

RELIGIOUS EXPERIENCES AND HEALTH ATTITUDES OF NEOPAGANS
COMPARED TO FOLLOWERS OF JUDEO-CHRISTIAN RELIGIONS

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To my parents, Rita and Tommy Ryan

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DISSERTATION ABSTRACT

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Introduction

Research into the effects of religiousness on health outcomes relies on an ability to conceptualize and measure religiousness accurately. In the U.S., the Judeo-Christian model of religiousness strongly dominates measurement efforts. Neopaganism presents a distinctly different model of religious belief and practice, some characteristics of which

may have direct bearing on health care choices. Modern western medicine, reflective of the culturally dominant paradigm of scientific materialism, has provided the context for research into religion/health interactions. Other views of healing and health care are available under the rubric of complementary and alternative medicine (CAM). Mind-body interventions, energy therapies, and prayer are forms of CAM.

This study investigated two related questions: “What are the significant differences between Neopagans and members of Judeo-Christian religious groups with regard to the experience of religiousness” and “What is the relationship between religious identification and the use of complementary and alternative healing treatment modalities?”

Procedures

The data for this study were collected using an internet survey. The survey consisted of items from three instruments, and was completed by 257 participants. The Brief Multidimensional Measure of Religiousness/Spirituality (BMMRS) was designed for use in health related research. Its items reflect the mainstream, Judeo-Christian experience of religion. The Diverse Religious Experiences Scale (DRES) was created for this study. It included items representative of religious practices and attitudes generally outside the Judeo-Christian experience. The Complementary and Alternative Medicine Questionnaire (CAMQ) asked respondents about their use of prayer, CAM modalities, and traditional western medicine for themselves and in the treatment of others.

Results

There were no significant differences in the total score on the BMMRS between Judeo-Christians and Neopagans. Examination of the subscales and individual items of

the BMMRS, showed that there are both similarities and significant differences between Judeo-Christians and Neopagans. In terms of diverse religious experiences, Judeo-Christians and Neopagans showed significant differences overall and on all but one item, which was related to conceptions of illness. Neopagans were more likely than Judeo-Christians to rank sensations, feelings or emotions as more important than thoughts or context, when evaluating an experience as religious. A significant positive correlation was found between Neopagans' self-ratings of religiousness and score on the DRES. A high degree of religiousness among Judeo-Christians was negatively correlated with score on the DRES. Significant positive correlations were found between self-rankings of religiousness and scores on the BMMRS for Judeo-Christians, and, unexpectedly, for Neopagans.

The CAM Questionnaire revealed that both groups use prayer about equally for the treatment of their own and others' health concerns. Neopagans are significantly more likely to use other CAM modalities for the treatment of their own and treatment of others' health concerns. The difference between the two groups is greatest with the regard to the latter.

Conclusions

The results of this study build upon the literature by elucidating some of the similarities and differences between members of mainstream religious groups and those of a minority religious group. They represent an exploration of the relationship between religious beliefs and practices and the use of alternative modes of health care and healing. As such the study results may prove useful in future effort to understand how religion affects health outcomes.

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CHAPTER 1

NATURE OF THE STUDY

Background of the Problem

An increasing body of research indicates that health outcomes are affected by an individual's religious or spiritual beliefs and practices. In January 2003, four articles appeared in the special section of *American Psychologist* devoted to spirituality, religion and physical health. Among the criticisms brought forth in a subsequent edition, Kier and Davenport (2004) observed that the four studies focused heavily on the Judeo-Christian majority. Earlier measures had viewed "religiousness" as a function of attendance at religious services, use of prayer and belief in god. In 1999, the Fetzer Institute/National Institute on Aging Working Group published the Brief Multidimensional Measurement of Religiousness/Spirituality for Use in Health Research (BMMRS). Noting that "we currently have no widely used and validated set of standard measures for key religious/spiritual domains to recommend to interested health researchers", the Working Group set about to identify the religious/spiritual domains "most likely to impact on health", and to provide a survey for use in clinical research. A number of factors associated with belief and practice were identified as contributing to health outcomes, including mental health. Acknowledging that "many of the items have a strong Judeo-Christian focus" the authors nevertheless consider this appropriate given

the distribution of religious preference in the United States.

Although the U.S. Census does not include questions about religious affiliation, several large surveys, notably the bi-annual General Social Survey of the National Opinion Research Center and the American Religious Identification Survey (ARIS) of the Graduate Center of the University of New York (Kosmin and Mayer, 2001), have collected substantial data about religious preferences and behavior.

Table 1
Self Described Religious Identification of U.S. Adult Population, 1990-2001^a

Religious Group	Number in 1990	Percent in 1990	Number in 2001	Percent in 2001
Christian	105,251,000	60.1	108,157,000	52.0
Catholic	46,004,000	26.2	50,873,000	24.5
Jewish	3,137,000	1.8	2,831,000	1.3
Muslim/Islamic	527,000	<0.1	1,104,000	0.5
Buddhist	401,000	< 0.1	1,082,000	0.5
Unitarian Universalist	502,000	< 0.1	629,000	0.3
Hindu	227,000	< 0.1	766,000	0.4
Atheist/Agnostic	1,186,000	0.1	1,893,000	0.9
Wiccan/Druid/Pagan	8,000	< 0.1	307,000	0.1
Other Religious Groups	1,050,000	0.1	1,021,000	0.6
Other "No Religion" groups (humanist, secular, no religion)	13,145,000	7.5	27,588,000	13.0
Refused to answer	4,031,000	2.3	11,246,000	5.0
Estimated U.S. Adult population 18+	175,440,000		207,980,000	

^a All figures were rounded to nearest 1000

According to the ARIS data, between 1990 and 2001, the estimated number of Wiccans rose from 8,000 to 134,000. In 1990, no data were reported for Pagans, while in 2001, the estimated number was 140,000. While not a large group in total numbers,

Wiccans and Pagans grew by a greater percentage than any other segment of the religiously affiliated population.

Neopaganism

The term Neopaganism refers to a modern religious movement expressed in great diversity, and therefore difficult to categorize in a few words. It is generally characterized as polytheistic, pantheistic or animistic (Carpenter, 1992; Hunt, 2003; von Stuckrad, 2002); nonauthoritarian (Harvey, 1996; Starhawk, 1989, Bahnisch, 2001); nature oriented (Bowman, 2000); and based on a syncretism of ancient or pre-Christian religion, folk customs, and 19th century Romanticism and occultism (Magliocco, 2004; Ellwood and Partin, 1988). Experience and practice, including magic, ritual and healing are central (Farrar and Farrar 1996; Orion, 1995). Because there is no religious hierarchy, no doctrine or creed, and no definitive criteria for identification, "people can simply declare themselves to be Pagans or Witches" (Berger, Leach and Shaffer, 2003, p 3).

No one knows the precise number of Neopagans in the U.S. Estimates range from several thousand to several million. In their belief and practice, they are a heterogeneous group, and according to most sources their numbers are rapidly growing. Many Neopagans are solitary practitioners. Those who are not solitary typically worship in groups of fewer than 20 individuals, although larger gatherings can include more than 1000 participants. Many Neopagans believe in reincarnation, although this belief is not universal. Most conceive of deity as both male and female. Although there is no established dogma or theology, there is a common ethic, the core of which is "harm none and do what you will". Perhaps because of their geographical dispersion, there is a good deal of interaction among Wiccans/Neopagans on the internet. Requests for "healing

energy" or the formation of a "healing circle" for a particular person, are common requests, and indicate a belief in the power of what has been referred to in the literature as "intercessory prayer", although Wiccans/Neopagans may not consider it such.

The word pagan derives from the Latin *paganus*. The original meaning of the word was simply "peasant" or "country dweller". As Christianity took hold in the cities of the Roman empire, the word came to be applied to those who retained the polytheistic pre-Christian religion that dominated in rural areas. Although the "official religion" in most of Europe has been Christianity for approximately the past 1500 years, indigenous European religions persevered in Christian countries, in folk traditions and lore. Throughout most of human history, belief in magic and witchcraft has been universal. The 15th, 16th and early 17th centuries in Europe brought a period of severe persecution, "a very complex social and ideological struggle [involving] religious repression, thought control and the violent imposition of orthodoxy" (Zusne and Jones, 1989, p268). Women and men who practiced healing, midwifery, and magic, were tried as witches; tens of thousands were executed. The intellectual upheaval of the Age of Reason brought religious wars to a Europe nearly fully Christianized, resulting in a further suppression of folk religion. And although Isaac Newton has been described as the "last of the magicians" his *philosophia naturalis*, with its objectification of nature, opened the door to the Enlightenment. This trend culminated in the ascendancy of the scientific and secular modern worldview. Along with this movement there came a rejection of traditional ways, and a "disenchantment of the modern world" (Weber, 1918). The re-enchantment of the world through ritual, magic, shamanic practices and bodily experience are central characteristics of the Neopagan experience.

Neopaganism is generally described by scholars as an attempt to revive the polytheistic, pre-Christian religion of Europe (Magliocco, 2004; Luhrmann, 1989; Orion, 1995). Wicca, the largest “denomination” within Neopaganism, is a blend of European folkways, hermetic occultism, ideals of 18th century Romanticism, and shamanic practices. Romanticism, which served as a reaction to the Enlightenment, emphasized the role of feeling, intuition, imagination and individualism in spiritual practice and highly valued the forces of the natural world. Hermetic occultism refers to a body of knowledge, existing in Western culture from ancient Egypt and Greece, and including astrology, alchemy and theurgy (the art of invoking and compelling gods or spirits). As a constituent of the “wisdom tradition” of the West, Hermeticism encourages the search for self-knowledge, pursuit of the spiritual life and the desire for union with the divine, without the accoutrements of institutionalized religion. Folk medicine ways, plant lore, mythic stories and a liturgical year based on historical agricultural rhythms derive from the folk traditions of Europe. Shamanism offers healing practices, as well as techniques for altering consciousness, primarily through dance and drumming.

These elements were drawn together by Gerald Gardner (1884-1964) and others in the mid-twentieth century. With the publication of several books by Gardner, the seeds of Neopaganism were planted in the form of Wicca. Other cultural sources should not be underestimated, however, as Druidic, Heathen, Classical and Egyptian traditions exist within Neopaganism. Dianic Wicca or Dianic Witchcraft is a feminist tradition in Neopaganism that emphasizes the existence and influential role of the goddess.

While the term Neopagan is frequently found in scholarly literature, it is rarely used in the popular literature, or heard among practitioners when referring to themselves.

Wiccan, Witch and Pagan are far more common. The term Witchcraft is sometimes used to refer to the religion of those who practice magic. The relationships among the various paths or traditions of Neopaganism are complex, particularly because association with a particular path is often formed by self-proclamation. Individuals may associate themselves with diverse groups, that to a non-participant may appear to have nothing to do with each other. As noted by Weinstein (1991) “Witchcraft is *not* an ‘organized religion’ ... Whatever the choice, remember free will. Everything in the work is voluntary.”(p.31) In the United States, the largest of these traditions is Wicca. The Witches’ Voice, one of the largest Neopagan web sites, conducted a poll in 1999 (WitchVox Survey #1 - Working with Groups), asking for respondents’ “Primary Magickal Path” (Table 2)

Table 2
Responses to the Prompt “Your Primary Magickal Path”

Path	Number	Percent
Wiccan	1,077	43.5%
Witch	583	23.5%
Pagan	421	17.0%
Other	67	2.7%
Druidic	52	2.1%
Dianic	50	2.0%
Shaman	40	1.6%
Hedge Witch	38	1.5%
Craft	32	1.3%
Hereditary	27	1.1%
NeoPagan	26	1.1%
Traditional	22	0.9%
Old Religion	12	0.5%
Norse	6	0.2%
Egyptian	6	0.2%
Asatru	5	0.2%
Revisionist	3	0.1%
Ceremonial	2	0.1%

These categories are not mutually exclusive, however. For example, an individual could identify herself as a Norse Witch or an Egyptian Shaman.

Although Witchcraft is not universal among Neopagans, for many it is a central feature of their religious practice. This “Craft of the Wise” may focus on personal empowerment, (Rabinovitch, 2000), healing (Farrar and Farrar, 1999), magic or divination. For Starhawk (1989), “Magic, the art of sensing and shaping the subtle, unseen forces that flow through the world, of awakening deeper levels of consciousness beyond the rational, is an element common to all traditions of Witchcraft.” (p. 27). Individuals following the same path or tradition may or may not practice magic and may or may not consider themselves witches. For those who identify as Wiccan, “Wicca is both a religion and a craft...As a religion—like any other religion, its purpose is to put the individual and the group in harmony with the Divine creative principle of the Cosmos, and its manifestations, at all levels. As a Craft, its purpose is to achieve practical ends by psychic means, for good, useful and healing purposes.” (Farrar, 1996, p. 12). This use of “psychic” energy for practical purposes is the essence of witchcraft, of magic, and depends on a belief in the interconnectedness of all things. According to Harvey (1996) “Pagans envisage the Earth as a radically interconnected and, above all, living being...Intimacy with Nature (the Earth and the body) is authoritative for Pagans and Paganism.” (p. 47) This radical interconnectedness permits magic. It depends on an attunement to the bodily signals that accompany and reflect changes in consciousness, emotion and ultimately health.

Measurement

Although the work of the Fetzer group (1999) resulted in an instrument that takes a broad approach to religious beliefs, practices and values, it may be an inappropriate assessment measure for Neopagans, as well as members of some other minority (in the U.S.) religions. For example, how does a person who believes in reincarnation answer the question: "do you believe there is life after death"? How does one answer questions about the acts of God when there are many gods who act differently? In the category of religious practice, the Fetzer instrument asked about prayer, watching religious programs on TV, reading religious literature and saying grace, so that one whose regular practice consists of divination, ecstatic dance and meditation may score zero on this scale.

Although extensive research supports a relationship between religion and health, the mechanism of this action is unknown (Contrada et al, 2004; Ellison and Larson, 2002). Neither is it known what characteristics of belief or practice are active in the effect. This lacuna reflects a general problem within the psychology of religion due to the tension between the need for measurement and the possibility that some things are not measurable. Emmons and Paloutzian (2003) wrote "Over the past decade, there has been arguably more print devoted to conceptualizing religion and spirituality than to any other topic in the psychology of religion," and "It has become fashionable, both culturally and in the scientific literature, to differentiate between the spiritual and religious". There is a trend in the direction of separating spirituality from religion and religiousness, and efforts at measurement seem to support this (e.g., Macdonald, 2000).

By broadening our understanding of how the experience of religiousness differs between religious groups, our ability to study interactions with health is increased. The study of the practices and attitudes of adherents of a religion so different from Christianity contributes to this breadth of understanding.

Problem Statement

With regard to religious values and practices, Neopagans are distinctly different from members of the conventional American religious groups, Judaism and Christianity. They may have more in common with religious groups that are in the minority in this country, such as Buddhism, Hinduism, Shinto, Taoism, Slavic Paganism, African Tribal religion, and Native American ways and the Shamanic traditions that appear throughout the world and in several of the religions just named. In some respects, Neopaganism represents an opposing worldview to that of Christianity and Judaism. Research into the relationship between religiousness and health outcomes has depended almost exclusively on measures designed for and normed on the Judeo-Christian majority.

The question this study seeks to answer is: What are the significant differences between Neopagans and members of Judeo-Christian religious groups with regard to the experience of religiousness, and choices with regard to healing and health care?

Research Questions

1. In what ways is the Neopagan experience of religiousness different from that of members of the religious majority in the U.S.?
2. What are the relationships between religious identifications and the use of complementary and alternative healing treatment modalities?

Application of Results

Although the BMMRS has proved useful in research on the interactions between religion/spirituality and health, it was nearly exclusively validated on Judeo-Christian populations. Consequently, it has very limited use with religious minorities in the United States. Neopagans engage in religious practices that are atypical among the religious majority, many of which derive from ancient shamanic ways. Such practices are designed to engage the individual physically and emotionally and to cultivate states of mind other than normal consciousness. A broader and more inclusive measure of religious and spiritual beliefs and practices, as long as it is well validated, must contribute to more effective research about how these elements of the psyche contribute to our physical and mental well being. Given that research has discovered that there are interactions, but as yet the mechanisms are unknown, a broader, deeper understanding of a variety of experiences of religiousness contributes to uncovering those mechanisms.

Theoretical Framework

One theoretical concern rests with the conceptualization of religion. Psychological research on religion, as distinct from spirituality, has focused almost exclusively on Judeo-Christian religion. While psychological theories of religion abound, criticism of their limitations, especially the limits imposed by the scientific context that spawns them, is almost equally common. A second concern is that, despite the interest in religion/health interactions, there is very little research in psychology on religion as experienced in the body. Theory on embodiment, particularly with regard to embodied religion, addresses this issue. Third, new theory on the relationship between (or unity of) mind and body bears directly on the concepts of religion and healing,

especially possible modes of interaction between experiences of religiousness and approaches to healing, health care and health. The Biopsychosocial model of health (including psychoneuroimmunology), and evolutionary theories about religion will be considered here.

Embodied Religion

Religion is generally considered to be a matter of spirit rather than body. That view has recently started to change. In her presidential address to the 1989 meetings of the Society for the Scientific Study of Religion, McGuire (1990) said, “The social sciences of religion could be transformed by taking seriously the fact that humans are embodied.” One current approach to embodied religion involves theories examining innate, evolved brain structures that may provide for religious experiences in humans (Newberg, D’Aquila and Rause, 2001; Livingston, 2005; Barsalou, Barbey, Simmons and Santos, 2005). Another neurobiological approach (Norris, 2005) focuses on emotion, which “can be re-evoked and refelt” allowing religious sentiment and ritual proficiency to “be refined and cultivated intentionally through discipline and training” (p. 187). Csordas (2004) theorizes that our embodiment brings with it a sense of otherness from our own bodies, which is the “phenomenological kernel of religion” (p. 163).

For Harvey (1996), embodiment places Neopagans in nature, whereas for Starhawk (1989) and Griffin (1995), it is the gods who become embodied through us. As described by Magliocco (2004), Neopagans engage in ritual embodiment of deities through a process called “aspecting”, in which “each deity has his or her own unique signature that [one] feels within [one’s] body” (p. 172). Starting with the assumption that shamanism is the source of religion, McClenon (1993, 1997, 2002) draws a relationship

among altered states of consciousness, inherited capacity to be hypnotized, religious rituals and faith healing. Belzen (1999) takes a “culture-psychological perspective” stating that for empirical research on religion to be successful, it must be recognized that “because the believer *embodies* [his] spirituality, he can *live* it, recognize it, and be recognized by it, not because he *knows* it.”

The Biopsychosocial Model

The biopsychosocial model of health asserts that biological, social and psychological factors all contribute to both health and illness. Beliefs about health and illness and their causes are social in the sense that they derive from an individual's cultural context, and psychological, in that they exist not only in the culture, but in the minds of individuals. In the biopsychosocial model, mind, body and culture interact with each other to produce health and illness. Research in psychoneuroimmunology has demonstrated the power of mental states to affect the body. Pert, Dreher and Ruff (1998) write

not only of body-mind interactions, but of a dynamical mind-body unity. In this vision, the integrity of the bodymind is protected and preserved by an internal healing system—a multidimensional entity guided by emotions and their biochemical substrates—vibrating with intelligence and purpose, without functional boundaries inside the human organism. (p. 30)

This point of view is consistent with the Neopagan worldview that describes a fundamental interconnectedness among the physical, mental and energetic aspects of existence (Carpenter, 1992). Integral to this worldview is the idea that “Healing is a magickal process... good health isn't the absence of trauma or pain, but rather the most complete embodiment of our authentic selves: the depth of sensation, emotion and experience, the fullness of expression and response” (Hardin, 2005).

Conceptualization of Religion

Psychological theorists may approach the conceptualization of religion with an emphasis on cognition, measurement, emotion, or personality. Or they may bring a psychological viewpoint to theory about religion developed in philosophy, anthropology, sociology and even economics. Theories about and descriptions of religious and spiritual phenomena abound within psychology, so that “Within the psychology of religion, the cry for good theory remains at the level of cacophony” (Spilka, Hood, Hunsberger and Gorsuch, 2003, p. 539). In spite of nearly universal acknowledgement that research in the psychology of religion consists overwhelmingly of samples drawn from Protestant Christians, and that this is a serious limitation, few studies on other populations have been forthcoming. Consideration of the theories that drive such research should be undertaken with this limitation in mind.

Contrada, et al. (2004) define religion in psycho-social terms, as “belief in religious doctrine, and behaviors, such as praying and attending religions services.”(p. 227). In this they agree with Miller and Thoreson (2003), who also see religion “as fundamentally a social phenomenon.” Contrasting religion with spirituality, they conceive of spirituality as existing within the individual, as personality and health do. They write: “the field of religion is to spirituality as the field of medicine is to health.”(p. 28)

Moberg (2002) puts forth the view that although there are “definitional problems”(p. 48) with the term spirituality, it is the central characteristic of religious life. He describes the assumption that spirituality is essentially universal, and measures of spirituality should therefore be applicable to all people with minor adjustments for

cultural and linguistic differences. However, the world's religions express very different viewpoints about the practices and beliefs appropriate in striving to attain a high degree of spirituality. Religious groups generally take the position that their beliefs and practices are better than others, or are even the only true ones. Referring to work by Pargament, Moberg identifies five factors of religions that contribute to this variability around a core of spiritual seeking. They are; "their means for and emotions associated with connectedness to the sacred, their importance and embeddedness in people's lives, the ways in which they are created and redesigned through life experience, whether they are held more as a way of knowing or of thinking about the world, and their content of conceptions and practices."(p. 50)

Considering different definitions of religion, as opposed to spirituality, Emmons and Paloutzian (2003, p.381) state that "Religions are rooted in authoritative spiritual traditions that transcend the person and point to larger realities within which the person is embedded." While most people describe themselves as both religious and spiritual, as constructs, religion and spirituality are increasingly being polarized for research purposes. Axes of this polarization include "organized religion versus personal spirituality", "substantive religion versus functional spirituality" and "negative religiousness versus positive spirituality". Whatever the characterizations, the religion and spirituality being studied have been "focused on mainline expressions, such as church attendance, prayer, Bible reading, and religious commitment" (Zinnbauer, Pargament and Scott, 1999).

Marks (2005) proposes a conceptual model that he believes is relevant not only for Christianity, but for any other religious group. In his tripartite model, he links religious practices to biological health, spiritual beliefs to psychological health and faith

community to social health. Relationships are acknowledged among religious practices and beliefs and participation in a faith community.

In their critique of the secular, scientific worldview's assumption that it alone is valid, Hall, Koenig and Meador (2004) state that to properly conceptualize religion, one must do so from the "inside." (p. 389). Their position is that nothing less than an understanding of the worldview of a religion is sufficient to meaningfully study the interaction of religion and health.

Although traditionally, such exploration of religious worldviews has been undertaken more often by anthropologists than psychologists, interest in the effects of meditation and other religious and spiritual practices on the brain has resulted in more attention by psychology and psychiatry. Shamanism, the source of several such practices, has been theorized to be the origin of religion (McClenon, 1997). According to Csordas (1983) all religious healing derives from shamanic techniques, and there are parallels that are applicable to mental health treatment as well. For example, "Memory/insight is the key component of psychoanalysis; vision/visualization is the key component of shamanism"(p. 345). McGuire writes, "The analysis of shamanism in other cultures suggests important parallels to some forms of alternative healing in this culture"(1983, p. 235). Citing the universality of shamanic practices in hunter-gatherer societies, Winkleman (2004) theorizes "The shamanic paradigm can contribute to a reconciliation of scientific and religious perspectives by providing a universalistic biopsychosocial framework that explicates the biological underpinnings of spiritual experiences and practices and provides a basis for neurotheology and evolutionary

theology approaches.” (p. 193). Shamanic approaches to ritual and healing are common among Neopagans (Farrar, Farrar and Bone, 1999; Hunt, 2003).

Theory of Religion Overview

Freud

Freud’s understanding of religion sprang from his experience with Judaism and Christianity. It is not surprising, therefore, that it is shaped by the patriarchal model of a father deity who is both loving and strict, much like the ideal or typical *paterfamilias* known in European society at the time. It was in the desire to slay that father that Freud found the roots of religion. For Freud, religion’s main virtue was that it offered moral constraints that deterred adherents from behavior that would be socially unacceptable, such as open aggression and incest (Freud, 1913/1989). But the means for achieving this social harmony involved a system of beliefs that Freud considered “neurotic” (Marks, 2005). As an atheist, Freud was less interested in religion *per se*, than in the human condition and how we are motivated to deal with the realities of life and death. His conclusions were generally pessimistic, and his view of religion reflected that negative view. He considered belief in god to be an illusion, and the desire for redemption a result of guilt provoked by the instinctual impulses religion forbids (Freud, 1927/1989).

