frequent attendees of religious services had larger social networks, and more contacts and social support from people within those networks than infrequent attendees or nonattendees; these findings have since been replicated in a US national sample (Bradley 1995) and in a large sample of elderly residents of a northeastern city (Idler and Kasl 1997, Patel 1985).

Psychological Mechanisms: Religious groups offer members a complex set of beliefs about God, ethics, human relationships, and life and death, beliefs which are directly relevant to health. Research in the US shows that the subjective beneficial effects of participating in religious services, prayer, and Bible reading are primarily due to their role in strengthening religious belief systems: individuals who describe themselves as having a strong religious faith report being happier and more satisfied with their lives.

Religious involvement also appears to have significant protective effects for the emotional and physical well-being of individuals in crisis. Religious coping, when compared with other ways of coping, appears to be especially helpful in situations, such as bereavement or serious illness, where little direct control is possible. Additional studies of heart surgery patients, hospitalized veterans, elderly women with hip fractures, men with severe disabilities, recent widowers, and parents who have lost a child found significantly less depression among those who had religious resources. Whether the stressor is a life-threatening disease or disability, an environmental disaster, or an interpersonal conflict, the subject's perceived support from God or other members of the congregation may reduce reaction to the stressor (Seeman and McEwen 1996). Experience of a deep inner peace, often in association with meditation and prayer, may signal a shift from sympathetic arousal to parasympathetic relaxation, which is known to dampen physiological reactions (Seeman and McEwen 1996, Benson 1975, Patel 1985).

Physiological Mechanisms: Religiousness/ spirituality may provide a cushion against both major and minor stressors through direct physiological pathways. Through such neuroendocrine messengers as catecholamines, serotonin, and cortisol, negative emotions have been associated with key pathogenic mechanisms including myocardial ischemia (Jiang 1996), arrhythmias (Kamarck and Jennings 1991), increased platelet aggregation (Levine et al 1985), suppressed immune response (Stone and Boybierg 1994), and elevations in risk factors (Brindley and Rolland 1989). Certain religious/spiritual practices elicit the "relaxation response," an integrated physiological reaction that opposes the "stress response." Repeated elicitation of the relaxation response results in reduced muscle tension, less activity of the sympathetic branch of the autonomic nervous system, less activity of the anterior pituitary-adrenocortical axis, lower blood pressure, lower heart rate, and

improved oxygenation, in addition to altered brain wave activity and function.

These potential mechanisms for health outcomes led the working group to focus on aspects of religiousness/spirituality that have possible connections to areas of health research in which there are known biobehavioral or psychosocial processes at work. While some of the recognized pathways have a direct cushioning effect, it could be argued that religiousness/spirituality enhances coping precisely in situations where predictability and control (concepts central to most models of stress reduction) are limited.

Identified Domains

The working group identified the following key domains of religiousness/spirituality as essential for studies where some measure of health serves as an outcome. In addition, these domains were chosen because of the strength of their conceptualization and theoretical or empirical connection to health outcomes.

Daily Spiritual Experiences
Meaning
Values
Beliefs
Forgiveness
Private Religious Practices
Religious/Spiritual Coping
Religious Support
Religious/Spiritual History
Commitment
Organizational Religiousness
Religious Preference

Additional aspects of religiousness/spirituality that affect health may be identified and studies are currently in process for some of them (see Current Research Efforts). Possible additional aspects include spiritual maturity, mystical experiences, compassion, hope, prayer, and spiritual integration, most of which have never been studied in relation to health and await empirical documentation. If such efforts are made, the working group recommends beginning with a strong conceptualization of the relationship to health.

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How to Use This Report

This publication was developed as a resource that provides an extensive listing of questions relevant to religiousness/spirituality as it relates to health outcomes. It is organized by domain. Each section identifies a domain, describes its relationship to health, recommends measures, discusses previous psychometric work, recommends uses, and discusses key questions and concerns. The religiousness/spirituality domains included in this document are intended for use in studies that evaluate the relationship between religiousness/spirituality and health.

Frequently, health studies present space and time limitations. Because of these limitations, we found it useful to develop a brief measure based substantially on select items from each of the domains. There are several ways to use the instruments included here. Researchers who wish to look merely at the direct effects of select domains of religiousness/spirituality on health can use the recommended measures for a specific domain. For example, an investigator might simply assess the interface between private religiousness/spirituality and health, or religious support and health, or daily spiritual experiences and health, and so on. Such an approach is simple and easy to implement but may overlook the fact that there are potentially important interrelationships among the different domains. Evaluating these, as well as their more immediate effects on health, is likely to lead to a more informed view of the health effects of religiousness/spirituality.

Investigators who wish to take a more comprehensive approach can assess the interplay between multiple domains of religiousness/spirituality and their association with health. For example, a researcher may hypothesize that people committed to their faith are more likely to turn to coreligionists for social support during difficult times than to individuals who are less religious. Fellow parishioners are also more likely to recommend

religious-coping responses. Finally, these religious-coping responses may eliminate or resolve the stressful probe, thereby preserving or improving the health of the person. Such a hypothesis suggests a model of religious commitment that has both direct and indirect effects on health, with the indirect effects operating through religious support as well as religious coping. This researcher could, therefore, use the multidimensional instrument—alone in its brief form or supplemented with long forms for specific domains, such as Religious Support and Religious/Spiritual Coping.

Current Research Efforts

The domains represented in this publication do not address all dimensions of religiousness/spirituality. There are other areas that have not yet been fully developed, either from theoretical or empirical perspectives. To address these areas, the Fetzer Institute supported a request for applications to encourage instrument development for additional domains. Such projects begin with a conceptual foundation, work through a qualitative phase, and end with quantitative measures.

Proposals from the following institutions were selected for funding.

- Duke University Medical Center, Durham, NC: Spiritual History in Relationship to Physical and Mental Health
- University of California-San Francisco, San Francisco, Calif: Spiritual Dimensions of the Compassionate Life
- University of Missouri-St. Louis, St. Louis, Mo: Spiritual Integration and Contemplative Development
- Indiana University School of Medicine, Indianapolis, Ind: Assessment of Perceived Relationship with God
- Bowling Green University, Bowling Green, Ohio: Sacred Purpose: Exploring the Implications of Spiritual Meaning for Physical and Mental Health

The NIA also included "Religion, Aging and Health" as a topic of interest in its FY1997 Small Grant (R03) solicitation. The Small Grant Program provides support for pilot research that is likely to lead to individual research grants. Research projects focusing on the complex interrelationships among religious and spiritual variables, other psychosocial-mediating factors, and health and functioning throughout a lifetime were encouraged. Specific topics of interest included the biopsychosocial mechanisms by which religion, spirituality and/or religious affiliations affect health; and the development of rigorous, but parsimonious scales and indices that can be embedded in more general studies of health and aging.

The following institutions are conducting research projects currently supported by the Behavioral and Social Science Research Program at NIA.

Relationship Between Religion and Health Outcomes

- Arlene R. Gordon Research Institute, New York, NY: Religiousness and Spirituality in Vision-Impaired Elders
- Rutgers University, New Brunswick, NJ: Religion and Spirituality in Recovering from Cardiac Surgery
- University of Michigan, Ann Arbor, Mich: Religion, Stress, and Physical/Mental Health in African-Americans
- University of Michigan, Ann Arbor, Mich: Role of Spirituality in Adjustment after Cardiac Surgery
- John W. Traphagen: Religion, Well-Being, and Aging in Japan

Measurement of Religiousness/Spirituality

- University of Florida-Gainesville, Gainesville, Fla: Refining and Testing a Spirituality Scale in the Elderly
- University of Michigan, Ann Arbor, Mich: Religion, Aging, and Health

- Eastern Virginia Medical School, Norfolk, Va: Religion, Health, and Psychological Well-being in the Aged
- Public Health Institute, Calif: Spirituality and Aging in the Alameda County Study
- Bonnie Walker and Associates, Bowie, Md: Spirituality Among the Elderly in Longterm Care
- Tulane University, New Orleans, La: Religion, Health, and Aging: Quantitative Issues

Recent Developments

Since the initial publication of this report, the Brief Multidimensional Measure of Religiousness/Spirituality: 1999 was embedded in the 1997-1998 General Social Survey (GSS), a random national survey of the National Data Program for the Social Sciences. The basic purpose of this survey is to gather and disseminate data on contemporary American society in order to monitor and explain trends in attitudes and behaviors, and to compare the United States to other societies.

The tables in Appendix A: Additional Psychometric and Population Distribution Data include the questions and domains, percentage distributions, and psychometric data from the GSS and reflect the efforts of the working group in analyzing the data, the findings of which have been prepared as a manuscript and submitted for publication (Idler et al 1999). The Fetzer Institute will have copies of article reprints available upon publication.

Conclusion

Religiousness and spirituality are important and vital features of many people's lives. The working papers included here conclude that these factors play an important role in health and health outcomes. Discussion of religiousness, spirituality, and health in leading

journals of psychosomatic medicine, public health, and gerontology, as well as in general magazines suggests there is widespread interest in these issues. Therefore, the utmost conceptual and methodological clarity is critically important. This report is intended to encourage further research that is conceptually and methodologically sound, and should, therefore, make a lasting and significant contribution to the study of religion, spirituality, and health.

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Daily Spiritual Experiences

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Domain of Measurement

This domain is intended to measure the individual's perception of the transcendent (God, the divine) in daily life and the perception of interaction with, or involvement of, the transcendent in life. The items attempt to measure experience rather than cognitive constructions. Although a variety of the domains in the more complete Brief Multidimensional Measure of Religiousness/Spirituality: 1999 address spirituality, this domain makes spirituality its central focus and can be used effectively across many religious boundaries.

Description of Measures

This domain attempts to capture those aspects of life that represent day-to-day spiritual experience particularly well. The domain was designed to be a more direct measure of the impact of religion and spirituality on daily life. The items assess aspects of day-to-day spiritual experience for an ordinary person, and should not be confused with measures of extraordinary experiences (such as near-death or out-of-body experiences), which may tap something quite different and have a different relationship to health outcomes. The experiences reflected in this domain may be evoked by a religious context or by daily life. They may also reflect the individual's religious history and/or religious or spiritual beliefs.

Cognitive interviews conducted with this instrument across a variety of cultural, religious, and educational groups have encouraged the use of the word "God" to

describe the transcendent. Even the few people for whom the word "God" is not the usual descriptor of the transcendent seem capable of connecting the term with their experience. Although this instrument assumes a predominantly Judeo-Christian research population, the items have shown promise in preliminary evaluations for use with other groups and may require only minor modifications for such application.

This complete domain has not been separately addressed in any published, tested instrument. In developing this instrument, the author drew on in-depth interviews and focus groups conducted over a number of years, exploring in an open-ended way the experiences of a wide variety of individuals from many religious perspectives. These reports of individual experience, plus a review of features of the spiritual life as highlighted in theological, spiritual and religious writings (Buber 1937, van Kaam 1991, Merton 1969, Hanh 1994, Underhill 1927, De Wit 1991), were used to develop this instrument. A review of current scales that attempt to measure some aspect of spiritual experience was also conducted (Hood 1975, Elkins et al 1988, Idler and Kasl 1992). Some of the most helpful insights came from reading works by those who have a deep understanding of the spiritual as an integral aspect of life, and seeing many similar issues emerge in the open-ended interviews. Cognitive interviews on earlier drafts of the instrument led to further refinements, and efforts were repeatedly made to ground the questions in daily experience.

The interviews revealed that connection was an important concept. Western spirituality emphasizes a more personal connection with God and other people, while Eastern spirituality places more emphasis on connection with all of life, and connection in unity. Many people have frequent interaction with the transcendent on a daily basis, looking to God for strength, asking for help, and feeling guidance in specific circumstances. Emotional support from the transcendent is manifested in feelings of being loved and comforted. A concept that emerges frequently in the spiritual literature of both Eastern and Western traditions is the concept of spiritual integration, with a resulting sense of inner harmony or wholeness.

Another concept that emerged was the sense that one can have an existence that does not solely depend on physical or mental aspects of self or social definitions: that one is connected to something beyond self or deeper within self. The ability to transcend the limits of one's present situation frequently comes from a spiritual and religious context. van Kamm (1986) suggests that awe is the central quality of the spiritual life and all other aspects flow from that. Awe comes from a realization that one is not the center of the universe, and from a sense of wonder or mystery that the universe itself speaks of the transcendent and can frame one's approach. David Steindal-Rast (1984) describes how gratefulness can provide a resting place for much of the rest of spiritual life. An attitude of gratefulness suggests that life is a gift rather than a right.

Compassion is a central component to many spiritual traditions (Smith 1991) and its capacity to benefit the one who is compassionate might be profitably explored in the setting of health. Forgiveness, while developed as its own domain in the larger instrument, is linked with the concept of mercy, which is employed in this scale. Giving others the benefit of the doubt, dealing with others' faults in light of one's own, and being generous are possible ways in which the spiritual is evident in everyday life.

In developing this instrument, the notion that one might not have a connection with the transcendent, but that one might long for such a connection was discussed. Longing for connections with God, or the divine, is an aspect of the spiritual life that crops up in the mystical literature of many traditions and can easily be considered an element of daily spiritual experience of ordinary people. Such yearning is also manifested in a sense of wanting to be closer to God, or to merge with the divine.

In developing this domain, 9 key dimensions were identified: connection with the transcendent, sense of support from the transcendent, wholeness, transcendent sense of self, awe, gratitude, compassion, mercy, and longing for the transcendent. The response categories, except for question 16, relate to frequency, and make use of the following scale: many times a day, every day, most days, some days, once in a while, never or almost never.

Connection with the Transcendent

- 1. I feel God's presence.
- 2. I experience a connection to all of life.

As in our relationships with each other, this quality of intimacy can be very important. These questions were developed to address both people whose experience of relationship with the transcendent is one of personal intimacy and those who describe a more general sense of unity as their connection with the transcendent.

Sense of Support from the Transcendent

A sense of support is expressed in 3 ways: strength and comfort, perceived love, and inspiration/discernment.

Strength and Comfort

- 4. I find strength in my religion or spirituality.
- 5. I find comfort in my religion or spirituality.

This dimension has been described as "social support from God." The Index of Religiosity measure—"I obtain strength and comfort

from my religion" (Idler and Kasl 1992)— was broken into 2 parts, based on cognitive interviews that revealed a perception that strength and comfort were distinct. The items intend to measure a direct sense of support and comfort from the transcendent. They may prove highly correlated and may be combined as this instrument undergoes further testing.

Perceived Love

9. I feel God's love for me directly.10. I feel God's love for me through others.

Individuals can believe that God is loving without feeling loved themselves. The emotional support of feeling loved may prove important in the relationship of religious/spiritual issues to health outcomes. The quality of love imputed to God has potential differences from the love humans give each other, and there is a kind of love from others which many attribute to God. God's love can be experienced as affirming, and can contribute to self-confidence and a sense of self-worth independent of actions.

Inspiration/Discernment

- 7. I ask for God's help in the midst of daily activities.
- 8. I feel guided by God in the midst of daily activities.

These items address the expectation of divine intervention or inspiration and a sense that a divine force has intervened or inspired. The "guidance" item was most often deemed similar to a "nudge" from God and more rarely as a more dramatic action.

Sense of Wholeness, Internal Integration

6. I feel deep inner peace or harmony.

This item attempts to move beyond mere psychological well-being. In the cognitive interviews, individuals were asked repeatedly whether a person could experience a sense of wholeness while feeling overwhelmed, stressed, or depressed. Those interviewed generally felt that a sense of

wholeness would be harder to experience under adverse circumstances, but that such internal integration was still possible. The word "deep" allows people to consider factors other than psychological ease.

Transcendent Sense of Self

3. During worship, or at other times when connecting with God, I feel intense joy which lifts me out of my daily concerns.

This item attempts to identify the experience of a lively worship service where one's day-to-day concerns can dissolve in the midst of worship. Transcending the difficulties of present physical ills or psychological situations may also be possible through an awareness that life consists of more than the physical and psychological. For further exploration of this concept, see Underwood 1998. This was a particularly difficult dimension to translate from metaphysical terms into more practical lay language.

Sense of Awe

11. I am spiritually touched by the beauty of creation.

This dimension attempts to capture the ways in which people experience the transcendent. A sense of awe can be provoked by exposure to nature, human beings, or the night sky, and has an ability to elicit experience of the spiritual that crosses religious boundaries and affects people with no religious connections (van Kaam 1986).

Sense of Gratitude

12. I feel thankful for my blessings.

This aspect of spirituality is considered central by many people and has potential connection to psychologically positive ways of viewing life. Because of the potential connections between gratitude and circumstances of life, external stressors may modify a respondent's feelings of thankfulness. It is important to note, however, that some people find blessings even in the most dire circumstances.

Sense of Compassion

13. I feel a selfless caring for others.

This item was preferred to "I care for others without expecting anything in return," which can reflect negative connotations about expectations of others. "Selfless caring," a seemingly unwieldy term, was easily understood by diverse individuals. Compassion is valued in Buddhist, Christian, and Jewish traditions, and may be a useful measure beyond these traditions.

Sense of Mercy

14. I accept others even when they do things I think are wrong.

This item addresses the felt sense of mercy, rather than the mere cognitive awareness that mercy is a good quality. As demonstrated in the cognitive interviews, this measure was successful in presenting mercy as a neutral, easily understood concept. Mercy, as presented in this item, is closely linked to forgiveness, yet is a deeper experience than isolated acts of forgiveness.

Longing for the Transcendent

15. I desire to be closer to God or in union with Him.

This item should always be paired with question 16 to fully evaluate the concept of longing. There are 2 opposed ways of responding to this item: some people feel they are so close to God that it is not possible to get closer; others have no desire to become closer. To clarify a respondent's view, item 16 has been added.

16. In general, how close to God do you feel?

Item 15 was included to evaluate experiences of being drawn to the spiritual, to assess desire or longing. Question 16 assesses the individual's current degree of intimacy or connection with God.

These dimensions form a starting point and will likely be expanded as this work

progresses. We hope that a number of the dimensions will be strongly correlated. The wide variety of items seeks to elucidate a few common elements.

Previous Psychometric Work

The instrument has been incorporated into 3 large studies of physical health outcomes, including the Chicago site of a multicenter menopause study, an Ohio University pain study, and a study at Loyola University of Chicago. In addition, the instrument has been incorporated into 3 ongoing health studies as well as a qualitative and quantitative evaluation on a non-Judeo-Christian Asian population at the University of California, San Francisco.

Reliability and exploratory factor analysis from the different samples support the use of the instrument to measure daily spiritual experiences. The scale is highly internally consistent, with alphas ranging from .91 to .95 across samples. Preliminary construct validity was established by examination of the mean scale scores across sociodemographic subgroups, and preliminary exploratory factor analyses support a unidimensional set. The analysis has been included in an article submitted for publication (Underwood and Teresi 1999).

A shortened version of the instrument was embedded in the 1997-1998 wave of the General Social Survey. A summary of that psychometric data is included in Appendix A of this report.

Association with Health

While existing scales for mystical or spiritual experience attempt to capture aspects of this domain associated with psychological wellbeing, little empirical work links the spiritual experiences of daily life with health outcomes. However, one of the items most strongly predictive of positive health outcome in the Oxman study of cardiovascular disease (Oxman et al 1995) was incorporated into this scale: "I obtain strength and comfort from my religion."

The emotional and physical feelings described by these items may buffer individuals from psychological stress, which has been extensively linked to health through specific physiologic effects (Cohen et al 1995). Positive emotional experiences have also been connected with positive effects on the immune system, independent of the negative effects of stress (Stone 1994). Likewise, positive expectations for outcomes have been linked to positive immune effects (Flood et al 1993, Roberts et al 1995). There may also be overlap between endorsing a "sense of deep peace" and the condition that leads to or emanates from direct neurologic and endocrine effects similar to those identified during meditation (Benson 1975).

The inclusion of this domain in health studies has great potential for establishing a pathway by which religiousness and spirituality might influence health, providing a possible link between certain religious/spiritual practices and/or cognition and health outcomes. This domain also provides an opportunity to assess direct effects of daily spiritual experiences on physical and mental health.

Estimated Completion Time

Less than 2 min.