Object Relations Theory

Where Freud emphasized the repression of aggressive and sexual drives as the root of religion, object-relations theory focused on different aspects of early relationships. Not only the father, but all significant early care-givers exist within the psyche as objects of relatedness. According to object-relations theorists, such introjected objects, with the

affective qualities of the relations to them, exist between the objective outer world and the deeply unconscious, instinctual subjective world. As the child moves from the pure subjectivity of infancy to act in the objective world, he trusts his transitional object as a representation of the security found with mother. So the experience of religion exists in the experiential space between the purely subjective and objective worlds and represent our relationship to the sacred. (Bhagat, 1998; Forsyth, 2003).

Jung

Although he was a contemporary of Freud's, Jung's ideas about religion could hardly have been more different. Jung's psychology emphasizes the process of individuation, through which one comes to know one's self fully, as a unique, whole and fully integrated person. He conceived of this process as essentially religious in nature, although conventional religious practices or beliefs were not as important to its progress as reconnecting with the "healing and energizing forces of one's own psyche" (Forsyth, 2003 p. 68). Jung viewed the dogma and symbols of all religions, as expressions of archetypal images, central to the transformative process of individuation. These living images could be reduced to meaningless doctrine when devoid of archetypal mystery. Deeply interested in systems of belief and symbol beyond the Judeo-Christian tradition, Jung explored Buddhist thought, Taoism, alchemy and the I Ching, the intuitive and ego-rejecting elements of which encouraged his belief that the core of religion is beyond rationality (Jung, 1927/1959). Rather it is deep within the collective unconscious of human kind, to be discovered when the individual seeks it out and welcomes it in.

James

At the conclusion of the lecture series that constitutes *The Varieties of Religious Experience*, William James (1902) lamented that there was a “tendency to let religion evaporate in intellectual terms”. James realized that the “thoughts” of various religions are varied, and “being thus variable, are secondary; and if you wish to grasp her essence, you must look to the feelings and the conduct as being the more constant elements”. The nature of these feelings is essentially universal in his view, and consists of “an excitement of the cheerful, expansive, 'dynamogenic' order which, like any tonic, freshens our vital powers. [It] overcomes temperamental melancholy and imparts endurance to the Subject, or a zest, or a meaning, or an enchantment and glory to the common objects of life”. This “faith-state...a biological as well as a psychological condition...may hold a very minimum of intellectual content”. But when ideas become associated with this state, “it gets invincibly stamped in upon belief, and this explains the passionate loyalty of religious persons everywhere to the minutest details of their so widely differing creeds.” This phenomenon is addressed a century after James, in the work of Newberg, D’Aquili, and Rause (2001).

Attachment

Attachment theory offers two main hypotheses with regard to religion. The compensation model suggests that individuals who did not have secure relationships with their caregivers may compensate by envisioning a loving god whom they can trust. The mental model hypothesis suggests that people pattern their relationship to God after their relationship with caregivers. (Spilka et al., 2003). As one evidence of this it is noted that during times of distress people will generally pray to God, rather than go to church in

their search for support or help. Considering a particular form of Neopagan religiousness that focuses on worship of the feminine form of deity, Drobin (1999) expresses the opinion that

interest in the goddess cults reflects a psychic need for an all-good, all accepting nurturant object, the ideal mother...What is curious about the current interest in the mother-goddess cults is the attendant blindness and denial regarding the dark sides of those cults...The image of the "Terrible Mother" is met in these cults as often as is the image of the nurturant or benevolent mother...I believe this aspect of the contemporary spiritual quest says more about our child-rearing practices than it does about healthy spiritual questing. (p. 232)

Following on this, one wonders if polytheistic Neopagans are reflecting early attachment experiences with multiple caregivers, as might be the case when mothers work and children attend daycare or have a variety of babysitters.

Attribution

Attribution theory, as applied to religion, asserts that three needs (to find meaning, to control outcomes, and for self-esteem) drive people everywhere to create explanations for what they experience and why things happen (Spilka, Shaver & Kirkpatrick, 1985). This process of causal attribution is evident in religion in the creation stories that exist in every culture. These stories provide the foundation for ritual and moral rules, social organization, and in many places the worldview of those who believe. Individuals observe that some events may have more than one cause, causal agents may be human or nonhuman and have a variety of motivations, and environmental factors may be significant. Attribution theory seeks to explain how people choose to attribute causes, reasons and motives to causal agents. When events occur that challenge an individual's sense of self-esteem, belief system or experience of control over events, an attempt is

made to attribute the cause of those events in a way that will restore feelings of self-esteem, meaning and control.

With regard to religion, attribution theory seeks to understand how people choose a religious as opposed to a nonreligious explanation for events. Although not all individuals subscribe to religious beliefs, there are no known cultures where religion is completely absent, so that, allowing for rare exceptions, everyone is familiar with religious explanations. In addition “Religion provides answers to questions that otherwise might seem unanswerable” (Spilka et al, p. 8) Further, religion, subject to the particulars of the specific belief system, offers the possibility of satisfying the need to control events (at least indirectly) by praying to god or trusting god’s control, to find meaning by being a part of god’s plan, for example, and for self-esteem by being loved by god, or by developing within a defined moral and ethical system. If both a religious and a naturalistic explanation are available for a given event, the characteristics and context of the person making the attribution and the characteristics and context of the event influence the choice of explanation (or attribution).

Definitions

The following definitions, unless otherwise noted, have been synthesized from reference materials for this study.

Complementary and alternative medicine (CAM)

According to the National Center for Complementary and Alternative Medicine, CAM is a diverse group of health care systems, practices, and products that are not currently considered to be part of conventional medicine. Examples include homeopathy, naturopathy, energy therapies, Chinese traditional medicine, and many other approaches

to healing. Faith healing, shamanism, folk medicine and magic will be considered in this study as extensions of the category of Complementary and Alternative Medicine.

Experience of religiousness

The practices, attitudes, beliefs, and feelings an individual experiences in association with the practice of, or as a result of identification as a member of, his or her religion.

Festival

A gathering of Neopagans for the purpose of sharing ritual and other activities. Many festivals include overnight camping, divination, ritual, workshops, creative activities, and performances.

Illness as opposed to disease

Disease refers to a biophysical condition as interpreted through a medical system's paradigm; *illness* means the individual's social and psychological response to his or her perceived biophysical condition [her emphasis] (McGuire 1983)

Magic (or Magick)

Magic is the process of creating change (in oneself or the world) by using thoughts, emotions or symbolic behavior focused through visualization, ritual or creative action and empowered by intention and will.

Mainstream religion

About 75% of the population of the United States identify as Christian, Catholic or Jewish, and as the dominant religious culture in this country, their beliefs and practices will be considered “Mainstream” for the purposes of this study.

Neopagan

Individuals whose religious self-identification is any one of the following: Asatru, Dianic, Druid, Heathen, Pagan, Neopagan, Shaman(istic), Wiccan, Witch, and any of the subdivisions of these groups, e.g., hereditary witch, Egyptian pagan, etc.

Other Religions/Religious Groups

For the purpose of this study, Other religions/religious groups are all except Neopagan religions, Judaism and Christianity (including Catholicism).

Ritual

In the context of Neopagan religion, ritual may be any mental or physical action for the purpose of performing magic, interacting with nonphysical entities, or expressing religious or spiritual intent.

Performative efficacy

Performative efficacy refers to the ability to produce an effect through the power of belief, imagination, symbols, meaning, expectation, persuasion and self-relationship. (Kaptchuk, 2002)

Religious

When referring to a person, religious refers to an individual who identifies as a member of a religion, and practices or believes according to the tenets of that religion.

When referring to beliefs and practices, religious refers to those shared teachings, beliefs and/or practices concerned with the sacred, that are supported by tradition, community, organization or authority.

Sabbat

One of eight holy days in the Wiccan liturgical year, or Wheel of the Year. The Wheel of the Year is considered one of the defining characteristics of Wiccan religion, and is celebrated by many, but not all, Neopagans.

Spiritual

When referring to a person, spiritual refers to an individual who is attentive to his or her experience of the sacred in daily life. With regard to beliefs and practices, spiritual refers to an individual's experience of the sacred including independently arrived at beliefs and practices.

Tradition

A lineage of teaching and practice. Although a number of established traditions exist within Neopaganism and have done so for decades, a new tradition may be created by anyone with the creativity and energy to do so.

Wicca

The largest Neopagan tradition in the United States and Britain. It is characterized by worship of a male and a female deity, a liturgical year of eight sabbats (or holy days), the inclusion of every initiate in the priesthood, and often by the practice of magic.

Outline of Remaining Chapters

Chapter 2 will present a review of the current literature available in the areas of interest. Chapter 3 will describe the methods to be employed in the proposed study, including the hypotheses to be tested, the rationale for each, and the levels of confidence required, operational definitions of all variables, measurement instruments and their characteristics, sampling methods, data collection and processing. The assumptions and limitations of the study will be articulated, and ethical assurances conveyed. The fourth chapter will present the study results and their evaluation. Chapter 5 will summarize the preceding chapters, present conclusions and offer recommendations for further study.

CHAPTER 2

REVIEW OF THE LITERATURE

Chapter Overview

This chapter offers a survey of the literature and other background information that give context to the present study. There are three sections related to the major concepts that serve as the foundation for the study. The first section examines Neopaganism and related belief systems with attention to both quantitative and qualitative approaches to these subjects. The second section discusses Measurement issues, including the conceptualization of religion and spirituality and the development and modification of instruments. A final section provides background on certain elements of Complementary and Alternative Medicine.

Neopaganism and Related Belief Systems

Quantitative

There have been few major quantitative studies of Neopagans in the United States. The three discussed here suffer from specific limitations, but they generally agree in their findings. The Covenant of the Goddess, a national Neopagan organization also conducted a census on the web. Other groups have undertaken similar efforts, although with less success.

The results of the earliest study (Orion, 1995) were originally published in book form with considerable supplemental material. The data were obtained by means of a survey distributed at several Neopagan festivals between 1983 and 1985. The questionnaire, entitled “Utilization of Health Care by Magickal Folk”, was completed by 189 respondents. Orion acquired additional information through interviews.

Detailed demographic information includes “magickal or chosen name”, sex, sexual preference, “mating status”, education, college major, occupation, field or industry, city and state, type of area (rural, suburban, urban), salary range and household income, political affiliation, religious affiliation during childhood and current, and context for worship (alone, with a group, or both). Additional questions in the demographic section include degree of satisfaction with job, home life and sex life, “do you practice magick”, and an open-ended question, “Please describe your idea of magick”. The remaining questions relate to health care issues. For example, “Do you belong to a health maintenance group”, “Do you believe healing requires physical contact?” “Do you drink alcohol?” Respondents were asked what kind of medical care they would seek for a variety of conditions, about their beliefs related illness and healing, and about their personal health practices.

Only descriptive data were presented, there was no statistical analysis. Respondents were 58% female, 38% male. The remainder included 45 individuals identifying as “androgynous” At the time, 51% of respondents lived in urban areas, 40% in suburbs and 19% in rural communities.

Berger, Leach and Shaffer (2003) set out “to provide scholars with data that may inform their research on Neo-Pagans.” Including questions from the General Social Survey of the National Opinion Research Center’s (NORC), their large sample of over 2000 respondents allows some comparison between Neopagan and nonpagan Americans. Data were collected between 1993 and 1995. Initially, with support from members of the Neopagan community, the survey was mailed to members of Neopagan groups. However, a number of respondents voluntarily forwarded the survey to others, some of whom posted the survey on the web. Through this “snowball” effect the survey was able to include 2089 responses, a much larger number than originally anticipated.

Berger et al. recorded gender, date of birth, marital status, sexual orientation, highest level of education completed, race, ethnicity, religion in which raised, state and type of area in which respondent now lives (e.g., rural, metropolitan), occupation, industry and household income. Respondents were asked whether they had any children or grandchildren, and the sex and age of each child, as well as questions about custody, schooling and religious upbringing. A number of questions were asked about political affiliation and views, including opinions about government spending, confidence in institutions such as the press, organized religion and the U.S. Congress, and about major social issues. Questions about religious and spiritual beliefs included four general questions and 13 specifically about Pagan affiliation and practice.

While not specifically limited to Neopagans, Bloch’s (1998) study of alternative spirituality included 22 participants, all of whom stated that they practiced magic, and earth-based spirituality. His sample was evenly balanced with regard to gender, and all were between 20 and 50 years of age, with the largest group (45%) aged 20-29. The

majority (77%) had been raised as Christian, Catholic or both, with the remainder stating that they were raised with no religion. About two thirds (69%) had completed at least a bachelor's degree or were currently enrolled as college students. Bloch recorded interviews based on the simple prompt "tell me the story of [your] spiritual journey", followed by follow up questions.

All 22 respondents indicated that their primary source of spiritual information was "the self", and this is central to Bloch's findings. Bloch's coding of the responses revealed 100% agreement among the participants on the importance of the self as authority, self-autonomy as a spiritual ideology, the existence of unique yet overlapping beliefs, and the importance of an alternative spiritual community". Agreement of 91% was expressed for "resistance to labels". Bloch discussed the tension between autonomy and community, particularly with regard to the practice of magic, which he stated is traditionally defined as being self-focused, and called into question, as do many authors cited in the current study, the distinctions between magic and religion.

Qualitative

Psychology has taken little interest in Neopaganism, to date. A search of PsycINFO for "Neopagan" going back 10 years yielded one result. A similar search for "Wiccan" yielded five results. For comparison, the results for other religions were: Christian, 4998, Jewish, 1874, Muslim, 473 and Hindu, 259.

Other academic disciplines, including Anthropology and Sociology, have not been as reticent with regard to this new religious movement. In December of 2005, Publishers Weekly noted that "Only recently have serious, academic books on contemporary paganism found homes at academic presses... In the past two years alone,

such books have been published by Duke, New York, Pennsylvania, Columbia and Oxford university presses.” (Winston, 2005).

Although not the most recent study, one of the best-known is Luhrmann’s (1989) investigation of British witches. Luhrmann describes her “primary fields [as] psychiatry and religion” (2005, p. 133). Her observations in Britain support a number of themes important to the current study. Among them, that the Neopagans she studied pursued ways of being that were seen as a return to “the ‘old ways’ ...that had been lost” (p. 81); that “Modern magic rests upon the idea that thought can affect matter without the intervention of the thinker’s acts.” (p. 117); that “The important feature of the magical narrative is that the magician explicitly identifies the narrative as efficacious and empowering.” (p. 250), and that “magical practice lacks the institutional structure that demands a commitment to a particular belief [or to] a hypothesis of the divine at all.” (p. 337).

Luhrmann described the training of the magician or witch as centered on imagery and symbolism, and directed toward the cultivation of self-knowledge and personal power, largely through confrontative “psychotherapeutic” processing of the powerful experiences generated through the training itself. Her conclusions that “magic is the romantic intellectual’s religion, a religion demanding no explicit belief but ripe with symbolic and experiential fruits” (p. 341), and that these are “not a body of objective facts, but a process of understanding, a way of knowing.” (p. 257) are critical insights necessary to understand the Neopagan experience of religion, and of healing.

Emphasis on experience, as opposed to belief, hierarchy or dogma, is central to an understanding of Neopaganism. It could be argued that the heart of “the old way” is to

experience, rather than to believe. Indeed, Luhrmann states that becoming involved with magic is a process of discovering the benefits of the practices themselves, rather than a conversion to a different belief system.

In a more recent article (Luhrmann, 2004) about the place of trance in the context of religion, and its relationship to dissociation and the aftermath of trauma, she expressed her belief that trance is learnable, and has been more or less encouraged as a religious expression in different periods of history. A subsequent essay on the same topics (2005), focused on what Luhrmann describes as a psychological and bodily capacity for “absorption”. Reflecting on her fieldwork in England, and the magical training she had there, she notes “interest in unusual sensory experience of a type called ‘spiritual’ is shared not only among witches and magicians but by Christians and many others” (p. 140). To describe spiritual experience as sensory is noteworthy. Indeed, Luhrmann acknowledges that there are anxieties in more conservative circles about the social effects of practices that cause people to “experience the divine vividly [and] immediately” (p. 141). Her main points, however, seem to be that there is an increasing interest in the cultivation of attention to anomalous internal experiences through a psychological mechanism she describes as absorption, that the capacity for absorption can be increased through learning, and that this mechanism is responsible for both dissociative states and sensations that can and are interpreted by some as spiritual.

McClenon (1997) proposed that the origin of religion lies in the experiences of Paleolithic shamans. His contention is that shamans were those who were more prone to dissociation, and were able to master and make meaning out of the resulting experiences. In this manner shamans gained the ability to induce therapeutic trance in others, and the

confidence required from those others in order to effect healing. Trance could be induced in both the shaman and the person being treated with simple rhythmic stimuli, such as drumming or chanting. Encounters with spirits, whether real, or the result of innate, evolutionarily determined, cognitive structures (Boyer, 2003; D'Aquili, 1983), were the presumed explanation for experiences while entranced. According to McClenon (2002), "shamanic healings systems", based on altered states of consciousness and communication with spirits became the basis of religion. "Shamans communicate with their clients on an unconscious emotional, and symbolic level rather than intellectually. They manipulate symbols which resonate with the needs of those in their society" (1993, p.117).

Writing about Neopaganism and contemporary witchcraft, Magliocco (2004) describes a subculture characterized by resistance against the dominant rationalist view of reality -- a view that "contradicts the embodied experience of many, if not most Neopagans and Witches" (p. 197). Central to that experience are the ecstatic states intentionally created through Neopagan religious ritual. Magliocco states "The instruction Witches and pagans receive in initiatory traditions prepares the imagination to experience religious ecstasy" (p 100). Techniques such as dance and other rhythmic movement, costuming, art, song, and the emotionally charged visualization of symbols serve to induce a variety of nonordinary experiences. Neopagan culture provides a context in which these experiences gain meaning and validation. In Magliocco's view, "Neo-pagans are reclaiming a Western tradition in which trance, healing and possession are important parts of spirituality" (p. 165).

Although her field is religious studies, Pike's (2001) investigation of Neopagans focuses on the "creation of new selves within Neopagan festival communities" (p. 219), and issues of identity that are aroused within festival participants. Festivals are most often situated in areas outside population centers, where the natural world can be experienced first hand, and the trappings of the mundane world left behind. Costume, nudity, fantasy and experimentation are standard fare. Festivals typically include fire circles at night, and drumming is a core element of the evening's experience. "Dance and movement around the fire are not only forms of self-expression and sexual experimentation, but also methods of healing. The body takes center stage at ritual fires and becomes a tool for healing the self" (p. 194). Participants also look forward to experiences of healing for themselves, their community and the earth.

And this healing, they believe, must take place through relationships—with deities, the land and each other... an intimate connection with the natural world, with a goddess or god, and with one's community. Neopagans embody their gods and goddesses in ritual, rather than only addressing them. And if the deity represents a force of nature or the earth itself, Neopagans believe that they are becoming one with the world. They go about this process of healing festival workshops and rituals... And the healing power that they conjure up is more powerful because of its collective amplification than if they were working individually, which is one of the reasons festivals are very important. (p. xxi)

Pike speculates that perhaps part of American society's apparent secularization of recent years is actually a misunderstood shifting of religious activity to spaces not previously understood as sacred, such as the Neopagan festivals. The fluidity and temporary nature of such "congregations" would appear to be a distinctive characteristic of Neopagan religious experience.

Measurement

Issues in the Measurement of Religiousness

The number of studies on the effects of religious and spiritual beliefs and practices on health outcomes has increased considerably in the past decade. Prior to that time, few studies were undertaken, and of those, even fewer were of sufficiently robust design to be considered for publication in peer-reviewed journals. An article (Walker, 2005) in the newsletter of the National Center for Complementary and Alternative Medicine states,

It can be challenging to separate out these effects because people have different ideas regarding the meaning of various practices...Other challenges in this very new field of research include: The fact that different researchers have defined prayer, spirituality, and related concepts in different ways [and a] relative lack of standardized questionnaires (compared with many other fields of medicine).. Social science research faces the same problems.

In a study by Powell, Shahabi & Thoreson, (2003) intended to "examine the scientific basis for some of the most popular hypotheses about the impact of religion or spirituality on physical health" (p.36) they evaluated studies that met "minimally acceptable methodological standards". An overview of the research in the area was presented and results of studies bearing on 9 hypotheses related to the interaction of religion and health were analyzed. In most cases, several studies were included for a given hypothesis. Rigorous criteria for inclusion and exclusion were outlined. Studies were subject to exclusion for failing to attempt to control for confounders, using a cross-sectional design, inadequately defining and measuring religion or spirituality or health, or lacking statistical analysis, among other criteria. In nearly all of the studies evaluated, the measure of religiousness was church/service attendance. Exceptions included studies

that focused on religious coping, religious struggle (e.g., ‘feel God has abandoned me’), or spirituality "measured as a belief in a power apart from one’s existence" (p. 46).

Regardless of the outcomes of the studies reviewed, the definition of religiousness employed in most of them remains subject to question. The authors concluded that the benefits of religion or spirituality on physical health have been underestimated because of such things as imprecise measurement of religion or spirituality and inadequate control for such suppressor variables as private religious practices, both of which have the effect of biasing findings toward the null hypothesis.

Attempts to determine what it is about religion and spirituality that may influence health have had limited success, perhaps in part due to the failure of researchers to measure religion and spirituality with sufficient sophistication. There has been a tendency to include brief, sometimes single-item, indices as one of many variables, rather than including religion and spirituality as a central variable in such studies (Hill & Pargament, 2003).

In fact, the twentieth century saw a reluctance to study religion or spirituality scientifically in any discipline – either because it was believed religion could not or should not be studied by science. As a consequence, *spirituality* in particular, has "elude[d] tight operational definition" (Miller & Thoreson, 2003).

Conceptualizing Religion and Spirituality

In 1999, Hill and Hood published a review of instruments designed to measure a variety of aspects of religiousness and spirituality. The authors’ stated purpose is to “relieve researchers of the unnecessary task of creating scales for which adequate measures already exist.” (p. 3). Among 125 instruments described are scales of beliefs

and practices, religious attitudes, religious development, commitment, experience, values, coping and fundamentalism, scales of spirituality and mysticism, forgiveness, and views of the afterlife, and multidimensional scales. Although the authors “do not oppose the development of new measures, [they] are confident that existing measures have been underutilized and that the researcher is unlikely to be interested in a construct for which a measure is not already available.” (p. 3). Nevertheless, they acknowledge that research in the psychology of religion has focused almost entirely on American Protestants and consequently “in terms of non-Western faith traditions, relevant scales are virtually nonexistent”.

Writing four years later, Hill and Pargament (2003) considered how the limitations on measures of religion and spirituality affect the ability of researchers to evaluate interactions between religious and spiritual belief and practice and health outcomes. They state that in a review of “59 quantitative studies including a religion or spirituality variable in four major psychiatric journals...only 3 included religion or spirituality as a central variable” (p. 65), and this in spite of the fact that even with “the use of global measures with limited reliability, religion and spirituality have been surprisingly robust variables in predicting health-related outcomes.” (p. 66) This points up a “particular need for religion and spirituality measures that are theoretically and functionally linked to mental and physical health, as well as to specific populations facing specific stressors.” (p. 70).

Beginning with a review of what religion and spirituality mean, Hill and Pargament note what they consider to be a particularly dangerous conceptual “polarization of religiousness and spirituality, with the former representing and

institutional, formal, outward, doctrinal, authoritarian, inhibiting expression and the latter representing an individual, subjective, emotional, inward, unsystematic, freeing expression.” (p. 64). The perceived danger here is that, inherent in this process is a valuing of spirituality over religion.

Among the recent advances in the conceptualization of religion, Hill and Pargament cite research in attachment theory that “suggests that people who experience a secure connection with god should also experience greater comfort in stressful situations and confidence in everyday life. Lower levels of stress and lower levels of loneliness are other logical consequences of a secure tie to God”.

Further theoretical support for religion-health interactions comes from the fact that,

Viewed in a religious and spiritual light, many aspects of life can be viewed as sacred in significance and character, including health, both physical (e.g., the body as a temple) and psychological...[causing people to] treat those dimensions of life they find sacred with respect and care. Moreover, the sense of sacredness may represent an important source of strength, meaning and coping (p. 68).

Yet another line of research considers the role of social support derived from religion through the community of fellow church members and clergy. “Self-esteem, information, companionship and instrumental aid” (p. 69) are factors that may aid in dealing with health and other life problems. For church members, although the individuals who make up the congregation may change, the congregation as a whole provides continuity, potentially from birth to death.

Hill and Pargament cite a number of studies that suggest struggle with spiritual issues can “represent a significant fork in the road for many people, one that can lead in

the direction of growth or to significant health problems. How well the individual is able to resolve these struggles may hold the key to which road is taken.”

Noting that nearly all measures of religion and spirituality are based on American Protestant points of view, Hill and Pargament warn that “When modifying or applying a measure originally developed for a Western population for cross-cultural research, investigators must be sensitive to more than the usual concerns about the content and meanings of words” and “to even subtle religious biases that may be embedded in the measure” (p. 70).

It is further suggested by Hill and Pargament that several other “areas for growth” and development exist in the conceptualization and measurement of religion and spirituality. These issues include the development of Contextually Sensitive Measures (e.g., for non-Christians and Christians in ethnic minority groups), Alternatives to Self-Report Measures, Measures of Religious and Spiritual Change and Transformation, and Measures of Religious and Spiritual Outcome (e.g., spiritual well-being). Specifically, if briefly mentioned, are two topics of particular interest for this study: physiological measures of religious states that could be related to health outcomes, and practices not like those of mainstream Protestantism.

Additional “promising areas” (p. 64) of interest to researchers include Perceived Closeness to God, Religion and Spirituality as Orienting, Motivating Forces, Religious Support and Religious and Spiritual Struggle. A list of assessment instruments that address these areas is offered without critique.

Although reference is made to some “potentially valuable” instruments (i.e., the Spiritual Well-Being Scale and the Spiritual Assessment Inventory), specific suggestions for the development of stronger instruments are missing.

Pargament (1988) identified three styles of “religious coping” that have served as the basis for a good deal of research. The three styles, collaborative, deferring and self-directing, are related to varying measures of religiousness and competence.

In contrast to Hill and Pargament’s overview, Hall, Koenig and Meador (2004) focus tightly on one difficulty in measuring religiosity. Stating that methodological and analytical refinements are “meaningless” if religion is incorrectly conceptualized, they approach the problem as one of epistemology and “world view”. They state, “the extent [to which] the scientific study of religion presumes a secular worldview betrays its purported objectivity” (p. 391). According to Hall et al., the basis for the development of modern science and the secular worldview can be found in the work of “philosophers like Rene Descartes and empiricists like Francis Bacon and Isaac Newton [that] signaled an innovation in epistemology” (p. 388). This way of viewing the world insists that rational evaluation of empirical observation is the only valid source of knowledge; as a consequence individual beliefs and cultural contexts become invalidated.

Challenging the limits of this secularized approach, Hall et al. state “there is a growing consensus that we are living through an epistemological revolution... Without an objective foundation for knowledge, current epistemology examines the ways that knowledge is *contingent* on the particular cultural and linguistic context in which it is generated” (p. 389). Describing both science and religion as cultural-linguistic systems, they question the assumed privilege of the secular worldview over the religious. Just as

do secularism and science, religions “constitute self-satisfying, cultural-linguistic worldviews that provide a comprehensive interpretation of the human condition without requiring reference to any external narrative or tradition” (p. 389). In other words, using the authors’ metaphor, religions are not different flavors of icing on the cake of human experience; rather secularism and the different religions are all different kinds of cake.

The implications for research on religion and health are described by the authors as “dangerous and threatening” (to the dominant secular worldview) in that they reframe the research question as “Are there health consequences for specific comprehensive worldviews, be they secularism, Marxism, Christianity, or any other?” (p. 387). Hence, the importance of exploring other worldviews.

Gladstone and Gupta (1963) approached this problem with the assumption that “The best index of the meaning of any concept [i.e. religion] to a person would be his behavioral responses to the incarnation of that concept” (p. 203). A total of 230 students from Oklahoma State University, and Delhi University in India participated in the study. Approximately 75 percent of the Indian students were Hindu, while 80 percent of the American students were Protestant. They were asked to “write five specific things a religious person might do during an average week as a result of being religious and five things he would not do” (p. 203). Participants were also asked to state what fraction of people in cities of various sizes (e.g., village, city), or in certain other countries would act in accordance with the respondents statements. A system of classification of responses was developed, based on categories derived from an initial screening of 15 Indian responses. Consistency of scoring, and adjustment to the categories was accomplished subject to agreement among multiple raters acting independently. The U.S. responses

were treated separately, and some further expansion of the categories made. Categories that received a response rate less than 1 percent after coding of all responses were dropped from the analysis. “Two broad classes” of responses emerged; those related to interpersonal relations (e.g., serving others, not discriminating), and those (e.g., praying, observing dietary rules, not blaspheming) derived “overwhelmingly from religion rather from their impact on other people” (p. 205).

Using these broad categories, “51 percent of the Indian’s Ss fall into the human relations category while 36 percent of the [responses] of the U.S. population fall into that class, a difference significant at less than the .001 level.” (p. 208). There was no significant difference between Indian and U.S. respondents with regard to the “city size” question, with both groups indicating “that the amount of virtuous behavior falls as the size of the populations center increases” (p. 210).

The authors’ brief article did not present a detailed statistical analysis of the responses, perhaps due to the limitations imposed on computational capacity “pre-computer”. A review of the tabulation of responses is suggestive however, bearing in mind that participants were asked to describe what a “religious person might do during an average week”. Nearly twice as many U.S. respondents (10.2%) as Indian respondents (5.6%) mentioned praying, while 7.1% of Indian and only 1.1% of U.S. respondents included being “honest, sincere, telling the truth”. U.S. respondents were also more than twice as likely (9.7% vs. 4.2%) to include attending church, temple or service.

In 2003, the Higher Education Research Institute (HERI), at UCLA, began a very large study designed to examine “the role that spirituality plays in students’ lives and to identify strategies that institutions can use to enhance student’s spiritual development”.

Over 100,000 college freshmen across the United States responded to the 160 item College Students' Beliefs and Values (CSBV) Survey, which was included as an addendum to the annual freshman survey conducted since 1966 by UCLA's Cooperative Institutional Research Program. The CSBV Survey was developed over two years by a team including HERI staff and technical advisors, and normed on 3,680 student respondents from an initial pool of over 11,000.

In attempting to "understand the various definitions of 'spirituality' which have been proposed by scholars in business, education and other fields", researchers Astin and Astin (2003) noted a number of limitations in the instruments used to measure it. Among them:

- 'Spirituality' is often equated with traditional religious practice and beliefs.
- Questions often assume (either explicitly or implicitly) a monotheistic/Judeo-Christian belief system
- No distinction is made between one's 'spirituality' and one's theological perspective
- No distinction is made between 'inner' and 'outer' manifestations of spirituality, i.e., between spiritual attitudes/beliefs/perspectives and spiritual action or behavior".

In preparing their own questionnaire, they sought an instrument that could elicit meaningful responses from students no matter what their religious or spiritual orientation, that would cover both practices and beliefs, and that would be clear and easy to answer. The HERI staff "made at least a cursory examination of every scale and every item" in Hill and Hood (1999), and in conjunction with their Technical Advisory Panel thoroughly considered the measurement problems inherent in most of these instruments (e.g., ceiling effects). Combining these findings with the results of interviews of undergraduate

students about what “spirituality means to them”, eleven domains of spirituality and religiousness were proposed for which questions would be developed.

Another cross-cultural perspective is offered by Traphagan (2005). Addressing “difficulties that arise when culture is factored into the attempt to develop methods for both describing and measuring religiousness or spirituality” (p. 387) he draws heavily on his own ethnographic research in Japan. Using the Fetzer report as a starting point he questions whether the “core ideas associated with the study of Western religions such as Christianity and Islam”, (i.e., religious coping, faith and forgiveness) should be used to define or evaluate religion and spirituality in other cultures. Traphagan, a medical anthropologist, presents the qualitative approach found in ethnographic research as an important adjunct, and perhaps precursor, to quantitative “survey research”. He describes the ethnographic approach as “to probe deeply into the ideas and attitudes people have” while focused on “specific instances of behavior in their natural context” which are significant because they reveal variation (p. 389). Such variation is meaningful not only within its own cultural context, but because it forces us to consider the validity and usefulness of conceptualizations we bring to the study of religion, or any human phenomenon. For example, as Traphagan notes “emphasis on an institutional element to religion—the church—proves restrictive.” (p. 391). He draws a number of counterpoints between the assumptions expressed in the Fetzer report and the beliefs and behavior of the Japanese people he observed and interviewed. For example, he argues that “the assumption that belief is a basic defining feature of religion” (p. 400), does not hold true in Japan where “religion is something that one does” rather than something in which one believes.

Even the meaning of “spirit” can vary widely from culture to culture, as do ideas about the relationship of the individual to “God”, the gods, the spirit realm, nature and community. The general lack of focus on subjective experience in favor of quantitative research often leads to a failure to discriminate between the secular and religious realms of behavior, and consequently limited efforts to operationalize definitions of religion and spirituality.

“The problem here is one of meaning”, Traphagan states, and he suggests alternative approaches to viewing and defining religiosity. These include attention to ritual, which he asserts is a common factor cross-culturally and provides a “basis for the possibility of collecting comparable empirical data” (p. 425). Given that “religion is a system of symbols that is used to establish moods and motivations through the formulation of notions about the order of existence, these moods and motivations become so internalized, or embodied, as to take on an air of unquestioned reality”(p .391)

Norris (2001) takes up a similar thread and addresses the concept of embodiment directly, stating “for those acculturated to a Judeo-Christian sense of body and soul it is not obvious that ‘spiritual’ or religious experience is also bodily experience” (p. 114).

Recent Development and Modification of Instruments

Religious Commitment Inventory

Recent years have seen a number of attempts to develop measures of various aspects of religiousness and spirituality. Little attention has been directed to minority religions, although in at least one case a pilot study was done to determine the feasibility of adapting the BMMRS for use with an ethnic minority.

Research conducted by Worthington et al. (2003) was designed to measure religious commitment, one of the domains included in the BMMRS. The model on which the study was based was developed by Worthington (1988). It asserts that owing to religious conflicts based on differences in dogma among adherents to the western monotheistic faiths “People highly committed to religion usually evaluate their world on at least three important value dimensions: the role of authority of human leaders, scripture or doctrine, and religious group norms.”(p. 168). Such people are presumed to adhere closely to the beliefs and practices of their churches, and to incorporate them as part of daily life. Recognizing that other research had investigated the question of religious commitment, the authors stated that several previous studies were limited because “they (a) were developed for use with individuals within the Judaic and Christian traditions and (b) focus in large part on the degree to which a person believes in and adheres to traditional doctrines.” (2003, p. 85). Six studies were undertaken with the aim of developing the Religious Commitment Inventory-10 (RCI-10) as a brief and “ecumenical” assessment of religious commitment for use in counseling and research, that would be consistent with Worthington’s model and both efficient and psychometrically sound. A previous instrument, the RCI-17 was deemed too long, and possessed of insufficient psychometric robustness.

The six studies included 1414 participants, 905 of whom were college students. Most were Christian, but the largest sample of 468 college students from the San Francisco Bay area included 52 Buddhists, 12 Muslims, 10 Hindus, and 117 nonreligious individuals.

Study 1 examined “the underlying factor structure” of the RCI-17. From the initial analysis, items with factor loadings of .60 or higher were retained resulting in a pool of 10 items. These 10 items were subjected to a principal-axis factor analysis and varimax rotation and two factors with eigenvalues greater than 1.0 emerged. These 10 items became the RCI-10. Intrapersonal Religious Commitment, with 6 items and primarily cognitive in nature, accounted for 62% of the common variance. Interpersonal Religious Commitment, mostly behavioral in emphasis, included 4 items and accounted for 10.1% of the common variance. Tests of internal consistency yielded coefficient alphas of .93 for the full scale, .92 for Intrapersonal Religious Commitment and .87 for Interpersonal Religious Commitment. Intercorrelations between the two subscales were .72 which is significant at the $p < .001$ level. Test-retest reliability was .87 for the full scale, .86 for Intrapersonal Religious Commitment and .83 for Interpersonal Religious Commitment.

Construct validity was assessed by performing “a one-way analysis of variance (ANOVA) by using participants’ endorsement of salvation on Rokeach’s Value Survey as the independent variable”. Scores on the RCI-10 were significantly higher for individuals who ranked salvation as one of the top five values on Rokeach’s scale, than for those who were “nonreligious”. Using Pearson correlation coefficients “to examine the relationship of the RCI-10 (full scale and subscales) and scores of endorsement of the single-item measures of religiosity and spirituality”. The full scale and both subscales correlated with self reported participation in religion and “spirituality as participation in some transcendental realm” (p. 88).

Discriminant validity was measured using Pearson correlation coefficients comparing the full scale and subscales with a “single-item measure of spirituality as defined as exemplary human characteristics”(p. 88) and with scores on the Visions of Everyday Morality Scale. There were no significant correlations in either case.

Criterion validity was measured by calculating Pearson correlation coefficients for the full scale and subscales with “frequency of attendance of religious activities”, and all correlations were significant at the $p < .001$ level.

The following table displays the items on the RCI-10 and statistical results from this study.

Items, Factor Loadings, Item Means, Standard Deviations, and Communalities for the Religious Commitment Inventory—10 (Study 1)

Item	Factor loadings		<i>M</i>	<i>SD</i>	<i>h</i> ²
	1	2			
5. My religious beliefs lie behind my whole approach to life. ^a	.81	.34	2.56	1.51	.72
3. I spend time trying to grow in understanding of my faith.	.78	.30	2.49	1.31	.64
8. It is important to me to spend periods of time in private religious thought and reflection.	.76	.32	2.52	1.36	.64
7. Religious beliefs influence all my dealings in life.	.67	.48	2.25	1.37	.67
4. Religion is especially important to me because it answers many questions about the meaning of life.	.66	.47	2.89	1.56	.64
1. I often read books and magazines about my faith.	.59	.32	1.96	1.16	.48
9. I enjoy working in the activities of my religious organization. ^b	.31	.83	2.34	1.36	.66
6. I enjoy spending time with others of my religious affiliation.	.35	.73	2.64	1.46	.61
10. I keep well informed about my local religious group and have some influence in its decisions. ^b	.39	.71	1.75	1.15	.64
2. I make financial contributions to my religious organization.	.31	.62	2.24	1.32	.47

Note. Values in boldface type are factor loadings at or above the criteria for selection. Factor loadings: 1 = Intrapersonal Religious Commitment; 2 = Interpersonal Religious Commitment. The exploratory factor analysis is for the 10 items retained after eliminating 7 items from the Religious Commitment Inventory—17 (the form in which the instrument was administered). Each item is rated as 1 = *not at all true of me*, 2 = *somewhat true of me*, 3 = *moderately true of me*, 4 = *mostly true of me*, or 5 = *totally true of me*.

^a Adapted from Hoge (1972). ^b Adapted from King and Hunt (1969).

Study 2 focused on concurrent validity in a research context. The RCI-10, Batson's Empathy Adjectives and the Revenge subscale of the Transgression-related Interpersonal Motivations (TRIM) Inventory were administered to 132 psychology undergraduates in groups of 10-20 per sitting. Religious commitment as measured by the RCI-10 was correlated with "the amount of empathy for the robber and motivation to seek revenge against and avoid the robber" from the TRIM. Study 3 measured test-retest reliability using a sample of 150 undergraduate students from Christian universities. Study 4 pursued confirmatory factor analyses using a sample of married Christian church-goers. The two-factor model for the RCI-10 and a one-factor model were tested. "The two factors were highly correlated at .86. Although the two-factor model was statistically superior to the one-factor model, the one-factor model is preferred because of the high factor correlation" (p.91). This result was replicated using the data from studies 2 and 3.

Acknowledging that "Thus far, each study has focused primarily on general samples of university students or on religiously committed Christians versus less committed Christians" and that "attention to other religious groups is important to establish the reliability and validity of scores on the RCI-10 across religious groups", Study 5 investigated a "religiously diverse" (p. 91) sample of college students. Analysis of Variance was used to compare the scores of the five religious groups (Buddhist, Muslim, Christian, Hindu and nonreligious). The nonreligious groups scored significantly lower than any other group on the full scale and the subscales. The authors report that while Christians and Muslims scored higher than Buddhists, they did not differ significantly from each other. In fact, Muslims scored higher than any other of the

groups in this study on both the full scale and each of the subscales. In terms of mean scores for the groups, Christian students most closely resembled Hindu students, as indicated below.

Sample	Study	<i>n</i>	Total RCI-10	Intrapersonal Commitment (Factor 1)	Interpersonal Commitment (Factor 2)
Subsample, Buddhist students	5	52	21.1 (8.8)	13.2 (5.3)	7.9 (3.8)
Subsample, Christian students	5	278	25.8 (10.3)	16.0 (6.3)	9.8 (4.4)
Subsample, Hindu students	5	10	24.5 (9.9)	15.1 (6.9)	9.4 (3.3)
Subsample, Muslim students	5	12	29.7 (15.1)	18.4 (9.2)	11.3 (6.0)
Subsample, Nonreligious students	5	116	14.9 (7.1)	9.5 (5.0)	5.3 (2.5)

Correlations were determined separately for each group between the RCI-10 and “frequency of religious activities”, as follows:

Buddhists	$r(49)$	= .33	$p < .05$
Christians	$r(276)$	= .52	$p < .001$
Hindus	$r(8)$	= .56	$p = .07$
Muslims	$r(10)$	= .79	$p < .01$
Nonreligious	$r(115)$	= .22	$p < .01$

Study 6 was undertaken to validate the RCI-10 within a counseling context, under the assumption that the previous studies had provided adequate statistical support for its use in research. Drawing participants from 6 explicitly Christian and 1 secular counseling centers resulted in a sample of 52 counselors and 217 clients. The two factor model was again validated, but with sufficiently high correlation between the two factors that the authors “accept the one factor model as preferable” (p. 93).

In their discussion of the 6 studies, Worthington et al. offer the RCI-10 as “a brief global assessment survey, which allows the therapist to determine the extent to which a

client's religious commitment might be considered when forming ecumenical therapeutic interventions strategies." (p. 95). While perhaps ecumenical in the sense of being suitable for the various Christian denominations, one of the "major drawbacks" (p. 85) the authors identified in other studies (that they were developed for use with individuals within the Judaic and Christian traditions), remains a problem with this instrument, especially when the two factors are collapsed into only one. With respect to Neopagans specifically, solitary practitioners could score very low because they do not *have* the religious groups or organizations queried about in the Factor 2 questions. An additional concern with several of the studies is correlations with frequency of religious activities. While most Christian, Jewish and Muslim congregations hold weekly services, Neopagan rituals are generally scheduled 8 times per year, which on the scale used in Studies 2 and 5 above must be recorded as "a few times a year". This offers a misleading comparison.

Religious Life Inventory

Religious commitment can be thought of as a measure of "how much". Hills, Francis and Robbins (2005) undertook a revision of a measure that considers religion and spirituality under the rubric of "what kind", the Religious Life Inventory (RLI: Batson and Schoenrade, 1991). Hills et al. concluded on the basis of previous research that "different ways of being religious have more in common with one another, than with any of the [21] personality factors included in the [RLI] study." (p. 1390). They also determined that the RLI lacked statistical soundness in some respects, identified ambiguous items, or those lacking discriminative validity. They present a revised instrument in this paper.

From an initial sample of 1585 undergraduate students at a church-related college, 1361 complete responses were analyzed. Among the participants 25% were Catholic, 26% claimed no religious affiliation, and the remainder belonged to a variety of Protestant denominations. Each completed the 32-item Religious Life Inventory, which includes subscales for extrinsic, intrinsic and quest religiosity. In addition, “Church attendance was measured on a 5-point scale ranging from ‘never’ through ‘once or twice a year’, ‘sometimes’, ‘at least once a month’ to ‘weekly’. Frequency of personal prayer was measured on a similar scale”(p. 1394) that also included “daily”.

An exploratory factor analysis using oblique rotation resulted in the identification of four factors with eigenvalues > 1 , through principal components analysis. These four factors accounted for 54% of the total variance. One factor consisted of a single quest item. The other three factors, although each included one or more items from other scales, generally corresponded to the intrinsic, extrinsic and quest orientations. Several ambiguous items were discovered. Among them were two items with reverse scoring, judged by some researchers to be a confounding element in factor analyses.

A confirmatory factor analysis was performed using a number of techniques including the chi-squared statistic, the Goodness of Fit Index, the Tucker-Lewis Index, the Comparative Fit Index and the Adjusted Goodness of Fit Index. The original 32-item RLI “did not meet any of the minimum fit requirements for a satisfactory model” (p.1396). Ultimately eight items were removed from the original instrument, four from the original extrinsic scale and four from quest.

In the data collected, the three religious orientations (extrinsic, extrinsic and quest) were significantly associated with age, however in different directions: increasing

age correlated with an increase in quest and intrinsicity, and a decrease in extrinsicity. There were no significant associations with gender. Frequency of personal prayer showed a significant positive association with each orientation, most strongly with the intrinsic orientation, and least with the extrinsic. Church attendance showed no significant association with the extrinsic orientation, but did with intrinsic and quest.

The revised instrument was found to have a more reliable quest scale with Cronbach's alpha increasing from 0.70 to 0.83. The reliability for extrinsic dropped slightly from 0.79 to 0.76, which was acceptable considering that there were four fewer items. Noted as "surprising" (p. 1397) was the fact that on the original RLI, extrinsicity did not appear to be significantly related to frequency of attendance at services. Surprising because "the underlying idea of the extrinsic orientation is that extrinsics attend church and take part in church activities in order to derive personal advantages and social satisfactions, and it would accordingly be expected that the frequency of church attendance and the level of extrinsicity would be positively and strongly associated." (p. 1398). The revised scale, however demonstrates the expected relationship.

Although Hills et al. (2005) conclude that they have been successful in producing an instrument "psychometrically more robust than its parent scale" they acknowledge that "more work remains to be done on establishing the construct validity of the three religious orientations" (p. 1398) that the RLI and RLI-R seek to measure.

Both the RLI-R and the RCI-10 address, in some form, the concerns raised by the HERI group. One purpose of the RLI-R is to distinguish between 'inner' and 'outer'. The RCI-10, by seeking an "ecumenical" approach attempts to disengage measurement of religious commitment from commitment to specific doctrine. Neither measure purports

to assess spirituality per se, and so they avoid equating spirituality with religion. However, both measures based their development process in part on correlations with church attendance.

Modified BMMRS

A small study was conducted in Hawaii (Mokuau, Hishinuma & Nishimura, 2001) in which a modified version of the BMMRS was administered to a group of Native Hawaiians involved in a fitness and health education program based on native ways. Native spirituality and religion permeate daily life for many Native Hawaiians in spite of the fact that the same individuals may also subscribe to a Christian faith or another nonnative belief system.

Participants included 17 adults aged 23 to 64 years, 11 of whom were male. All had some Native Hawaiian ancestry combined with Caucasian, Chinese, Japanese, Korean, Hispanic, or other ethnic and racial backgrounds. The program, Uli'eo Koa (Warrior Preparedness), was designed as a culturally appropriate health education and fitness program that included traditional Hawaiian fighting arts, diet and massage as well as periodic health assessments.

The BMMRS was chosen for this study “because of (1) the emerging evidence of its psychometric properties, (2) the dual focus on religious and spiritual beliefs and practices, and (3) the explication of multiple domains that capture diverse and complex features of religiousness and spirituality” (p. 410). Modifications were made to increase face validity in line with previous research on Hawaiian spirituality. Questions that included the word “God” were changed to read “God/Akua”, and other native terms were included where meaningful. Two items were deleted from the original BMMRS. The

first, part of the Religious Coping domain, stated “I work together with God as a partner”. This item was deemed incompatible with traditional Hawaiian views of God. The other deleted item was “During the last year about how much was the average monthly contribution of your household to your congregation or to religious causes.” No rationale for this deletion was offered. Six items related to family and social group support were added, and one item was added to the religious/Spiritual History domain. Three items were added that related directly to the program in which the participants were involved. The original 38 items of the BMMRS were thus expanded to 47.

The modified BMMRS was administered before and after the Uli’eo Koa program. A thorough statistical analysis was performed on the resulting data. Three open-ended questions were excluded. Eleven subscales and 6 individual items were analyzed. Cronbach’s alpha was calculated for 10 of the subscales. The remaining subscale (three questions about the program) was not evaluated this way because all the participants gave the same answer on one of questions. To determine the internal consistency for each item, item-total correlations were calculated, and in pretest, the range was .03 to .93, with 6 of the correlations below .25. At post-test the range was .00 to .93, but only three correlations were lower than .25. The items with the lowest internal consistency were “watches/listens to religious programs” (.03 and .00), “family makes demands” (.20 and .24) and “significant loss in faith (.11 and .11). “God/Akua abandoned me” and “do things without God/Akua” expressed internal consistency of less than .25. Mokuau et al, surmise that “negative connotations of God or family are not clear to participants or are interpreted differently by participants”(p. 412) because they are so alien to native Hawaiian cultural values.

Complementary and Alternative Medicine

According to the National Center for Complementary and Alternative Medicine (NCCAM), there are five categories of treatments within the field of CAM.