Other Considerations

We are hoping to tap into a trait. However, since this domain measures perceptions and feelings, scores may vary according to external stressors and emotional state. Ideally, psychosocial variables (such as emotional states, traits, and levels of stressors) would be addressed in concurrently administered measures, allowing researchers to account for confounding by these factors.

Please note: When introducing the Daily Spiritual Experience items to subjects, please inform them, "The list that follows includes items you may or may not experience. Please consider if and how often you have these experiences, and try to disregard whether you feel you should or should not have them. In addition, a number of items use the word 'God.' If this word is not a comfortable one,

please substitute another idea that calls to mind the divine or holy for you."

Proposed Items

DAILY SPIRITUAL EXPERIENCES-LONG FORM

You may experience the following in your daily life. If so, how often?

- 1. I feel God's presence.
 - 1 Many times a day
 - 2 Every day
 - 3 Most days
 - 4 Some days
 - 5 Once in a while
 - 6 Never or almost never
- 2. I experience a connection to all of life.
 - 1 Many times a day
 - 2 Every day
 - 3 Most days
 - 4 Some days
 - 5 Once in a while
 - 6 Never or almost never
- 3. During worship, or at other times when connecting with God, I feel joy which lifts me out of my daily concerns.
 - 1 Many times a day
 - 2 Every day
 - 3 Most days
 - 4 Some days
 - 5 Once in a while
 - 6 Never or almost never
- 4. I find strength in my religion or spirituality.
 - 1 Many times a day
 - 2 Every day
 - 3 Most days
 - 4 Some days
 - 5 Once in a while
 - 6 Never or almost never
- 5. I find comfort in my religion or spirituality.
 - 1 Many times a day
 - 2 Every day
 - 3 Most days
 - 4 Some days
 - 5 Once in a while
 - 6 Never or almost never

- 6. I feel deep inner peace or harmony.
 - 1 Many times a day
 - 2 Every day
 - 3 Most days
 - 4 Some days
 - 5 Once in a while
 - 6 Never or almost never
- 7. I ask for God's help in the midst of daily activities.
 - 1 Many times a day
 - 2 Every day
 - 3 Most days
 - 4 Some days
 - 5 Once in a while
 - 6 Never or almost never
- 8. I feel guided by God in the midst of daily activities.
 - 1 Many times a day
 - 2 Every day
 - 3 Most days
 - 4 Some days
 - 5 Once in a while
 - 6 Never or almost never
- 9. I feel God's love for me, directly.
 - 1 Many times a day
 - 2 Every day
 - 3 Most days
 - 4 Some days
 - 5 Once in a while
 - 6 Never or almost never
- 10. I feel God's love for me, through others.
 - 1 Many times a day
 - 2 Every day
 - 3 Most days
 - 4 Some days
 - 5 Once in a while
 - 6 Never or almost never
- 11. I am spiritually touched by the beauty of creation.
 - 1 Many times a day
 - 2 Every day
 - 3 Most days
 - 4 Some days
 - 5 Once in a while
 - 6 Never or almost never

- 12. I feel thankful for my blessings.
 - 1 Many times a day
 - 2 Every day
 - 3 Most days
 - 4 Some days
 - 5 Once in a while
 - 6 Never or almost never
- 13. I feel a selfless caring for others.
 - 1 Many times a day
 - 2 Every day
 - 3 Most days
 - 4 Some days
 - 5 Once in a while
 - 6 Never or almost never
- 14. I accept others even when they do things I think are wrong.
 - 1 Many times a day
 - 2 Every day
 - 3 Most days
 - 4 Some days
 - 5 Once in a while
 - 6 Never or almost never

The following 2 items are scored differently.

- 15. I desire to be closer to God or in union with Him.
 - 1 Not at all close
 - 2 Somewhat close
 - 3 Very close
 - 4 As close as possible
- 16. In general, how close do you feel to God?
 - 1 Not at all close
 - 2 Somewhat close
 - 3 Very close
 - 4 As close as possible

DAILY SPIRITUAL EXPERIENCES-SHORT FORM

None provided.

Additional information regarding DSES Survey:

The Daily Spiritual Experience Scale (DSES) has been included in a number of research studies, including the alcohol studies mentioned in the preface as well as projects funded from the Fetzer Institute request for proposals, Scientific Research on Altruistic Love and Compassionate Love. We found that many investigators without current self-report measures directly addressing compassionate love included two items from the DSES in their study as a measure of compassion and mercy. These items are DSES #13, "I feel a selfless caring for others," and DSES #14, "I accept others even when they do things I think are wrong."

These same two items were also placed in the latest 2002 wave of the General Social Survey in a National Study of Altruism, (National Opinion Research Center/University of Chicago). The results are as follows:

	I feel a selfless caring for others	I accept others even when they do things I think are wrong
Many times a day	9.8	9.4
Every day	13.2	15.5
Most days	20.3	32.4
Some days	24.0	23.0
Once in a while	22.3	14.8
Never or almost never	10.4	4.9

Including the DSES as measurement of a spiritual component along with more organizational religious measures may present an important method to examine religiousness/spirituality in health studies.

A copy of the article, "The Daily Spiritual Experience Scale: Development, Theoretical Description, Reliability, Exploratory Factor Analysis, and Preliminary Construct Validity Using Health-Related Data" by Underwood and Teresi, *Annals of Behavioral Medicine* 2002, 24(1): 22-33, can be found at www.fetzer.org or by contacting info@fetzer.org.

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Meaning

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Domain of Measurement

Constructing meaning from life's events is an essentially human endeavor. Less clear is the means for measuring a person's search for meaning (the process) and the success or failure of that search (the outcome). Although many items pertaining to meaning are present in a variety of scales, none could be called definitive.

Description of Measures

Attempts to measure the construct of meaning grow largely out of the theoretical work of Viktor Frankl, who asserted that the "will to meaning" is an essential human characteristic, one that can lead to physical and mental symptomatology if blocked or unfulfilled (Frankl 1963). Others have also spoken of the importance of meaning or purpose in life as part of a sense of coherence (Antonovsky 1979), an essential function of coping with major life stresses (Park and Folkman in press), or an element of psychological well-being (Ryff 1989).

The search for meaning has also been defined as one of the critical functions of religion. Frankl himself viewed meaning in religious terms. Meaning as he saw it was something to be "discovered rather than created," that is, every individual was said to have a unique, externally given purpose in life. Other theorists have also defined religion as that individual and social force concerned with existential questions and their solutions (Batson, Schoenrade, and Ventis 1993; Geertz 1966).

In support of the "religion-meaning" connection, several studies have demonstrated significant relationships between measures of religiousness (particularly conservative religiousness) and a sense of purpose in life (Dufton and Perlman 1986, Paloutzian 1981).

Previous Psychometric Work

Current Scales for Assessing Meaning:

Several scales have been developed to measure aspects of meaning or purpose in life. These include:

- The Purpose-in-Life scale (PIL), which assesses the degree to which the individual experiences a sense of meaning or purpose (Crumbaugh 1968);
- The Seeking of Noetic Goals scale (SONG), which measures the strength of motivation to find meaning in life (Crumbaugh 1977);
- The Life Regard Index (LRI), which assesses whether the individual has a framework from which meaning can be derived and the degree to which these life goals are being fulfilled (Battista and Almond 1973);
- The Life Attitude Profile (LAP), which contains items from the PIL and SONG, as well as other items (Reker 1992);
- The Sense of Coherence scale (SOC), which assesses the degree to which the world and life events are perceived as comprehensible, manageable, and meaningful (Antonovsky 1979, 1987); and
- Ryff's Purpose-in-Life subscale, which assesses the degree to which the individual has goals in life, holds beliefs that give life purpose, and perceives meaning in the present and past (Ryff and Keyes 1995).

Measures of meaning have been criticized. First, the scales appear to be multidimensional. For example, factor analyses of the PIL test (one of the most heavily used meaning measures) reveal several factors which vary from study to study (Dufton and Perlman 1986, Chamberlain and Zika 1988). Dufton and Perlman (1986) in working with college students created a two-factor solution (life satisfaction and life purpose) and another set of items that did not use either of these factors. Chamberlain and Zika (1988), working with a sample of community women, found a four-factor solution (meaning in life through goal commitment, contentedness with life, being in control, enthusiasm with life). They did, however, find a higher order general factor. Other rationally derived meaning scales include a number of subscales that seem to be related, tangentially at best, to the core construct of meaning. For example, an early form of the LAP consisted of 7 subscales: goal seeking, future meaning, existential vacuum, death acceptance, life purpose, life control, and will to meaning (Reker and Peacock 1981). The PIL subscale by Ryff (1989) appears to measure an active goal orientation ("I enjoy making plans for the future and working to make them a reality"), as well as the sense of meaning and purpose.

Criticisms can also be made of the confounding of meaning with other health-related constructs, such as depression. The PIL scale, for instance, correlates -.65 with the Minnesota Multiphasic Personality Inventory depression scale and -.58 with the Beck Depression Inventory (Dyck 1987). The correlation is understandable; several items on the PIL include responses about suicidal ideation, emptiness and despair, and painful and boring experiences.

It would be useful to distinguish the search for meaning (a process) from the success or failure of the search (the outcome). In fact, some of the factor-analytic results suggest this split (Dufton and Perlman 1986). The scales seem to do a better job of measuring

the outcome than the process. Stated another way, more measures evaluate whether the individual has found meaning than whether the individual is searching for meaning. The outcome-oriented approach to measurement is apparently more vulnerable to confounding; the attainment of a sense of meaning and purpose in life seems difficult to separate from life satisfaction or low levels of depression. The process-oriented approach seems to be less vulnerable to confounding; whether people who are engaged in a search for meaning are more likely to report better health status is an interesting question. In this vein, Emmons has conducted a number of studies that indicate significant relationships between various personal strivings (efforts to attain a variety of goals in daily life) and indices of mental and physical health (Emmons 1986, Emmons in press).

The Religious Aspects of Meaning:

A key question for researchers is whether meaning is inherently religious or spiritual. This question cuts to the heart of what it means to be religious. From the functional tradition of religious definition, the search for meaning could be (and has been) defined as inherently religious (Pargament 1997). Anyone who searches for answers to guestions of meaning from this point of view would be defined as religious, regardless of the nature of that search. The person who seeks meaning through science, drugs, power, etc., would be considered as religious as the person who seeks meaning through transcendental means. From the substantive tradition of religious definition, the search for meaning becomes religious only when it involves some connection with the sacred.

Meaning has traditionally been measured from the functional tradition. Most items on meaning scales do not explicitly reference God, higher powers, or spiritual matters. To assess meaning from the perspective of this tradition, researchers could select the PIL test by Crumbaugh (the most widely used instrument), the Purpose and Coherence subscales from the LAP by Reker (conceptually

sharper), or the PIL subscale from Ryff (linked to a larger theory of psychological well-being). It is also important to note that these scales generally focus more on the attainment of meaning (the outcome) than the search for meaning (the process). Reker's subscales, however, do recognize this distinction.

No scales measure meaning from a substantive religious perspective. The development of a more explicit religious and/or spiritual meaning scale would be a useful addition to the literature. Because religious/spiritual meaning lies at the core of meaning itself, according to some theorists, an explicitly religious/spiritual meaning may add power to the study of meaning (for example, a spiritual meaning measure may predict health above and beyond the effects of traditional meaning measures). An explicitly theistic meaning scale would consist of items such as: "The events in my life unfold according to a divine plan"; and "Without God, my life would be meaningless." A spiritual meaning scale would consist of items such as: "My spirituality gives meaning to my life's joys and sorrows"; and "What gives meaning to my life is the knowledge that I am a part of something larger than myself." These illustrative items are also better indicators of the attainment of religious/spiritual meaning (the outcome) than the search for religious/ spiritual meaning (the process).

Studies of the search for religious/spiritual meaning are also needed. Batson's "quest" scale provides 1 useful tool for assessing the degree to which the individual is engaged in efforts to answer fundamental existential questions (Batson, Schoenrade, and Ventis 1993). Emmons' research on personal strivings could also be extended to include studies of religious and spiritual strivings, or the degree to which personal strivings are sanctified (Emmons in press).

Association with Health

A number of studies have found significant relationships between the sense of meaning

in life and indices of health, particularly mental health (Crumbaugh 1968, Zika and Chamberlain 1987, Padelford 1974, Ryff 1989).

Proposed Items

MEANING-LONG FORM

Instructions: Please circle how much you agree or disagree with the following statements on the scale below.

- 1 Strongly disagree
- 2 Disagree
- 3 Neutral
- 4 Agree
- 5 Strongly agree
- 1. My spiritual beliefs give meaning to my life's joys and sorrows.
 - 1 Strongly disagree
 - 2 Disagree
 - 3 Neutral
 - 4 Agree
 - 5 Strongly agree
- 2. The goals of my life grow out of my understanding of God.
 - 1 Strongly disagree
 - 2 Disagree
 - 3 Neutral
 - 4 Agree
 - 5 Strongly agree
- 3. Without a sense of spirituality, my daily life would be meaningless.
 - 1 Strongly disagree
 - 2 Disagree
 - 3 Neutral
 - 4 Agree
 - 5 Strongly agree
- 4. The meaning in my life comes from feeling connected to other living things.
 - 1 Strongly disagree
 - 2 Disagree
 - 3 Neutral
 - 4 Agree
 - 5 Strongly agree

- 5. My religious beliefs help me find a purpose in even the most painful and confusing events in my life.
 - 1 Strongly disagree
 - 2 Disagree
 - 3 Neutral
 - 4 Agree
 - 5 Strongly agree
- 6. When I lose touch with God, I have a harder time feeling that there is purpose and meaning in life.
 - 1 Strongly disagree
 - 2 Disagree
 - 3 Neutral
 - 4 Agree
 - 5 Strongly agree
- 7. My spiritual beliefs give my life a sense of significance and purpose.
 - 1 Strongly disagree
 - 2 Disagree
 - 3 Neutral
 - 4 Agree
 - 5 Strongly agree
- 8. My mission in life is guided/shaped by my faith in God.
 - 1 Strongly disagree
 - 2 Disagree
 - 3 Neutral
 - 4 Agree
 - 5 Strongly agree
- 9. When I am disconnected from the spiritual dimension of my life, I lose my sense of purpose.
 - 1 Strongly disagree
 - 2 Disagree
 - 3 Neutral
 - 4 Agree
 - 5 Strongly agree
- 10. My relationship with God helps me find meaning in the ups and downs of life.
 - 1 Strongly disagree
 - 2 Disagree
 - 3 Neutral
 - 4 Agree
 - 5 Strongly agree

- 11. My life is significant because I am part of God's plan.
 - 1 Strongly disagree
 - 2 Disagree
 - 3 Neutral
 - 4 Agree
 - 5 Strongly agree
- 12. What I try to do in my day-to-day life is important to me from a spiritual point of view.
 - 1 Strongly disagree
 - 2 Disagree
 - 3 Neutral
 - 4 Agree
 - 5 Strongly agree
- 13. I am trying to fulfill my God-given purpose in life.
 - 1 Strongly disagree
 - 2 Disagree
 - 3 Neutral
 - 4 Agree
 - 5 Strongly agree
- 14. Knowing that I am a part of something greater than myself gives meaning to my life.
 - 1 Strongly disagree
 - 2 Disagree
 - 3 Neutral
 - 4 Agree
 - 5 Strongly agree
- 15. Looking at the most troubling or confusing events from a spiritual perspective adds meaning to my life.
 - 1 Strongly disagree
 - 2 Disagree
 - 3 Neutral
 - 4 Agree
 - 5 Strongly agree
- 16. My purpose in life reflects what I believe God wants for me.
 - 1 Strongly disagree
 - 2 Disagree
 - 3 Neutral
 - 4 Agree
 - 5 Strongly agree

- 17. Without my religious foundation, my life would be meaningless.
 - 1 Strongly disagree
 - 2 Disagree
 - 3 Neutral
 - 4 Agree
 - 5 Strongly agree
- 18. My feelings of spirituality add meaning to the events in my life.
 - 1 Strongly disagree
 - 2 Disagree
 - 3 Neutral
 - 4 Agree
 - 5 Strongly agree
- 19. God plays a role in how I choose my path in life.
 - 1 Strongly disagree
 - 2 Disagree
 - 3 Neutral
 - 4 Agree
 - 5 Strongly agree
- 20. My spirituality helps define the goals I set for myself.
 - 1 Strongly disagree
 - 2 Disagree
 - 3 Neutral
 - 4 Agree
 - 5 Strongly agree

MEANING-SHORT FORM

None provided. See Brief Multidimensional Measure of Religiousness/Spirituality: 1999, Appendix.

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Values

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Domain of Measurement

This domain is intended to measure dimensions distinct from the value the individual places on religion itself ("How important is religion in your life?"), which is currently covered under the domain entitled "Commitment." This domain is not about the sheer presence or absence of values per se; presumably everybody values something. Instead, this domain is based on the approach of Merton (1968), who described values as goals, and norms as the means to those goals. Other theorists viewed values as criteria people use to select and justify actions (Williams 1968, Kluckhohn 1951). This domain attempts to assess the extent to which an individual's behavior reflects a normative expression of his/her faith or religion as the ultimate value.

Description of Measures

The Short Form for this domain directly assesses the influence of faith on everyday life. Three items have been proposed, 1 from Benson (1988) and 2 from the Intrinsic/Extrinsic (I/E) Revised Scale (Gorsuch and McPherson, 1989). One of the 3 items is phrased negatively and 1 includes a moral dimension.

The Long Form assesses the importance of a wide range of possible values, placing religious values in a more general context of competing values. The advantage of this approach is that it minimizes the known social desirability problems of the I/E Scale (Leak and Fish 1989). The best known work in the comprehensive measurement of values

is that of Rokeach (1973). His Value Survey asks respondents to rank 18 terminal (goal) values and 18 instrumental (process) values. Rokeach's research reflects a strong interest in the relationship between values and religiousness (Rokeach 1969a, 1969b) and reveals some differences between American Christians and American Jews. It also demonstrates differences by religiousness: the values of salvation and forgiving are more salient for those who attend church/synagogue more often and say religion is more important to them. An important feature of the Rokeach scale is that respondents are asked to rank their values, necessitating that some be placed ahead of others.

More recently, Schwartz (Schwartz and Bilsky 1987, Schwartz 1992, Schwartz and Huismans 1995) has developed and tested an expanded and modified version of the Rokeach scale. Respondents are asked to rate each of 56 values in terms of their importance as guiding principles in their life on a scale varying from "opposed to my principles" (-1) through "not important" (0) to "of supreme importance" (7). Schwartz's original work used the same ranking technique as Rokeach, but the later work added more values and shifted to a rated scoring system. The ranking tasks can be time-consuming. Schwartz's work demonstrated that the 56 values can be categorized into a smaller number of domains, and that results from a survey organized in this manner can be replicated across populations as diverse as German students, Israeli teachers, Greek Orthodox, Dutch Protestants, and Spanish Catholics. He also found that religiousness among respondents correlates

negatively with the "individualist" value domains of hedonism, stimulation, achievement, and self-direction, and positively with the "collectivist" domains of tradition, conformity, benevolence, and security. Some value domains, such as power and universalism, show little association with religion.

According to Schwartz and Huismans:

Theological analyses suggest that most and possibly all major contemporary religions promote transcendence of material concerns. Religions encourage people to seek meaning beyond everyday existence, linking themselves to a "ground of being" through belief and worship. Most foster attitudes of awe, respect, and humility by emphasizing the place of the human being in a vast, unfathomable universe, and exhort people to pursue causes greater than their personal desires. The opposed orientation, self-indulgent materialism, seeks happiness in the pursuit and consumption of material goods. In this view, the primary function of religion is to temper self-indulgent tendencies and to foster transcendental concerns and beliefs. Religions seek to do this by promulgating religious creeds. moral prescriptions, and ritual requirements. If greater religiosity signifies acceptance of these priorities, we would expect religiosity to correlate positively with values that emphasize reaching toward and submitting to forces beyond the self and negatively with values that emphasize gratification of material desires. (1995:91).

Other researchers have also identified the prosocial orientation of religious respondents. Ellison (1992), Pollner (1989), and others argue along these lines: modeling human relationships after divine ones provides "godlike" models for behavior; there are

direct teachings in many faiths on the subject of love and concern for others; feelings of divine protection may encourage feelings of security and friendliness to strangers. Ellison found that religious people were generally kind, as judged by the interviewers for the National Survey of Black Americans (1992).