1. Alternative Medical Systems are complete systems of theory and practice that developed separately from conventional medicine as practiced in the United States. Homeopathy and naturopathy, and Ayurveda are examples.
2. Mind-Body Interventions include, among other modalities, prayer, meditation and art or dance therapy.
3. The Biologically Based therapies include herbs, vitamins and other supplements.
4. Manipulative body-based methods involve the movement of parts of the body. Chiropractic and massage are examples.
5. Energy therapies include, for example, Reiki and Therapeutic Touch or the use of electromagnetic fields to stimulate or alter presumed energy fields associated with the body.

In this study, shamanic practices, the use of herbs, magic, imagery, and faith healing will be considered part of CAM.

Prayer, Magic and Words of Power

There is a fair amount of ethnological literature on topics such as shamanism, folk medicine, and "magical" healing, much of which is germane to the use of prayer, words of power and magic in contemporary society. This anthropological evidence suggests that beliefs and expectations contribute to both sickness and health. It has even been suggested that religion evolved out of shamanic healing rituals. (McClenon, 2000).

Csordas (1983) argued that “that the category of the “holy” may in its own way be fundamental to our understanding of health and health problems” (p. 334), and that healing is, in fact, a form of communication, or “discourse” between healer and sufferer. This culturally informed dialog results in a “*predisposition* to be healed, to create the experience of spiritual *empowerment*, and to create the concrete perception of personal *transformation*. It is shown that this threefold process activates and controls healing processes” (p. 346).

In their study of traditional Navajo healers, Schneider and DeHaven (2003) emphasize the fact that “Reality mirrors the spoken word, and for this reason, words should be chosen carefully. A person’s words do not merely describe the surrounding world, but in fact help created it.” (p. 418) It is through the power of the words that constitute Navajo healing songs, that balance in creation is maintained, and the harmony with nature that sustains health is renewed.

Prayer

Prayer is specifically recognized as a CAM modality, and “is defined by NCCAM as an active process of appealing to a higher spiritual power, specifically for health reasons; it includes individual or group prayer on behalf of oneself or others” (Walker 2005). Prayer on behalf of those who are sick or dying is practiced in every culture around the world. In recent years a number of large studies of intercessory prayer have been undertaken with mixed results. In a study published in Lancet, Krucoff et al. (2005) examined the effect of prayer, music, imagery and touch therapy on 748 patients with coronary artery disease. This randomized controlled study at the Duke University Clinical Research Unit failed to find any significant differences among the groups with

regard to the “primary composite endpoints”, including death and new congestive heart failure. However, the same researchers found in 2001 that patients receiving treatment with “off-site intercessory prayer had the lowest short- and long-term absolute complication rates.” (Krucoff, et al. 2001, abstract).

Words of Power

In her extensive study of healing groups in suburban New Jersey, McGuire (1983) observed 255 group healing sessions and conducted 332 interviews with leaders and participants. Her focus was on “words of power”, and how those words effect healing by empowering those who use them in healing rituals. McGuire describes disease as a “biophysical condition as interpreted through a medical system’s paradigm”(p. 221) and illness as an “individual’s social and psychological response to his or her perceived biophysical condition”. She argues that healing of illness is effected largely by enhancing the individual’s sense of empowerment. Because the dominant medical system disempowers the sick, sufferers turn to alternative forms of healing that restore their power.

Her study classified groups as Christian, Meditation and Human Potential, Metaphysical, Occult and Eclectic, or Technique Oriented. She found that all the groups believed in “the extraordinary power of some words”(p. 225), and that for some groups “ritual language was a central part of the belief system”. Among the various groups, the use of ritual verbalization included praying, chanting, glossolalia, and the use of affirmation. One function of ritual healing speech is the restoration of order to an experience disordered by illness. Another purpose is to focus the intention of the speakers on the metaphysical purpose of healing. Groups differed in whether they

believed the power to heal resided in the words themselves, in the intention of the speaker, or in the person to be healed.

Most participants in the study also sought traditional medical treatment. However, the focus on “self-healing and empowerment of the individual” (p. 236) in the alternative healing groups was felt to support the healing process in a way that traditional medicine does not.

Magic

The ritual use of words for healing purposes has been part of the human experience for thousands of years. Prior to the advent of modern medicine, charms and spells were among the most commonly used treatments for a wide variety of ailments. Davies (1996) chronicles their use into the 20th century in England and Wales, focusing on charms known to have been in use for over 100 years. Three types are included: “prayers, which take the form of request directed to God, Jesus, Mary or a saint; blessings, which take the form of wishes directed to the patient; adjurations, which take the form of commands directed to the sickness itself or to the agent responsible” (p. 20).

Modern studies of magic and its use can be found in the literature on new religious movements, and of course, in anthropological studies of cultures other than our own. In the psychological literature, magical thinking is generally considered pathological (Zusne, 1989). Zusne provides a definition of magical thinking that is consistent with common thought on the subject.

Magical thinking is the belief that (a) transfer of energy or information between physical systems may take place solely because of their similarity or contiguity in time and space, or (b) one’s thoughts, words, or actions can achieve specific physical effects in a manner not governed by the principles of ordinary transmission of energy or information (p. 13)

Individuals seek explanations for phenomena, and sometimes there is insufficient evidence to explain them. For this reason, Zusne asserts, “even an adult in an industrial society can succumb to magical thinking” (p. 14) if that person lacks the knowledge necessary for a correct interpretation of events. In such cases, meaning, rather than information, shapes an individual’s evaluation of causes, and magical thinking arises.

A PsycINFO search for journal articles with “magic” in the subject field for the previous 10 years resulted in 142 results. However, virtually all of them were of the sort, “the magic of fill-in-the-blank”, rather than actually treating belief in or use of magic. Most exceptions fell into the following categories: sympathetic magic and its relationship to gambling behavior, the use of magic in other cultures (e.g., Africa, the Caribbean, Asia), and magical thinking among children.

Among the few that are of interest for the current study, is van der Geest’s (2005) consideration of the relationship between religion and magic in the context of the hospital. Starting with Malinowski’s distinctions among science, rooted in empiricism, religion as faith in the supernatural, and magic as a practical art based on hope, van der Geest goes on to say that in “real life” the lines between science, religion and magic are not clearly drawn. Condemning the “dichotomist world view in which subject is posed against object, spirit against body, rational against emotional” (p. 137), and noting that “Medical research, such as randomized controlled trials, are attempts to separate specific effects from placebo effects, to distinguish between science and magic” (p. 138) he urges researchers to open to the “magic” that happens in clinical context – through the use of specific words and ritualized actions, performed with the intent to heal.

Greenwood (2005) sees magical thinking as participative, analogical and implicit. Through shamanic and magical techniques such as drumming, dancing, chanting, using psychotropics and contacting “forces unseen but real” (p. 92), regular consciousness may be transformed and the otherworld of spirits and synchronicity entered. Training and experience increase the efficacy with which practitioners can use these techniques for healing and personal development.

In spite of the relative paucity of academic literature on the actual practice of magic, there is a large popular literature on the subject, ranging from “Howto” treatments, to books on ethical considerations. Seminal works such as those by the Farrars and Starhawk have already been cited.

Hardin (2005) describes a common perspective among Neopagans about magic in the context of healing.

Healing is a magickal process, and we need no more evidence than a bloody cut which quickly heals until there is no mark, to know that our bodies are miraculous, indeed. Our intent, focused power, skill, spells, practices and knowledge of nutrition and herbs can assist with this miracle. Our intention, however, needn't be to escape all pain or even avoid forever our mortal demise, but rather to become as consciously balanced and whole as the ever-changing universe we are a part of. (p. 38)

This point of view echoes Carpenter (1994) who emphasizes the importance of magic to Neopagans in a more generalized way, reiterating the themes of interconnectedness with nature and communication with spirits, as central characteristics of Neopagan religious consciousness. A practical application of magic is offered by Saippenu (n.d.) in an instructional article posted to a popular Neopagan web site. I quote at length, as Saippenu has incorporated most of the elements common to the Neopagan conception of the relationship between magic and healing.

So when people ask me what the requirements would be for using magick (power of the mind, link to universal consciousness, invoking the power of spirit, whatever your path delivers for verbiage) to control pain, I would have to respond that you need to believe in your own power to accomplish it... I know traditional therapy implies that subconscious thought is the root of all problems, but my spirit guides disagree. The many layers of my subconscious mind, which admittedly are tangled and complex when viewed by the eyes of the conscious mind, are where my inherent wisdom dwells. I simply need to turn off the conscious controller in order to allow truth, power and healing to surface from below. My conscious mind is the trouble maker. It is the control freak that does not allow for anything that I can't see, touch, feel and prove through physical sensation. It is the gatekeeper and my jailer. The gatekeeper appears to store beliefs through many methods but, having suffered some trauma in the past, mine had stored many false beliefs based on trauma-induced input. My gatekeeper had become ill and misinformed... Meditation puts the gatekeeper to sleep and allows for what is actually reality to break free and exist... What I am calling meditation is also known as trance. I use binaural beat technology as a vehicle to trance, but... Some people use drumming, mantras whatever gets you to this state is what is needed.

Mindbody

Several recent studies have investigated the efficacy of intentional healing. For example, Achterberg, Cooke, Richards, Standish, Kozak et al. (2005) used functional magnetic resonance imaging to investigate the effects of healing intention. Eleven healers and recipients were paired. Each recipient was placed in an MRI scanner, isolated from the healer, while the healer sent healing in the form of distant intentionality, at intervals unknown to the recipient. Areas of the brain activated during the trials were recorded, and differences between experimental and control procedures were found to be significant ($p = 0.000127$). The investigators concluded, “instructions to a healer to make an intentional connection with a sensory isolated person can be correlated to changes in brain function of that individual”(abstract).

Although there appears to be no research in this area specifically about the experiences of Neopagans, more general research in psychoneuroimmunology

contributes to our understanding of these phenomena. Recognizing that the mind is a function of the brain and that the brain interacts with the immune, endocrine and nervous systems, it has been firmly established that the mind affects the body, and beliefs affect health (Ray, 2004). Dickerson, Kemeny, Aziz, Kim & Fahey (2004) found, for example, that among individuals in whom self-blame was induced, those who showed the most shame also had the greatest elevations of proinflammatory cytokines which are related to inflammatory and infectious diseases. Pert, Dreher and Ruff (1998) eloquently describe how “the bodymind is protected and preserved by an internal healing system—a multidimensional entity guided by emotions” (p. 31) and the importance of “emotional expression [as] a marker for psychospiritual vitalization”(p. 30).

There has been increased interest recently in brain activity related to religious and spiritual experiences (Boyer, 2003, Livingston, 2005). In his discussion of the differences between Christian and Metaphysical healing groups, Glik (1988) notes evidence of altered states of consciousness (ASCs) among participants of both kinds of groups. Studies of shamanic practices have focused on brain activity as well (McClenon, 1997, Walsh, 1993)

Chapter Summary

This chapter has presented a review of the literature related to the study topics. Quantitative and qualitative studies on Neopagans were considered. The studies by Orion and Berger are essentially descriptive of their samples. In both cases convenience sampling methods were used. No studies of Neopagans were found in the psychological literature.

The literature on the conceptualization and measurement of religion is substantial. The studies presented here were chosen to represent recent trends in grappling with issues related to the topic. The development and modification of measurement instruments benefits from the application of tried and true psychometric principles, and studies in this area are generally very sound. The conceptualization of religion and spirituality, however, presents at least two difficulties. The first is the wide variety of theoretical orientations brought to bear on the subject by psychology. The second is the historical homogeneity of the population in the U.S. with regard to religion, which limits the kinds of comparison that can be drawn by researchers. These factors seem to be less an issue for anthropologists and sociologists, who apparently have a better set of theoretical tools for dealing with religion. These disciplines offer views of American religious groups as part of a worldwide spectrum of religious and spiritual expression.

Selected literature related to complementary and alternative medicine focused on shamanism, faith healing and magic (a central element of Neopagan practice) and on aspects of mindbody healing. The latter has only recently begun to be empirically investigated, and later studies show greater rigor than earlier ones. Very sophisticated theory abounds. Studies of shamanic techniques and faith healing have been conducted by anthropologists, sociologists, and psychiatrists, so that the literature as a whole weaves together social, cultural and physiological perspectives. Similar treatment of magic is nearly non-existent, in spite of burgeoning popular literature.

CHAPTER 3

RESEARCH DESIGN AND METHOD

Chapter Overview

This chapter describes the methods used in the current study. The problem statement presented in Chapter 1 will be restated. The hypotheses tested, the rationale for each, and the levels of confidence required will be presented. The design of the study will be set forth in detail, including operational definitions of all variables, measurement instruments and their characteristics, sampling methods, data collection and processing, design validity information, and procedures. The assumptions and limitations of the study will be considered. Finally, ethical assurances will be offered.

Problem Statement

With regard to religious values and practices, Neopagans are distinctly different from members of the conventional American religious groups, Judaism and Christianity. They may have more in common with religious groups that are in the minority in this country, such as Buddhism, Hinduism, Shinto, Taoism, Slavic Paganism, African Tribal religion, and Native American ways and the Shamanic traditions that appear throughout the world and in several of the religions just named. In some respects, Neopaganism represents an opposing worldview to that of Christianity and Judaism. Research into the

relationship between religiousness and health outcomes has depended almost exclusively on measures designed for and normed on the Judeo-Christian majority.

The question this study seeks to answer is: What are the significant differences between Neopagans and members of Judeo-Christian religious groups with regard to the experience of religiousness and choices with regard to healing and health care?

Hypotheses and Rationales

The confidence level for all hypotheses is set at the $p < .05$ level. The dependent variables are the Brief Multidimensional Measure of Religiousness/Spirituality (BMMRS/GSS) as included in the General Social Survey, the Diverse Religious Experiences Scale (DRES), and the Complementary and Alternative Medicine Questionnaire (CAMQ).

Hypothesis 1

Participants who identify themselves as Neopagan will score significantly lower on a measure of mainstream religiousness and spirituality, the BMMRS/GSS, than participants who identify as Jewish or Christian.

Hypothesis 2

Participants who identify as Neopagan will score significantly higher on a measure of diverse religious practices, the DRES, than participants who identify as Jewish or Christian.

Rationale 1-2.

The BMMRS/GSS and the DRES measure different experiences of religiousness. The BMMRS/GSS was originally validated on populations consisting almost entirely of

individuals who would be identified in this study as Judeo-Christian. The Religious Experiences subscale of the DRES includes items describing practices and attitudes common to Neopaganism and some religions that are classified as Other in this study. The DRES includes a number of items reflecting practices related to the body, sexuality, magic and worship that are integral to Neopagan religiousness. Norris (2001, p. 114) writes “for those acculturated to a Judeo-Christian sense of body and soul it is not obvious that ‘spiritual’ or religious experience is also bodily experience.” This is one factor in the general exclusion of such experiences from mainstream religiousness in the United States. Further, because many Neopagans “are theists (usually polytheists, but some are animists or atheists)” (Harvey, 1996), or conceive of deity as female, references to “God” in a large number of the items in the BMMRS/GSS may result in Neopagans responding in the negative even if they otherwise agree with the content of the questions. Finally, many Neopagans are solitary practitioners, so questions about the respondent’s congregation are likely to be answered in the negative. This would be atypical among those who identify as Jewish or Christian.

Hypothesis 3

Participants who identify as Neopagan will demonstrate greater utilization of complementary and alternative medicine procedures, as measured by score on the CAMQ, than those individuals who identify as Jewish or Christian.

Rationale 3

It has been asserted “Almost every Neopagan thinks of him- or herself as a healer”(Orion, 1995, p.182). For Neopagans who are not licensed medical practitioners, presumably the majority of them, CAM healing practices, including prayer and ritual,

would be the only available means to act as a healer. Manipulation of the energy systems of the body and the use of herbs and other natural substances are features of several CAM modalities. Neopagan attitudes and practices are consistent with the principles underlying such CAM modalities.

Hypothesis 4

Participants who identify as Neopagan will be more likely to rank “sensations”, “feelings”, or “emotions” as most important or second most important on the DRES Evaluation of Experience than those who identify as Jewish or Christian.

Rationale 4

According to Pike (2001) “it is in techniques of the body—such as trance states and fire dancing—and ritual action that Neopagans most clearly diverge from other religious communities in North America.” (p. xix). Neopagan religious practice is oriented toward body, feeling and emotion, rather than to thought and context.

Hypothesis 5

There will be a significant, positive correlation between the degree to which Neopagan participants rate themselves as very religious and their total score on the DRES.

Hypothesis 6

There will be a significant negative correlation between the degree to which Neopagan participants rate themselves as very religious and their total scores on the BMMRS/GSS.

Hypothesis 7

There will be a significant positive correlation between the degree to which Jewish or Christian participants rate themselves as very religious and their total scores on the BMMRS/GSS.

Hypothesis 8

There will be a significant negative correlation between the degree to which Jewish or Christian participants rate themselves as very religious and their total scores on the DRES.

Rationale 5-8

Experiences of religiousness may be conceived of as including the practices, attitudes, beliefs, and feelings an individual associates with his or her religion. The primary focus of both the BMMRS and the DRES is on the experience of religiousness. The content of the two instruments is very different. Although a continuum of experience exists, the BMMRS primarily reflects an experience of religiousness common within Judeo-Christian religious groups. The DRES primarily reflects experiences of religiousness familiar to members of a variety of religious groups other than Judaism and Christianity, including Neopagans as defined above.

Research Design

This study uses both the causal-comparative method and the correlational method to compare religious groups on the basis of experiences of religiousness and use of CAM healing methods. The method examines possible cause and effect relationships through the analysis of data collected after the events of interest have transpired. Unlike true

experimental research, manipulation of the variables is not possible, nor may participants be randomly assigned to groups.

The strength of this method is that it allows examination of variables that can not be manipulated for one reason or another, including ethical reasons. The main weakness of the causal-comparative method is its limited ability to establish cause and affect relationships between study variables, due in part to the lack of controls noted above. Other variables may exist that are outside the parameters of the study.

For the current study, the following statistical analyses are performed: independent samples t-test (hypotheses 1-4), and correlations (hypotheses 5-8). Responses to the Evaluation of Experience question (item 68) consist of rankings, and will be organized in a cumulative frequency distribution table. Additional analyses may be undertaken. Should there be sufficient responses by individuals adhering to religious groups defined as Other for this study, ANOVA will be used for additional analysis.

Operational Definition Of Research Variables

Independent Variable

The independent variable in the proposed study is Religious Identification. Religious Identification is defined by the response to Item 9, "Your religion now."

Responses to Item 9 are categorized as Judeo-Christian, Neopagan (Wiccan/Pagan/Druid), or as members of some other religion (Muslim, Buddhist, Hindu, Unitarian Universalist¹, Other). Only responses from individuals in the first two groups are utilized for the present study.

¹ According to the Unitarian Universalist Association "The living tradition which we share draws from many sources... Grateful for the religious pluralism which enriches and ennobles our faith, we are inspired

The list of response choices for Item 9, “Your religion now”, is derived from the list of largest religious groups provided by the American Religious Identification Study (ARIS) expanded to include a separate category, “Catholic”, a subgroup within Christianity, and restoring the ARIS category that included Atheist, Agnostic, Humanist, Secular and No Religion.

Dependent Variables

The dependent variables are defined by:

1. total score on the BMMRS/GSS, (items 37-51, 69-78 and 83-84 on the web survey)
2. total score on the DRE Scale (items 15-35, and 52-67 on the web survey)
3. total score on the CAM questionnaire (items 86-92 on the web survey)
4. response to the Evaluation of Experience as Religious question (item 68 on the web survey) from the DRE Scale.
5. Extent to which respondent considers him or her self religious (item 7 on the web survey)

Levels of Measurement

Demographics questions produce nominal data, except for age, which is ratio data. The BMMRS and the DRES (except for the Evaluation of Experience question) employ Likert scales resulting in ordinal data with equal appearing intervals. Responses to the Evaluation of Experience question are given as rankings. These rankings result in respondents being categorized, so the data is nominal.

Kinds of Measurement for All Variables

Data was collected on-line. Reactivity was minimized, as the researcher was not present. Some degree of reactivity exists, however, in that participants are asked to consider and reveal personal information about which they may be sensitive. Additional reactivity may have arisen if there were computer-related problems during a participant's effort to complete the web-based questionnaire. However, no such problems were reported.

Design Validity

Experimental designs are protected from most threats to validity by the random assignment of participants to groups. Causal-comparative research design and correlational research examines the associations among variables for pre-existing groups. As a consequence, such studies are subject to a variety of threats. Foremost among these is subject selection bias, which can be addressed by the matching of subjects on the basis of demographic information, or by comparison of subgroups within the sample determined by such extraneous variables (e.g., level of education).

An experiment is internally valid to the degree that it demonstrates a causal relationship. Causal-comparative research can not show such a relationship, and therefore internal validity can not be determined for this design.

Diagram of Design

The correlational portion of the proposed study is represented by the diagram below.

X1	O1, O2, O3
X2	O1, O2, O3

Materials

This study was conducted on the web. All responses were collected at one site, referred to herein as the “web survey”. The web survey includes:

1. The consent form (Appendix A)
2. Demographic Questions (Appendix B)
3. BMMRS/GSS (Appendix C)
4. DRES (Appendix D)
5. CAM Questionnaire (Appendix E)

One potential respondent requested a paper version of the web survey, which was provided, although it was not returned by the deadline.

Procedures

Participants completed the web survey. In order to minimize response bias, items belonging to the two instruments were mixed. In other words, several items from the DRE Scale were followed by several items from the BMMRS/GSS. The order in which the questions are offered, and the instrument and scale to which each item belongs is included in Appendix F. Quantitative data for this study were analyzed using SPSS Graduate Pack 13.0 for Windows.

Survey responses were gathered from the web. Use of the web for data collection also allows for much greater geographic diversity in the sample, and a larger sample. Of course, only individuals with access to computers may participate in this way.

The survey was mounted at a commercial data collection site, www.surveymonkey.com. Survey Monkey provides templates for the creation of questions in different formats, e.g., multiple choice-single answer, multiple choice-multiple answer, open-ended (text box), and ranking. The format of the data provided upon completion by Survey Monkey corresponds to the type of question. The wording of all questions and associated documents, such as the Consent Form, is determined and entered into the web site by the investigator.

A variety of methods are available to inform potential participants. For this study, a link to a unique web address was generated, and included in an email targeting the sample population. Participants were instructed to click on the link and enter the survey at the Consent Form.

To prevent one participant from answering the survey multiple times, Survey Monkey places a “cookie” on the participant’s computer. Participants whose computer settings reject such small information files will still be allowed to proceed with the survey. Data may be collected at any time, and may be downloaded in several formats.

An incentive, in the form of a drawing for a cash reward was offered, with participation in the incentive being voluntary. Interested participants were invited to submit their email addresses, so they could be contacted after the drawing.

Although the survey does not require any identifying personal information, concerns about the security of data collected over the web were addressed. Secure

Sockets Layer (SSL) is the standard internet protocol for the transmission of private information, and is the method used for credit card transactions on the web. The use of two encryption keys, one for the sender and one for the receiver provide a high level of assurance that data transmitted in this manner cannot be intercepted.

The collection of data via the internet for research purposes is fairly new, but recent evaluations of its effectiveness and validity generally encourage its use. Skitka and Stargis (2006) reviewed 121 studies and noted that during the period they studied, 2003-2004 “that 21% of APA journals published at least one article that reported on Web-based research”(abstract). In a study (Kiernan, Kiernan, Oyler & Gilles, 2005) in which program evaluation data was collected from 274 university educators following a two day conference, participants were randomly assigned to receive a survey via the Web or by mail. The investigators found no evidence of evaluative bias among the respondents. However, web participants wrote more in response to qualitative questions, and had a higher response rate overall (95% compared to 79%). Roster, Rogers and Albaum (2004), however, had a very different experience in a similar study. Although the response rate was over twice as high for the Web respondents (27.9% as opposed to 11.5%), the web responders were more likely to fail to answer all survey questions. This was particularly true with regard to demographic questions. Citing a study by the UCLA Center for Communication Policy, Lyons, Cude, Lawrence and Gultner (2005) point to the preponderance of individuals in the U.S. that now use the internet, estimated to be in excess of 70%. They write, “The numerous benefits associated with the use of online surveys include larger sample sizes, faster response time, less data processing and lower marginal costs.” (p. 354). They also address the challenges of such research, including

the initial implementation of the web data collection point, prior to the study, and issues of privacy. Nevertheless, their conclusion is that with proper planning and infrastructure the internet can be used effectively to capture reliable data.

Participants

A convenience sample of individuals at least 18 years old was drawn. Email messages inviting participation were sent via religiously oriented listservs (Appendix G).

Two methods were used to find the listservs. For the Judeo-Christian and Others lists, a Google query was performed. Lists that offered an email address for the moderator and appeared to have the most traffic (numbers of messages) were chosen. The Neopagan lists were provided by a contact in the Neopagan community in Los Angeles.