Previous Psychometric Work

For the Short Form, the I/E Scale is the single most frequently used measure in the social scientific study of religion (Allport and Ross 1967). One of the items from the I/E Scale was determined to be the highest loading item on the I/E Scale, and Gorsuch and MacPherson (1989) suggest it can be used as a single item if the survey sample is large enough.

The Long Form comes from Schwartz, who has tested his instrument for reliability and validity in numerous international samples (Schwartz 1992, Schwartz and Bilsky 1987, Schwartz and Huismans 1995).

Association with Health

There is no obvious, direct connection between values and health, and virtually no research has been done in this area. The link would have to be through behaviors that are promoted by the value or criteria of faith. Schwartz and Huismans (1995) found that religious people consistently show a more collectivist orientation and place less value on self-indulgence or sensation-seeking.

A collectivist orientation that places little value on self-stimulation, pleasure, and excitement might cause a person to avoid risky behaviors, such as heavy drinking, fast driving, and/or promiscuous sex. Such a collectivist orientation may also be reflected in larger or more supportive social networks. Ellison and George (1994) and Bradley (1995) found that religiously active people report larger social networks, especially of friends, which would provide another link to health.

Another effect of the value of concern for others, especially those less fortunate than oneself, may be the facilitation of social comparisons. In health research, "downward comparisons," or the tendency of people to compare themselves with others who are worse off, is commonly shown to enhance feelings of well-being and reduce depression (Wood, Taylor, and Lichtman 1985; Gibbons 1986; Affleck and Tennen 1991). Volunteering time to others in the community is said to produce an altruistic "helper's high" (Luks 1993). If religiously motivated values cause people to expose themselves to the physical or social needs of others, and perhaps to help others in some way, feelings of relative wellbeing may be an unintentional but nevertheless real benefit.

Suggested Administration

The Short Form items are easily self-administered or administered by phone or in-person. The Long Form items must be self-administered.

Time Referent

Both scales refer to the present only.

Estimated Completion Time

Short Form: 15-20 sec.

Long Form: approximately 10 min.

Proposed Items

VALUES-LONG FORM

Instructions: Please rate the following values "AS A GUIDING PRINCIPLE IN MY LIFE." Begin by reading the first column (1-30). Then, from that column only, choose and rate the most important value and the least important value. Next read the second column (31-56), and select the most important value and the least important value in that column. Finally, rate each value in both columns using the following scale.



First Column

- 1. ___ Equality (equal opportunity for all)
- 2. ___ Inner harmony (at peace with myself)
- 3. ___ Social power (control over others, dominance)
- 4. ___ Pleasure (gratification of desires)
- 5. ___ Freedom (freedom of action and thought)
- 6. ___ A spiritual life (emphasis on spiritual not material matters)
- 7. ___ Sense of belonging (feeling that others care about me)
- 8. ___ Social order (stability of society)
- 9. ___ An exciting life (stimulating experiences)
- 10. ___ Meaning in life (a purpose in life)
- 11. ___ Politeness (courtesy, good manners)
- 12. ___ Wealth (material possessions, money)
- 13. ___ National security (protection of my nation from enemies)
- 14. ___ Self-respect (belief in one's own worth)
- 15. ___ Reciprocation of favors (avoidance of indebtedness)
- 16. ___ Creativity (uniqueness, imagination)
- 17. ___ A world at peace (free of war and conflict)
- 18. ___ Respect for tradition (preservation of time-honored customs)
- 19. ___ Mature love (deep emotional and spiritual intimacy)
- 20. ___ Self-discipline (self-restraint, resistance to temptation)
- 21. ___ Detachment (from worldly concerns)
- 22. ___ Family security (safety for loved ones)
- 23. ___ Social recognition (respect, approval by others)
- 24. ___ Unity with nature (fitting into nature)
- 25. ___ A varied life (filled with challenge, novelty, and change)
- 26. ___ Wisdom (a mature understanding of life)
- 27. ___ Authority (the right to lead or command)
- 28. ___ True friendship (close, supportive friends)
- 29. ___ A world of beauty (beauty of nature and the arts)
- 30. ___ Social justice (correcting injustice, care for the weak)

Second Column

- 31. ___ Independent (self-reliant, self-sufficient)
- 32. ___ Moderate (avoiding extremes of feeling and action)
- 33. ___ Loyal (faithful to my friends, group)
- 34. ___ Ambitious (hardworking, aspiring)
- 35. ___ Broad-minded (tolerant of different ideas and beliefs)
- 36. ___ Humble (modest, self-effacing)
- 37. ___ Daring (seeking adventure, risk)
- 38. ___ Protecting the environment (preserving nature)
- 39. ___ Influential (having an impact on people and events)
- 40. ___ Honoring of parents and elders (showing respect)
- 41. ___ Choosing own goals (selecting own purposes)
- 42. ___ Healthy (not being sick physically or mentally)
- 43. ___ Capable (competent, effective, efficient)
- 44. ___ Accepting my portion in life (submitting to life's circumstances)
- 45. ___ Honest (genuine, sincere)
- 46. ___ Preserving my public image (protecting my "face")
- 47. ___ Obedient (dutiful, meeting obligations)
- 48. ___ Intelligent (logical, thinking)
- 49. ___ Helpful (working for the welfare of others)
- 50. ___ Enjoying life (enjoying food, sex, leisure, etc.)
- 51. ___ Devout (holding to religious faith and belief)
- 52. ___ Responsible (dependable, reliable)
- 53. ___ Curious (interested in everything, exploring)
- 54. ___ Forgiving (willing to pardon others)
- 55. ___ Successful (achieving goals)
- 56. ___ Clean (neat, tidy)

VALUES-SHORT FORM

- 1. My whole approach to life is based on my religion. (I/E Scale)
 - 1 Strongly agree
 - 2 Agree
 - 3 Not sure
 - 4 Disagree
 - 5 Strongly disagree
- 2. Although I believe in my religion, many other things are more important in life. (I/E Scale)
 - 1 Strongly agree
 - 2 Agree
 - 3 Not sure
 - 4 Disagree
 - 5 Strongly disagree
- 3. My faith helps me know right from wrong. (Benson)
 - 1 Strongly agree
 - 2 Agree
 - 3 Not sure
 - 4 Disagree
 - 5 Strongly disagree

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Beliefs

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Domain of Measurement

The central feature of religiousness is the cognitive dimension of belief; members of religious groups are identified as "believers." However, members of the same religious group vary in the strength of their belief and may also disagree about what their beliefs should be. By definition, beliefs differ from religion to religion, so finding a set of beliefs common to all religions, not to mention finding beliefs that religions might have in common with spirituality, is by definition impossible. Stark, Rodney, and Glock (1968), for example, approach the measurement of belief with an orthodoxy index, and find great variation even within a restricted range of Protestant denominations. Nevertheless, it is essential to measure this cognitive dimension of religiousness/spirituality.

Beliefs can be central to health and healing as well. The placebo effect, a change in a patient's condition attributable to the symbolic import of a treatment rather than to a specific pharmacological or physiological intervention, has long been acknowledged (Beecher 1955). Recent work (reviewed in Turner et al 1994) suggests that placebo response rates may actually be higher than traditionally thought. Herbert Benson's work (1996) argues that religious faith mobilizes placebo effects by enhancing the memory of repeated, familiar, positive therapeutic states.

Moreover, religious/spiritual beliefs offer individuals cognitive resources beyond the relatively simple or naive expectations of positive outcomes. Beliefs about the meaning of suffering and death are in some way central to all religions (Bowker 1970, 1991); they create webs of meaning and comprehensibility that may comfort and sustain believers, even in the midst of acute tragedy or long-term suffering.

The measurement of beliefs for this domain should be limited to beliefs that are relevant to health by:

- Promoting expectations of positive outcomes, and/or
- Providing frameworks for the interpretation of human suffering.

Description of Measures

The first item that pertains to both criteria is the "strength and comfort" item, with its reference to the 23rd Psalm (Idler and Kasl 1992; Oxman, Freeman, and Manheimer 1995). Already used in several health outcome studies, this item is included in both Long and Short Forms, if only for the sake of comparison with other studies. The second item on the Short Form is the standard "life after death" question, taken from the General Social Survey (1990).

The Long Form includes 5 additional items from National Opinion Research polling (McCready and Greeley 1976), which are described as "statements about the deeper meaning of life and the ultimate purpose of living."

Previous Psychometric Work

Little psychometric work exists for the 2 items on the Short Form, although they exhibit strong face validity. The additional items for the Long Form all have loadings of .45 or better on a factor called "faith" by McCready and Greeley (1976).

Association with Health

The first Short Form item has been associated, alone or in combination with other items, with higher rates of survival following cardiac surgery (Oxman, Freeman, and Manheimer 1995), lower levels of depression among men with functional disability (Idler and Kasl 1992), lower levels of depression and better ambulation among hip fracture patients (Pressman et al 1990), and lower risk of mortality among elderly respondents in poor health (Zuckerman, Kasl, and Ostfeld 1984). To date, no research has made use of the "life after death" item or the "ultimate purpose of living" scale as related to health outcomes.

Suggested Administration

Both the Long and Short Forms are simple and can be self-administered or administered by phone or in-person.

Time Referent

These items assess only current behavior and attitudes.

Estimated Completion Time

Short Form: 10 sec. Long Form: 1.5 min.

Proposed Items

BELIEFS-LONG FORM

- 1. How much is religion a source of strength and comfort to you? (Yale Health and Aging Project)
 - 1 None
 - 2 A little
 - 3 A great deal

- 2. Do you believe there is a life after death? (General Social Survey)
 - 1 Yes
 - 2 No
 - 3 Undecided
- 3. God's goodness and love are greater than we can possibly imagine.
 - 1 Agree strongly
 - 2 Agree somewhat
 - 3 Can't decide
 - 4 Disagree somewhat
 - 5 Disagree strongly
- 4. Despite all the things that go wrong, the world is still moved by love.
 - 1 Agree strongly
 - 2 Agree somewhat
 - 3 Can't decide
 - 4 Disagree somewhat
 - 5 Disagree strongly
- 5. When faced with a tragic event I try to remember that God still loves me and that there is hope for the future.
 - 1 Agree strongly
 - 2 Agree somewhat
 - 3 Can't decide
 - 4 Disagree somewhat
 - 5 Disagree strongly
- 6. I feel that it is important for my children to believe in God.
 - 1 Agree strongly
 - 2 Agree somewhat
 - 3 Can't decide
 - 4 Disagree somewhat
 - 5 Disagree strongly
- 7. I think that everything that happens has a purpose.
 - 1 Agree strongly
 - 2 Agree somewhat
 - 3 Can't decide
 - 4 Disagree somewhat
 - 5 Disagree strongly

BELIEFS-SHORT FORM

- 1. How much is religion a source of strength and comfort to you? (Yale Health and Aging Project)
 - 1 None
 - 2 A little
 - 3 A great deal
- 2. Do you believe there is a life after death? (General Social Survey)
 - 1 Yes
 - 2 No
 - 3 Undecided

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Forgiveness

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Domain of Measurement

This domain includes 5 dimensions of forgiveness: confession, feeling forgiven by God, feeling forgiven by others, forgiving others, and forgiving oneself. The Short Form contains single items for forgiveness of self, forgiveness of others, and forgiveness by God. The Long Form contains multiple items for each dimension.

Description of Measures

The concept of forgiveness is central to the Judeo-Christian tradition. It is the focus of a major Jewish holiday (Yom Kippur) and a theme in much of Jewish scripture. It is also the core belief of the Christian faith, celebrated in Easter, the most important Christian holiday. Jews and Christians have concepts of both divine and interpersonal forgiveness, the latter being modeled on the former. Kaplan, Munroe-Blum and Blazer (1993) and Enright, Gassin, and Wu (1992) discuss definitions of forgiveness. Enright et al use a definition adapted from North:

Forgiveness is overcoming of negative affect and judgment toward the offender, not by denying ourselves the right to such affect and judgment, but by endeavoring to view the offender with compassion, benevolence, and love while recognizing that he or she has abandoned the right to them (1992:101).

Kaplan et al (1993) and Enright et al (1992) note the existence of the concept of forgiveness, but little more, in Zen Buddhism,

Confucianism, and Islam. Kaplan notes that we need cross-cultural studies of forgiveness.

Weiner and his colleagues at the University of California at Los Angeles (1991) conducted a series of experiments on the effects of public confession of wrongdoing. Confession assumes both personal responsibility and personal blame; it implies the shared recognition that a norm has been violated and reaffirms that the transgressor values that rule. Confession can repair the perception of the transgressor as a moral person, reduce feelings of guilt, and restore the collectivity. Their research examined whether confessions actually result in forgiveness. In 5 experiments they found that "... confession generally does result in perceived changes in personality traits, causal attributions, affective reactions, expectancies, forgiveness, and judgments of behavior toward the confessor" (Weiner et al 1992:296). Weiner's work is entirely secular in its language and concepts, and presents as examples Jimmy Swaggart (who confessed) and Jim Bakker (who did not). Without intending to, these researchers make the case for the power of forgiveness because their research demonstrates the effectiveness of ritualized public confession.

There is a growing body of literature regarding forgiveness, most of it from the years 1992 to 1997. Mauger et al (1992) note that a PsycLIT search for 1984 to 1992 failed to produce a single research paper on the subject. Enright and his colleagues in the Human Development Study Group at the University of Wisconsin have run a 5-year seminar about the process of forgiveness,

likening it to Kohlberg's stages of moral development. The stages demonstrate the parallel development of cognitive and moral reasoning: as individuals develop cognitively, they can take the perspectives of others, empathize with others' weaknesses, and value them despite their faults. The Enright model of this developmental process and several other models are compared in McCullough and Worthington (1994).

Previous Psychometric Work

Many citations from recent literature are to dissertations, which means that the current scales have questionable validity and reliability, but also that forgiveness is an area of high and continuing interest. Mauger et al (1992) developed scales measuring forgiveness of others and forgiveness of self, with demonstrated reliability and validity. However, these scales do not explore forgiveness by God or by others.

Association with Health

Enright et al (1992) cite other researchers' experimental studies that demonstrate correlations between high levels of forgiveness and lower blood pressure and fewer negative emotions; other nonexperimental studies associated forgiveness with less depression and anxiety, and higher levels of self-esteem. Mauger et al (1992) found that lower scores for forgiving oneself or forgiving others correlated with higher psychopathology scores on the Minnesota Multiphasic Personality Inventory. In much of the therapeutic literature, healing, in the spiritual sense, is linked with forgiveness. Clearly, research about forgiveness has hardly begun.

Suggested Administration

The items can be self-administered or administered by phone or in-person.

Time Referent

These items assess only current behavior and attitudes.

Estimated Completion Time

Short Form: 15-20 sec. Long Form: <1 min.

Proposed Items

FORGIVENESS-LONG FORM

Confession

- 1. It is easy for me to admit that I am wrong. (Mauger et al)
 - 1 Always or almost always
 - 2 Often
 - 3 Seldom
 - 4 Never
- 2. If I hear a sermon, I usually think about things that I have done wrong.

 (Mauger et al)
 - 1 Always or almost always
 - 2 Often
 - 3 Seldom
 - 4 Never

Forgiveness by God

- 3. I believe that God has forgiven me for things I have done wrong.
 - 1 Always or almost always
 - 2 Often
 - 3 Seldom
 - 4 Never
- 4. I believe that there are times when God has punished me.
 - 1 Always or almost always
 - 2 Often
 - 3 Seldom
 - 4 Never

Forgiveness by Others

- 5. I believe that when people say they forgive me for something I did they really mean it. (Mauger et al)
 - 1 Always or almost always
 - 2 Often
 - 3 Seldom
 - 4 Never

- 6. I often feel that no matter what I do now I will never make up for the mistakes I have made in the past. (Mauger et al)
 - 1 Always or almost always
 - 2 Often
 - 3 Seldom
 - 4 Never

Forgiveness of Others

- 7. I am able to make up pretty easily with friends who have hurt me in some way. (Mauger et al)
 - 1 Always or almost always
 - 2 Often
 - 3 Seldom
 - 4 Never
- 8. I have grudges which I have held onto for months or years. (Mauger et al)
 - 1 Always or almost always
 - 2 Often
 - 3 Seldom
 - 4 Never

Forgiveness of Oneself

- 9. I find it hard to forgive myself for some things that I have done. (Mauger et al)
 - 1 Always or almost always
 - 2 Often
 - 3 Seldom
 - 4 Never
- 10. I often feel like I have failed to live the right kind of life. (Mauger et al)
 - 1 Always or almost always
 - 2 Often
 - 3 Seldom
 - 4 Never

FORGIVENESS-SHORT FORM

- 1. I have forgiven myself for things that I have done wrong.
 - 1 Always or almost always
 - 2 Often
 - 3 Seldom
 - 4 Never

- 2. I have forgiven those who hurt me.
 - 1 Always or almost always
 - 2 Often
 - 3 Seldom
 - 4 Never
- 3. I know that God forgives me.
 - 1 Always or almost always
 - 2 Often
 - 3 Seldom
 - 4 Never

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Private Religious Practices

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Domain of Measurement

These items are designed to assess private religious and spiritual practices, a conceptual domain or dimension of religious involvement often characterized by terms such as nonorganizational, informal, and non-institutional religiosity.

Description of Measures

Private religious practices represent a subset of behaviors constituting the larger construct of religious involvement. The domain of private religious practices is distinct from the domain of public (ie. organizational, formal. institutional) religious behavior. Private practices are nonorganizational in that they occur outside the context of organized religion. They are informal in that they may not always occur at fixed times or in fixed places, or necessarily involve fixed liturgical formulae. Finally, they are noninstitutional in that they are private behaviors that occur at home—individually or in a family setting rather than as collective experiences in a formal place of worship.

The items were modified from existing measures and were selected in part because they represent the most commonly used items from other scales or survey instruments. The items were selected to be cross-religiously applicable whenever possible, at least with respect to the US population. A review of 7 well-known scales or survey instruments revealed 45 items assessing private religious practices. In most instances, these items are not listed separately in these inventories under a "private religious practices" heading,

but constitute a subset within a larger, undifferentiated collection of religious involvement items.

The National Opinion Research Center (NORC) General Social Survey (GSS) for many years has included several items assessing private religious practices. These include ordinal items about prayer frequency and home Bible study, a binary item about saying grace, and items about financial contributions and watching religious television, with coding schemes specifying exact dollar amounts and numbers of hours, respectively. The National Survey of Black Americans (NSBA) also asks about prayer frequency and watching religious television, but includes listening to the radio in the latter question, and also asks about reading religious books or materials and requesting prayer from others. A significant improvement of the NSBA over the GSS questions is the use of a common 5-category ordinal response scheme. This feature better enables the construction of a scale based on these items.

In the 1960s and 1970s, sociologists of religion proposed numerous multidimensional inventories of religiosity. The most influential and widely used were measures developed by Glock and Stark, Faulkner and DeJong, and King and Hunt (Robinson and Shaver 1969). The first 2 sets of measures include items about praying privately, saying grace, and reading the Bible or other religious literature, each with unique coding schemes, whose metrics are not comparable and thus do not easily permit scaling. The King

and Hunt measures include items about praying privately, reading religious literature, and reading the Bible. These items use a common coding scheme (regularly, fairly frequently, occasionally, seldom or never), which is imprecise.

Based on this prior work, as well as a review of a few other measures (Himmelfarb 1975, Paloma and Gallup 1991), and taking into account certain psychometric principles, the working group concluded that any new measure of private religious practices should 1) be widely applicable, 2) assess the most prevalent behaviors, 3) use a common metric, and 4) include at least 4 items.

First, a scale of private religious practices for use in national surveys and clinical studies should assess behaviors that occur across the spectrum of common US religious traditions. To develop a brief instrument that covers all facets of private religious practice for all religions or denominations would be impossible, naturally. Yet every item should be interpretable, meaningful, and important to most Catholics, Protestants, and Jews, as they represent the 3 largest religious groups in America.

Second, a handful of important practices commonly appear in inventories of private religious practices and should be included here. These include praying, watching religious television programs or listening to religious radio programs, reading the Bible or other religious literature, saying grace, and contributing to religious institutions. This last behavior could also be construed as an indicator of religious commitment, so it may not be essential in a short-form private religious practices scale. This list does not exhaust all possible private religious practices. Rather, it includes the most prevalent or frequently practiced behaviors, thus ensuring reasonable response distributions.