All instruments included in the study were administered, and data collected, through the web site. A link to the survey site was included in the email. The first page of the survey included the consent form (Appendix A). Individuals were required to indicate consent before proceeding with the study questions. Participants were allowed to complete the study questions in more than one sitting, although a deadline for completion was established, and noted at the web site. Paper copies of all instruments were available upon request to individuals who wished to participate in that way.

Instrumentation

Brief Multidimensional Measure of Religiousness/Spirituality

The Brief Multidimensional Measure of Religiousness/Spirituality (BMMRS) was developed through the collaboration of the National Institute on Aging (NIA) and the

Fetzer Institute. Members of the working group included researchers with expertise in the relationships among health, wellbeing and religiousness and spirituality. Their objectives included the identification of those aspects of religion/spirituality with the most impact on health and wellbeing, the possible mechanisms of action for these, and the production of an assessment instrument for these variables that would be suitable for use in health related research. Nine domains were considered, and ultimately eight were included in the BMMRS. The included domains are Daily Spiritual Experiences, Values/Beliefs, Forgiveness, Private Religious Practices, Religious and Spiritual Coping, Religious Support, Religious/Spiritual History, and Overall Self-Ranking. The report by the Fetzer/NIA group (1999) regarding the BMMRS states, “Many of the items have a strong Judeo-Christian focus” although “a number of items relevant to the growing proportion of Americans who engage in spiritual activities outside the context of churches and synagogues”(p 3).

Daily spiritual experiences

The Daily Spiritual Experiences Survey (DSES) was developed using in-depth interviews and focus groups. It included 16 items addressing 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 BMMRS domain derived from the DSES comprises six items, one or two items for each DSES dimension, and estimated completion time is approximately two minutes. The DSES has been used in several large studies including one involving a primarily non-Judeo-Christian Asian population. Claiming satisfactory reliability, exploratory factor analyses and high internal consistency (alphas from .91 to .95 across several samples), its use has

been supported as a measure the frequency of spiritually experiences. Of the 38 questions on the BMMRS, 6 are drawn from the DSES Survey. The response set is a 6 point Likert scale with responses ranging from “many times a day” to “Never or almost never”.

Values

The long form questionnaire for Values asks respondents to rate “as a guiding principle” 56 statements describing values such as creativity, pleasure, a spiritual life and family security. Dimensions of hedonism, stimulation, achievement and self-direction, correlate negatively with religiousness, while dimensions of tradition, conformity, benevolence and security correlate positively. Although there is essentially no research that directly links values and health, values do influence behaviors that in turn affect health. In spite of this, the short form used for the BMMRS includes three only questions assessing “the influence of faith on everyday life”. Two of those questions are drawn from the Intrinsic/Extrinsic Revised Scale.

Beliefs

The section on Beliefs seeks to measure religious beliefs that promote positive health outcomes or address the meaning of suffering. The centrality of beliefs to healing has been demonstrated in research on the placebo effect and more recently in psychoneuroimmunological studies. The long form includes seven questions, five of which were previously included in polls conducted by the National Opinion Research Center (NORC). The BMMRS short form version of this scale includes only two questions for which “little psychometric work exists, although they exhibit strong face validity” (p 32) The first question, from the Yale Health and Aging project asks “ How

much is religion a source of strength and comfort to you?”. The second, from the General Social Survey (GSS) is “Do you believe there is a life after death?” Values and Beliefs were combined as a two item “domain” on the BMMRS. Scoring of the two items is on a 4 point Likert scale with responses “Strongly agree” to “strongly disagree”.

Forgiveness

A search of PsycINFO for “forgiveness” going back 10 years yielded only 446 results, of which 228 were written in the past 3 years. As noted in the Fetzer document, research on this topic is indeed limited. Nevertheless, forgiveness is one of the central concepts in the Judeo-Christian religious tradition, and there is some research indicating that “forgiveness” is associated with lower blood pressure, reduced depression and higher self-esteem. Generally this research has focused on forgiving oneself and others, rather than being forgiven by god or others. In spite of the lack of psychometric support, three questions regarding forgiveness for oneself, toward others and by god are included in the BMMRS. The response set for this domain includes 4 choices from “Always or almost always” to “Never”.

Private religious practices

In attempting to measure Private Religious Practices, it was decided that “a scale of religious practices for use in national surveys and clinical studies should assess behaviors that occurs across the spectrum of common U.S. religious traditions” (p. 40). A variety of extant scales were reviewed including items from the NORC General Social Survey. In the interest of future analysis of reliability and validity it was felt that at least four items should be included, and that in adapting items from other surveys a common response scheme should be applied to all the items. Although some of the items derive

from instruments that had been validated, there has been no separate psychometric analysis of this scale. Neither is there both a short and long form as with other scales in the BMMRS. The scale consists of four items asking about private prayer, watching or listening to religious programming, reading religious literature, and praying at mealtime. The 8 point Likert scale includes responses from “More than once a day” to “Never”.

Religious coping

There has been a good deal of research on Religious Coping. The widely used RCOPE assesses 17 different methods of religious or spiritual coping such as religious helping and anger at God. It is noteworthy in that it acknowledges both positive and negative aspects of such coping strategies. A brief (21 item) version of the RCOPE was developed that addressed 2 factors: a search for significance and religious struggle. The seven items drawn from the RCOPE and assessing Religious and Spiritual Coping on the BMMRS constitute its longest section, and consequently the most heavily weighted domain. Scoring choices range from “A great deal” to “Not at all” on a 4 point Likert scale.

Religious social support

Although measurement of general social support is now supported by sophisticated and psychometrically sound instruments, researchers interested in social support in a religious context have not kept pace. The working group determined that adapting existing, validated instruments that measure general social support to measurement of religious support would assure some measure of reliability and validity and avoid several drawbacks associated with developing a completely new instrument. From among the many items available a long form was developed that examined

emotional support received from others, emotional support provided to others, negative interaction, and anticipated support. All eight questions refer to interactions with or feelings about “people in your congregation”. A final short form addressing these dimensions includes four items, each scored on a 4 point Likert scale.

Commitment

Commitment to one’s religion has been measured most frequently by asking respondents how religious they are, how often they attend religious services and how much time or money they contribute to their church. Gartner, Larsen and Allen (as cited in Fetzer Institute, 1999) demonstrated that the latter, described as “hard” measures of religious commitment, have been shown to have a greater relationship to health than the former. Two of the BMMRS questions in this domain are open-ended and ask for dollar amounts. One is scored on a 4 point Likert scale.

Organizational religiousness

The Organizational Religiousness domain assesses the degree to which a respondent is involved with a church, synagogue, ashram, or other religious institution. The original instrument included eight items addressing both behavioral elements of involvement (How often do you attend religious services) and attitudes (I feel at home in this church/synagogue). Two items on attendance were retained as the short form included in the BMMRS. Several theoretical reasons are offered for including Organizational Religiousness in studies related to health outcomes. For example, church attendance may indicate behavioral conformity to religiously prescribed diet or life style that may affect health and attendance may foster participation in a social network that

may provide support. Questions in this domain offer responses on a 6 point Likert scale. Choices range from “More than once a week” to “Never”.

Self ranking

Overall Self-Ranking is scored on a 4 point Likert scale with no option for neutrality. Respondents choose among “Very religious”, “Moderately religious”, “Slightly religious”, and “Not religious at all”.

Psychometrics

In addition to information provided for the individual scales, descriptive statistics for the results of the General Social Survey administration of the BMMRS and percentage distribution of responses to each item are provided in the report. The General Social Survey (GSS) is conducted by the National Opinion Research Council and “except for U.S. the Census, the most frequently analyzed source of information in the social sciences.” (NORC, 2006) During the 1997-1998 administration, the items comprising the BMMRS were included as part of that survey’s module on religion, although there were minor changes to the wording in some cases. To take advantage of the descriptive statistics obtained during the GSS administration, which are included as an appendix to the documentation on the BMMRS (Fetzer Institute, 1999), I have followed the wording used by the GSS in the current study.

Diverse Religious Experience Scale

The Diverse Religious Experience Scale (DRES) is a self-report measure of practices, attitudes and experiences related to religion, the body and healing. It is intended as a complement to measures of religiousness currently in use in health research,

such as the BMMRS, that were designed for a largely Christian population. The DRES comprises the following subscales: Commitment (1 item), Experience of Religiousness (12 items), Healing (7 items), Magical Beliefs (4 items), Religion and Body (6 items), and Religious Practices (9 items).

The single question on Commitment will be a free response question, asking for the amount of time spent on certain activities. The Experience of Religiousness, and Religion and the Body subscales will each include an open-ended question. A 7-point Likert scale will be employed for all remaining items. The response set for the Likert scale will range from “I strongly agree” to “I strongly disagree”.

1 (I strongly agree)	2	3	4 (I'm neutral)	5	6	7 (I strongly disagree)
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Commitment subscale

The BMMRS/GSS includes a question on commitment that asks about the respondent’s financial contribution to religious and nonreligious organizations or causes, and to the respondent’s religious congregation. The DRES question (Item 81) asks the same question, but in terms of the amount of time contributed. A range of values is possible from this free response.

Demographics and religious identification

Demographic information includes age, gender, educational level, state of residence, current religion (religious identification), source of spiritual practice and age at which the respondent came to his or her religion. With the exception of age, which is expressed through a range of values, responses to demographic questions yield categories of responses.

Religious Identification questions, which present a list of religions, offer the choices in random order, and an open response choice labeled “Other” is provided.

Experience of Religiousness subscale

Items in this subscale (items 24-27, 52-55, 57, 63, 64 and 82) focus on experiences rather than practices. Religious discrimination, emotional effects of religious participation, mystical experiences, and visions are included. Item 25 is reverse scored. A single question, on Evaluating Experience as Religious (item 68), asks respondents to rank the relative importance of context, feelings, sensations, emotions and thoughts in determining whether a given experience is a religious one.

Healing subscale

The Healing subscale (Items 19, 28, 33, 35, 58, 59 and 66) considers behavior and attitudes about sickness and healing in a religious context. Both the origins of illness, and the mechanisms of healing are addressed. Scoring for items 33 and 59 are reversed.

Magical Beliefs subscale

The practice of magic is a part of religious experience for many Neopagans, as well as individuals in many non-Western traditions. The Magical Beliefs items (60, 61, 65, 67) focus on attitudes and experiences with Magic (or Magick) as defined for this study.

Religion and Body subscale

Although the BMMRS was designed for use in health research, it includes no questions about attitudes and experiences of the body. Items 29-32, 34 and 36 constitute the Religion and Body subscale. These questions address religious attitudes toward the

body and sexuality. Items 30 and 32 are reverse scored. An open-ended question (item 36) asks, “What do you believe about your body?”

Religious Practices subscale

In the DRES, the focus is on the behaviors the respondents engage in as a result of their religious identification, or the rules that govern those behaviors. The focus is on religious practices excluded by the BMMRS/GSS. Items 15-18, 20-23, 53, 56 and 62 complete this scale. Item 56 is scored in reverse.

Psychometrics

The Cronbach's alpha across the 37 items on the DRES was .90 for the 257 responses in this study.

CAM Questionnaire

The CAM Questionnaire includes 9 items. One asks for a self report of perceived health relative to others in the respondent’s age group. Seven address frequency of utilization and practice of different health care modalities, experiences with religiously based healing. They offer a range of responses from “Daily or nearly daily” to “Never”. Item 88 is reverse scored.

1 (Daily or nearly daily)	2	3	4 (About once a month)	5	6	7 (Never)
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A final open-ended question allows participants to describe how religious beliefs and practices have affected their health.

Data Processing

Data was downloaded from the web survey site (www.surveymonkey.com), in Excel format and transferred to SPSS version 13.0. Reverse scored items were identified and scores recoded.

Assumptions and Limitations

Following are underlying assumptions regarding the methods and procedures of the study:

1. The participants are representative of the population from which they are drawn.
2. Responses will be normally distributed.
3. Test instruments demonstrate appropriate validity and reliability.
4. Administration of the instruments on-line does not introduce any additional bias or reactivity.
5. The participants are candid in their responses.

Potential limitations of the study include the following:

1. Because of the very small percentage of Neopagans in the general population there is a possibility that the number of Neopagan respondents will be too small to allow meaningful statistical analysis.
2. Likert scales are subject to several biases; central tendency bias, acquiescence response bias and social desirability bias.

Ethical Assurances

In order to assure the welfare and privacy of the participants, this study will be conducted according to the ethical guidelines of the American Psychological Association. Participants will be required to read a consent form outlining the purpose of the study, the participants' role and rights, and any benefit or potential harm to the participants. After reading, the participant will be required to indicate consent before proceeding with the survey. A sample of the consent form is included in Appendix A.

Chapter Summary

This chapter has presented the research methodology employed for the study. The problem statement was reiterated, and the hypotheses investigated were presented. The design of the study, including operational definitions of the variables, measurement instruments, sampling methods, data collection and processing were described. The assumptions and limitations were considered and ethical assurances provided.

CHAPTER 4

FINDINGS AND EVALUATION

Chapter Overview

Chapter 4 opens with a description of the sample and details of the demographic characteristics and religious identities of the participants. Findings for the eight hypotheses are then described. Additional findings are presented, followed by an analysis of the design of the study. A discussion of the results completes the chapter.

Findings

Brief Description of the Sample

The web survey was initiated by 306 respondents. Nine responses were blank, and 40 were partial. The balance, 257 responses, constitutes the sample. The sample size used in the statistics for individual variables may differ, because not every question was answered by every respondent. This is reflected in the analysis.

Demographic and Religious Identification Findings

The Demographic and Religious Identification Items, included in Appendix B, asked for limited personal information about each respondent. Tables summarizing these data are included in Appendix H. Table H-1 provides Distribution by Sex and Education

within Religious Groups. Table H-2 lists a summary of the places of residence for the participants. Table H-3 summarizes the data for religious identification within the study groups, while Table H-4 lists the specific answers provided by respondents who chose “Other” for their religious identification. Finally Table H-5 shows Age of Religious Identification by Religious Group.

Age

The age range for Judeo-Christian respondents was 24 to 79 years ($M = 46.1$, $SD = 12.4$). In the Neopagan group, ages ranged from 19 to 74 years ($M = 43.1$, $SD = 11.53$). The mean age of the complete sample was 44.2 and ages ranged from 19 to 79. A statistical comparison of the means indicates there is no significant difference between the two groups ($p = .09$).

Sex

Female respondents substantially outnumbered males in both the Judeo-Christian (68.1%) and Neopagan (76.5%) religious groups, as well as in the sample as a whole (72%). One individual among the Judeo-Christians and one among the Neopagans selected “I do not identify as solely either male or female”.

Education

Respondents were generally well educated. According to the U.S. Census Bureau (2004), nationally, 28% of the population aged 25 years or older, have completed college. In the Judeo-Christian group, 82.7% completed college, and of those, 34.8% also completed a graduate degree. Among the Neopagans in the sample, 59.4% had completed college and an additional 23.5% completed a graduate degree. Including all

respondents, 72.8% completed college with 25.9% completing a graduate degree as well. A chi-square test found that there was a significant difference, $\chi^2(5, N=201) = 13.73$, $p < .05$, between Judeo-Christians and Neopagans with regard to the amount of education completed.

Place of Residence

All regions of the United States are represented in the sample, with responses submitted from individuals in 32 states. California contributed 119 respondents, the largest number from any single state. There were also 31 responses from foreign countries, including 21 from Australia. It is likely that the convenience sampling method is responsible for this overrepresentation of California Neopagans, as the study was initiated in Los Angeles.

Religion

Forty-one respondents chose Other as their primary religious identification. An additional 42 selected Other along with one of the listed choices. Respondents who chose Other also provided an open-ended description of religious identification. Based on these responses the Religious Identification of some individuals was recoded. The majority of these were moved into the Neopagan group, as described below. Four, who indicated both Christian and Neopagan were recoded as “other”, as were three who chose Neopaganism and either Buddhism or Hinduism.

The Judeo-Christian group included 21 Christian, 26 Catholic and 22 Jewish respondents. The Neopagan group included the 119 respondents who initially responded as Wiccan, Pagan, Druid or Neopagan shamanic, and thirteen who initially responded “Other” and were recoded. The recoded responses included Baltic Ethnic Faith -

Romuva, Chaote/Shaman, Heathen/Lukumi, Heathen, Isian, Kemetic (2), Pagan and Witch (5).

Age at Religious Identification

That majority (55.1%) of the Judeo-Christian group had followed their current religion from birth. The second largest segment of this group (21.7%) came to their current religious identification between the ages of 26 and 50. Among Neopagans, only 9.1% were Neopagan by birth; 34.1% chose a Neopagan religious identification between the ages of 18 and 25, while 32.6% made this choice between ages 26 and 50.

A chi-square test found that there was a significant difference, $\chi^2 (4, N=201) = 53.71, p < .01$, between Judeo-Christians and Neopagans with regard to Religious Group and Age at Religious Identification.

Inferential Statistics – Hypotheses Findings

The findings for the hypotheses are based on responses of 257 participants, of whom 69 are defined as Judeo-Christian, 132 as Neopagan. The number of cases included in specific results may vary because not every respondent answered every question.

Hypothesis 1

Participants who identify themselves as Neopagan will score significantly lower on a measure of mainstream religiousness and spirituality, the BMMRS/GSS, than participants who identify as Jewish or Christian.

Table 4

Total Score on the BMMRS/GSS by Religious Group

Group	<i>N</i>	<i>M</i>	<i>SD</i>	<i>t</i>	<i>df</i>	<i>p</i>
Judeo-Christian	63	89.56	20.59	-.554	97.127	.58
Neopagan	123	91.18	15.105			

Hypothesis 1 was not supported. Respondents who identified themselves as Neopagan scored higher on the BMMRS/GSS ($M = 91.18$, $SD = 15.11$) than those who identified as Judeo-Christian ($M = 89.56$, $SD = 20.59$). The difference in the means was not significant ($p = .58$).

Hypothesis 2

Participants who identify as Neopagan will score significantly higher on a measure of diverse religious practices, the DRES, than participants who identify as Jewish or Christian.

Table 5

Total Score on the Diverse Religious Experience Scale by Religious Group

Group	<i>N</i>	<i>M</i>	<i>SD</i>	<i>t</i>	<i>df</i>	<i>p</i>
Judeo-Christian	60	152.97	31.87	-13.53	77.61	<.01
Neopagan	124	212.77	17.94			

Hypothesis 2 was supported. Respondents who identified themselves as Neopagan scored significantly higher on the DRES ($M = 212.77$, $SD = 17.94$) than did those who identified as Judeo-Christian ($M = 152.97$, $SD = 31.87$), $t(77.6)$, $p < .01$.

Hypothesis 3

Participants who identify as Neopagan will demonstrate greater utilization of complementary and alternative medicine procedures, as measured by a high score on the CAMQ, than those individuals who identify as Jewish or Christian.

Table 6

Total Score on the CAM questionnaire by Religious Group

Group	<i>N</i>	<i>M</i>	<i>SD</i>	<i>t</i>	<i>df</i>	<i>p</i>
Judeo-Christian	68	20.46	6.61	-3.615	196	< .01
Neopagan	130	24.16	6.97			

Hypothesis 3 was supported. Respondents who identified themselves as Neopagan utilized Complementary and Alternative Medicine to a significantly greater degree ($M = 24.16$, $SD = 6.97$) than did those who identified as Judeo-Christian ($M = 20.46$, $SD = 6.61$), $t(196) = -3.62$, $p < .01$.

Hypothesis 4

Participants who identify as Neopagan will be more likely to rank “sensation”, “feeling”, or “emotion” as most important or second most important on the DRES Evaluation of Experience than those who identify as Jewish or Christian.

Hypothesis 4 was supported. A crosstabulation with chi-square significance test was performed to examine the relation between religious identification and ranking of evaluative criteria for religious experience. The relation between the variables was significant: for sensation, $\chi^2 (5, N=195) = 23.47, p < .01$; for feeling, $\chi^2 (5, N=197) = 19.94, p < .01$; for emotion, $\chi^2 (5, N=196) = 24.36, p < .01$.

Hypothesis 5

There will be a significant, positive correlation between the degree to which Neopagan participants rate themselves as very religious and their total score on the DRES.

Hypothesis 5 was supported. Pearson's correlation between the degree to which Neopagan participants considered themselves religious ($M = 2.76, SD = .97$) and their total score on the DRES ($M = 212.77, S = 17.94$) supported the research hypothesis, $r = .18, p < .05$.

Hypothesis 6

There will be a significant negative correlation between the degree to which Neopagan participants rate themselves as very religious and their total scores on the BMMRS/GSS.

Hypothesis 6 was not supported. Pearson's correlation between the degree to which Neopagan participants considered themselves religious ($M = 2.76, SD = .974$) and their total score on the BMMRS/GSS ($M = 91.18, SD = 15.10$) demonstrated a significant correlation in the direction opposite that stated in the research hypothesis, $r = .347, p < .01$

Hypothesis 7

There will be a significant positive correlation between the degree to which Jewish or Christian participants rate themselves as very religious and their total scores on the BMMRS/GSS.

Hypothesis 7 was supported. Pearson's correlation between the degree to which Jewish or Christian participants considered themselves as religion ($M = 2.77, SD = .789$) and their total score on the BMMRS/GSS ($M = 8.56, SD = 20.59$) showed the expected positive relationship, $r = .67, p < .01$

Hypothesis 8

There will be a significant negative correlation between the degree to which Jewish or Christian participants rate themselves as very religious and their total scores on the DRES.

Hypothesis 8 was not supported. Pearson's correlation between the degree to which Jewish or Christian participants considered themselves as religion ($M = 2.77, SD = .79$) and their total score on the DRES ($M = 152.97, SD = 31.87$) did not support the hypothesis, $r = -.01, p > .05$

Additional Findings

Research Question #1

The first research question asked about the ways in which the Neopagan experience of religiousness differs from that of members of the religious majority.

The results of the study refute the idea, contained in Hypotheses 1, that Neopagan religiousness is not effectively measured by instruments such as the Brief

Multidimensional Measure of Religiousness/Spirituality. The rationale for Hypothesis 1 expressed the view that Neopagans, with their widely varying ideas about deity, would reject characterizations of belief and practice that were framed in conventional and monotheistic terms. One Neopagan respondent captured this concern in an open-ended response to the question (item 82) ‘If you had the thought ‘I am being religious’, what might have caused you to think that?’

This is not to answer this question - but to express a problem. Your questions are oriented towards mainstream monotheism[sic]. nothing wrong with that for mainstream monotheists[sic] - but it is often difficult to know how to answer them from a Pagan shamanic perspective. Very difficult.

Given the results, however, it is apparent that the majority of Neopagans were able to interpret the BMMRS/GSS questions broadly. For example, another Neopagan answered the aforementioned question,

When I answered questions about God; to me, God refers to either the great horned god or male deity in general or goddess!!! But never do I answer to the Christian God. As for questions about religious[sic] services that implies to my faith Paganism.

There were several Neopagan respondents who rated themselves as ‘Very Religious’ and yet responded with comments similar to this one ‘Hmmm... I can't imagine having that thought.’

The BMMRS/GSS

With regard to self-rankings of how religious the members of each group considered themselves to be, Judeo-Christians ($M = 2.77$, $SD = .79$) and Neopagans ($M = 2.76$, $SD = .98$) were not different. Neopagans ($M = 3.71$, $SD = .55$) did consider themselves more spiritual than the Judeo-Christians did ($M = 3.22$, $SD = .73$).

While there were no significant differences between Judeo-Christians and Neopagans with regard to the total score on the BMMRS/GSS, there were significant differences on several of the subscales, and in some instances, on individual questions within a subscale. Table 7 includes scores on subscales of the BMMRS/GSS by religious group; the corresponding results for each question of the BMMRS/GSS are presented in Appendix H.

Table 7
Scores on Subscales of the BMMRS/GSS by Religious Group

Subscale	Group	<i>N</i>	<i>M</i>	<i>SD</i>	<i>t</i>	<i>df</i>	<i>p</i>
Public Practices	Judeo-Christian	69	11.23	4.88	2.80	199.00	.01
	Neopagan	132	9.05	5.43			
Private Practices	Judeo-Christian	69	13.03	5.73	0.17	95.07	.86
	Neopagan	129	12.90	3.45			
Religious Social Support	Judeo-Christian	69	9.00	2.73	0.06	199.00	.96
	Neopagan	132	8.98	2.78			
Religious Coping	Judeo-Christian	65	12.74	2.28	-1.19	193.00	.24
	Neopagan	130	13.16	2.38			
Forgiveness	Judeo-Christian	69	8.94	2.15	1.47	198.00	.14
	Neopagan	131	8.42	2.50			
Spiritual Experiences	Judeo-Christian	68	23.50	7.34	-2.99	114.71	.00
	Neopagan	132	26.59	6.04			
Values	Judeo-Christian	68	9.31	1.84	0.71	196.00	.01
	Neopagan	130	9.13	1.58			

Significant differences existed between Judeo-Christians and Neopagans on three of the seven subscales (Public Practices, Spiritual Experiences and Values, $p < .01$). Even though no significant differences on the Forgiveness and Private Practices subscales were

observed, there were significant differences in the way individual questions were answered by the two religious groups.

The Forgiveness subscale includes three questions (items 46, 47 and 48). The means for Judeo-Christians (2.86) and for Neopagans (2.89) are almost identical for the question “Because of my religious or spiritual beliefs I have forgiven myself for things that I have done wrong”. But there is a significant difference, $p < .01$, for the question “Because of my religious or spiritual beliefs I know that god forgives me”, where the means are 3.23 and 2.64 for the Judeo-Christian and Neopagan respondents, respectively.

Similarly, for the Private Practices subscale (items 49, 50, 51), there was no significant difference between the means for Judeo-Christian respondents ($M = 13.03$, $SD = 5.73$) and that for Neopagans ($M = 12.90$, $SD = 3.45$). Examination of the individual questions reveals that while there is no significant difference in response to the questions (item 49) “How often do you pray privately in places other than at a church or synagogue?” In contrast, there are differences, significant at $p < .01$, in response to questions about meditation and reading the Bible. Judeo-Christians endorse reading the Bible ($M = 3.52$) and meditating ($M = 3.93$) to about the same degree. Neopagans meditate significantly more ($M = 5.70$) and read the Bible ($M = 1.49$) significantly less.

The Spiritual Experiences subscale (items 38-43) also shows differences in response between the two groups. Judeo-Christians ($M = 3.99$) and Neopagans ($M = 3.98$) agree on their “desire to be closer to or in union with God”, but they differ significantly on several other questions on this subscale, and the Neopagan group scores higher on all the other questions.

The DRE Scale

The Diverse Religious Experience Scale revealed a different picture of the two religious groups. The difference in their means for total score on the DRES was significant at $p < .001$. In fact, there was only one item on the entire instrument for which the difference in the means between the two groups was not significant. Members of both groups tended to disagree with Item 59, "Illness can be a punishment or trial." With regard to whether "In religious matters personal experience is less important than doctrine or faith", the difference in the responses of Judeo-Christians ($M = 4.96$, $SD = 1.97$) and Neopagans ($M = 5.53$, $SD = 2.00$) was less significant ($p < .05$) than on the remaining items, all of which showed differences significant at $p < .001$.

As stated in Hypothesis 8, it was expected that there would be a significant, negative correlation between the degree to which Judeo-Christians are religious and their total score on the DRES. Although the correlation between Judeo-Christian religiousness and diverse religious practices was negative it was not strong enough for significance. Surprisingly, there was a significant, positive correlation ($r = .518$, $p < .001$) for Judeo-Christians between their self-ranking of degree of spirituality ($M = 3.22$, $SD = .73$) and their total score on the DRES ($M = 152.98$, $SD = 31.87$).

As shown in Table 8, correlations between mainstream religiousness and diverse religious practices were insignificant, whether positive or negative, while correlations between diverse religious practices, and self-rankings of spirituality were positive and significant, with the exception of those related to the body.

Table 8

Intercorrelations between Scores on Subscales of the DRES for Judeo-Christians

	Degree Spiritual	Healing	Exp. of Relig.	Magical Beliefs	Relig. & Body	Relig. Prac.
Degree Religious	.19	-.21	.08	.13	-.16	.02
Degree Spiritual		.39**	.60**	.26*	.20	.37**
Healing			.60**	.34**	.39**	.54**
Experience of Religiousness				.51**	.58**	.74**
Magical Beliefs					.29*	.39**
Religion and Body						.50**

*. Correlation is significant at the 0.05 level (2-tailed)

** .Correlation is significant at the 0.01 level (2-tailed)

As reported in Appendix J, differences in the responses of Judeo-Christians and Neopagans were significant at $p < .01$ on all questions in the Healing subscale except item 59, “Illness can be a punishment or trial”, to which there was general disagreement.

Research questions #2

The second research question pursued the relationship between religious identification and the use of complementary and alternative healing treatment modalities.

As noted above, Neopagans are more likely to use CAM than are Judeo-Christians. However, there are both similarities and differences in the way the two groups approach the use of complementary and alternative medicine.

There were no significant differences between the degree to which Judeo-Christians and Neopagans prayed for their own health or the health of others. Neither

was there a significant difference between the two groups' use of licensed medical professionals for health treatments.

The difference was significant ($p < .01$), however, in the use of CAM methods other than prayer. Among Neopagans 71.9% stated they used CAM, other than prayer, for their own health at least once per month. The comparable figure for Judeo-Christians is 37.7%. The difference is even more pronounced when considering the use of CAM for the treatment of others. Among Judeo-Christians, 71% never treat other individuals using CAM modalities. Of those who do use CAM for the treatment of others, 13% do so at least once a month. Among Neopagans, only 16.7% reported that they never use CAM to treat the health concerns of others, and 49.2% do so at least once per month. Neopagans were also significantly more likely ($p < .01$) to attribute healing to their religious practice, beliefs or experiences.

A subscale within the CAM Questionnaire includes the two questions about the use of CAM for self and others (items 86 and 89). There were significant correlations between the score on the CAM subscale and a number of subscales in both the DRES and the BMMRS/GSS. The strongest correlations are with the DRES Healing ($r = .586$), and Experience of Religiousness ($r = .580$) subscales. The use of CAM, as defined by score on the CAM subscale, shows weaker correlations with subscales in the BMMRS/GSS. The strongest ($r = .302$) is on the Spiritual Experiences scale, the only subscale of the BMMRS/GSS on which Neopagans scored significantly higher than Judeo-Christians .

With regard to perceptions of health relative to others their own age, there is a significant difference ($p < .05$) between the two groups. Judeo-Christians ($M = 5.33$,

$SD = 1.49$) rated their health as somewhat better than the Neopagans did ($M = 4.89$, $SD = 1.52$).

Analysis of Design

Causal-comparative research seeks to identify relationships among variables in pre-existing groups. Explanations for the causes or consequences of differences between such groups are investigated based on data collected after events of interest have occurred. Correlational research seeks to establish relationships among variables as they pertain to a pre-existing group. Both types of research were employed in this study, and both are limited in that it is impossible to randomly assign participants to comparison groups or to manipulate an independent variable. Consequently, in considering the study results, causality cannot be assumed.

Collecting data over the internet allowed a rapid accumulation of results, and a much larger number of respondents than would have been possible in the time allowed, had paper surveys been used. The inherent limit in this kind of data collection is, of course, that individuals who do not have access to a computer are excluded from participation. Although internet usage is common in the U.S., it is not universal. It is unknown whether the sample was biased as a result of this factor.

Although all the instruments used in this study employed Likert scales, only the DRES and CAMQ were uniform in their answer choices; both used a 7 point scale. The BMMRS (and the GSS version used here) was originally created using items from a variety of previously validated instruments, and the various scoring paradigms were retained. Comparison of mean scores on individual items within the BMMRS is inconvenient as a result.

Relative to their representation in the general population, a disproportionate number of the respondents were Neopagan. This may have been a result of recruitment efforts driven by concern that the number of Neopagan participants would be insufficient to allow a valid statistical analysis. The number of Neopagan listservs to which the recruitment email was sent equaled the number for all other religious groups combined. A more balanced approach might have resulted in a larger number of respondents from other minority religious groups, and provided data for additional comparisons. There is reason to believe that some of the practices reflected in the DRES are engaged in by members of other nonJudeo-Christian religions, as well as by Neopagans. This remains to be tested.

The independent variable in this study is Religious Identification, and spirituality, as a distinct factor, was purposefully excluded from the hypotheses. However, because the BMMRS/GSS includes the question “To what extent do you consider yourself a spiritual person”, this information was available for analysis. Table 9 shows a comparison of the mean self-rankings for each of Religious Identification groups that included enough respondents for an analysis. All ranked themselves as more spiritual than religious, with Catholics showing the least difference in this regard, and Unitarian Universalist showing the most.

Table 9

Self-Ranking of Religiousness and Spirituality by Religious Identification

Religious Identification	<i>n</i>	Variable	<i>M</i>	<i>SD</i>	<i>t</i>	<i>df</i>	<i>p</i>
Christian	21	Religious	2.62	.74	16.22	20	<.001
		Spiritual	3.33	.73	20.92		
Catholic	26	Religious	2.96	.66	22.81	25	<.001
		Spiritual	3.19	.63	25.69		
Jewish	22	Religious	2.68	.95	13.30	21	<.001
		Spiritual	3.14	.83	17.65		
Agnostic/Atheist	19	Religious	1.21	.42	12.60	18	<.001
		Spiritual	2.63	1.01	11.34		
Unitarian Universalist	4	Religious	1.50	.58	5.20	3	.01
		Spiritual	3.50	.58	12.12		
Neopagan	132	Religious	2.76	.97	32.53	131	<.001
		Spiritual	3.71	.55	78.10		
Other	22	Religious	2.36	1.05	10.57	21	<.001
		Spiritual	3.82	.40	45.37		

The distinction between Religious and Spiritual may have been an unrecognized factor in some or all of the results obtained for this study.

Discussion

The main objectives of this study were to discover the differences in how Neopagans and members of the Judeo-Christian majority experience religiousness, and whether or not there are related differences in how these groups use complementary and alternative medicine.

The study grew out of an interest in the interaction between religion and healing, and personal knowledge that distance healing and CAM are widely used in the Neopagan community. It was apparent from the literature that there were problems defining and

measuring religiousness, although research into religion and health has been increasing. The abundance of conflicting theories of religion proffered by psychology provided little help.

The widely used BMMRS was a starting point for measurement. James McClenon's writings on the connection between shamanism, dissociative and other altered states of consciousness, and healing, argue that the purposeful engagement of those states for healing purposes was the root of religion. Theoretically, the investigations of Eugene D'Aquili, and his associates and successors, into the neural mechanisms underlying religious phenomena provided the toehold required, as they offered an empirically validated link between religious experience and the body. I was encouraged along these lines by psychoneuroimmunological theory and research that demonstrate the mechanisms by which body and mind interact to create or destroy health, and by recent writings on the body by Norris, Barsalou, and other scholars of religion.

An article in the online *Christian Research Journal*, (Howe, 2005) drew a number of well articulated distinctions between Christianity and "witchcraft" (which, as described in that article, clearly refers to the group identified as Neopagans in this study), ultimately declaring "The belief systems of Christianity and witchcraft are mutually exclusive." While Howe's viewpoint might be extreme, it provided hope for a comparison between the two groups that would show substantial differences. And in some respects this was achieved.

The study revealed that Neopagans share many religious attitudes and experiences with Judeo-Christians. Given that two-thirds of the Neopagans did not so identify until adulthood, many of them were, no doubt, exposed to Judeo-Christian religious beliefs

and practices as children. And while some Neopagan respondents found difficulty when questions asked about “God” or “congregation”, most re-interpreted those terms or adjusted meanings to suit their current beliefs and practices.

There were also significant differences between the groups. Neopagans practice magic, which is, in essence, action at a distance. Neopagans use their bodies as instruments of religious expression, for example through sexual rituals and ecstatic dance. Neopagans pursue altered states of consciousness and use shamanic practices such as chanting and engagement with spirit helpers. Neopagans validate their religion through experience rather than belief. They have more “anomalous experiences” than other study participants. Neopagans disagree that it is “God” who has taken action, when healing prayer works, and they incorporate healing rituals in their religious practice. The majority (69.7%) agree, “The natural world contains all the medicine we need.”

Can any inference be made from these facts, about why Neopagans use CAM so much more than Judeo-Christians? More than twice as many Neopagans as Judeo-Christians use CAM at least once a month to treat their own health concerns. Fewer than 30% of Judeo-Christians never treat another using CAM, while almost half of Neopagans do so monthly or more often. And Neopagans more often attributed healing to religious factors. Among the Neopagan respondents to this survey, religious healing ritual behavior is nearly universal. More than 92% of Neopagans agreed with the statement “Healing rituals are part of my religious or spiritual practice”, compared to 39% of Judeo-Christians.

CAM provides a means for people to practice healing outside the highly regulated and exclusive confines of western medicine. It seems that Neopagans are taking advantage of this.

This study carries implications for both research psychology and the practice of psychotherapy. The increasing size of minority religious groups in the U.S. and the diversity of their practices calls into question Hill and Hood's assertion that "the researcher is unlikely to be interested in a construct for which a measure is not already available" (1999, p. 3). For example, the religious practice of magic, anathema among Christians, it common in some other groups, and so may be of interest to researchers.

Investigators with a particular interest in complementary and alternative medicine may consider examining outcomes of the CAM practices among Neopagans as compared to others. The differences in religious practices and attitudes revealed in this study, (which would not be apparent when using the BMMRS alone) could be an important factor in such research. In the practice of psychotherapy, itself a healing art, the beliefs of both parties affect the outcome. As a growing religious minority, with some beliefs very different from those of the religious majority, Neopagans may present some challenges to psychologists.

Chapter Summary

Chapter 4 has presented the findings for the study. The demographic characteristics and the religious identifications of the participants were described in detail. The eight hypotheses and the inferential statistics that support them were shown. Additional findings were examined. Among them were both similarities and differences between the study groups, apparent when responses to individual survey items were

considered. The research design was reviewed and consideration given to its strengths and weaknesses. Finally, there was a discussion of the findings in the context of the theory and literature supporting the study.

CHAPTER 5

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

Summary

Medical anthropology, studies of community based medicine, and history show, that for most of the world, religion and healing are not separate. Modern western medicine has held itself apart from religion, and continues to do so, but there is increasing interest in how religion affects health outcomes. Measurement of religion in the U.S. has been oriented almost exclusively toward the beliefs and practices of the Judeo-Christian majority. Neopaganism, a new religious movement, presents a picture of religious life quite different from that of the Judeo-Christian faiths. Among the differences are the use of healing ritual as an integral part of religious practice, belief in and use of magic, and purposeful alterations of consciousness in religious rites, all of which could have bearing on health care choices, healing and health outcomes.

The purpose of this study was to investigate the differences between Neopagans and members of Judeo-Christian religious groups with regard to the experience of religiousness and choices with regard to healing and health care: specifically, whether there is a relationship between religious identification and the use of complementary and alternative medicine.

Studies focusing on Neopagans are absent from the psychological literature. A number of quantitative and qualitative studies are available in the literature from anthropology and sociology. The studies by Orion (1995), and by Berger, Leach, and Shaffer (2003) provide descriptions of their samples without comparison or statistical analysis. There are quite a few excellent qualitative investigations of Neopagans, including, particularly, those of Luhrmann (1989) and Pike (2001).

The literature on the conceptualization and measurement of religion is substantial. The development and modification of measurement instruments benefits from the application of tried and true psychometric principles, and studies in this area are generally very sound. The need for measures that go beyond the mainstream of Judeo-Christian belief and practice is widely acknowledged, however. Implementation has lagged, but this may be a function of the considerable amount of time needed to develop and validate such instruments. The great diversity of theoretical approaches to religion that exist within psychology may be a factor, as well. Modification of extant instruments may satisfy some of this need, as in the study by Mokuau, Hishinuma, and Nishimura (2001).

Investigation of complementary and alternative medicine is proceeding along several lines at a rapid pace. Medicine, psychology, public health and the other social sciences recognize that the general population is using CAM methods with increasing regularity. Empirical studies, such as those by Achterberg et al. (2005) and Krucoff et al. (2005) seek to verify the efficacy, or lack thereof, for various CAM modalities. Theoretical investigations such as those by Kaptchuk (2002) and Marks (2005) provide context and organization for the large amount of information accumulating on topics related to the use, utility, meaning and mechanisms of the CAM approaches to healing.

Elements of CAM that were of particular interest for this study, are the use of prayer, faith healing, magic and shamanic practices; all of which could be included under the rubric of mindbody healing. Studies of shamanic techniques and faith healing have been conducted by anthropologists, sociologists and psychiatrists. Similar treatment of magic is nearly non-existent, in spite of a substantial popular literature.

This study used both the causal-comparative method and the correlational method. A convenience sample was drawn by recruiting participants through religiously oriented listservs. Data was analyzed for 257 respondents who completed the study instruments via the internet. Based on their responses, 132 were classified as Neopagan and 69 as Judeo-Christian. The web survey included: a previously validated measure of mainstream religiousness and spirituality, a new measure of diverse religious experiences, and, a measure of the frequency of use of CAM practices for the health concerns of self and other, also created for this study.

The results of this research may be summarized in terms of the hypotheses as follows:

There was no significant difference between Judeo-Christian and Neopagan respondents on the measure of mainstream religiousness. (Hypothesis 1 was not supported.)

Neopagan respondents scored significantly higher on a measure of diverse religious practices than did Judeo-Christians. (Hypothesis 2 was supported.)

Neopagan respondents were significantly more likely to use complementary and alternative medicine, than Judeo-Christian respondents. (Hypothesis 3 was supported.)

Neopagan respondents were more likely to evaluate “sensation”, “feeling”, or “emotion” as important in the evaluation of an experience as religious, than were Judeo-Christian respondents. (Hypothesis 4 was supported.)

There was a significant positive correlation between the degree to which Neopagan respondents rated themselves as religious and their score on a measure of diverse religious practices. (Hypothesis 5 was supported.)

There was a significant positive correlation, rather than the hypothesized negative correlation, between the degree to which Neopagan respondents described themselves as religious and their score on a measure of mainstream religiousness and spirituality. (Hypothesis 6 was not supported.)

There was a significant positive correlation between the degree to which Judeo-Christian respondents rated themselves as religious and their score on a measure of mainstream religiousness and spirituality. (Hypothesis 7 was supported.)

There was a negative correlation between the degree to which Judeo-Christian respondents described themselves as religious and their score on a measure of diverse religious practices, however the correlation was not statistically significant. (Hypothesis 8 was not supported.)

Conclusions

Some limitations are inherent in a study of this type. The causal comparative design is limited in that the results can only suggest, not demonstrate causal relationships. The sampling procedure introduced some bias, in that only individuals with access to a computer were included. Further, individuals who did not participate in a religiously

oriented listserv were unlikely to become aware of the opportunity to participate. Both factors limit the generalizability of the results.

Nevertheless, it can still be argued that the results have some value. They represent the beginning of a deeper investigation into experiences of religiousness, going outside the bounds of extant research. Studies that depend on the measurement of religion will benefit from this start.

Recommendations

Respondents to this survey included a small number of individuals who identified themselves as Hindu, Buddhist, Atheist/Agnostic, Unitarian Universalist, and others. Replication of this study with a sufficiently large number of respondents in these categories would help researchers understand the utility of including diverse practices in measures of religiousness.

Female respondents outnumbered male respondents by at least 2 to 1 in both study groups and in the “Other” category. Gender differences may have exercised some influence on the findings, which may or may not have been independent of religious identification. Additional study in this area is warranted.

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APPENDIX A

CONSENT FORM

CONSENT TO PARTICIPATE IN DISSERTATION RESEARCH

Welcome, and thank you for participating in the Religion and Healing Study.

The purpose of this study is to examine the relationship between different experiences of religiousness and the choices individuals make with regard to healing and health care.

To continue, please read and respond to the statements below.

I understand that my participation in this study is completely voluntary and that I may refuse to participate or withdraw my consent to participate at any time without penalty. My identity and responses on the questionnaires will be kept in strict confidence and no identifying information will be collected during my participation in this study.

I understand that I will not receive any feedback, data or reports related to my participation in this study. If I would like to receive information about the final aggregate results, I can email lilar@naturalstudies.org to obtain a copy.

I understand that the survey takes most people about 30-40 minutes to complete, and that I may leave the survey at any time and return to complete it later. (All first round surveys must be completed by November 6, 2006) I will complete the survey only once. The questions included in the survey do not involve any risk, but I understand that answering of some questions could make me feel uncomfortable. If this occurs, or if I have any further questions about this study, I may contact the researcher, Lila Ryan, at lilar@naturalstudies.org, or Dr. Terry Oleson at the California Graduate Institute, Department of Psychology, 1145 Gayley Avenue, Suite 322, Los Angeles, CA, 90024, (310) 208-4240.

I understand that by selecting “I consent” below, I am giving my consent to participate in this research study. I have read this form and understand what it says. I am 18 years of age or older and voluntarily agree to participate in this research project.

APPENDIX B

DEMOGRAPHIC AND RELIGIOUS IDENTIFICATION ITEMS

Table B-1

Demographic And Religious Identification Items

No.	Question
3	Age (open-ended)
4	Sex
	<input type="checkbox"/> Male
	<input type="checkbox"/> Female
	<input type="checkbox"/> I do not identify as solely either male or female
5	Educational Background
	<input type="checkbox"/> Did not complete high school
	<input type="checkbox"/> Complete high school
	<input type="checkbox"/> Some college
	<input type="checkbox"/> Completed Bachelor's degree (BA, BS, etc)
	<input type="checkbox"/> Some graduate school
	<input type="checkbox"/> Completed graduate degree (MA, MS, PhD, MD, etc)
6	Place of residence -- please use 5 digit zip code. If you live in another country, please enter the country name
9	Your religion now. If you would choose more than one answer, please check your primary choice (the one you would choose if you could choose only one) and use the space below to indicate your other choice(s)
	<input type="checkbox"/> Christian
	<input type="checkbox"/> Catholic
	<input type="checkbox"/> Jewish
	<input type="checkbox"/> Islam
	<input type="checkbox"/> Buddhist
	<input type="checkbox"/> Hindu
	<input type="checkbox"/> Agnostic/Atheist/Nonreligious
	<input type="checkbox"/> Unitarian Universalist
	<input type="checkbox"/> Wiccan/Pagan/Druidic/Neopagan Shamanic
	<input type="checkbox"/> Other (please specify)
11	Please state the religious tradition to which you belong, if any (e.g., Irish Catholic, Sufi, Pentecostal), or use the space below to briefly clarify your religious identification or the nature of your individual spiritual or religious practice. (open-ended)

Table B-1

Demographic And Religious Identification Items

No.	Question
12	Considering your primary religious identification now, please state at what age you came to identify as an adherent of that religion or way of thinking (if not religious). If you have always followed the same beliefs, please answer "From birth".
[]	From birth
[]	Between ages 10 and 17
[]	Between ages 18 and 25
[]	Between ages 26 and 50
[]	After 50 years of age
13	If you are a spiritual but not religious person, your spiritual practice(s) may come from a religious tradition. Please indicate the most important religious source(s) for your practices, if any.
[]	Christianity
[]	Catholicism
[]	Judaism (including Kabbalah)
[]	Islam (including Sufism)
[]	Buddhism (including Zen
[]	Hinduism (including Yoga)
[]	Unitarian Universalist
[]	Wiccan/Pagan/Druid (including Shamanic practices)
[]	My practice does not draw on a religious tradition
[]	Other (please specify)
14	Please describe briefly what brought you to your current religious identification. (e. g. It was my parents' choice, something I read, better fit for my beliefs, etc) (open-ended)

APPENDIX C

BRIEF MULTIDIMENSIONAL MEASURE OF RELIGIOUSNESS/SPIRITUALITY

Table C-1

Brief Multidimensional Measure of Religiousness/Spirituality

No.	Question
7	To what extent do you consider yourself a religious person?
<input type="checkbox"/>	Very religious
<input type="checkbox"/>	Moderately religious
<input type="checkbox"/>	Slightly religious
<input type="checkbox"/>	Not religious at all
8	To what extent do you consider yourself a spiritual person?
<input type="checkbox"/>	Very spiritual
<input type="checkbox"/>	Moderately spiritual
<input type="checkbox"/>	Slightly spiritual
<input type="checkbox"/>	Not spiritual at all
37	Did you ever have a religious or spiritual experience that changed your life?
<input type="checkbox"/>	Yes
<input type="checkbox"/>	No
38	I feel God's presence
<input type="checkbox"/>	Many times a day
<input type="checkbox"/>	Every day
<input type="checkbox"/>	Most days
<input type="checkbox"/>	Some days
<input type="checkbox"/>	Once in a while
<input type="checkbox"/>	Never or almost never
39	I find strength and comfort in my religion
<input type="checkbox"/>	Many times a day
<input type="checkbox"/>	Every day
<input type="checkbox"/>	Most days
<input type="checkbox"/>	Some days
<input type="checkbox"/>	Once in a while
<input type="checkbox"/>	Never or almost never
40	I feel deep inner peace or harmony
<input type="checkbox"/>	Many times a day
<input type="checkbox"/>	Every day
<input type="checkbox"/>	Most days
<input type="checkbox"/>	Some days
<input type="checkbox"/>	Once in a while
<input type="checkbox"/>	Never or almost never

Table C-1 (continued)