Third, a common coding scheme applied to all or nearly all items would provide a more universal metric, and thus more easily enable development and validation of a unidimensional scale. The best ordinal scale would specify quantified amounts of each behavior, ranging from "never" to multiple times per day. This would ensure capture of the full range of possible frequencies of each practice.

Fourth, inclusion of at least 4 items is highly desirable for psychometric reasons (see Suggested Administration). Three or fewer items may be detrimental in terms of scale reliability and also less than ideal for validating a scale's measurement properties.

Previous Psychometric Work

The proposed scale has not been psychometrically confirmed or validated. However, variations on the constituent items have appeared in other validated scales or have been scaled and subsequently confirmed in secondary analyses. For example, items regarding frequency of prayer, reading religious material, and watching or listening to religious television or radio constituted three-fourths of a well-fitting measurement model of nonorganizational religiosity confirmed in a national probability sample of African Americans, for use both among older adults (Chatters, Levin, and Taylor 1992) and across the life course (Levin, Taylor, and Chatters 1995). Similar items regarding frequency of prayer, reading religious material, and saying grace also formed part of an internally consistent, reliable measure of nonorganizational religiosity in 4 successive age cohorts within a multiracial national probability sample (Levin 1993).

Association with Health

A review of gerontological research on religion through the late 1980s concluded that the domain of nonorganizational religious involvement was significantly associated with physical health status and psychological well-being (Levin 1989). Such an association has been examined in several gerontological studies since 1980 (Markides 1983; Idler 1987; Markides, Levin, and Ray 1987;

Koenig, Moberg, and Kvale 1988; Alexander and Duff 1991,1992; Taylor and Chatters 1991; Ainlay, Singleton, and Swigert 1992; Levin, Chatters, and Taylor 1995). This relationship, usually manifested in older adults and in prevalence surveys, is somewhat complex and merits explanation. Nonorganizational religiosity and health or well-being may be inversely associated in cross-sectional analyses, possibly reflecting an increase in private religious practices among older adults disengaging from organizational religious behavior for reasons of ill health or disability. Therefore, longitudinal designs are necessary to accurately characterize the effects of private religious practices on health and well-being.

Suggested Administration

Because only 4 items appear on the proposed scale, no suggested Short Form is provided. If prior psychometric research can serve as a guide, these items constitute a reliable. unidimensional measure that is applicable across the US adult population. Items are simple enough that they may be either selfadministered or administered in a personal or telephone interview, although a multimethod comparison analysis would be instructive. As noted earlier, the use of at least 4 items is highly desirable from a psychometric standpoint, as this is believed to enhance reliability and is known to enable the use of powerful confirmatory procedures, such as those based on covariance-structure modeling. For a unidimensional latent construct, such as private religious practices, a minimum of 4 items is required to overidentify parameters for purposes of estimation, a necessary condition for testing overall model fit (Bollen 1989, Chou and Bentler 1995).

Time Referent

These items refer to current religious behavior and are written in the present tense.

Estimated Completion Time

60 sec.

Proposed Items

PRIVATE RELIGIOUS PRACTICES-LONG FORM

Please choose the most accurate response to the following questions.

- 1. How often do you pray privately in places other than at church or synagogue?
 - 1 Several times a day
 - 2 Once a day
 - 3 A few times a week
 - 4 Once a week
 - 5 A few times a month
 - 6 Once a month
 - 7 Less than once a month
 - 8 Never
- 2. How often do you watch or listen to religious programs on TV or radio?
 - 1 Several times a day
 - 2 Once a day
 - 3 A few times a week
 - 4 Once a week
 - 5 A few times a month
 - 6 Once a month
 - 7 Less than once a month
 - 8 Never
- 3. How often do you read the Bible or other religious literature?
 - 1 Several times a day
 - 2 Once a day
 - 3 A few times a week
 - 4 Once a week
 - 5 A few times a month
 - 6 Once a month
 - 7 Less than once a month
 - 8 Never

- 4. How often are prayers or grace said before or after meals in your home?
 - 1 At all meals
 - 2 Once a day
 - 3 At least once a week
 - 4 Only on special occasions
 - 5 Never

PRIVATE RELIGIOUS PRACTICES-SHORT FORM

None provided. See Suggested Administration for this domain.

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Religious/Spiritual Coping

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Domain of Measurement

These items assess 2 patterns of religious/ spiritual coping with stressful life events: positive religious/spiritual coping reflective of benevolent religious methods of understanding and dealing with life stressors; and negative religious/spiritual coping reflective of religious struggle in coping.

Description of Measures

Empirical studies have shown a clear connection between stressful life events and various forms of religious/spiritual involvement (Bearon and Koenig 1990, Biorck and Cohen 1993, Ellison and Taylor 1996, Lindenthal et al 1970). Why should this be the case? Major life events can threaten or harm many objects of significance—the sense of meaning, intimacy with others, personal control, physical health, the sense of personal comfort, etc. Religion (defined broadly as the search for significance in ways related to the sacred) offers a variety of coping methods for conserving these objects of significance in times of stress or, if that is no longer possible, transforming these objects of significance (Pargament 1997).

There is a large body of empirical evidence that religious/spiritual methods of coping can affect the psychological, social, physical, and spiritual adjustment of people to crisis, for better or worse (Koenig et al 1992; Oxman et al 1995; Pargament et al 1994; Wright, Pratt, and Schmall 1985). Research also indicates that methods of religious/spiritual coping do not duplicate those of nonreligious coping; religious/spiritual coping measures continue

to predict significant portions of variance in outcomes to life stressors after removing the effects of nonreligious coping measures (Pargament and Koenig 1997). Furthermore, methods of religious/spiritual coping are not redundant with global religious measures, such as intrinsic religiousness, average church attendance, average frequency of prayer, and self-rated religiousness. Several studies have shown that measures of specific methods of religious/spiritual coping continue to predict outcomes to life stressors significantly, even after removing the effects of global religious measures (Pargament 1997). The reverse is not typically the case; that is, global religious measures do not predict adjustment to life crises with much power after the effects of religious coping methods are removed. These findings suggest a model in which religious/spiritual coping methods mediate the relationship between global variables (eg, intrinsic religiousness, frequency of prayer, denomination, frequency of church attendance) and the outcomes of stressful life events. In plainer language, in times of crisis people translate their general religious orientation into specific methods of religious/spiritual coping. The specific methods of coping have the more immediate and most proximal implications for health.

Five approaches have been used to measure religious/spiritual coping: the indicators approach, the overall approach, the general coping approach, the specific religious coping methods approach, and the patterns of religious coping approach.

The Indicators Approach to Measurement:

This approach uses global religious items (eg, frequency of prayer or frequency of church attendance) as indicators of religious/spiritual coping. Using indicators is frequently an efficient way to collect survey data about religion. However, even when significant correlations emerge between the indicator and the measures, questions remain. Has the individual actually applied that religious practice or belief to the critical situation? This can be a problem when the religious/ spiritual indicator is phrased in terms of average frequency of prayer or attendance, rather than frequency of prayer or attendance as a way of dealing with a problem. We are also left with questions about the underlying functional mechanism that connects the indicator of religious/spiritual coping to outcomes. A relationship between frequency of prayer or attendance and health can be explained by several theoretical frameworks. In addition, as noted earlier, there is evidence that measures of religious/spiritual coping methods predict outcomes more strongly than do religious indicators.

The Overall Approach to Measurement:

This approach assesses the overall degree of religious/spiritual involvement in coping. A good example is Koenig and colleagues' (1992) Religious Coping Index. A strength of this 3-item index is its use of multiple methodologies: 1 item is an open-ended question about how the individual coped with a stressor (religious coping is coded); another item involves the interviewer's rating of the extent to which the individual relied on religion to cope; the third item uses a visual analogue scale in which the individual rates how helpful he/she found religious beliefs or activities in coping with the situation. The strength of this approach is also a weakness; as is, the scale could not be used in large surveys. In addition, if religious/spiritual coping is defined in terms of attempts or efforts to understand and deal with problems through religion, then the item in which the individual rates the helpfulness of religious/ spiritual coping is more reflective of "religious

coping efficacy" or religious outcome than religious/spiritual coping per se. Care is needed to avoid confounding outcomes with coping.

Pargament et al (1990) used a single item to tap into the overall degree of religious/spiritual involvement in coping: "To what extent was your religion involved in understanding or dealing with THIS EVENT in any way? (By religion, we mean your religious beliefs, practices, relationship with God, and relationships with members and clergy in your church.)" This item is answered on a 5-point Likert scale ranging from "not at all" to "considerably." On the positive side, confounding of coping process with outcome may be less of a problem with this item. In unpublished analyses, the item has been associated with more specific religious/spiritual coping methods. Yet this overall item does not predict outcomes to life stressors as well as the more specific religious/spiritual coping methods. In addition, as with the indicators approach described earlier, the overall approach leaves unanswered the question, "What is it about religion that makes the difference in health?"

General Coping Approach to Measurement:

In this approach, items reflecting a few uses of religion in the process of coping with a life stressor are included in general coping instruments (Keefe 1992, Lazarus and Folkman 1984). For example, Lazarus and Folkman's (1984) Ways of Coping Scale includes 2 explicitly religious items: "found new faith" and "I prayed." However, the special contribution religion may make to coping tends to be obscured in this approach, because the small number of religious items are typically embedded in broader factoranalytically derived dimensions. In the case of the Ways of Coping Scale, the 2 religious items become part of a larger "Positive Reappraisal" factor.

The Specific Religious Coping Methods Approach to Measurement:

If we assume that religion offers a variety of methods for coping with life's problems (eg, confession, seeking spiritual support, rites of passage, conversion), then it should be possible to assess these different methods in detail. Several approaches have been taken to measure specific methods of religious/spiritual coping.

Styles of Religious Problem Solving:

Pargament et al (1988) measured 3 religious styles of attaining control in the problemsolving process. In the deferring style, control is sought from God; the individual places the responsibility for coping on God. In the collaborative style, control is sought with God; the individual and God share the responsibility for coping. In the self-directing style, control rests within the individual; the individual takes the responsibility for coping him/herself. We developed three 12-item scales to measure these problem-solving styles (the Religious Problem Solving scales or RPS). The items cover various domains of the problem-solving process: problem definition, generation of alternative solutions, selection of a solution, implementation of the solution, conclusion and redefinition of the problem. A Short Form of the scale made up of three 6-item scales is also available. The scales have been used in several studies (Pargament 1997). Factor analyses yield a strong 3-factor solution, which has been replicated in a few studies. The scales are highly consistent internally and stable. They have demonstrated evidence of discriminant and criterion-related validity with respect to measures of depression, anxiety, mood, guilt, physical symptoms, and psychosocial competence. Although the RPS scales are phrased and measured in terms of how the individual generally copes with problems, a situationspecific version of the scale has also been published (Schaefer and Gorsuch 1993).

Religious Coping Activities: Pargament et al (1990) took a less theory-based, more inductive approach by attempting to measure a

wider range of religious/spiritual coping methods. The items were developed through a literature review and through interviews with clergy and adults who were dealing with various crises. The items were factor analyzed in a sample of more than 500 members of mainline Protestant and Roman Catholic churches, with respondents facing a variety of life crises. The resulting factors were: spiritually-based coping (through the relationship with God, problems are reframed, limits of control are accepted, and guidance and reassurance are sought), good deeds (efforts to live a better, more religiously integrated life), discontent (expressions of anger, mistrust, and distance to God and the congregation), religious support (attempts to obtain help from the clergy or congregation members), pleading (attempts to bargain with God or obtain a miracle), and religious avoidance (religious activities to distract the individual from problems). In several studies, the Religious Coping Activities (RCA) scales have emerged as predictors of mood, depression, anxiety, and religious outcomes among people facing various crises (Pargament 1997). The scales are not redundant with nonreligious coping measures and are not redundant with global religious measures.

With respect to the working group's task, the religious/spiritual support scale is redundant with Krause's religious support items. The pleading scale might also be conceptualized as a fourth religious problem-solving style, one in which control is sought indirectly through God.

The Turning to Religion Subscale of the COPE:

Carver, Scheier, and Weintraub (1989) developed a 4-item religious/spiritual coping subscale in their larger measure of coping. There is a situational and dispositional version of the scale. Individuals respond to the items in terms of what they generally do when they face stressors or what they do when they face a particular stressor. The subscale seems to tap into an emotion-focused, spiritually-based coping method. The 4 items are: "I seek God's help. I put my trust

in God. I try to find comfort in religion. I pray more than usual." The subscale is internally consistent and stable. It has been associated with optimism and a monitoring information processing style.

The RCOPE: Most recently, Koenig and Pargament have been working on a comprehensive measure of religious/spiritual coping called RCOPE (Koenig, Pargament, and Nielsen in press; Pargament and Koenig 1997). This measure is designed to be theoretically based, comprehensive, and open to the negative as well as the positive side of religious/spiritual coping. There are 5-item and 3-item versions that assess 17 religious/ spiritual coping methods. Examples of the measures include: benevolent religious appraisals, religious forgiving, spiritual discontent, religious helping, the search for spiritual connection, and anger at God. These coping methods are targeted variously to the search for meaning, intimacy, self-development, comfort, and spirituality. Preliminary factor analytic results with college students and medically ill patients are promising. The scales also correlate with a variety of measures of stress-related outcomes, including physical health, mental health, and spiritual outcomes.

On the positive side, the specific religious/ spiritual coping methods approach appears to yield stronger relationships with outcomes than the global approach to religious measurement. Moreover, by using these measures, it is easier to understand how religion may affect health because the function of religion is, to some extent, "built into" the items. Unfortunately, this approach is lengthy. Thus, unless the researcher chooses to focus on one particular type or set of religious/ spiritual coping methods, this approach is not feasible for use in large, general purpose surveys.

The Patterns of Religious Coping Approach to Measurement:

People do not appear to use methods of religious/spiritual coping singly. Moderate

intercorrelations among the religious/spiritual coping scales suggest that methods of religious/spiritual coping are applied in combinations or patterns. Rather than measure the variety of religious/spiritual coping methods in detail, then, it is possible to assess a broad range of religious/spiritual coping activities more economically. Two groups have examined patterns of religious/spiritual coping.

Ways of Religious Coping Scale (WORCS):

Boudreaux et al (1995) created a 40-item scale that taps into a variety of religious/ spiritual methods of coping with stress (eg, saying prayers, confessing, obtaining help from clergy, thinking about Jesus as my friend, trying to be less sinful). Factor analysis revealed 2 interpretable factors: an internal/private factor of personal/cognitive religious coping methods and an external/social factor of religious behaviors and social activities. The scales are easy to read and relate differentially to the Religious Coping Activities scales. No data are available on the relationships of these scales to measures of health status. The scales also lack a theoretical underpinning.

Brief RCOPE: Pargament, Smith, Koenig and Perez (1998) developed a subscale by selecting 21 items from the RCOPE dimensions discussed earlier. The items were administered to a community sample of family, friends, and acquaintances of victims of the Oklahoma City bombing. The factor analysis yielded 2 factors: a positive religious/spiritual coping factor that reflects benevolent religious involvement in the search for significance (12 items), and a negative factor that reflects religious struggle in coping (9 items). The subscales were internally consistent and evidence was found of discriminant and criterion-related validity using measures of stress-related growth, post-traumatic stress disorder symptoms, callousness to others, and religious outcomes.

Previous Psychometric Work

As noted earlier, the overall religious/spiritual coping item has been associated with specific methods of religious/spiritual coping (Pargament et al 1990) and with the outcomes of major life stressors, though the association is less strong than with measures of specific religious coping methods. The subset of items drawn from the Brief RCOPE for use here (see p 48 and 49) has not been tested directly. However, the Brief RCOPE has shown evidence of internal consistency, discriminant, and criterion-related validity. Moreover, similar items have been used in other measures and studies of religious/ spiritual coping and demonstrated concurrent and predictive validity (Pargament 1997). The RCOPE has received factor analytic support. It has also shown evidence of internal consistency, criterion-related validity, and incremental validity in 2 diverse samples.

Association with Health

Measures of religious/spiritual coping have been associated with indicators of physical health, mental health, and spiritual outcomes. Theorists have suggested several functional mechanisms to explain the connection between religious/spiritual coping and health and well-being. Methods of religious/ spiritual coping may serve as antidotes to anxiety, as a check on human impulses (Freud 1927/1961), as sources of meaning in the world (Geertz 1966), as stimuli for personal growth and development (Fromm 1950), and as bases of social cohesiveness (Durkheim 1915). The motivation to find and experience the sacred may also have intrinsic health benefits that cannot be "reduced" to other psychosocial mechanisms.

Suggested Administration

In large surveys with limited space, the overall approach and the patterns approach to the measurement of religious/spiritual coping appear to be the most appropriate. The overall religious/spiritual coping question

from Pargament et al (1990) provides a summary evaluation of the degree to which the individual involves religion/spirituality in coping (see the Brief RCOPE Items and Overall Religious/Spiritual Coping Items on p 48 and 49).

The Brief RCOPE Items (p 48, 49) can also be adapted for the purposes of a larger survey (Pargament, Smith, Koenig and Perez 1998). The 3 items that load highest on the positive (items 1-3 on p 52) and negative (items 1-3 on p 52, 53) religious/spiritual coping factors, respectively, were selected to create a Short Form of the Brief RCOPE 1. A longer form of the Brief RCOPE, consisting of the 5 items that load highest on the positive and negative religious/spiritual coping factors, respectively, is also presented (p 48, 49). The specific religious/spiritual coping methods assessed by each item of the Brief RCOPE are noted in parentheses. The items can be rated in terms of how the individual copes with a particular stressor, or with life stressors in general, if coping is measured dispositionally. Whether to use situational or dispositional forms of the religious/spiritual coping measures depends on the purpose of the survey. If the focus is on a group facing a particular life stressor, then the situation-specific form is most appropriate. If the focus is on health status more generally, the dispositional form makes more sense.

The 2 subscales of the Brief RCOPE allow for examination of both the potentially positive and negative effects of religion/spirituality. The items also have some theoretical connection and suggest how religion/spirituality may affect health. Analyses of specific items on the subscales could also point to areas for further, more detailed investigation using the specific religious coping methods approach to measurement.

For studies in which space limitations are less of an issue, the RCOPE appears to be the most appropriate measure (see the Long Form starting on p 48). Theoretically-based, comprehensive, and open to the negative as

well as the positive, this instrument provides an intensive analysis of religious/spiritual coping methods and could serve as a basis for the development of psychoreligious interventions.

Time Referent

When coping is measured dispositionally (as in the Brief RCOPE Short Form), no time frame is specified. When coping is measured situationally (as in the RCOPE Long Form), the items refer to the time frame of the specific life crisis.

Estimated Completion Time

Short Form (Brief RCOPE): 90 sec.-2 min. Long Form (RCOPE): 30 min.

Proposed Items

RELIGIOUS/SPIRITUAL COPING-LONG FORM

*Indicates item is on the 3-item version of the given subscale.

Brief RCOPE Items

Instructions (Dispositional): Think about how you try to understand and deal with major problems in your life. To what extent is each involved in the way you cope?

Positive Religious/Spiritual Coping Subscale (factor loadings> .60)

- 1. I think about how my life is part of a larger spiritual force (Search for Spiritual Connection).*
 - 1 A great deal
 - 2 Quite a bit
 - 3 Somewhat
 - 4 Not at all

- 2. I work together with God as partners to get through hard times (Collaborative Religious Coping).*
 - 1 A great deal
 - 2 Quite a bit
 - 3 Somewhat
 - 4 Not at all
- 3. I look to God for strength, support, and guidance in crises (Seeking Spiritual Support).*
 - 1 A great deal
 - 2 Quite a bit
 - 3 Somewhat
 - 4 Not at all
- 4. I try to find the lesson from God in crises (Benevolent Religious Appraisal).
 - 1 A great deal
 - 2 Quite a bit
 - 3 Somewhat
 - 4 Not at all
- 5. I confess my sins and ask for God's forgiveness (Ritual Purification).
 - 1 A great deal
 - 2 Quite a bit
 - 3 Somewhat
 - 4 Not at all

Negative Religious/Spiritual Coping Subscale (factor loadings> .53)

- 1. I feel that stressful situations are God's way of punishing me for my sins or lack of spirituality (Punishing God Reappraisal).*
 - 1 A great deal
 - 2 Quite a bit
 - 3 Somewhat
 - 4 Not at all
- 2. I wonder whether God has abandoned me (Spiritual Discontent).*
 - 1 A great deal
 - 2 Quite a bit
 - 3 Somewhat
 - 4 Not at all

- 3. I try to make sense of the situation and decide what to do without relying on God (Self-Directed Religious Coping).*
 - 1 A great deal
 - 2 Quite a bit
 - 3 Somewhat
 - 4 Not at all
- 4. I question whether God really exists (Religious Doubts).
 - 1 A great deal
 - 2 Quite a bit
 - 3 Somewhat
 - 4 Not at all
- 5. I express anger at God for letting terrible things happen (Anger at God).
 - 1 A great deal
 - 2 Quite a bit
 - 3 Somewhat
 - 4 Not at all

Overall Religious/Spiritual Coping Item

To what extent is your religion involved in understanding or dealing with stressful situations in any way?*

- 1 Very involved
- 2 Somewhat involved
- 3 Not very involved
- 4 Not involved at all

RCOPE Subscales and Items and Definitions of Religious/Spiritual Coping Methods 1

Religious/Spiritual Methods of Coping to Find Meaning

Instructions (Situational Form): The following items deal with ways you coped with the negative event in your life. There are many ways to try to deal with problems. These items ask what you did to cope with this negative event. Obviously different people deal with things in different ways, but we are interested in how you tried to deal with it. Each item says something about a particular way of coping. We want to know to what extent you did what the item says. How much or how frequently? Don't answer on the basis

of what worked or not—just whether or not you did it. Use these raceway choices. Try to rate each item separately in your mind from the others. Make your answers as true FOR YOU as you can. Circle the answer that best applies to you.

- 1 Not at all
- 2 Somewhat
- 3 Quite a bit
- 4 A great deal

Benevolent Religious Reappraisal—redefining the stressor through religion as benevolent and potentially beneficial

- *1. Saw my situation as part of God's plan.
- *2. Tried to find a lesson from God in the event.
- *3. Tried to see how God might be trying to strengthen me in this situation.
- 4. Thought that the event might bring me closer to God.

Punishing God Reappraisal—redefining the stressor as a punishment from God for the individual's sins

- *1. Wondered what I did for God to punish me.
- *2. Decided that God was punishing me for my sins.
- *3. Felt punished by God for my lack of devotion.
- 4. Wondered if God allowed this event to happen to me because of my sins.
- 5. Wondered whether God was punishing me because of my lack of faith.

Demonic Reappraisal—redefining the stressor as the act of the Devil

- *1. Believed the Devil was responsible for my situation.
- *2. Felt the situation was the work of the Devil.
 - 3. Felt the Devil was trying to turn me away from God.
- *4. Decided the Devil made this happen.
- 5. Wondered if the Devil had anything to do with this situation.

Reappraisal of God's Powers—redefining God's power to influence the stressful situation

- *1. Questioned the power of God.
- *2. Thought that some things are beyond God's control.
- *3. Realized that God cannot answer all of my prayers.
- 4. Realized that there were some things that even God could not change.
- 5. Felt that even God has limits.

Religious/Spiritual Methods of Coping to Gain Control

Collaborative Religious Coping—seeking control through a partnership with God in problem solving

- *1. Tried to put my plans into action together with God.
- *2. Worked together with God as partners.
- *3. Tried to make sense of the situation with God.
- 4. Felt that God was working right along with me.
- 5. Worked together with God to relieve my worries.

Active Religious Surrender—an active giving up of control to God in coping

- *1. Did my best and then turned the situation over to God.
- *2. Did what I could and put the rest in God's hands.
- *3. Took control over what I could, and gave the rest up to God.
- 4. Tried to do the best I could and let God do the rest.
- 5. Turned the situation over to God after doing all that I could.

Passive Religious Deferral—passive waiting for God to control the situation

- *1. Didn't do much, just expected God to solve my problems for me.
- *2. Didn't try much of anything; simply expected God to take control.
- *3. Didn't try to cope; only expected God to take my worries away.
- 4. Knew that I couldn't handle the situation, so I just expected God to take control.
- 5. Didn't try to do much; just assumed God would handle it.

Pleading For Direct Intercession—seeking control indirectly by pleading to God for a miracle or divine intercession

- *1. Pleaded with God to make things turn out okay.
- *2. Prayed for a miracle.
- *3. Bargained with God to make things better.
- 4. Made a deal with God so that he would make things better.
- 5. Pleaded with God to make everything work out.

Self-Directing Religious Coping—seeking control directly through individual initiative rather than help from God

- *1. Tried to deal with my feelings without God's help.
- *2. Tried to make sense of the situation without relying on God.
- *3. Made decisions about what to do without God's help.
- 4. Depended on my own strength without support from God.
- 5. Tried to deal with the situation on my own without God's help.

Religious/Spiritual Methods of Coping to Gain Comfort and Closeness to God

Seeking Spiritual Support—searching for comfort and reassurance through God's love and care

- *1. Sought God's love and care.
- *2. Trusted that God would be by my side.
- *3. Looked to God for strength, support and guidance.
- 4. Trusted that God was with me.
- 5. Sought comfort from God.

Religious Distraction—engaging in religious/ spiritual activities to avoid focusing on the stressor

- *1. Prayed to get my mind off of my problems.
- *2. Thought about spiritual matters to stop thinking about my problems.
- *3. Focused on religion to stop worrying about my problems.
- 4. Went to church to stop thinking about this situation.
- 5. Tried to get my mind off my problems by focusing on God.

Religious Purification—searching for spiritual cleansing through religious actions

- *1. Confessed my sins.
- *2. Asked forgiveness for my sins.
- *3. Tried to be less sinful.
- 4. Searched for forgiveness from God.
- 5. Asked for God to help me be less sinful.

Spiritual Connection—experiencing a sense of connectedness with forces that transcend

- 1. Looked for a stronger connection with God.
- *2. Sought a stronger spiritual connection with other people.
- *3. Thought about how my life is part of a larger spiritual force.
- 4. Tried to build a strong relationship with a higher power.
- 5. Tried to experience a stronger feeling of spirituality.

Spiritual Discontent—expressing confusion and dissatisfaction with God's relationship to the individual in the stressful situation

- *1. Wondered whether God had abandoned me.
- *2. Voiced anger that God didn't answer my prayers.
- *3. Questioned God's love for me.
- 4. Wondered if God really cares.
- 5. Felt angry that God was not there for me.

Marking Religious Boundaries—clearly demarcating acceptable from unacceptable religious behavior and remaining within religious boundaries

- *1. Avoided people who weren't of my faith.
- *2. Stuck to the teachings and practices of my religion.
- *3. Ignored advice that was inconsistent with my faith.
- 4. Tried to stick with others of my own faith.
- 5. Stayed away from false religious teachings.

Religious/Spiritual Methods of Coping to Gain Intimacy with Others and Closeness to God

Seeking Support from Clergy or Members—searching for comfort and reassurance through the love and care of congregation members and clergy

- *1. Looked for spiritual support from clergy.
- *2. Asked others to pray for me.
- *3. Looked for love and concern from the members of my church.
- 4. Sought support from members of my congregation.
- 5. Asked clergy to remember me in their prayers.

Religious Helping—attempting to provide spiritual support and comfort to others

- *1. Prayed for the well-being of others.
- *2. Offered spiritual support to family or friends.
- *3. Tried to give spiritual strength to others.
- 4. Tried to comfort others through prayer.
- 5. Tried to provide others with spiritual comfort.

Interpersonal Religious Discontent—expressing confusion and dissatisfaction with the relationship of clergy or members to the individual in the stressful situation

- *1. Disagreed with what the church wanted me to do or believe.
- *2. Felt dissatisfaction with the clergy.
- *3. Wondered whether my church had abandoned me.
- 4. Felt my church seemed to be rejecting or ignoring me.
- 5. Wondered whether my clergy was really there for me.

Religious/Spiritual Methods of Coping to Achieve a Life Transformation

Seeking Religious Direction—looking to religion for assistance in finding a new direction for living when the old one may no longer be viable

- *1. Asked God to help me find a new purpose in life.
- *2. Prayed to find a new reason to live.
- *3. Prayed to discover my purpose in living.
- 4. Sought new purpose in life from God.
- 5. Looked to God for a new direction in life.

Religious Conversion—looking to religion for a radical change in life

- *1. Tried to find a completely new life through religion.
- *2. Looked for a total spiritual reawakening.
- *3. Prayed for a complete transformation of my life.
- 4. Tried to change my whole way of life and follow a new path—God's path.
- 5. Hoped for a spiritual rebirth.

Religious Forgiving—looking to religion for help in shifting from anger, hurt, and fear associated with an offense to peace

- *1. Sought help from God in letting go of my anger.
- *2. Asked God to help me overcome my bitterness.
- *3. Sought God's help in trying to forgive others.
- 4. Asked God to help me be more forgiving.
- 5. Sought spiritual help to give up my resentments.

RELIGIOUS/SPIRITUAL COPING-SHORT FORM

Brief RCOPE Items

Instructions (Dispositional): Think about how you try to understand and deal with major problems in your life. To what extent is each involved in the way you cope?

Positive Religious/Spiritual Coping Subscale (factor loadings> .60)

- 1. I think about how my life is part of a larger spiritual force (Search for Spiritual Connection).
 - 1 A great deal
 - 2 Quite a bit
 - 3 Somewhat
 - 4 Not at all
- 2. I work together with God as partners to get through hard times (Collaborative Religious Coping).
 - 1 A great deal
 - 2 Quite a bit
 - 3 Somewhat
 - 4 Not at all
- 3. I look to God for strength, support, and guidance in crises (Seeking Spiritual Support).
 - 1 A great deal
 - 2 Quite a bit
 - 3 Somewhat
 - 4 Not at all

Negative Religious/Spiritual Coping Subscale (factor loadings> .53)

- 1. I feel that stressful situations are God's way of punishing me for my sins or lack of spirituality (Punishing God Reappraisal).
 - 1 A great deal
 - 2 Quite a bit
 - 3 Somewhat
 - 4 Not at all

- 2. I wonder whether God has abandoned me (Spiritual Discontent).
 - 1 A great deal
 - 2 Quite a bit
 - 3 Somewhat
 - 4 Not at all
- 3. I try to make sense of the situation and decide what to do without relying on God (Self-Directed Religious Coping).
 - 1 A great deal
 - 2 Quite a bit
 - 3 Somewhat
 - 4 Not at all

Overall Religious/Spiritual Coping Item

To what extent is your religion involved in understanding or dealing with stressful situations in any way?

- 1 Very involved
- 2 Somewhat involved
- 3 Not very involved
- 4 Not involved at all

RCOPE Subscales and Items and Definitions of Religious/Spiritual Coping Methods 1

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the others. Make your answers as true FOR YOU as you can. Circle the answer that best applies to you.

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- 3. Thought about how my life is part of a larger spiritual force.

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- 1. Wondered whether God had abandoned me.
- 2. Voiced anger that God didn't answer my prayers.
- 3. Questioned God's love for me.

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- 3. Looked for love and concern from the members of my church.

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- 1. Prayed for the well-being of others.
- 2. Offered spiritual support to family or friends.
- 3. Tried to give spiritual strength to others.

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- 1. Disagreed with what the church wanted me to do or believe.
- 2. Felt dissatisfaction with the clergy.
- 3. Wondered whether my church had abandoned me.

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- 2. Prayed to find a new reason to live.
- 3. Prayed to discover my purpose in living.

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- 1. Tried to find a completely new life through religion.
- 2. Looked for a total spiritual reawakening.
- 3. Prayed for a complete transformation of my life.

Religious Forgiving—looking to religion for help in shifting from anger, hurt, and fear associated with an offense to peace

- 1. Sought help from God in letting go of my anger.
- 2. Asked God to help me overcome my bitterness.
- 3. Sought God's help in trying to forgive others.

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Religious Support

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Domain of Measurement

These items are designed to measure select aspects of the social relationships between study participants and others in their shared place of worship.

Description of Measures

The literature to date contains numerous theoretical discussions about the interface between religion and social support. Even so, efforts to measure social support within the context of religion have not kept pace with this conceptual work. The lag is unfortunate because the wider literature on social support measurement is now well developed, and sophisticated multidimensional scales that assess social support outside the context of religion are readily available. Moreover, these scales have sound psychometric properties. Rather than avail themselves of this extensive work, most researchers interested in social support and religion have instead turned to 1 of 2 less desirable measurement approaches: some merely ask about social support generally, without any explicit reference to religion, while others rely on the few social support items that can be gleaned from larger religious coping batteries. Either tactic fails to do justice to the complex nature of the social support process.

Given this unsatisfactory state of affairs, the best strategy is to devise new measures that focus explicitly on social support and religion. However, instead of ignoring all previous work, it makes more sense to use secular scales of social support (ie, support that takes place outside the context of religion) as a

template. While this strategy provides a useful point of departure, developing a practical measure of religious support calls for more than just a straightforward extrapolation of previous work. In particular, important decisions must be made about item content. One of 2 major approaches may be taken. The first involves modifying existing secular support items by specifying that assistance comes from a fellow parishioner. The only change involves specifying that the source of support is a coreligionist. In contrast, the second approach focuses on assistance that is specifically religious in nature. Such an approach involves much more substantial change because there is a fundamental shift in the nature or kind of help being given. In this instance, the items would assess the provision of uniquely religious support.

The first strategy—modifying secular support items to specify the source of support—is perhaps best illustrated by an example. One widely used secular support item asks respondents how often people in their informal social network listen to them talk about their private problems and concerns. This indicator may be altered by asking how often fellow parishioners listen to them talk about their private problems and concerns. The advantage in pursuing this option is that much is known about the psychometric properties of the secular support items used to create these indicators. As a result, the odds of developing equally good religious support items seem promising, particularly if the change is simply adding an additional clause specifying the source of support as another

religious person. But there is another, perhaps even more important benefit in using this approach. Decades of research with secular support items have now established clear links between these measures and health. If the intent of a study is to assess religious support and health, it would appear that researchers can capitalize on previous work by maintaining the content of the support question, while only modifying the source of assistance.

As noted earlier, the second way to construct religious social support items requires investigators to begin almost from scratch, devising indicators that focus on assistance that is explicitly religious in nature. For example, an investigator might ask how often fellow parishioners give an elder spiritual strength. There are, however, 3 drawbacks associated with this strategy. First, since the items must be developed de novo, we have no sense of their psychometric properties. Second, we have no way of knowing whether the new measures will be related to health. Finally, there are likely to be many ways in which people of different religions provide religious support. Given these drawbacks, the range of potential measures will be guite broad and it will be especially difficult to determine whether the domain has been specified and sampled adequately.

Therefore, it would appear that the best strategy is the first approach, that is, modify secular social support items to reflect the fact that we are interested only in assistance that comes from a coreligionist. However, as noted earlier, the literature on general social support measures is vast and investigators have devised a plethora of scales to assess a range of dimensions or types of help. Consequently, the next task is to determine which dimensions should be covered and which scales used. A fairly extensive battery, covering the full spectrum of social support dimensions, would be ideal, though impractical. As a result, the subset of social support dimensions likely to provide the greatest payoff was considered.

A necessary first step for our working group was to briefly critique the range of secular support measures available in the literature. Barrera (1986) provides a succinct summary of the options, arguing that there are 3 broad categories of social support measures:

- Measures of social embeddedness (the frequency of contact with others);
- Received or enacted support (the amount of tangible help actually provided by others);
 and
- Measures of perceived support (subjective evaluations of supportive exchanges, such as satisfaction with support).

Clearly, measures of enacted and perceived support are more highly correlated with health than measures of social embeddedness. Given these findings, it makes the most sense to focus the religious support measures on these 2 key dimensions.

The term "enacted support" does not refer to a single type of assistance. Instead, it encompasses a fairly diverse range of specific helping behaviors. Although there are many ways to classify specific types of enacted support, one useful schema divides this conceptual domain into 3 broad types of helping: emotional, tangible, and informational support. Extensive research indicates these dimensions of enacted support are highly correlated, and the most crucial appears to be emotional support (House and Kahn 1985). Consequently, indicators of emotional support provided by others are included in the battery of religious support items proposed here.

Although it is important to focus on the amount of help provided by others, a small but intriguing cluster of studies suggests that giving support to others may have beneficial effects as well (Krause 1986). This view is supported by a rich theoretical tradition in the social sciences, specifying that social relations are based on reciprocity, and that networks function best when individuals give as well as receive. This seems to be an

especially salient issue for the study of religious support, because sacred texts of many faiths make numerous references to the importance of helping others. As a result, measures of emotional support provided to others are also included in the battery proposed here.

There are also a number of different ways to conceptualize the measure of perceived social support. Two are included in the battery provided at the end of this section: the first assesses negative interaction, whereas the second deals with anticipated support. Investigators working in the social support field often overlook the fact that relations with others are not always positive, and encounters with social network members are sometimes marred by conflict and strife. Moreover, compelling evidence provided by Rook (1984) and others suggests that negative interaction may exert a greater effect on health and wellbeing than the positive or beneficial things that significant others do for us. Even so, apparently no scales of religious support include measures of negative interaction. This is somewhat surprising, since even casual observations suggest that churches may at times be rife with conflict. Given this fact, we decided to include indicators of negative interaction in the religious support measure proposed here.

The final dimension of perceived support to be included in our religious support measures is anticipated support, defined as the belief that others are willing to provide help in the future should the need arise. Several recent studies reveal that anticipated support may exert a more beneficial effect on health and well-being than the actual amount of assistance provided by others (Krause in press). There are several reasons for this. First, some investigators suspect that anticipated support acts as a social safety net that encourages risk-taking and individual resolution of problems. This means that people will be more likely to resolve difficulties on their own if they believe that others will be there to help out, should the individually based

coping strategies turn out to be ineffective. Second, anticipated support may reduce social network burden and promote the smooth functioning of social relationships. This benefit may arise because the individual coping efforts that it promotes tend to reduce the demands made on others for assistance. Finally, anticipated support may be especially important within the context of religion, because membership in a formal religious organization carries the implicit promise that members of the religious community will provide help in the future if necessary.

Previous Psychometric Work

After reviewing current scales, the working group included the following dimensions of social support in this religious support scale.

- Emotional support received from fellow parishioners;
- Emotional support given to others in one's congregation;
- Negative interaction with coreligionists; and
- Anticipated support.

The measures of emotional support received and emotional support provided to others were adapted from the work of Krause and Markides (1990). The indicators of negative interaction as well as anticipated support are modified versions of the items devised by Liang (1990) and evaluated in a nationwide survey of older adults by Krause (1995, 1997).

The items in these scales have not been tested directly. However, they represent relatively minor modifications of indicators that have been tested extensively with a nationwide probability sample of older adults in the US (Krause 1995, 1997), as well as in Japan (Liang 1990). The minor modifications took the following form. As discussed previously, the items assessing emotional support received from others were modified to refer to coreligionists only. Similarly, the original 1-year time frame was switched to the present tense.

Association with Health

A number of researchers suspect that involvement in religion improves a person's health and psychological well-being. Although there are many ways to explain these relationships, some investigators believe that assistance exchanged among those who worship together accounts for at least part of the healthful effect. This postulate is supported by a vast literature linking social support to health and well-being outside the context of religion. There are 2 ways that religious support may enhance health and well-being. First, assistance from coreligionists may help to offset the noxious effects of stressful life events (the death of a loved one, financial loss). Second, irrespective of this stress-buffering function, religious support may be an important determinant of health in its own right (a direct effects model). This second function is based on the hypothesis that health and well-being are bolstered simply by being embedded in an active and integrated social network. Presumably, these benefits arise because being part of a tightly knit group increases selfesteem, bolsters feelings of control and, in some instances, promotes the adaptation of desirable health behaviors. For example, some religious groups encourage their members to avoid alcohol and tobacco. There is also some evidence that social support improves health by bolstering immune function.