Brief Multidimensional Measure of Religiousness/Spirituality

No.	Question
41	I desire to be closer to or in union with God
	<input type="checkbox"/> Many times a day
	<input type="checkbox"/> Every day
	<input type="checkbox"/> Most days
	<input type="checkbox"/> Some days
	<input type="checkbox"/> Once in a while
	<input type="checkbox"/> Never or almost never
42	I feel God's love for me, directly or through others
	<input type="checkbox"/> Many times a day
	<input type="checkbox"/> Every day
	<input type="checkbox"/> Most days
	<input type="checkbox"/> Some days
	<input type="checkbox"/> Once in a while
	<input type="checkbox"/> Never or almost never
43	I am spiritually touched by the beauty of creation
	<input type="checkbox"/> Many times a day
	<input type="checkbox"/> Every day
	<input type="checkbox"/> Most days
	<input type="checkbox"/> Some days
	<input type="checkbox"/> Once in a while
	<input type="checkbox"/> Never or almost never
44	I believe in a God who watches over me
	<input type="checkbox"/> Strongly agree
	<input type="checkbox"/> Agree
	<input type="checkbox"/> Disagree
	<input type="checkbox"/> Strongly disagree
45	I feel a deep sense of responsibility for reducing pain and suffering in the world
	<input type="checkbox"/> Strongly agree
	<input type="checkbox"/> Agree
	<input type="checkbox"/> Disagree
	<input type="checkbox"/> Strongly disagree
46	Because of my religious or spiritual beliefs I have forgiven myself for things that I have done wrong
	<input type="checkbox"/> Always or almost always
	<input type="checkbox"/> Often
	<input type="checkbox"/> Seldom
	<input type="checkbox"/> Never

Table C-1 (continued)

Brief Multidimensional Measure of Religiousness/Spirituality

No.	Question
47	Because of my religious or spiritual beliefs I have forgiven those who hurt me
<input type="checkbox"/>	Always or almost always
<input type="checkbox"/>	Often
<input type="checkbox"/>	Seldom
<input type="checkbox"/>	Never
48	Because of my religious or spiritual beliefs I know that god forgives me
<input type="checkbox"/>	Always or almost always
<input type="checkbox"/>	Often
<input type="checkbox"/>	Seldom
<input type="checkbox"/>	Never
49	How often do you pray privately in places other than at a church or synagogue?
<input type="checkbox"/>	More than once a day
<input type="checkbox"/>	Once a day
<input type="checkbox"/>	A few times a week
<input type="checkbox"/>	Once a week
<input type="checkbox"/>	A few times a month
<input type="checkbox"/>	Once a month
<input type="checkbox"/>	Less than once a month
<input type="checkbox"/>	Never
50	Within your religious or spiritual tradition, how often do you meditate?
<input type="checkbox"/>	More than once a day
<input type="checkbox"/>	Once a day
<input type="checkbox"/>	A few times a week
<input type="checkbox"/>	Once a week
<input type="checkbox"/>	A few times a month
<input type="checkbox"/>	Once a month
<input type="checkbox"/>	Less than once a month
<input type="checkbox"/>	Never
51	How often have you read the Bible in the last year?
<input type="checkbox"/>	More than once a day
<input type="checkbox"/>	Once a day
<input type="checkbox"/>	A few times a week
<input type="checkbox"/>	Once a week
<input type="checkbox"/>	A few times a month
<input type="checkbox"/>	Once a month
<input type="checkbox"/>	Less than once a month
<input type="checkbox"/>	Never

Table C-1 (continued)

Brief Multidimensional Measure of Religiousness/Spirituality

No.	Question
69	I think about how my life is part of a larger spiritual force
	<input type="checkbox"/> A great deal
	<input type="checkbox"/> Quite a bit
	<input type="checkbox"/> Somewhat
	<input type="checkbox"/> Not at all
70	I work together with God as a partner
	<input type="checkbox"/> A great deal
	<input type="checkbox"/> Quite a bit
	<input type="checkbox"/> Somewhat
	<input type="checkbox"/> Not at all
71	I look to God for strength, support, and guidance
	<input type="checkbox"/> A great deal
	<input type="checkbox"/> Quite a bit
	<input type="checkbox"/> Somewhat
	<input type="checkbox"/> Not at all
72	I feel God is punishing me for my sins or lack of spirituality
	<input type="checkbox"/> A great deal
	<input type="checkbox"/> Quite a bit
	<input type="checkbox"/> Somewhat
	<input type="checkbox"/> Not at all
73	I wonder whether God has abandoned me
	<input type="checkbox"/> A great deal
	<input type="checkbox"/> Quite a bit
	<input type="checkbox"/> Somewhat
	<input type="checkbox"/> Not at all
74	I try to make sense of the situation and decide what to do without relying on god
	<input type="checkbox"/> A great deal
	<input type="checkbox"/> Quite a bit
	<input type="checkbox"/> Somewhat
	<input type="checkbox"/> Not at all
75	If you were ill, how much would the people in your congregation help you out?
	<input type="checkbox"/> A great deal
	<input type="checkbox"/> Some
	<input type="checkbox"/> A little
	<input type="checkbox"/> None

Table C-1 (continued)

Brief Multidimensional Measure of Religiousness/Spirituality

No.	Question
76	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?
	<input type="checkbox"/> A great deal
	<input type="checkbox"/> Some
	<input type="checkbox"/> A little
	<input type="checkbox"/> None
77	How often do the people in your congregation make too many demands on you?
	<input type="checkbox"/> Very often
	<input type="checkbox"/> Fairly often
	<input type="checkbox"/> Once in a while
	<input type="checkbox"/> Never
78	How often are the people in your congregation critical of you and the things you do?
	<input type="checkbox"/> Very often
	<input type="checkbox"/> Fairly often
	<input type="checkbox"/> Once in a while
	<input type="checkbox"/> Never
79	I try hard to carry my religious beliefs over into all my other dealings in life
	<input type="checkbox"/> Strongly agree
	<input type="checkbox"/> Agree
	<input type="checkbox"/> Disagree
	<input type="checkbox"/> Strongly disagree
80	During the last year about how much money did you and other family members in your household contribute to each of the following?
	Your local congregation? []
	Other religious organizations, programs, causes? []
	Nonreligious charities, organizations? []
83	How often do you attend religious services?
	<input type="checkbox"/> Several times a week
	<input type="checkbox"/> Every week
	<input type="checkbox"/> Nearly every week
	<input type="checkbox"/> 2-3 times a month
	<input type="checkbox"/> Several times a year
	<input type="checkbox"/> Once or twice a year
	<input type="checkbox"/> Less than once a year
	<input type="checkbox"/> Never
	<input type="checkbox"/> Other (please specify)

Table C-1 (continued)

Brief Multidimensional Measure of Religiousness/Spirituality

No.	Question
84	How often do you take part in the activities or organizations of a church or place of worship other than attending services?
<input type="checkbox"/>	Several times a day
<input type="checkbox"/>	Once a day
<input type="checkbox"/>	Several times a week
<input type="checkbox"/>	Every week or more
<input type="checkbox"/>	Nearly every week
<input type="checkbox"/>	2-3 times a month
<input type="checkbox"/>	Once a month
<input type="checkbox"/>	Several times a year
<input type="checkbox"/>	Once or twice a year
<input type="checkbox"/>	Less than once a year
<input type="checkbox"/>	Never
<input type="checkbox"/>	Other (please specify)

APPENDIX D

DIVERSE RELIGIOUS EXPERIENCES SCALE

Table D-1

Diverse Religious Experiences Scale

No.	Question						
15	I sometimes travel to large religious gatherings						
	1	2	3	4	5	6	7
	I strongly agree			I'm neutral		I strongly disagree	
17	I have an altar or other sacred space in my home						
	1	2	3	4	5	6	7
	I strongly agree			I'm neutral		I strongly disagree	
18	I am usually solitary in my religious or spiritual practice						
	1	2	3	4	5	6	7
	I strongly agree			I'm neutral		I strongly disagree	
19	Religious or spiritual healing practices may be more powerful than modern medicine						
	1	2	3	4	5	6	7
	I strongly agree			I'm neutral		I strongly disagree	
20	Honoring my ancestors is a regular part of my religious practice						
	1	2	3	4	5	6	7
	I strongly agree			I'm neutral		I strongly disagree	
21	Singing, chanting and dancing are valuable religious expressions.						
	1	2	3	4	5	6	7
	I strongly agree			I'm neutral		I strongly disagree	
22	The cycles of the sun, moon and seasons are the context for my religious practices						
	1	2	3	4	5	6	7
	I strongly agree			I'm neutral		I strongly disagree	
23	Any member of my religion may perform the rites; official clergy are not required.						
	1	2	3	4	5	6	7
	I strongly agree			I'm neutral		I strongly disagree	
24	Altered states of consciousness, such as trance, are part of my religious experience						
	1	2	3	4	5	6	7
	I strongly agree			I'm neutral		I strongly disagree	
25	In religious matters personal experience is less important than doctrine or faith						
	1	2	3	4	5	6	7
	I strongly agree			I'm neutral		I strongly disagree	

Table D-1 (continued)

Diverse Religious Experiences Scale

No.	Question							
26	I have experienced or I believe I might experience religious discrimination							
	1	2	3	4	5	6	7	
	I strongly agree			I'm neutral			I strongly disagree	
27	Participating in religious rituals helps me express and come to terms with my emotions							
	1	2	3	4	5	6	7	
	I strongly agree			I'm neutral			I strongly disagree	
28	Healing is more a function of belief than of medical treatment							
	1	2	3	4	5	6	7	
	I strongly agree			I'm neutral			I strongly disagree	
29	My sexuality is an integral part of my religious practice							
	1	2	3	4	5	6	7	
	I strongly agree			I'm neutral			I strongly disagree	
30	My religion teaches that physical pleasures should be subordinated to spiritual goals							
	1	2	3	4	5	6	7	
	I strongly agree			I'm neutral			I strongly disagree	
31	The body is the medium through which the divine is experienced							
	1	2	3	4	5	6	7	
	I strongly agree			I'm neutral			I strongly disagree	
32	My religion encourages modesty and sexual restraint							
	1	2	3	4	5	6	7	
	I strongly agree			I'm neutral			I strongly disagree	
33	When healing prayer works, it is because God has taken action, not because of the power of the person praying							
	1	2	3	4	5	6	7	
	I strongly agree			I'm neutral			I strongly disagree	
34	The body is a means for the soul to experience the pleasures of life on this earth							
	1	2	3	4	5	6	7	
	I strongly agree			I'm neutral			I strongly disagree	
35	Illness can be the result of unbalanced energy or lack of harmony							
	1	2	3	4	5	6	7	
	I strongly agree			I'm neutral			I strongly disagree	

Table D-1 (continued)

Diverse Religious Experiences Scale

No.	Question						
36	What do you believe about your body (open ended)						
	1	2	3	4	5	6	7
	I strongly agree			I'm neutral		I strongly disagree	
52	I have experienced the feeling that the earth and all beings are one.						
	1	2	3	4	5	6	7
	I strongly agree			I'm neutral		I strongly disagree	
54	I have experienced the presence of a spirit guide, or other non-human spiritual helper.						
	1	2	3	4	5	6	7
	I strongly agree			I'm neutral		I strongly disagree	
55	I believe in, or have experienced, reincarnation						
	1	2	3	4	5	6	7
	I strongly agree			I'm neutral		I strongly disagree	
56	My religion provides a clearly stated set of rules for behavior.						
	1	2	3	4	5	6	7
	I strongly agree			I'm neutral		I strongly disagree	
57	I have experienced a healing dream or vision						
	1	2	3	4	5	6	7
	I strongly agree			I'm neutral		I strongly disagree	
58	The natural world contains all the medicine we need in the form of herbs, and other natural substances						
	1	2	3	4	5	6	7
	I strongly agree			I'm neutral		I strongly disagree	
59	Illness can be a punishment or trial.						
	1	2	3	4	5	6	7
	I strongly agree			I'm neutral		I strongly disagree	
60	All people can participate in creation by using imagination and will						
	1	2	3	4	5	6	7
	I strongly agree			I'm neutral		I strongly disagree	
61	Weather and other natural events can be influenced by individual action.						
	1	2	3	4	5	6	7
	I strongly agree			I'm neutral		I strongly disagree	

Table D-1 (continued)

Diverse Religious Experiences Scale

No.	Question						
		Most important	Second most	Third most	Fourth most	Fifth most	N/A
68	<p>How do you know when you are having a religious experience? Please rank the items below according to how important they are for you to tell if you are having a religious experience.</p> <p>If you have never had a religious experience, mark N/A (not applicable) for all of them.</p>						
	Feelings: during such experiences I have particular bodily feelings I don't have at other times. (for example, feeling light, or disconnected, or large)						
	Emotions: during such experiences I find that my emotions are more intense than usual, or somehow different						
	Context: during such experiences I am in prayer, meditation, or ritual, or in a place of worship or sacred space						
	Sensations: during such experiences sensations seem different (for example, colors are more intense, sounds more clear and beautiful)						
	Thoughts: during such experiences I have thoughts about sacred things, god, the soul or other religious or spiritual matters						
81	<p>During the last year about how much time did you and other family members in your household contribute to each of the following</p> <p>Your local congregation? []</p> <p>Other religious organizations, programs, causes? []</p> <p>Nonreligious charities, organizations? []</p>						
82	<p>If you had the thought "I'm being religious" what might have caused you to think that?</p> <p>(open-ended)</p>						

APPENDIX E

COMPLEMENTARY AND ALTERNATIVE MEDICINE QUESTIONNAIRE

Table E-1

Complementary and Alternative Medicine Questionnaire

No.	Question						
85	When compared with other people my age I would say my health is:						
	1	2	3	4	5	6	7
	Excellent		About average			Not very good	
86	In the past year, how often have you treated YOUR OWN health problems using and of the following: Acupressure, Aromatherapy, Ayurveda, Biofeedback, Crystals, Guided Imagery, Energy Healing, Focused Intention, Herbs or Botanicals, Homeopathy, Self-hypnosis?						
	1	2	3	4	5	6	7
	Daily or nearly daily		About once a month			Never	
87	In the past year, how often have you treated YOUR OWN health problems by praying or asking someone to pray for you?						
	1	2	3	4	5	6	7
	Daily or nearly daily		About once a month			Never	
88	In the past year, how often have you had YOUR OWN health problems treated by a licensed medical professional such as a doctor, surgeon, chiropractor, radiologist, nutritionist, or dentist?						
	1	2	3	4	5	6	7
	Daily or nearly daily		About once a month			Never	
89	In the past year, how often have you treated SOMEONE ELSE's health problems using and of the following: Acupressure, Aromatherapy, Ayurveda, Biofeedback, Crystals, Guided Imagery, Energy Healing, Focused Intention, Herbs or Botanicals, Homeopathy, Self-hypnosis?						
	1	2	3	4	5	6	7
	Daily or nearly daily		About once a month			Never	
90	In the past year, how often have you treated SOMEONE ELSE's health problems by praying or asking someone to pray for you?						
	1	2	3	4	5	6	7
	Daily or nearly daily		About once a month			Never	
91	In the past year, how often have you had SOMEONE ELSE's health problems treated by a licensed medical professional such as a doctor, surgeon, chiropractor, radiologist, nutritionist, or dentist?						
	1	2	3	4	5	6	7
	Daily or nearly daily		About once a month			Never	

Table E-1

Complementary and Alternative Medicine Questionnaire

No.	Question
92	<p>In the past year how often have you experienced healing that you would say is a result of your religious practices, beliefs, or experiences.</p> <p style="text-align: center;"> 1 2 3 4 5 6 7 </p> <p style="text-align: center;"> Daily or nearly daily About once a month Never </p>
93	<p>Thinking about the questions you've answered, describe how your religious beliefs and practices have affected your health in the last 12 months. Specifically, how have you used any of those beliefs or practices to maintain or improve your health?</p> <p>(open-ended)</p>

APPENDIX F

THE WEB SURVEY

Table F-1

Religion and Healing Web Survey

No.	Question	Variable name	source
1	I understand that by selecting "I consent" below, I am giving my consent to participate in this research study. I have read this form and understand what it says. I am 18 years of age or older and voluntarily agree to participate in this research project.	consent	DRE Scale
2	To be included in a drawing for \$100, please enter your email address below. Your email address will ONLY be used to contact you about the results of the drawing, which will be conducted in early 2007.	incentive	DRE Scale
3	Age	DAge	DRE Scale
4	Sex	DSex	DRE Scale
5	Educational Background	Deduc	DRE Scale
6	State of residence -- please use 2 letter postal code. If you live in another country, please enter the country name	Dzip	DRE Scale
7	To what extent do you consider yourself a religious person?	Breligious	BMMRS/GSS
8	To what extent do you consider yourself a spiritual person?	Bspiritual	BMMRS/GSS
9	Your religion now. If you would choose more than one answer, please check your primary choice (the one you would choose if you could choose only one) and use the space below to indicate your other choice(s).	Religion	DRE Scale
10	(Neopagan respondents)Please state the tradition to which you belong, if any, or use the space below to briefly clarify your religious identification or the nature of your individual spiritual or religious practice.(e.g., I am a solitary hedge witch, and I normally attend a large festival twice a year)	Open-ended	DRE Scale

Table F-1 (continues)

Religion and Healing Web Survey

No	Question	Variable name	source
11	(Judeo-Christian and Other respondents)Please state the religious tradition to which you belong, if any (e.g., Irish Catholic, Sufi, Pentecostal), or use the space below to briefly clarify your religious identification or the nature of your individual spiritual or religious practice, if you wish.	Open-ended	DRE Scale
12	Considering your primary religious identification now, please state at what age you came to identify as an adherent of that religion or way of thinking (if not religious). If you have always followed the same beliefs, please answer "From birth".	Rage	DRE Scale
13	If you are a spiritual but not religious person, your spiritual practice(s) may come from a religious tradition. Please indicate the most important religious source(s) for your practices, if any.	SnotR	DRE Scale
14	Please describe briefly what brought you to your current religious identification. (e. g. It was my parents' choice, something I read, better fit for my beliefs, etc)	Open-ended	DRE Scale
15	I sometimes travel to large religious gatherings	Dgatherings.	DRE Scale
16	In my experience, worship outdoors brings one closer to the sacred	Doutdoors	DRE Scale
17	I have an altar or other sacred space in my home	Daltar	DRE Scale
18	I am usually solitary in my religious or spiritual practice	Dsolitary.	DRE Scale
19	Religious or spiritual healing practices may be more powerful than modern medicine	Dspirit_med	DRE Scale
20	Honoring my ancestors is a regular part of my religious practice	Dancestors	DRE Scale
21	Singing, chanting and dancing are valuable religious expressions.	Ddancing	DRE Scale

Table F-1 (continues)

Religion and Healing Web Survey

No.	Question	Variable name	source
22	The cycles of the sun, moon and seasons are the context for my religious practices	Dcycles	DRE Scale
23	Any member of my religion may perform the rites; official clergy are not required.	Dclergy_not	DRE Scale
24	Altered states of consciousness, such as trance, are part of my religious experience	Dtrance	DRE Scale
25	In religious matters personal experience is less important than doctrine or faith	Dexperience	DRE Scale
26	I have experienced or I believe I might experience religious discrimination	Ddiscrimination	DRE Scale
27	Participating in religious rituals helps me express and come to terms with my emotions	Demotions	DRE Scale
28	Healing is more a function of belief than of medical treatment	Dbelief_med	DRE Scale
29	My sexuality is an integral part of my religious practice	Dsexuality	DRE Scale
30	My religion teaches that physical pleasures should be subordinated to spiritual goals	Dsubordinated	DRE Scale
31	The body is the medium through which the divine is experienced	Dbody_medium	DRE Scale
32	My religion encourages modesty and sexual restraint	Drestraint	DRE Scale
33	When healing prayer works, it is because God has taken action, not because of the power of the person praying	Dprayer_works	DRE Scale
34	The body is a means for the soul to experience the pleasures of life on this earth	Dbody_pleasures	DRE Scale
35	Illness can be the result of unbalanced energy or lack of harmony	Dlack_harmony.	DRE Scale
36	What do you believe about your body (open ended)	open-ended	DRE Scale
37	Did you ever have a religious or spiritual experience that changed your life	Bchanged_life	
38	I feel God's presence	Bpresence	BMMRS/GSS

Table F-1 (continued)

Religion and Healing Web Survey

No.	Question	Variable name	source
39	I find strength and comfort in my religion	Bstrength	BMMRS/GSS
40	I feel deep inner peace or harmony	Bharmony	BMMRS/GSS
41	I desire to be closer to or in union with God	Bunion	BMMRS/GSS
42	I feel God's love for me, directly or through others	Bfeel_love	BMMRS/GSS
43	I am spiritually touched by the beauty of creation	Bcreation.	BMMRS/GSS
44	I believe in a God who watches over me	Bwatches	BMMRS/GSS
45	I feel a deep sense of responsibility for reducing pain and suffering in the world	Bresponsibility	BMMRS/GSS
46	Because of my religious or spiritual beliefs I have forgiven myself for things that I have done wrong	Bforgiven_self.	BMMRS/GSS
47	Because of my religious or spiritual beliefs I have forgiven those who hurt me	Bforgive_others.	BMMRS/GSS
48	Because of my religious or spiritual beliefs I know that god forgives me	Bforgives_me	BMMRS/GSS
49	How often do you pray privately in places other than at a church or synagogue?	Bprivately	BMMRS/GSS
50	Within your religious or spiritual tradition, how often do you meditate?	Bmeditate	BMMRS/GSS
51	How often do you read the Bible or other religious literature?	Bbible	BMMRS/GSS
52	I have experienced the feeling that the earth and all beings are one.	Dall_beings	DRE Scale
53	Some substances that alter consciousness bring one closer to the divine.	Dconsciousness	
54	I have experienced the presence of a spirit guide, or other non-human spiritual helper.	Dhelper	DRE Scale
55	I believe in, or have experienced, reincarnation	Dreincarnation.	DRE Scale
56	My religion provides a clearly stated set of rules for behavior.	Drules.	DRE Scale
57	I have experienced a healing dream or vision	Dvision.	DRE Scale

Table F-1 (continued)

Religion and Healing Web Survey

No.	Question	Variable name	source
58	The natural world contains all the medicine we need in the form of herbs, and other natural substances	Dherbs	DRE Scale
59	Illness can be a punishment or trial.	Dpunishment	DRE Scale
60	All people can participate in creation by using imagination and will	Dparticipate	DRE Scale
61	Weather and other natural events can be influenced by individual action.	DWeather	DRE Scale
62	My religion forbids or discourages fortune telling, or trying to see what is in the future.	Dfortunes	DRE Scale
63	I have experienced the embodiment of deity within me.	Dembodiment	DRE Scale
64	It is important to me to bring creativity to my religious practice.	Dcreativity	DRE Scale
65	Action at a distance, including healing, can be accomplished through focused intention	Dintention	DRE Scale
66	Healing rituals are a part of my religious or spiritual practice	DHealing	DRE Scale
67	How many of the following have you experienced: being hypnotized, ESP, a prophetic or paranormal dream, psychokinesis (affecting physical objects with one's mind), an out of body experience, contact with the dead, an occult event, a UFO, and apparition	DHow_many	DRE Scale
68	How do you know when you are having a religious experience	Rankings of Evaluative criteria	DRE Scale
69	I think about how my life is part of a larger spiritual force	Bforce	BMMRS/GSS
70	I work together with God as a partner	Bpartners	BMMRS/GSS
71	I look to God for strength, support, and guidance	Bguidance	BMMRS/GSS
72	I feel God is punishing me for my sins or lack of spirituality	Bpunishing	BMMRS/GSS
73	I wonder whether God has abandoned me	Babandoned	BMMRS/GSS

Table F-1 (continued)

Religion and Healing Web Survey

No.	Question	Variable name	source
74	I try to make sense of the situation and decide what to do without relying on god	Bno_rely	BMMRS/GSS
75	If you were ill, how much would the people in your congregation help you out?	Bill	BMMRS/GSS
75	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?	Bproblem	BMMRS/GSS
77	How often do the people in your congregation make too many demands on you	Bdemands	BMMRS/GSS
78	How often are the people in your congregation critical of you and the things you do	Bcritical	BMMRS/GSS
79	I try hard to carry my religious beliefs over into all my other dealings in life	Bcarryover	BMMRS/GSS
80	During the last year about how much money did you and other family members in your household contribute to each of the following	Bcong_money	BMMRS/GSS
81	During the last year about how much time did you and other family members in your household contribute to each of the following	Dcong_time	DRE Scale
82	If you had the thought "I'm being religious" what might have caused you to think that?	open-ended	DRE Scale
83	How often do you attend religious services	Bservices	BMMRS/GSS
84	How often do you take part in the activities or organizations of a church or place of worship other than attending services?	Bnot_services	BMMRS/GSS
85	When compared with other people my age I would say my health is:	Chealth	CAMQ

Table F-1 (continued)

Religion and Healing Web Survey

No.	Question	Variable name	source
86	In the past year, how often have you treated YOUR OWN health problems using and of the following: Acupressure, Aromatherapy, Ayurveda, Biofeedback, Crystals, Guided Imagery, Energy Healing, Focused Intention, Herbs or Botanicals, Homeopathy, Self-hypnosis, Meditation, Native American healing practices, reiki, Shamanic practices, or performed a healing ritual?	CownCAM	CAMQ
87	In the past year, how often have you treated YOUR OWN health problems by praying or asking someone to pray for you?	Cownpray	CAMQ
88	In the past year, how often have you had YOUR OWN health problems treated by a licensed medical professional such as a doctor, surgeon, chiropractor, radiologist, nutritionist, or dentist?	CownDr	CAMQ
89	In the past year, how often have you treated SOMEONE ELSE's health problems using and of the following: Acupressure, Aromatherapy, Ayurveda, Biofeedback, Crystals, Guided Imagery, Energy Healing, Focused Intention, Herbs or Botanicals, Homeopathy, Self-hypnosis, Meditation, Native American healing practices, reiki, Shamanic practices, or performed a healing ritual?	CothenCAM	CAMQ
90	In the past year, how often have you treated SOMEONE ELSE's health problems by praying or asking someone to pray for you?	Cothenpray	CAMQ
91	In the past year, how often have you had SOMEONE ELSE's health problems treated by a licensed medical professional such as a doctor, surgeon, chiropractor, radiologist, nutritionist, or dentist?	CothenDr	CAMQ

Table F-1 (continued)

Religion and Healing Web Survey

No.	Question	Variable name	source
92	In the past year how often have you experienced healing that you would say is a result of your religious practices, beliefs, or experiences.	Chealing_freq	CAMQ
93	Thinking about the questions you've answered, describe how your religious beliefs and practices have affected your health in the last 12 months. Specifically, how have you used any of those beliefs or practices to maintain or improve your health?	Open-ended	CAMQ

APPENDIX G

RECRUITMENT OF PARTICIPANTS

The following email was sent to the listservs included in Table G-1.

Research shows that there is a relationship between religion and healing. But the research has focused nearly exclusively on mainstream religions.

The Religion and Healing Survey is designed to look at ALL kinds of religion. Please support understanding of YOUR experience of religion and healing by completing the survey at <http://www.surveymonkey.com/s.asp?u=418282376178>

If you complete the survey you can be included in a random drawing for \$100. Get your friends to fill out the survey too, because if there are 200 completed surveys by November 6, there will be TWO drawings for \$100 each.

Thank you for your support of this research. Please forward this to friends and relatives (and if you strip off extra headers, etc, that would be really nice!)
Problems opening the survey? email lilar@naturalstudies.org
What's this all about? <http://www.naturalstudies.org/rhs.htm>

Be well,

Lila

Table G- 1

Listservs used to contact potential respondents

Religious Group	Listserv email address
Judeo-Christian	catholic@american.edu
Judeo-Christian	ACM-CATHOLIC-request@LISTSERV.ACM.ORG
Judeo-Christian	CathCal-listserver@easterbrooks.com
Judeo-Christian	updates-subscribe@4catholiceducators.com
Judeo-Christian	majordomo@gt.ed.net
Judeo-Christian	Christian@cs.rutgers.edu
Judeo-Christian	bible@mcs.net
Neopagan	internest@lists.daft.com
Neopagan	Temple_ofisis@yahoogroups.com
Neopagan	altenergy-list@burningman.com
Neopagan	greeningman-list@burningman.com
Neopagan	CAW-Phoenix@yahoogroups.com
Neopagan	Calpagan@yahoogroups.com
Neopagan	friends-of-annwfn@yahoogroups.com
Neopagan	CAWfeehouse@yahoogroups.com
Neopagan	Isis-House@yahoogroups.com
Neopagan	OpenHearth@yahoogroups.com
Neopagan	OzSalon@yahoogroups.com
Neopagan	rdgtalk@yahoogroups.com
Neopagan	LA-Pagan@yahoogroups.com
Neopagan	dryadsrealm@yahoogroups.com
Others	hssumn@umn.edu
Others	modern-india-subscribe@topica.com
Others	sanskriti@hscuci.org
Others	owner-MUSLIMS@gmu.edu
Others	sri@hrweb.org
Others	soc-religion-islam@telerama.lm.com
Others	Majordomo@leb.net

APPENDIX H

DEMOGRAPHIC AND RELIGIOUS IDENTIFICATION

SUMMARY TABLES

Table H-1
Distribution by Sex and Education within Religious Groups

			Judeo-		Neopagans		Others		Total	
Item	No.	Variable	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>N</i>	%
4	Sex	Male	21	30.4	31	23.5	18	32.1	70	27.2
		Female	47	68.1	101	76.5	37	66.1	185	72.0
		Neither/Both	1	1.4	0	0.0	1	1.8	2	.8
5	Educ.	Some HS	0	0.0	3	2.3	0	0.0	3	1.2
		Finished HS	1	1.4	9	6.8	4	7.1	14	5.4
		Some coll.	10	14.5	42	31.8	14	25.0	66	25.7
		Finished coll.	23	33.3	33	25.0	9	16.1	65	25.3
		Some grad.	11	15.9	14	10.6	5	8.9	30	11.7
		Finished grad.	24	34.8	31	23.5	24	42.9	79	30.7

Table H-2
State or Country of Residence

State or Country	Number
AZ	7
CA	119
CO	2
FL	4
IA	2
IL	3
IN	7
KS	4
KY	1
MA	3
MD	1
MN	2
MO	1
NC	2
ND	1
NE	2
NH	1
NJ	1
NM	1
NV	2
NY	7
OH	2
OR	22
PA	8
SC	2
SD	1
TN	1
TX	4
UT	2
VA	4
VT	2
WA	1
WI	3
WV	1
Australia	21
Canada	2
England	2
Other countries	6
Total	257

Table H-3
Religious Identification within Study Groups

	<i>n</i>	%
Judeo-Christian Category	69	26.9
Christian	21	8.2
Catholic	26	10.1
Jewish	22	8.6
Neopagan Category	132	51.4
Neopagan	132	51.4
Other Category	56	21.9
Buddhist	1	.4
Hindu	2	.8
Agnostic/Atheist	19	7.4
Unitarian Universalist	4	1.6
Other	30	11.7
Total	257	100.0

Table H-4

Open-ended Responses Specifying “Other” Religious Identification

Choice from List	Response to “Other (please specify)”
Christian	Methodist
Christian	Wiccan - Buddhist
Christian	Study the Tao
Christian	Hindu (yoga tradition primarily) Buddhist
Christian	Christian Buddhist Native American
Christian	Gnostic, primarily. A metaphorical Christian... with some syncretic ideas about Vodou, Lucumi/Santeria and traditional Taoist practices.
Jewish	Taoist
Jewish	Messianic with heavy Gnostic Unity-like influences
Buddhist	Taoist, Pagan.
Buddhist	Hindu, African Traditional Religion, Science of Mind, Rastafari, Dakota/Sioux Concept of 'the Great Spirit' or 'the Great Mystery'
Buddhist	Hindu, UU, Pagan
Hindu & Neopagan	Qabalist
Hindu	I am also very self-defined and although Hinduism has most of what I hold to be true, I identify most strongly with the results of my own philosophical discourse.
Agnostic/Atheist	Pastafarian --
Unitarian	Pagan
Universalist	
Neopagan	Individualist, Goddess aware. Very personal.
Neopagan	Goddess oriented Lightworker
Neopagan	catholic
Neopagan	nice jewish boy
Neopagan	Just generally spiritual
Neopagan	I am Wyandot, a nation of American Indigenous people.
Neopagan	Kemetic
Neopagan	Jewish, Unitarian
Neopagan	I have been a practising[sic] Wiccan for 30 years but I am also involved in, and have a strong connection with Tibetan Buddhism.
Neopagan	Goddess worshipper
Neopagan	raised roman catholic
Neopagan	Unitarian Universalist
Neopagan	ALONG WITH CHRISTIANITY
Neopagan	Toaist[sic]
Neopagan	Buddhist. U.U. New Age, Hindu. Eclectic.
Neopagan	i would not like to classify myself as I have spent so long trying to finding and re-affirming [sic] my personal beliefs.
Neopagan	Native American
Neopagan	Reclaiming Witch, not sure if that fits above category
Neopagan	Pagan Witch

Table H-4 (continued)

Open-ended Responses Specifying "Other" Religious Identification

Choice from List	Response to "Other (please specify)"
Neopagan	I don't really identify with any religion. I believe in a Universal Force/Energy. Pagan/Buddhism perhaps are the closest to what I believe.
Neopagan	Spiritualist
Neopagan	Hellenismos
Neopagan	Jewish Unitarian Pagan
Neopagan	I'm pagan, but with a very strong mix of Buddhism as well. Hinduism also appeals.
Neopagan	spiritualist
Other	Combination of Christian and Druid.
Other	I believe in karma and reincarnation; I believe that my soul is my true identity and that the life I live right now is designed as a learning/growing mechanism for my eternal soul; I believe that we have some degree of ability to influence the outside world by our thoughts and intentions; I believe that all animals (and maybe plants, not sure) have a soul as valuable as humans.
Other	Religious Science
Other	None
Other	Church of Religious Science
Other	Movement of Spiritual Inner Awareness
Other	Esoteric Christianity
Other	I have been involved in the [sic] Movement of Spiritual Inner Awareness for over 35 years. I grew up Jewish but that never fulfilled my Spiritual needs. I LOVE MSIA!!! It changed/s my life.
Other	I have a family tradition
Other	witch
Other	love
Other	Don't practice
Other	Witchcraft - in Aust. Wicca is a structured and specific path of Witchcraft
Other	Christo-pagan
Other	Baltic Ethnic Faith - Romuva
Other	Traditional Tsalagi (Cherokee)
Other	A person that believes in the scriptures that I have been taught. Non-denominational
Other	Native American Shamanic
Other	native american practices
Other	I don't put myself in any one box. I like to explore different religions.
Other	witch
Other	MSIA
Other	Do not identify with a specific Religion [sic].
Other	none

Table H-4 (continued)

Open-ended Responses Specifying “Other” Religious Identification

Choice from List	Response to “Other (please specify)”
Other	heathen(norse focus)
Other	Mystic
Other	Thelemite
Other	born jewish- but consider myself spiritual and do not identify with the religion
Other	Religious Science/Science of Mind/Course in Miracles
Other	Chaote/Shaman
Other	raised catholic - current beliefs hard to define
Other	none
Other	Dual Faith: Heathen / Lukumi
Other	Witch
Other	new thought
Other	eclectic, solitary witch
Other	Isian
Other	I do not identify with a single reliious [sic] group/organization as defined above.
Other	Kemetic Orthodox
Other	Quaker Episcopal Buddhist Neopagan
Other	I pull wisdom from all traditions.
Other	Kemetic (Ancient Egyptian)

Table H-5

Age of Religious Identification by Religious Group

	Judeo-Christian		Neopagan		Other		Total	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
From birth	38	55.1	12	9.1	7	12.5	57	22.2
Between ages 10 and 17	6	8.7	29	22.0	13	23.2	48	18.7
Between ages 18 and 25	8	11.6	45	34.1	10	17.9	63	24.5
Between ages 26 and 50	15	21.7	43	32.6	26	46.4	84	32.7
After 50 years of age	2	2.9	3	2.3	0	0	5	1.9

APPENDIX I

BMMRS/GSS SUMMARY TABLE

Table I-1

BMMRS/GSS Summary Table for the Judeo-Christian and Neopagan Religious Groups by subscale

No.	Variable name	Group	<i>n</i>	<i>M</i>	<i>SD</i>	<i>t</i>	<i>df</i>	<i>p</i>
<u>Self-Ranking</u>								
7	Breligious	Judeo-Christian	69	2.77	0.79	0.08	165.15	.93
		Neopagan	132	2.76	0.97			
8	Bspiritual	Judeo-Christian	69	3.22	0.72	-4.98	109.32	<.01
		Neopagan	132	3.71	0.55			
<u>History</u>								
37	Bchanged_life	Judeo-Christian	69	1.70	0.46	-2.00	116.89	.03
		Neopagan	132	1.83	0.38			
<u>Spiritual Experience</u>								
38	Bpresence	Judeo-Christian	69	3.81	1.60	-2.57	199.00	.01
		Neopagan	132	4.40	1.51			
39	Bstrength	Judeo-Christian	69	3.74	1.47	-5.28	106.41	<.01
		Neopagan	132	4.80	1.07			
40	Bharmony	Judeo-Christian	68	3.66	1.25	-3.03	198.00	<.01
		Neopagan	132	4.23	1.25			
41	Bunion	Judeo-Christian	69	3.99	1.60	0.00	199.00	.99
		Neopagan	132	3.98	1.67			
42	Bfeel_love	Judeo-Christian	69	3.97	1.56	-0.32	199.00	.75
		Neopagan	132	4.05	1.55			
43	Bcreation.	Judeo-Christian	69	4.36	1.27	-4.32	199.00	<.01
		Neopagan	132	5.14	1.17			
44	Bwatches	Judeo-Christian	68	3.06	1.02	2.66	197.00	.01
		Neopagan	131	2.67	0.95			
45	Bresponsibility	Judeo-Christian	68	3.18	0.65	0.57	198.00	.57
		Neopagan	132	3.11	0.78			
<u>Forgiveness</u>								
46	Bforgiven_self	Judeo-Christian	69	2.86	0.73	-0.25	198.00	.81
		Neopagan	131	2.89	0.88			
47	Bforgive_others	Judeo-Christian	69	3.12	0.68	0.84	198.00	.40
		Neopagan	131	3.02	0.78			
48	Bforgives_me	Judeo-Christian	69	3.23	0.94	3.93	164.20	<.01
		Neopagan	132	2.64	1.15			

Table I-1 (continued)

BMMRS/GSS Summary Table for the Judeo-Christian and Neopagan Religious Group by subscale

No.	Variable name	Group	<i>n</i>	<i>M</i>	<i>SD</i>	<i>t</i>	<i>df</i>	<i>p</i>
<u>Private Practices</u>								
49	Bprivately	Judeo-Christian	69	5.58	2.32	-0.53	198.00	.60
		Neopagan	131	5.76	2.33			
50	Bmeditate	Judeo-Christian	69	3.93	2.56	-5.08	106.81	<.01
		Neopagan	132	5.70	1.87			
51	Bbible	Judeo-Christian	69	3.52	2.15	7.42	84.93	<.01
		Neopagan	130	1.49	1.03			
<u>Coping</u>								
69	Bforce.	Judeo-Christian	68	2.69	0.95	-3.12	198.00	<.01
		Neopagan	132	3.11	0.86			
70	Bpartners	Judeo-Christian	69	2.43	1.02	-1.89	198.00	.06
		Neopagan	131	2.72	0.99			
71	Bguidance	Judeo-Christian	68	2.90	1.01	2.22	198.00	.03
		Neopagan	132	2.57	0.98			
72	Bpunishing	Judeo-Christian	68	1.18	0.52	1.44	98.39	.15
		Neopagan	131	1.08	0.34			
73	Babandoned	Judeo-Christian	69	1.29	0.57	1.86	109.32	.07
		Neopagan	132	1.14	0.43			
74	Bno_rely	Judeo-Christian	68	2.24	0.96	-2.06	150.50	.04
		Neopagan	132	2.55	1.09			
75	Bill	Judeo-Christian	69	2.86	1.05	-0.67	199.00	.50
		Neopagan	132	2.97	1.20			
76	Bproblem	Judeo-Christian	69	2.91	1.07	-0.56	199.00	.58
		Neopagan	132	3.01	1.18			
77	Bdemands	Judeo-Christian	69	1.67	0.76	1.10	199.00	.27
		Neopagan	132	1.55	0.73			
78	Bcritical	Judeo-Christian	69	1.57	0.78	1.04	199.00	.30
		Neopagan	132	1.45	0.68			
<u>Commitment</u>								
79	Bcarryover	Judeo-Christian	68	3.07	0.94	-2.09	197.00	.04
		Neopagan	131	3.33	0.75			

Table I-1 (continued)

BMMRS/GSS Summary Table for the Judeo-Christian and Neopagan Religious Groups

No.	Variable name	Group	<i>n</i>	<i>M</i>	<i>SD</i>	<i>t</i>	<i>df</i>	<i>p</i>
<u>Public Practices</u>								
83	Bservices	Judeo-Christian	69	6.23	2.67	4.75	199.00	<.01
		Neopagan	132	4.29	2.80			
84	Bnot_services	Judeo-Christian	69	5.00	2.74	0.52	199.00	.60
		Neopagan	132	4.77	3.20			

APPENDIX J

DRES SUMMARY TABLE

Table J-1

*DRES Summary Table for the Judeo-Christian and Neopagan Religious Groups
by subscale (R) indicates reverse scored items*

No.	Variable name	Group	<i>n</i>	<i>M</i>	<i>SD</i>	<i>t</i>	<i>df</i>	<i>p</i>
<u>Experience of Religiousness subscale</u>								
24	Dtrance	Judeo-Christian	69	2.35	1.70	-13.80	199.00	<.01
		Neopagan	132	5.73	1.63			
25	Dexperience	Judeo-Christian	69	4.96	1.97	-1.94	199.00	0.05
		Neopagan	132	5.53	2.00			
26	Ddiscrimination	Judeo-Christian	69	4.03	2.17	-4.30	114.52	<.01
		Neopagan	132	5.33	1.74			
27	Demotions	Judeo-Christian	69	4.59	1.82	-4.03	108.58	<.01
		Neopagan	131	5.60	1.35			
52	Dall_beings	Judeo-Christian	69	4.81	1.79	-6.82	94.36	<.01
		Neopagan	132	6.42	1.08			
53	Dconsciousness.	Judeo-Christian	68	3.51	1.97	-3.91	198.00	<.01
		Neopagan	132	4.63	1.88			
54	Dhelper	Judeo-Christian	69	3.96	2.21	-7.45	95.87	<.01
		Neopagan	132	6.13	1.37			
55	Dreincarnation.	Judeo-Christian	69	3.59	2.22	-8.11	104.00	<.01
		Neopagan	132	6.03	1.56			
57	Dvision.	Judeo-Christian	69	4.29	2.23	-5.17	101.21	<.01
		Neopagan	132	5.83	1.50			
63	Dembodiment	Judeo-Christian	69	3.38	1.98	-9.36	110.51	<.01
		Neopagan	131	5.92	1.51			
64	Dcreativity	Judeo-Christian	69	4.74	1.64	-6.75	107.93	<.01
		Neopagan	131	6.25	1.21			
<u>Healing subscale</u>								
19	Dspirit_med	Judeo-Christian	69	4.36	1.69	-4.95	199.00	<.01
		Neopagan	132	5.47	1.40			
28	Dbelief_med	Judeo-Christian	69	4.00	1.70	-3.29	199.00	<.01
		Neopagan	132	4.77	1.52			
33	Dprayer_works(R)	Judeo-Christian	68	3.99	2.00	-4.72	197.00	<.01
		Neopagan	131	5.24	1.64			

Table J-1 (continued)

*DRES Summary Table for the Judeo-Christian and Neopagan Religious Groups
by subscale*

No.	Variable name	Group	<i>n</i>	<i>M</i>	<i>SD</i>	<i>t</i>	<i>df</i>	<i>p</i>
<u>Healing subscale (continued)</u>								
35	Dlack_harmony	Judeo-Christian	69	4.87	1.90	-5.21	89.37	<.01
		Neopagan	132	6.15	1.03			
58	Dherbs	Judeo-Christian	69	3.80	2.09	-5.68	199.00	<.01
		Neopagan	132	5.39	1.77			
59	Dpunishment (R)	Judeo-Christian	69	5.01	1.95	0.73	199.00	0.47
		Neopagan	132	4.81	1.85			
66	DHealing	Judeo-Christian	68	3.76	1.99	-9.76	87.96	<.01
		Neopagan	132	6.29	1.08			
<u>Magical Beliefs subscale</u>								
60	Dparticipate	Judeo-Christian	69	4.17	2.01	-7.15	92.00	<.01
		Neopagan	132	6.05	1.15			
61	DWeather	Judeo-Christian	69	2.81	1.87	-10.38	116.50	<.01
		Neopagan	131	5.52	1.52			
65	Dintention	Judeo-Christian	68	3.87	2.01	-10.41	78.49	<.01
		Neopagan	132	6.52	0.81			
67	DHow_many	Judeo-Christian	67	2.69	2.17	9.33	197.00	<.01
		Neopagan	132	5.45	1.87			
<u>Religion and Body subscale</u>								
29	Dsexuality	Judeo-Christian	69	3.09	1.79	-5.01	199.00	<.01
		Neopagan	132	4.45	1.85			
30	Dsubordinated(R)	Judeo-Christian	69	4.39	1.81	-6.66	109.76	<.01
		Neopagan	132	6.05	1.37			
31	Dbody_medium	Judeo-Christian	69	4.71	1.77	-3.66	111.29	<.01
		Neopagan	132	5.61	1.37			
32	Drestraint(R)	Judeo-Christian	69	3.32	1.79	-11.17	104.31	<.01
		Neopagan	132	6.02	1.26			
34	Dbody_pleasures	Judeo-Christian	67	4.97	1.72	-4.25	100.03	<.01
		Neopagan	132	5.97	1.21			

Table J-1 (continued)

DRES Summary Table for the Judeo-Christian and Neopagan Religious Groups by subscale

No.	Variable name	Group	<i>n</i>	<i>M</i>	<i>SD</i>	<i>t</i>	<i>df</i>	<i>p</i>
<u>Religious Practices subscale</u>								
15	Dgatherings.	Judeo-Christian	69	3.20	2.07	-4.86	198.00	<.01
		Neopagan	131	4.70	2.08			
<u>Religious Practices subscale (continued)</u>								
16	Doutdoors	Judeo-Christian	69	4.57	1.72	-7.98	94.11	<.01
		Neopagan	132	6.36	1.03			
17	Daltar	Judeo-Christian	69	3.17	2.26	-10.52	95.27	<.01
		Neopagan	131	6.30	1.37			
18	Dsolitary	Judeo-Christian	69	4.22	1.65	-4.35	197.00	<.01
		Neopagan	130	5.27	1.61			
20	Dancestors	Judeo-Christian	69	3.94	1.75	-5.02	199.00	<.01
		Neopagan	132	5.23	1.71			
21	Ddancing	Judeo-Christian	69	4.94	1.64	-6.10	99.89	<.01
		Neopagan	132	6.28	1.09			
22	Dcycles	Judeo-Christian	68	3.22	2.09	-11.45	87.46	<.01
		Neopagan	132	6.33	1.12			
23	Dclergy_not	Judeo-Christian	69	3.59	2.18	-8.77	100.10	<.01
		Neopagan	132	6.15	1.45			
56	Drules (R)	Judeo-Christian	68	2.53	1.61	-7.13	172.25	<.01
		Neopagan	132	4.45	2.14			
62	Dfortunes (R)	Judeo-Christian	69	3.46	2.15	-11.76	83.85	<.01
		Neopagan	132	6.68	1.01			

APPENDIX K

CAMQ SUMMARY TABLES

Table K-1

Scores on Subscales of the CAM Questionnaire by Religious Group

Subscale	Group	<i>n</i>	<i>M</i>	<i>SD</i>	<i>t</i>	<i>df</i>	<i>p</i>
CAM usage	Judeo-Christian	69	4.77	3.07	-7.37	199.00	<.01
	Neopagan	132	8.09	3.02			
Prayer usage	Judeo-Christian	69	6.97	3.61	2.10	197.00	.04
	Neopagan	130	5.92	3.20			

Table K-2

*Scores on Individual Items of the CAM Questionnaire by Religious Group**(R) indicates reverse scored items*

Item		Group	<i>n</i>	<i>M</i>	<i>SD</i>	<i>t</i>	<i>df</i>	<i>p</i>
No.	Variable name							
85	Chealth	Judeo-Christian	69	5.33	1.49	1.99	199.00	.05
		Neopagan	132	4.89	1.52			
86	CownCAM	Judeo-Christian	69	3.04	2.07	-5.58	199.00	<.01
		Neopagan	132	4.63	1.83			
87	Cownpray	Judeo-Christian	69	3.10	2.04	1.69	117.60	.09
		Neopagan	130	2.62	1.68			
88	CownDr (R)	Judeo-Christian	69	4.83	1.39	-1.81	199.00	.07
		Neopagan	132	5.17	1.24			
89	CotherCAM	Judeo-Christian	69	1.72	1.41	-7.64	164.49	<.01
		Neopagan	132	3.46	1.74			
90	Cotherpray	Judeo-Christian	69	3.87	2.01	1.76	199.00	.08
		Neopagan	132	3.36	1.93			
91	CotherDr	Judeo-Christian	68	1.50	1.57	0.38	198.00	.71
		Neopagan	132	1.42	1.43			
92	Chealing_freq	Judeo-Christian	69	2.29	1.59	-4.81	199.00	<.01
		Neopagan	132	3.50	1.75			