Suggested Administration

Two issues should be kept in mind when using these measures. First, a Short Form and a Long Form are provided. We strongly recommend using the Long Form, because doing so will improve the psychometric properties of the measures (by increasing the internal consistency reliability estimates) and facilitate the use of more advanced data analytic techniques (such as latent variable modeling). Second, if the intent of the study is to see whether religious support offsets the deleterious effects of stressful life events, then the items assessing emotional support received from others, emotional support

provided to others, and negative interaction should be modified. When researchers study stress, they are typically concerned with events that have arisen 6 months to a year before the interview. Consequently, the time frame used for the social support items should match the time frame used to gather information on stress. This means, for example, that if a study focuses on stressful events in the past year, then the social support questions should refer to the past year as well.

Time Referent

No time frame is specified; items are written in the present tense.

Estimated Completion Time

Short Form: 90 sec.

Proposed Items

RELIGIOUS SUPPORT-LONG FORM

Emotional Support Received from Others

The following questions deal with the relationships you've had with the people in your congregation.

- 1. How often do the people in your congregation make you feel loved and cared for?
 - 1 Very often
 - 2 Fairly often
 - 3 Once in a while
 - 4 Never
- 2. How often do the people in your congregation listen to you talk about your private problems and concerns?
 - 1 Very often
 - 2 Fairly often
 - 3 Once in a while
 - 4 Never

- 3. How often do the people in your congregation express interest and concern in your well-being?
 - 1 Very often
 - 2 Fairly often
 - 3 Once in a while
 - 4 Never

Emotional Support Provided to Others

The following questions deal with things you may do for the people you worship with.

- 4. How often do you make the people in your congregation feel loved and cared for?
 - 1 Very often
 - 2 Fairly often
 - 3 Once in a while
 - 4 Never
- 5. How often do you listen to the people in your congregation talk about their private problems and concerns?
 - 1 Very often
 - 2 Fairly often
 - 3 Once in a while
 - 4 Never
- 6. How often do you express interest and concern in the well-being of people you worship with?
 - 1 Verv often
 - 2 Fairly often
 - 3 Once in a while
 - 4 Never

Negative Interaction

Sometimes the contact we have with others is not always pleasant.

- 7. How often do the people in your congregation make too many demands on you?
 - 1 Very often
 - 2 Fairly often
 - 3 Once in a while
 - 4 Never

- 8. How often are the people in your congregation critical of you and the things you do?
 - 1 Very often
 - 2 Fairly often
 - 3 Once in a while
 - 4 Never
- 9. How often do the people in your congregation try to take advantage of you?
 - 1 Very often
 - 2 Fairly often
 - 3 Once in a while
 - 4 Never

Anticipated Support

These questions are designed to find out how much help the people in your congregation would be willing to provide if you need it in the future.

- 10. If you were ill, how much would the people in your congregation be willing to help out?
 - 1 A great deal
 - 2 Some
 - 3 A little
 - 4 None
- 11. If you had a problem or were faced with a difficult situation, how much comfort would the people in your congregation be willing to give you?
 - 1 A great deal
 - 2 Some
 - 3 A little
 - 4 None
- 12. If you needed to know where to go to get help with a problem you were having, how much would the people in your congregation be willing to help out?
 - 1 A great deal
 - 2 Some
 - 3 A little
 - 4 None

RELIGIOUS SUPPORT-SHORT FORM

Emotional Support Received from Others

The following questions deal with the relationships you've had with the people in your congregation.

- 1. How often do the people in your congregation make you feel loved and cared for?
 - 1 Very often
 - 2 Fairly often
 - 3 Once in a while
 - 4 Never
- 2. How often do the people in your congregation listen to you talk about your private problems and concerns?
 - 1 Very often
 - 2 Fairly often
 - 3 Once in a while
 - 4 Never

Emotional Support Provided to Others

The following questions deal with things you may do for the people you worship with.

- 3. How often do you make the people in your congregation feel loved and cared for?
 - 1 Very often
 - 2 Fairly often
 - 3 Once in a while
 - 4 Never
- 4. How often do you listen to the people in your congregation talk about their private problems and concerns?
 - 1 Very often
 - 2 Fairly often
 - 3 Once in a while
 - 4 Never

Negative Interaction

Sometimes the contact we have with others is not always pleasant.

- 5. How often do the people in your congregation make too many demands on you?
 - 1 Very often
 - 2 Fairly often
 - 3 Once in a while
 - 4 Never
- 6. How often are the people in your congregation critical of you and the things you do?
 - 1 Very often
 - 2 Fairly often
 - 3 Once in a while
 - 4 Never

Anticipated Support

These questions are designed to find out how much help the people in your congregation would be willing to provide if you need it in the future.

- 7. If you were ill, how much would the people in your congregation be willing to help out?
 - 1 A great deal
 - 2 Some
 - 3 A little
 - 4 None
- 8. If you had a problem or were faced with a difficult situation, how much comfort would the people in your congregation be willing to give you?
 - 1 A great deal
 - 2 Some
 - 3 A little
 - 4 None

Scoring: Score these responses in the following manner (points in parentheses): Very often (4); Fairly often (3); Once in a while (2); Never (1). Score these responses in the following manner (points in parentheses): A great deal (4); Some (3); A little (2); None (1).

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Religious/Spiritual History

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Domain of Measurement

Measures in this domain are intended to assess the individual's religious/spiritual history. As compared to measures of current religious/spiritual participation, these items provide a brief assessment of religious/spiritual participation over the life course.

Description of Measures

There have been few attempts to develop scales that measure religious or spiritual history. Thus, options for this domain are severely limited. Three or 4 current measures tap religious/spiritual history, yet they vary widely in levels of detail.

Religious Biography: Benson has developed the most comprehensive measure of religious history published to date (Benson 1991). As part of a larger survey of religiousness, he created a 100-item section focused on religious history. The major contents of this measure can be summarized as follows:

- 30 items reported retrospectively for 2 time periods: ages 5 to 12 years and ages 13 to 18 years. Items cover a wide range, including public religious participation, private practices, degree to which religion was emphasized at home, etc.
- 22 items reported for 4 time periods (as applicable): ages 20 to 29 years, ages 30 to 39 years, ages 40 to 49 years, and ages 50 to 64 years. Again, items cover a wide range.
- 2 items about history of participation in current church.
- 2 items about education in churchrelated schools.

- 3 items about religious commitments of significant others.
- 22 items about life events, only one of which involves religion. (Thus, this subsection is largely irrelevant to spiritual history.)
- 1 item about the age at which any significant loss of faith occurred.
- 1 item about the age at which any significant growth in faith occurred.
- 1 item, containing 30 response categories, about religious role models.
- 16 items about religious participation during the past 2 to 3 years. All items tap public participation and private religious practices.

Benson has not yet developed specific subscales or indexes from this pool of items. His approach to analyzing data based on these items has been to compare age groups with respect to specific facets of religiousness, for example, religious importance, frequency of private prayer, frequency of Bible reading, and/or church involvement.

Benson's work provides an excellent starting point for future efforts in developing meaningful, but briefer, measures of religious history. Unfortunately, it provides no evidence about especially salient aspects of religious or spiritual biography that may be related to health.

Religious/Spiritual History Questionnaire:

Kehoe, a clinical psychologist in full-time practice at Cambridge Hospital, Mass., developed a 36-item questionnaire (unpublished), including 11 items about religious

practices in the family of origin, 6 items about religion during early childhood, 8 items about religion during the "school years," 8 items about religion during adolescence/ young adulthood, and 3 items about current religious practices. All questions are openended; Kehoe has not developed response or coding categories and has used this measure exclusively for clinical purposes, never administering it outside of the treatment context. Kehoe is convinced, on the basis of clinical experience, that there is a link between religious/spiritual history and mental health, and that assessing current religious practices is not sufficient for understanding the impact of religion on health status. In addition, with the exception that Kehoe is careful to specify interest in spirituality as well as religion, all of these measures are included (in somewhat different form, of course) in Benson's items about religious history.

Life-Changing Religious/Spiritual Experience:

Several studies have included measures (2 or 3 items) regarding the respondent's experience of a life-changing religious or spiritual event. The origin of these items is unclear. An affirmative response leads to a follow-up question about the age at which that experience occurred. Researchers disagree about what these items measure. Some researchers refer to them as a measure of intense religious experience. Yet with the focus on age, these items are perhaps better viewed as components of religious history. Given the results of previous research and the few items involved, further research regarding the lifetime experience of life-changing religious/spiritual events is highly recommended.

Spiritual Maturity: Measures of spiritual maturity are intended to focus on the substance of religious or spiritual beliefs. There is an assumed hierarchy, which ranges from purely extrinsic religiousness to religious autonomy, the highest level of spiritual maturity.

James Fowler (1981) is the father of the theoretical concept of spiritual maturity. although he uses the term "faith development" instead of "spiritual maturity." Fowler takes a developmental perspective, similar in structure and approach to the theories of Erickson, Piaget, and, especially, Kohlberg. Fowler has also developed an interview guide to assess faith development. The revised interview includes 34 questions in 4 major areas: 4 life review questions, 7 questions about life-shaping experiences and relationships, 14 questions about present values and commitments, and 9 questions about religion. All of the questions are open-ended. Standardized response or coding categories are not available. The interview usually requires 2 hours for completion and seems highly unsuitable for survey research or large-scale clinical studies.

Benson and colleagues (Benson 1991, Benson and Elkin 1990) developed the 38-item Faith Maturity Index for their national study of 5 Protestant denominations. The 38 items tap 2 dimensions of faith, which are labeled "vertical religion," focused on the relationship between the respondent and God; and "horizontal religion," focused on social service and social justice. Responses can be scored in 2 ways. First, responses to all 38 items can be averaged to yield a mean score that ranges from 1 to 7. Benson and colleagues suggest that higher scores represent higher levels of spiritual maturity. When this scoring method is used cross-sectionally, faith maturity increases, modestly but significantly, with increasing age. The second method of scoring the Faith Maturity Index is to cross-classify individuals' scores on the vertical and horizontal measures of religiousness, yielding a typology of 4 discrete groups, or, as Benson calls them, faith types:

- Undeveloped Faith (low vertical, low horizontal)
- Vertical Faith (high vertical, low horizontal)
- Horizontal Faith (low vertical, high horizontal)
- Integrated Faith (high vertical, high horizontal).

Benson views integrated faith as the apex of spiritual maturity. In his sample, as with mean index scores, the proportion of persons with integrated faith increased linearly as age increased.

The Faith Maturity Index has significant problems on conceptual grounds. For the developmental perspective of faith maturity to have value, subjects must respond to items that represent the full range of maturity. That is, items would assess purely extrinsic religiousness, religious autonomy, and so forth. Scores would then be summed to determine the "state" of faith maturity most representative of the individual. This is, in fact, how measures of Piaget-based cognitive development and Kohlberg-based moral development are constructed. Yet Benson and colleagues give equal weight to all items, with no attempt to determine what stage of maturity the items represent. They simply average agreement with all the items. The items also appear to represent a variety of stages of faith maturity as defined by Fowler and others.

Finally, spiritual maturity (or faith development) has never been studied in relation to health. A relationship may exist, but if so, it awaits empirical documentation. If such efforts are made, it would be useful to conceptualize the role of spiritual maturity in health. For example, does spiritual maturity help to prevent or minimize illness as many cognitive resources do? Does spiritual maturity also affect illness course and outcome by boosting coping abilities? Because considerable empirical work remains, we cannot in good faith recommend inclusion of any brief set of items tapping spiritual maturity.

Previous Psychometric Work

Tests of reliability and validity on Benson's Religious History Scale are not available and may not have been performed. Nor has Kehoe done psychometric tests on her scales. It is difficult to assess single-item measures, such as life-changing religious/spiritual history,

psychometrically. Using longitudinal data from the 3 major studies mentioned previously, investigators have only been able to examine stability of reports over time. The evidence on this point is very reassuring. Even over a 7-year interval, less than 1% of the people who reported a life-changing experience at 1 point in time denied having such an experience at a later interview.

Association with Health

There is little evidence that religious/spiritual history correlates with physical or mental health. Benson did not examine the relationship between religious history and health. Kehoe has done so as a clinician, but has no empirical evidence. The exception to this uncertainty is the measure of life-changing religious/spiritual experience. Strong relationships have been found between this measure and depressive disorders and symptoms (Koenig et al 1994a, Meador et al 1992, Ellison and George 1994), anxiety disorders and symptoms (Koenig et al 1993; Koenig, Ford et al 1993), and alcohol abuse and dependence (Koenig et al 1994b). Current unpublished data from these studies indicate that this item is significantly related to selfrated health. These findings come from 3 major studies—2 population-based epidemiological studies (1 age-heterogeneous, 1 based on persons age 65 years and older), and a large clinical study of depression among medically ill older adults. At least this aspect of religious history seems to have robust associations with health, especially mental health. These findings also suggest the potential importance of further efforts to develop psychometrically sound measures of religious/spiritual history.

Note: the author, as coinvestigator, is conducting a study supported by the Fetzer Institute that examines spiritual life history trajectories and their association with health status. The investigators are currently analyzing the extensive data in order to further develop the spiritual history scale.

Suggested Administration

Although we strongly recommend including the "life-changing experience" item, there are 2 forms from which to choose. The choice of form depends on the nature of the population to which the item is administered. We also recommend, but with less confidence, a few other items extracted primarily from Benson's Religious History Measure. This recommendation is not based on evidence of psychometric adequacy or demonstrated relationship to health. It is based, instead, on the assumption that we will never understand the relationship between religious/spiritual history and health unless we study it.

Estimated Completion Time

Regardless of form, the "life-changing experience" items require less than 1 minute to administer. Estimated time to administer the other items is approximately 5 minutes.

Proposed Items

RELIGIOUS/SPIRITUAL HISTORY-LONG FORM

Are you a born again Christian?

Yes No

IF YES: How old were you when this occurred?

IF NO: Have you had a religious or spiritual experience that changed your life?

No Yes

IF YES: How old were you when this occurred?

Brief Religious History

Were you raised in a religious tradition? No Yes

IF YES: Answer next 5 items.

- 1. When you were a young child, how often did you attend religious services?
- 2. When you were a young child, how often did you participate in religious practices at home, either by yourself or with your family?
- 3. When you were a teenager, how often did you attend religious services?
- 4. When you were a teenager, how often did you participate in religious practices at home—either by yourself or with your family?
- 5. Do you currently practice the same religion in which you were raised?

No, no longer practice any religion No, I've changed religious affiliations Yes

Now let's turn to your religious participation as an adult. For each of the following age periods, please rate your religious involvement.

20-29 30-39 40-49 50-64 65+

Involvement in religious services

Low	Low	Low	Low	Low
Medium	Medium	Medium	Medium	Medium
High	High	High	High	High
Does not				
apply	apply	apply	apply	apply

Involvement in private religious practices such as prayer, meditation, and study of religious materials

Low	Low	Low	Low	Low
Medium	Medium	Medium	Medium	Medium
High	High	High	High	High
Does not				
apply	apply	apply	apply	apply

The strength of your religious or spiritual faith

Low	Low	Low	Low	Low
Medium	Medium	Medium	Medium	Medium
High	High	High	High	High
Does not				
apply	apply	apply	apply	apply

Note: Age categories are those used by Benson with the exception of adding a category for 65 years and older.

RELIGIOUS/SPIRITUAL HISTORY-SHORT FORM

History of Life-Changing Religious/Spiritual Experience

Did you ever have a religious or spiritual experience that changed your life?

No Yes

IF YES: How old were you when this experience occurred?

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Commitment

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Domain of Measurement

These items were designed to measure the importance of and commitment to one's religious/spiritual beliefs.

Description of Measures

Currently there is no extensive literature on religious/spiritual commitment and health, nor is there consensus regarding which aspects of religious/spiritual involvement indicate religious commitment. In fact, some of the measures included in other domains (for example, the measure of religious attendance) could also be conceptualized as a measure of religious commitment. However, most researchers agree that religious commitment is multidimensional and the measures proposed here attempt to capture the more important dimensions relevant to health status. These measures are best thought of as individual dimensions of a construct, rather than as a cohesive, multiple-item scale. The proposed Short Form includes items about contributions of time and money, and a single-item indicator of intrinsic religion.

Traditional measures of religious commitment include the reported importance of attending religious services or the salience of faith. They include: "How religious would you say you are?" (Chatters et al 1992); and "How important is attending church or synagogue to you?" (Futterman and Koenig 1995). Some evidence suggests that behaviorally oriented "hard" measures of religious commitment are more strongly linked to health status than attitudinally oriented "soft" ones (Gartner,

Larson, and Allen 1991). Accordingly, religious measures that capture commitments of time and money to religious organizations or causes probably tap important dimensions of religious commitment (Ainlay and Smith 1984, Williams 1994). The King and Hunt scale (Hilty et al 1984; King and Hunt 1972, 1975) and the General Social Survey, among others, have included measures of financial contributions to religious organizations. The Detroit Area Study (1995) used this question: "During the last year about how much was the average monthly contribution of your family to your church (or place of worship)?" Combined with annual income, this item quantifies commitment in financial terms. Commitment of time could be assessed by the following question: "In an average week, how many hours do you spend in activities on behalf of your congregation or activities that you do for religious or spiritual reasons?"

Intrinsic religiousness is a measure of religious motivation that has a long and distinguished history in the study of religion. Although it is primarily used as a measure of religious motivation, it captures the pervasiveness of religious influence in daily life. Because intrinsic religiousness captures a general orientation to all aspects of life and social relationships, it can be regarded as a measure of religious commitment. Allport's Religious Orientation Scale and its adaptations are the most widely used measure of intrinsic and extrinsic religiousness in the empirical study of religion (Kirkpatrick 1989). Allport's Scale has proven to be empirically robust and theoretically enlightening in the study of prejudice and other social phenomena (Donahue 1985).

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Hoge (1972) has proposed a 10-item short form for measuring intrinsic religious motivation. The items are:

- 1. My faith involves all of my life.
- 2. One should seek God's guidance when making every important decision.
- 3. In my life I experience the presence of the Divine.
- 4. My faith sometimes restricts my actions.
- 5. Nothing is as important to me as serving God as best I know how.
- 6. I try hard to carry my religion over into all my other dealings in life.
- 7. My religious beliefs are what really lie behind my whole approach to life.
- 8. It doesn't matter so much what I believe as long as I lead a moral life.
- 9. Although I am a religious person, I refuse to let religious considerations influence my everyday affairs.
- 10. Although I believe in my religion, I feel that there are many more important things in life.

Hoge's scale is useful and appropriate for researchers interested in a longer form than the 3-item Short Form proposed here.

There are several critiques of the Intrinsic Religion Scale (Kirkpatrick 1989, Kirkpatrick and Hood 1990, Stark and Glock 1968), and efforts have been made to develop short versions (Gorsuch and McPherson 1989). Three items from the Benson and Elkin (1990) Mature Faith (Vertical Dimension) Scale appear to be conceptually similar to the intrinsic dimension of religion. They address the extent to which faith informs daily decisions, and dictates moral principles. These items appear to have face validity as a multiple-item short version of intrinsic religious motivation.

- 1. My faith shapes how I think and act each and every day;
- 2. My faith helps me know right from wrong; and
- 3. I talk with other people about my faith.

Another potential alternative to the Intrinsic Religion Scale is a measure of religious importance. The following single-item measure has been used in some research studies.

1. In general, how important are religious or spiritual beliefs in your day-to-day life? Would you say very important, fairly important, not too important, or not at all important?

Sociologists (Raden 1985) and psychologists (Abelson 1988) have also been developing attitudinal items that capture the presence or strength of a respondent's conviction. Their approach could be used successfully to assess religious commitment and may be especially useful in assessing the salience of religious beliefs and attitudes. Researchers studying conviction attempt to distinguish attitudes that are consequential or central from those that are inconsequential. Abelson's (1988) work has identified 3 dimensions of conviction important in capturing the strength of attitudes toward God, nuclear power, divestment, abortion, welfare, star wars, Nicaragua, and AIDS. To my knowledge, these measures have not been applied in any study of religious involvement, but they are another potentially promising direction for research. The cognitive-elaboration items may be less relevant to assessing the strength of religious or spiritual attitudes in terms of health. The highest-loading items under each of Abelson's (1988) "conviction" clusters are:

- A. Emotional Commitment
- 1. My beliefs about X express the real me.
- 2. I can't imagine ever changing my mind about X.
- B. Ego Preoccupation
- 1. I think about X often.
- 2. I hold my views very strongly.
- 3. My belief is important to me.

- C. Cognitive Elaboration
- 1. I've held my views a long time compared to most people.
- 2. Several other issues could come up in a conversation about it.

Another dimension of religious commitment is how religious an individual is compared with others in the same religious group. This measure partially captures the "social control" dimensions of religion (Umberson 1987). Stark (1984) emphasizes that religion shapes individual behavior, not only through internalized religious beliefs, but also as an aspect of groups. Levin and Vanderpool (1987) have recommended this item: "Compared to most people in your place of worship are you more religiously involved and committed, just about the same as everyone else, or less religiously involved and committed?"

Previous Psychometric Work

Most of the suggested items have been used in prior studies, but no psychometric data are available for the scale as proposed. For researchers interested in the longer version of the Intrinsic Religion Scale, ample information is available on its psychometric properties (Kirkpatrick 1989, Kirkpatrick and Hood 1990, Gorsuch and McPherson 1989, Hoge 1972).

Association with Health

Measures of intrinsic religion have been related to a broad range of social and psychological phenomena (Donahue 1985), but their association with health has generated few empirical studies. Small studies of religious individuals suggest that intrinsic religion is positively related to mental health (Payne et al 1991), but this association needs to be examined in broad-based epidemiologic studies. Similarly, there is little empirical support for the notion that indicators of the commitment of time and means are related to health status. However, it is likely that these measures account, at least in part, for the well-established association between religious attendance and health. By refining

and broadening the domain of religious involvement, these measures may also enhance our ability to identify the extent to which religiousness is related to health (Williams 1994).

Time Referent

No time frame is specified; items are written in the present tense.

Estimated Completion Time

Less than 1 min.

Proposed Items

COMMITMENT-LONG FORM

None provided. See Description of Measures for this domain.

COMMITMENT-SHORT FORM

- 1. I try hard to carry my religious beliefs over into all my other dealings in life.
 - 1 Strongly agree
 - 2 Agree
 - 3 Disagree
 - 4 Strongly disagree
- 2. During the last year about how much was the average monthly contribution of your household to your congregation or to religious causes?

\$_		_ OR \$_	
	Contribution		Contribution
	per year		per month

3. In an average week, how many hours do you spend in activities on behalf of your congregation or activities that you do for religious or spiritual reasons?

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Organizational Religiousness

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Domain of Measurement

This domain assesses the involvement of the respondent with a formal public religious institution: a church, synagogue, temple, mosque, ashram, etc. It can include both behavioral and attitudinal dimensions.

Description of Measures

Most surveys that measure religiousness include a measure of attendance at religious services. As an alternative, some surveys use membership in a congregation. Activities other than worship, such as choir practice, youth groups, and volunteer activities, should also be included. In addition to these behavioral indicators, a measure of how well the individual "fits" into the religious congregation of which he or she is a member represents an evaluation of involvement. Finally, this domain can include a measure of aspects of the experience of public religious worship that are both behavioral and attitudinal, including the importance of prayer, music, reading texts, ritual, architecture, etc.

Previous Psychometric Work

As a set, these items have not been tested for reliability and validity; however, it is doubtful that one would want to use them as a single scale in any case. Attendance at religious services is a reliable item and has been used for 50 years in the Gallup Poll (Wingrove and Alston 1974), though a recent study shows apparent overstatement of attendance rates (Hadaway, Marler, and Chaves 1993). Some have argued for using the "membership" item as a means of reducing this bias

(Stolzenberg, Blair-Loy, and Waite, 1995), but the long history of using the "attendance" item, and its demonstrated association with health, argue for retaining it.

The item that includes "other activities" (choir practice, youth groups, etc.) has been used and tested in the Alameda County Study (Strawbridge et al 1997), together with the "attendance" item, as an index of organizational religiousness.

The single "fit" item was developed and tested by Pargament, Tyler, and Steele (1979). The 4 "fit" items were developed by Benson et al (1988), but no psychometric data are available.

The "experience of worship" items are new and have not yet been tested, so their validity and reliability are unassessed.

Association with Health

Studies of the association between religiousness and morbidity or mortality have, with few exceptions, employed the single item of "attendance" at services as a measure of organizational religiousness. Often, this is the only measure of religious involvement (aside from "affiliation") available in the data. Cross-sectional and longitudinal studies (reviewed in Koenig and Futterman 1995, Levin 1994) consistently find significant associations between religious attendance and physical health-status indicators, including specific conditions such as hypertension, general measures of functional disability, and overall mortality. Findings

from cross-sectional study designs are problematic, because of the impact illness is likely to have on attendance; the significant association would be due to selection and not causation. The strong existing evidence comes from longitudinal studies.

From a theoretical perspective, there are many reasons to believe that organizational religiousness would show a positive relationship with health and longevity (Idler and Kasl 1997a, Idler and Kasl 1997b). Frequency of attendance at services may indicate the frequency with which heightened states of religious consciousness or the experience of the sacred is achieved through prayer, music, architecture, or rituals (Benson 1996; Bygren, Konlaan, Johansson 1996; Williams 1994); regular attendance may indicate behavioral conformity to religious beliefs regarding alcohol use, smoking, dietary practices, or sexual intercourse (Gorsuch 1995); frequent contact with the social network of the congregation may make spiritual, emotional, or instrumental social support more readily available (Ellison and George 1994); or the constant reinforcing of beliefs may provide understanding and comfort in times of crisis (Pressman et al 1990). The effectiveness of most of these mechanisms varies directly with the frequency of attendance and may be a simple. global indicator for a complex set of processes.

Suggested Administration

The items are simple and can be self-administered or administered by phone or inperson. Because the "experience of worship" items have not been tested before, they are not recommended for the Short Form. The "membership" and "fit" items should also be used only for the Long Form.

Time Referent

These items assess only current behavior and attitudes.

Estimated Completion Time

Short Form (items 1 and 2 only): 15 sec. Long Form: 1 to 1-1/2 min.

Proposed Items

ORGANIZATIONAL RELIGIOUSNESS-LONG FORM

Attendance (General Social Survey)

- 1. How often do you attend religious services?
 - 1 Never
 - 2 Less than once a year
 - 3 About once or twice a year
 - 4 Several times a year
 - 5 About once a month
 - 6 2-3 times a month
 - 7 Nearly every week
 - 8 Every week
 - 9 Several times a week
- 2. Besides religious services, how often do you take part in other activities at a place of worship?
 - 1 Never
 - 2 Less than once a year
 - 3 About once or twice a year
 - 4 Several times a year
 - 5 About once a month
 - 6 2-3 times a month
 - 7 Nearly every week
 - 8 Every week
 - 9 Several times a week

Fit (Pargament, Tyler, and Steele 1979; Benson 1988)

3. We all differ according to our general interests, attitudes, beliefs, and values. Your church/synagogue, in turn, has its own unique identity as demonstrated through its religious, educational, organizational, and social activities.

Church/synagogue members may differ somewhat according to how well they, as individuals, fit in their church/synagogue. How well do you feel that you fit in your church/synagogue?

- 1 Fit extremely well
- 2 Fit very well
- 3 Fit slightly
- 4 Do not fit very well
- 5 Do not fit at all
- 4. If I had to change churches/synagogues, I would feel a great sense of loss.
 - 1 Strongly agree
 - 2 Agree
 - 3 Not sure
 - 4 Disagree
 - 5 Strongly disagree
- 5. I feel at home in this church/synagogue.
 - 1 Strongly agree
 - 2 Agree
 - 3 Not sure
 - 4 Disagree
 - 5 Strongly disagree
- 6. I would change my church/synagogue if it developed major leadership or financial problems.
 - 1 Strongly agree
 - 2 Agree
 - 3 Not sure
 - 4 Disagree
 - 5 Strongly disagree
- 7. The church/synagogue I attend matters a great deal to me.
 - 1 Strongly agree
 - 2 Agree
 - 3 Not sure
 - 4 Disagree
 - 5 Strongly disagree

Worship Experience (Idler)

- 8. Following is a list of things people commonly experience in religious worship services. Please state how often you do these things when attending services and how important they are to you.
- a. Listening to others perform music.
 - 1 More than once per service
 - 1 Extremely important
 - 2 One per service
 - 2 Very important
 - 3 Regularly but not every service
 - 3 Somewhat important
 - 4 Occasionally
 - 4 Of slight importance
 - 5 Never
 - 5 Not important at all
- b. Singing or performing music yourself.
 - 1 More than once per service
 - 1 Extremely important
 - 2 One per service
 - 2 Very important
 - 3 Regularly but not every service
 - 3 Somewhat important
 - 4 Occasionally
 - 4 Of slight importance
 - 5 Never
 - 5 Not important at all
- c. Praying.
 - 1 More than once per service
 - 1 Extremely important
 - 2 One per service
 - 2 Very important
 - 3 Regularly but not every service
 - 3 Somewhat important
 - 4 Occasionally
 - 4 Of slight importance
 - 5 Never
 - 5 Not important at all

- d. Reading or listening to Scripture or Torah.
 - 1 More than once per service
 - 1 Extremely important
 - 2 One per service
 - 2 Very important
 - 3 Regularly but not every service
 - 3 Somewhat important
 - 4 Occasionally
 - 4 Of slight importance
 - 5 Never
 - 5 Not important at all
- e. Listening to the sermon or drasha.
 - 1 More than once per service
 - 1 Extremely important
 - 2 One per service
 - 2 Very important
 - 3 Regularly but not every service
 - 3 Somewhat important
 - 4 Occasionally
 - 4 Of slight importance
 - 5 Never
 - 5 Not important at all
- f. Participating in rituals or sacraments, such as communion, baptism, or lighting the Sabbath candles.
 - 1 More than once per service
 - 1 Extremely important
 - 2 One per service
 - 2 Very important
 - 3 Regularly but not every service
 - 3 Somewhat important
 - 4 Occasionally
 - 4 Of slight importance
 - 5 Never
 - 5 Not important at all
- g. Thinking about the beauty of the building.
 - 1 More than once per service
 - 1 Extremely important
 - 2 One per service
 - 2 Very important
 - 3 Regularly but not every service
 - 3 Somewhat important
 - 4 Occasionally
 - 4 Of slight importance
 - 5 Never
 - 5 Not important at all

- h. Sitting in silence.
 - 1 More than once per service
 - 1 Extremely important
 - 2 One per service
 - 2 Very important
 - 3 Regularly but not every service
 - 3 Somewhat important
 - 4 Occasionally
 - 4 Of slight importance
 - 5 Never
 - 5 Not important at all
- i. Being part of a healing ritual, like the laying on of hands.
 - 1 More than once per service
 - 1 Extremely important
 - 2 One per service
 - 2 Very important
 - 3 Regularly but not every service
 - 3 Somewhat important
 - 4 Occasionally
 - 4 Of slight importance
 - 5 Never
 - 5 Not important at all
- j. Receiving gifts of the spirit, like speaking in tongues.
 - 1 More than once per service
 - 1 Extremely important
 - 2 One per service
 - 2 Very important
 - 3 Regularly but not every service
 - 3 Somewhat important
 - 4 Occasionally
 - 4 Of slight importance
 - 5 Never
 - 5 Not important at all

ORGANIZATIONAL RELIGIOUSNESS-SHORT FORM

Attendance (General Social Survey)

- 1. How often do you attend religious services?
 - 1 Never
 - 2 Less than once a year
 - 3 About once or twice a year
 - 4 Several times a year
 - 5 About once a month
 - 6 2-3 times a month
 - 7 Nearly every week
 - 8 Every week
 - 9 Several times a week
- 2. Besides religious services, how often do you take part in other activities at a place of worship?
 - 1 Never
 - 2 Less than once a year
 - 3 About once or twice a year
 - 4 Several times a year
 - 5 About once a month
 - 6 2-3 times a month
 - 7 Nearly every week
 - 8 Every week
 - 9 Several times a week

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Religious Preference

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Domain of Measurement

This item is designed to ascertain the religious tradition or denomination with which an individual identifies.

Description of Measures

Items about religion or religious preference generally tap identification with, or closeness to, a given religious community or tradition. Thus, an expression of religious preference may or may not indicate current church membership or current participation in a given group.

Previous Work

Items about religious preference have become standard in many major large-scale surveys (eg, General Social Surveys, National Survey of Families and Households [NSFH], National Survey of Black Americans [NSBA], Americans' Changing Lives Survey). Most of these surveys assess religious preference in a single question about a respondent's religious preference, along with a brief probe asking Protestant respondents to specify a denomination. Some surveys record specific denominations with the aid of a partial checklist (8 to 12 of the largest denominations), while others use only an open-ended item, with responses coded on a post-hoc basis.

Association with Health

Numerous studies have reported religious group differences in a wide range of mental and physical health outcomes and mortality (Jarvis and Northcott 1987; Troyer 1988; Dwyer, Clarke, and Miller 1990; Ellison 1991; Idler and Kasl 1992). There are several general reasons to anticipate denominational variations in such outcomes. Some religious communities discourage unhealthful lifestyles and/or promote positive health behaviors. For instance, certain denominations (Mormons, evangelical and fundamentalist Protestants) prohibit or discourage the consumption of alcoholic beverages (Cochran, Beeghley, and Bock 1988), and some also frown on tobacco use. A few groups (Adventists) embrace specific dietary practices that may be healthful. The values of many conservative and sectarian groups may also reduce the likelihood of risky sexual practices. In addition, specific religious traditions may have well-articulated philosophical perspectives on personal well-being (Ott 1991, Sweet 1994).

In a more speculative vein, some have suggested that a range of denomination-specific beliefs or ritual practices may influence mental or physical health. While these issues remain under studied, a few examples include beliefs about sin and divine grace (Watson, Morris, and Hood 1988), specific beliefs about the death and the afterlife (Wuthnow, Christiano, and Kuzlowski 1980), and cathartic worship styles (Gritzmacher, Bolton, and Dana 1988), among other possibilities. Depending on the study design and the specific health outcome under consideration, some associations between religious preference and health may be accounted for by the inclusion of direct measures of health behaviors, coping, religious experience, and other intervening constructs.

Suggested Administration

Although the proposed item and related probe are relatively straightforward, several considerations are germane when using this item. It seems important to collect as much information as feasible. This permits investigators to categorize religious preferences later, in ways appropriate to the particular populations and research questions at hand. Although generic schemes for classifying denominations (into fundamentalist, moderate, and liberal, or variants thereof) are widely used by social scientists (Smith 1986, 1990; Roof and McKinney 1987), such approaches may not be well-suited to the needs and objectives of health researchers.

An open-ended item may offer the best strategy for maximizing information and flexibility, allowing isolation of particular groups with distinctive health behaviors or beliefs. However, some researchers might wish to use the appended listing of religious preference categories simply for guidance, or as a possible checklist for a self-administered item. This listing is not intended to be complete. Although it includes virtually all major religions in the US, including predominantly African American denominations, this list focuses heavily on Christian and Jewish groups. Therefore, it may be less helpful for researchers studying Asian Americans and some other immigrant populations in the US.

Researchers should understand that broad denominational labels like "Lutheran" and "Baptist" can mask considerable heterogeneity in terms of theology, structure, organizational culture, and so on. A good example is provided by the wide gulf that separates members of the Evangelical Lutheran Church of America from Missouri Synod Lutherans. Investigators should be attentive to such differences when using the denominational probe. Similarities in denominational names often result in confusion as well, since they can conceal major intergroup differences. A good example: several very distinct groups use the label "Church of Christ." These

groups range from theologically liberal (United Church of Christ) to fundamentalist Protestant (Church of Christ) in aspects of their theology and culture. Thus, investigators should be alert to the potential for confusion. When classifying the many smaller religious groups or those with which they may be unfamiliar, investigators may find it helpful to consult leading reference guides on religious groups in the US, including works by Melton (1989) and Mead and Hill (1990).

Finally, it is important to mention the geographical clustering of many religious groups in the US. This issue may be especially germane to studies conducted within a single community, or those focusing on a small number of research sites. In the case of some religious traditions (eg, Lutheran, Dutch Reformed), patterns of regional concentration reflect the historic link between religion and ethnicity in the US. A plethora of tiny denominations and sectarian groups in the US can only be found in a few areas of the country. Researchers seeking further information on the distribution of diverse faith communities across the US may wish to consult the Glenmary Research Institute's Churches and Church Membership in the United States: 1990 (Bradley et al 1992). This valuable resource presents detailed membership and adherence statistics for numerous religious groups at regional, state, and county levels. These figures, along with estimates for some undercounted groups, are based primarily on data compiled by the National Council of Churches and several other major religious bodies.

Time Referent

The proposed item is designed to measure current religious preference at the time of the interview. However, many previous surveys have also used similarly structured items to gauge religious preference at earlier times (eg, at age 16, or while the respondent was growing up).

Estimated Completion Time

Under 1 min.

Proposed Items

RELIGIOUS PREFERENCE

At the present time, what is your religious preference?

IF PROTESTANT ASK: Which specific denomination?

Religious Preference Categories

(for advisory purposes only)

No religion (includes atheist, agnostic)

Roman Catholic Orthodox (Eastern, Greek, Russian, Serbian, Ukrainian) Non-Chalcedonian Orthodox (Armenian, Syrian, Coptic, Ethiopian)

Jewish, Reform Jewish, Conservative Jewish, Reconstructionist Jewish, Orthodox

Episcopal, Anglican

Lutheran, ELCA Lutheran, Missouri Synod Lutheran, other Lutheran, don't know which

Methodist, United Methodist African Methodist Episcopal (AME, AME Zion) Methodist, other Methodist, don't know which Wesleyan Methodist

Presbyterian, PCUSA Presbyterian, other Presbyterian, don't know which

United Church of Christ (Congregational)

Christian Church (includes Disciples of Christ, Christian-Disciples, any modifier such as First, Eastside, Community, etc. NOT including "just a Christian" or "Christian-no denomination")

Reformed (Reformed Church in America, Christian Reformed)

Baptist, Southern Baptist Convention
Baptist, Independent
Baptist, other fundamentalist (Primitive,
Free Will, Missionary)
Baptist, African American bodies (National
Baptist Convention of America)
Baptist, American
Baptist, other
Baptist, don't know which

Christian and Missionary Alliance
Churches of Christ (NOT including United
Church of Christ [above], or International
Churches of Christ)
Evangelical Free Church
Salvation Army
Full Gospel Fellowship
Foursquare Gospel
Nazarene

Bible Church Churches of God (if possible, specify which) Other fundamentalist or evangelical Protestant (if possible, specify which)

Mennonite Friends, Quaker Brethren Hutterites Amish

Assemblies of God
Church of God in Christ
Pentecostal (includes anything with
Pentecostal in the name)
Holiness
Apostolic
Sanctified, Sanctification
Other charismatic (if possible, specify which)

Adventist

Mormon (includes all Latter Day Saints groups)

Jehovah's Witness

Christian Scientist
Metropolitan Community Church
Spiritualist
Unity
Other community church
Non-denominational church (other than

charismatic)

Protestant, no further information Christian, no further information

Baha'i

Islamic/Muslim (if possible, specify which)

Buddhist (if possible, specify which)

Shinto

Taoist

Wiccan, other ritual magic

Other religion not mentioned here (if possible, specify which)

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Brief Multidimensional Measure of Religiousness/Spirituality: 1999

For more information about this measure, see Introduction: How to Use This Report.

Daily Spiritual Experiences

The following questions deal with possible spiritual experiences. To what extent can you say you experience the following:

- 1. I feel God's presence.
 - 1 Many times a day
 - 2 Every day
 - 3 Most days
 - 4 Some days
 - 5 Once in a while
 - 6 Never or almost never
- 2. I find strength and comfort in my religion.
 - 1 Many times a day
 - 2 Every day
 - 3 Most days
 - 4 Some days
 - 5 Once in a while
 - 6 Never or almost never
- 3. I feel deep inner peace or harmony.
 - 1 Many times a day
 - 2 Every day
 - 3 Most days
 - 4 Some days
 - 5 Once in a while
 - 6 Never or almost never
- 4. I desire to be closer to or in union with God.
 - 1 Many times a day
 - 2 Every day
 - 3 Most days
 - 4 Some days
 - 5 Once in a while
 - 6 Never or almost never

- 5. I feel God's love for me, directly or through others.
 - 1 Many times a day
 - 2 Every day
 - 3 Most days
 - 4 Some days
 - 5 Once in a while
 - 6 Never or almost never
- 6. I am spiritually touched by the beauty of creation.
 - 1 Many times a day
 - 2 Every day
 - 3 Most days
 - 4 Some days
 - 5 Once in a while
 - 6 Never or almost never

Meaning

See Appendix at the end of this section.

Values/Beliefs

- 7. I believe in a God who watches over me.
 - 1 Strongly agree
 - 2 Agree
 - 3 Disagree
 - 4 Strongly disagree
- 8. I feel a deep sense of responsibility for reducing pain and suffering in the world.
 - 1 Strongly agree
 - 2 Agree
 - 3 Disagree
 - 4 Strongly disagree

Forgiveness

Because of my religious or spiritual beliefs:

- 9. I have forgiven myself for things that I have done wrong.
 - 1 Always or almost always
 - 2 Often
 - 3 Seldom
 - 4 Never
- 10. I have forgiven those who hurt me.
 - 1 Always or almost always
 - 2 Often
 - 3 Seldom
 - 4 Never
- 11. I know that God forgives me.
 - 1 Always or almost always
 - 2 Often
 - 3 Seldom
 - 4 Never

Private Religious Practices

- 12. How often do you pray privately in places other than at church or synagogue?
 - 1 More than once a day
 - 2 Once a day
 - 3 A few times a week
 - 4 Once a week
 - 5 A few times a month
 - 6 Once a month
 - 7 Less than once a month
 - 8 Never
- 13. Within your religious or spiritual tradition, how often do you meditate?
 - 1 More than once a day
 - 2 Once a day
 - 3 A few times a week
 - 4 Once a week
 - 5 A few times a month
 - 6 Once a month
 - 7 Less than once a month
 - 8 Never

- 14. How often do you watch or listen to religious programs on TV or radio?
 - 1 More than once a day
 - 2 Once a day
 - 3 A few times a week
 - 4 Once a week
 - 5 A few times a month
 - 6 Once a month
 - 7 Less than once a month
 - 8 Never
- 15. How often do you read the Bible or other religious literature?
 - 1 More than once a day
 - 2 Once a day
 - 3 A few times a week
 - 4 Once a week
 - 5 A few times a month
 - 6 Once a month
 - 7 Less than once a month
 - 8 Never
- 16. How often are prayers or grace said before or after meals in your home?
 - 1 At all meals
 - 2 Once a day
 - 3 At least once a week
 - 4 Only on special occasions
 - 5 Never

Religious and Spiritual Coping

Think about how you try to understand and deal with major problems in your life. To what extent is each of the following involved in the way you cope?

- 17. I think about how my life is part of a larger spiritual force.
 - 1 A great deal
 - 2 Quite a bit
 - 3 Somewhat
 - 4 Not at all
- 18. I work together with God as partners.
 - 1 A great deal
 - 2 Quite a bit
 - 3 Somewhat
 - 4 Not at all

- 19. I look to God for strength, support, and guidance.
 - 1 A great deal
 - 2 Quite a bit
 - 3 Somewhat
 - 4 Not at all
- 20. I feel God is punishing me for my sins or lack of spirituality.
 - 1 A great deal
 - 2 Quite a bit
 - 3 Somewhat
 - 4 Not at all
- 21. I wonder whether God has abandoned me.
 - 1 A great deal
 - 2 Quite a bit
 - 3 Somewhat
 - 4 Not at all
- 22. I try to make sense of the situation and decide what to do without relying on God.
 - 1 A great deal
 - 2 Quite a bit
 - 3 Somewhat
 - 4 Not at all
- 23. To what extent is your religion involved in understanding or dealing with stressful situations in any way?
 - 1 Very involved
 - 2 Somewhat involved
 - 3 Not very involved
 - 4 Not involved at all

Religious Support

These questions are designed to find out how much help the people in your congregation would provide if you need it in the future.

- 24. If you were ill, how much would the people in your congregation help you out?
 - 1 A great deal
 - 2 Some
 - 3 A little
 - 4 None

- 25. If you had a problem or were faced with a difficult situation, how much comfort would the people in your congregation be willing to give you?
 - 1 A great deal
 - 2 Some
 - 3 A little
 - 4 None

Sometimes the contact we have with others is not always pleasant.

- 26. How often do the people in your congregation make too many demands on you?
 - 1 Very often
 - 2 Fairly often
 - 3 Once in a while
 - 4 Never
- 27. How often are the people in your congregation critical of you and the things you do?
 - 1 Very often
 - 2 Fairly often
 - 3 Once in a while
 - 4 Never

Religious/Spiritual History

28. Did you ever have a religious or spiritual experience that changed your life?

No

Yes

IF YES: How old were you when this experience occurred?

29. Have you ever had a significant gain in your faith?

No

Yes

IF YES: How old were you when this occurred?

30. Have you ever had a significant loss in your faith?

No

Yes

IF YES: How old were you when this occurred?

Commitment

- 31. I try hard to carry my religious beliefs over into all my other dealings in life.
 - 1 Strongly agree
 - 2 Agree
 - 3 Disagree
 - 4 Strongly disagree
- 32. During the last year about how much was the average monthly contribution of your household to your congregation or to religious causes?

\$	OR \$
Contribution	Contribution
per vear	per month

33. In an average week, how many hours do you spend in activities on behalf of your church or activities that you do for religious or spiritual reasons?

Organizational Religiousness

- 34. How often do you go to religious services?
 - 1 More than once a week
 - 2 Every week or more often
 - 3 Once or twice a month
 - 4 Every month or so
 - 5 Once or twice a year
 - 6 Never
- 35. Besides religious services, how often do you take part in other activities at a place of worship?
 - 1 More than once a week
 - 2 Every week or more often
 - 3 Once or twice a month
 - 4 Every month or so
 - 5 Once or twice a year
 - 6 Never

Religious Preference

36. What is your current religious preference?

IF PROTESTANT ASK:

Which specific denomination is that?

(List of religious preference categories attached for advisory purposes. See Religious Preference section.)

Overall Self-Ranking

- 37. To what extent do you consider yourself a religious person?
 - 1 Very religious
 - 2 Moderately religious
 - 3 Slightly religious
 - 4 Not religious at all
- 38. To what extent do you consider yourself a spiritual person?
 - 1 Very spiritual
 - 2 Moderately spiritual
 - 3 Slightly spiritual
 - 4 Not spiritual at all

Appendix-Meaning

The working group did not feel it was appropriate at this time to include any "religious meaning" items in this measure, as no final decisions have been made regarding this domain. The following items are being considered for a Short Form.

- 1. The events in my life unfold according to a divine or greater plan.
 - 1 Strongly agree
 - 2 Agree
 - 3 Disagree
 - 4 Strongly disagree
- 2. I have a sense of mission or calling in my own life.
 - 1 Strongly agree
 - 2 Agree
 - 3 Disagree
 - 4 Strongly disagree

Appendix A: Additional Psychometric and Population Distribution Data

The Brief Multidimensional Measure of Religiousness/Spirituality: 1999 was embedded in the 1997-1998 General Social Survey (GSS), a random national survey of the National Data Program for the Social Sciences. The basic purpose of this survey is to gather and disseminate data on contemporary American society in order to monitor and explain trends in attitudes and behaviors, and to compare the United States to other societies.

Several factors went into deciding to add the questions from the measure to the GSS. First, The Brief Multidimensional Measure of Religiousness/Spirituality: 1999 contains a wide variety of demographic measures and includes the detail necessary for such a survey and its required coding. Also, with the Census barred from measuring religious affiliation and with many large government surveys limited to ascertaining affiliation, the GSS may be the most widely used source to study religion's role in contemporary society. The 1998 version of the GSS also included a topical module on religion. Thus, the NIA/ Fetzer measurement instrument benefited from a unique opportunity to examine how its measures relate to other measures of religion both in the GSS core as well as in this onetime topical module. Finally, the GSS data are of the highest quality. In terms of sampling procedure, response rate, validation procedures, data cleaning, and quality control, the GSS meets the most demanding standards of contemporary survey research.

One disadvantage in utilizing the GSS was that slight wording changes were required in some questions and several questions were not included in the survey.

The following tables include the questions and domains, percentage distributions, and psychometric data from the GSS and reflect the efforts of the working group in analyzing the data, the findings of which have been prepared as a manuscript and submitted for publication (Idler et al 1999). The Fetzer Institute will have copies of article reprints available upon publication. The findings support the multidimensional approach outlined in this publication and indicate that the domains were endorsed by substantial numbers of respondents, that the items formed reliable indices within the domain, and that the indices were moderately but not highly correlated with each other (Idler et al 1999). While some minor regroupings are reflected in the data presented, we cannot finally determine whether there is need for regrouping the instrument's domains without collecting further health-related data. A limitation to this analysis is the small number of items for each domain.

The results to date support the theoretical basis of the measure and indicate it has the appropriate reliability and validity to facilitate further research that will help us better understand the complex relationship of religion, spirituality, and health.

Bibliography

Idler E, Musick M, Ellison C, George L, Krause N, Levin J, Ory M, Pargament K, Powell L, Williams D, Underwood L. NIA/ Fetzer Measure of Religiousness and Spirituality: conceptual background and findings from the 1998 General Social Survey. In press.

Table 1: NIA/Fetzer Short Form, Domains and Instrument - GSS* Results

Domain	Testable relevance to health	1998 GSS item wording
Affiliation	Denomination-specific proscriptions for lifestyle risk factors: alcohol, diet, smoking	What is your religious preference? Is it Protestant, Catholic, Jewish, some other religion, or no religion? (If Protestant: What specific denomination is that?)
History	Life-changing experience fostering behavior change Exposure to psychophysical religious/spiritual states	Did you ever have a religious or spiritual experience that changed your life?
Public Practices	Exposure to psychophysical religious/spiritual states Conformity to risk-reducing behaviors Exposure to social networks and sources of support	How often do you attend religious services? How often to you take part in the activities or organizations of a church or place of worship other than attending services?
Private Practices	Exposure to psychophysical religious/spiritual states	How often do you pray privately in places other than at church or synagogue? Within your religious or spiritual tradition, how often do you meditate? How often have you read the Bible in the last year?
Support	Access to instrumental assistance and expression of caring Reduction of stress through resolution of conflict Encouragement of compliance with medical treatments Reduction of health risk behaviors Access to medical care and health information through referral networks	If you were ill, how much would the people in your congregation help you out? If you had a problem or were faced with a difficult situation, how much comfort would the people in your congregation be willing to give you? How often do the people in your congregation make too many demands on you? How often are the people in your congregation critical of you and the things you do?

Table 1: NIA/Fetzer Short Form, Domains and Instrument - GSS* Results (continued)

Domain	Testable relevance to health	1998 GSS item wording
Coping	Reduction of negative impact of stressful life events	Think about how you try to understand and deal with major problems in your life. To what extent is each of the following involved in the way you cope: I think about how my life is part of a larger spiritual force. I work together with God as partners. I look to God for strength, support, guidance. I feel that God is punishing me for my sins or lack of spirituality. I wonder whether God has abandoned me. I try to make sense of the situation and decide what to do without relying on God.
Beliefs and Values	Opportunities for social comparison promote personal well-being Reduction of stress through provision of hope	I believe in a God who watches over me. I feel a deep sense of responsibility for reducing pain and suffering in the world. Do you believe there is life after death? I try hard to carry my religious beliefs over into all my other dealings in life.
Commitment	Enhancement of well-being through concern for others	During the last year how much money did you and the other family members in your household contribute to each of the following: Your local congregation? Other religious organizations, programs, causes? Nonreligious charities, organizations, causes? Were any of your contributions involved in the arts, culture, or humanities?
Forgiveness	Reduction of stress through resolution of conflict	Because of my religious or spiritual beliefs: I have forgiven myself for things that I have done wrong. I have forgiven those who hurt me. I know that God forgives me.
Spiritual Experience	Exposure to psychophysical religious/spiritual states	The following questions deal with possible spiritual experiences. To what extent can you say you experience the following: I feel God's presence. I find strength and comfort in my religion. I feel deep inner peace or harmony. I desire to be closer to or in union with God. I feel God's love for me, directly or through others. I am spiritually touched by the beauty of creation.
Religious Intensity	Indicator of feelings of self-worth	To what extent do you consider yourself a religious person? To what extent do you consider yourself a spiritual person?

^{*1998} General Social Survey, National Opinion Research Center, University of Chicago **R = respondent

Table 2: Percentage Distribution within NIA/Fetzer Religiousness and Spirituality Domains - GSS* Results

Dally Spiritual	Never/	Once in a	Some days	Most days	Every day	Many times		
Experiences	Almost	while				a day		
	never							
Feel God's presence	11.9	17.0	13.8	13.9	25.8	17.5		
Find strength in religion	13.8	12.8	13.8	17.4	25.9	16.2		
Feel inner peace	6.4	14.6	20.2	28.0	19.2	11.6		
Closer to God	11.4	13.1	14.7	16.4	27.9	16.6		
Feel God's love	10.3	13.1	15.1	17.7	26.8	17.1		
Touched by creation	6.1	9.6	12.6	17.5	28.6	25.5		
Values and Beliefs	Strongly	Disagree	Agree	Strongly				
	disagree	0)	agree				
God watches over R**	3.6	7.4	30.1	58.9				
Want to reduce pain	6.9	30.7	45.4	17.0				
6					No	Undecided	Yes	
Belief in afterlife					16.5	12.4	7.1.1	
Forgiveness	Never	Seldom	Often	Always/				
				Almost				
Forgiven self	5.9	13.5	36.3	44.3				
Forgiven others	4.2	10.0	38.6	47.2				
God has forgiven	4.8	3.3	17.5	74.4				
Private Religious	Never	Less than	Once a	A few times	Once a	A few times	Once a	More
Practices		once a	month	a month	week	a week	day	than once
Private prayer	13.2	9.2	2.3	5.5	4.9	13.9	26.5	24.4
Meditation	48.2	6.9	3.4	4.4	5.0	9.5	13.7	9.0
	Never	Less than once a week	Once a week	Several times a	Once a day	Several times a day		
Reading the Bible	41.9	28.3	9.2	10.0	8.1	2.6		
Religious and Spiritual Coping	Not at all	Somewhat	Quite a bit	A great deal				
Life part of larger force	23.9	35.2	21.1	19.7				
Work with God	19.1	35.9	22.6	22.3				
Look to God for strength	13.1	22.9	20.6	43.5				
Feel God is punishing	26.8	17.4	3.8	2.0				
Wonder if abandoned	87.6	9.5	1.7	1.2				
Make sense without God	37.9	33.6	15.6	12.9				

Table 2: Percentage Distribution within NIA/Fetzer Religiousness and Spirituality Domains - GSS* Results (continued)

Religious Support	None	A little	Some	A great deal							
Help out with illness Help out with problems	7.8	13.6 10.2	32.4 29.8	46.2 54.0							
		,			Never	Once in a	Fairly	Very often			
Make too many demands Critical of R**					$61.9 \\ 75.2$	28.9	6.5	2.6			
Religious/Spiritual	No	Yes									
Life-changing experience	6.09	39.1									
Commitment	Not at all (religious/ spiritual)	Slightly	Moderately	Very							
Religious strength Spiritual strength	15.3	23.5 25.7	42.5 40.2	18.8 22.1							
Carry over beliefs					Strongly agree 7.3	Agree 20.4	Disagree 44.7	Strongly disagree 27.7			
Organizational Religiousness Service attendance	Never 19.5	Less than once a year 10.7	Once or twice a year 10.8	Several times a year 11.0	Once a month 8.1	2-3 times a month 7.9	Nearly every week	Every week	Several times a week		
Other public activities	38.1	11.9	10.9	10.6	5.2	تن ت	4:4	7.1	.3	Once a day	Several times a day 0.6
Religious preference Religious preference	Protestant 54.2	Catholic 25.7	Jewish 1.8	Other 4.2	None 13.8	N 1,437					

^{*1998} General Social Survey, National Opinion Research Center, University of Chicago **R = respondent

Table 3: Descriptive Statistics for NIA/Fetzer Religiousness and Spirituality Items - GSS* Results

	Range	Mean	SD	Female Mean	Male Mean	p: μ _f = μ _m
Public Activity						
Service attendance	0 - 8	3.63	2.77	3.91	3.28	•••
Other public activities	1 - 11	3.43	2.71	3.60	3.22	•
Private Activity						
Private prayer	1 - 8	5.49	2.50	5.98	4.90	•••
Meditation	1 - 8	3.39	2.72	3.53	3.23	•
Bible reading	1 - 6	2.22	1.42	2.37	2.03	•••
Congreation Support						
Help with illness	1 - 4	3.17	.94	3.20	3.13	
Help with problem	1 - 4	3.32	.88	3.24	3.29	
Makes too many demands	1 - 4	3.50	.73	3.53	3.46	
Critical of R**	1 - 4	3.67	.67	3.72	3.59	• •
Coping						
Life is part of larger force	1 - 4	2.36	1.05	2.50	2.21	•••
Work with God	1 - 4	2.48	1.04	2.65	2.27	•••
Look to God for strength	1 - 4	2.94	1.09	3.14	2.71	•••
Feel God is punishing	1 - 4	3.69	.64	3.71	3.67	
Wonder if abandoned	1 - 4	3.83	.49	3.84	3.83	
Make sense without God	1 - 4	2.97	1.02	3.11	2.80	•••
Intensity						
Religious strength	1 - 4	2.65	.95	2.75	2.52	•••
Spiritual strength	1 - 4	2.72	.94	2.83	2.59	•••
Forgiveness						
Forgiven self	1 - 4	3.19	.88	3.28	3.08	•••
Forgiven others	1 - 4	3.29	.81	3.34	3.23	• •
Know that God forgives	1 - 4	3.61	.77	3.69	3.52	•••
Spiritual Experience						
Feel God's presence	1 - 6	3.77	1.67	3.99	3.52	•••
Find comfort in religion	1 - 6	3.77	1.66	4.02	3.47	• • •
Feel inner peace	1 - 6	3.74	1.40	3.89	3.55	•••
Desire to be closer to God	1 - 6	3.86	1.62	4.07	3.60	•••
Feel God's love	1 - 6	3.89	1.59	4.09	3.64	•••
Touched by creation	1 - 6	4.29	1.51	4.47	4.08	•••
Beliefs and Values						
Carry over beliefs	1 - 4	2.93	.88	3.04	2.79	•••
God watches over	1 - 4	3.44	.78	3.56	3.30	• • •
Desire to reduce pain	1 - 4	2.72	.82	2.78	2.66	• •
Belief in afterlife	1 - 3	2.55	.76	2.57	2.51	
Commitment						
Giving amount in (\$1000s)	0 - 60	.88	3.72	.77	1.02	
Giving ratio	0 - 0.10	.01	.03	.01	.01	
History		· = =	***	· · –		
Religious experience	0 - 1	.39	.49	.38	.40	

^{*1998} General Social Survey, National Opinion Research Center, University of Chicago

^{**}R = respondent

Table 4: Reliability Tests (r) for NIA/Fetzer Indices - GGS* Results

Index	Alpha <i>r</i> for domain	Items	Alpha r of items within domain
Public Religious Activitie	es .82	Religious service attendance Other public religious activities	.70 .70
Private Religious Activit	ies .72	Private prayer Meditation Bible reading	.55 .51 .56
Congregation Benefits	.86	Congregation helps with illness Congregation helps with problems	.76 .76
Congregation Problems	.64	Congregation makes too many demands Congregation is critical	.47 .47
Positive Religious Coping	g .81	Life is part of a larger force Work with God as a partner Look to God for support	.58 .75 .65
Negative Religious Copin	ng .54	Feel that God is punishing Wonder if God has abandoned	.37 .37
Religious Intensity	.77	Religious person Spiritual person	.63 .63
Forgiveness	.66	Forgiven self Forgiven others Know that God forgives	.47 .50 .43
Daily Spiritual Experience	ces .91	Feel God's presence Find comfort in religion Feel deep inner peace Desire to be closer to God Feel God's love Touched by beauty of creation	.77 .81 .70 .79 .82 .63
Beliefs and Values	.64	God watches over me Responsibility to reduce pain and suffering Life after death Carry beliefs to other areas of life	.51 .34 .30 .56

*1998 General Social Survey, National Opinion Research Center, University of Chicago



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