

Religion, Spirituality, and Alternative Health Practices: The Baby Boomer and Cold War Cohorts

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ABSTRACT: Research in religion and health has suggested positive relationships, and most recently has concentrated on the *experience* of religion, or spirituality. Currently, cohort studies have shown that the baby boomers differ significantly from their elders in their approach to religion, preferring to explore spirituality rather than the religious doctrine of their elders. They also differ in their approaches to health, including greater acceptance and use of alternative health practices. This study isolates the baby boomer and cold war cohorts in order to explore differences in religion, spirituality and alternative health practices. Findings indicate that, for boomers, increased spirituality is significantly related to increased positive health perceptions, while their elders' health perceptions are related to increased religiosity. Alternative health practices and spirituality, however, are not related for either cohort. However, this study does identify important distinctions between the two cohorts. Future studies must recognize differing cohort constructions of reality concerning the meanings of health, spirituality and religion.

KEY WORDS: religion; spirituality; alternative health; cohort analysis.

Introduction

Over the past several decades research examining religion, spirituality and health has become more precise and specific. Numerous studies have produced findings illuminating the relationships among the three. Of late, however, calls for greater specificity have been made, challenging work in this area to more carefully address measures and conceptualizations (cf. Levin

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2002). George et al. (2000) outline the problems relating to defining, conceptualizing and measuring the three concepts. According to these authors, few studies have succeeded in separating religion from spirituality, whether in terms of defining the concepts or measuring them. In their call for greater precision, George et al. outline the attempts made by the National Institute of Healthcare Research (NIHR) to specifically define religion and spirituality so as to separate the two concepts and isolate them in future studies exploring relationships with health. George et al. raise concerns about the existing studies that claim to assess spirituality, but in fact do so in the language of religion (p. 107). Hill (2000) and Hill and Hood (1999) discuss the conceptualization of religion versus spirituality. In brief, they offer definitional criteria for spirituality (the broader of the two constructs) as “the search for the sacred” (see also Slater, Hall & Edwards 2001; Hill, Pargament, Hood, McCullough, Swyers, Larson & Zinnbauer 2000).

It is the assumption of this study that religion and spirituality can indeed be independently defined and measured separately from one another in order to understand relationships with health more precisely. Also in line with the call made by George et al. (2000), this work looks at two specific subgroups. By isolating two age groups (the baby boomer and the cold war cohort), this paper attempts to explore the variety of meanings that different groups give to religion and spirituality.

Religion and health. The extent to which religion affects or relates to a person's health has been the focus of extensive research for many decades. Generally these studies have produced positive relationships, suggesting that religious beliefs and/or practices are good for one's health. More than 25 years ago, Kaplan (1976) found religious protections, such as increased hope, social-personal regulation, and regulation of depression, fear and anxiety, to have positive effects on a patient's cardiovascular system. Benson (1975) showed how prayer provided emotional comfort, and thus, improved health. Idler (1987) concluded that religious beliefs may indeed alter a person's perception of illness and disabilities and provide greater comfort. Koenig (1999) detailed the numerous ways that the “healing power of faith” can improve one's health, including relaxation effects, coping and social support.

Levin (e.g. 1994a, 1998) investigated the effects of religiosity on numerous conditions, including chronic disease, functional disability, psychological well-being, and subjective perceptions of health, while controlling for age, race, ethnicity, gender, social class, denomination, as well as other social and psychological factors. His goal in the area of health and religion was to establish a new scientific field he calls the “epidemiology of religion” (cf. Levin & Vanderpool 1987; Levin 1994b, 2002). Levin's work includes a meticulous review of religious studies and the effects of religiosity on morbidity and mortality (Levin & Schiller 1987), health care use (Levin 1989) and the health effects of religious attendance (Levin & Vanderpool 1987). Overwhelmingly, and appar-

ently irrespective of the measures used, the data present evidence “remarkably consistent” and supportive of the positive health benefits of religion (Levin 1994a:5; see also Ellison et al. 2001).

Spirituality and health. The term “spirituality,” as used in empirical research, goes beyond the religious sense of organization, practices and ritual. The psychological literature describes spirituality as “the personal awareness of dimensions of existence which extend beyond the physical domain but also encompass the physical” (Benor & Benor 1993:22). “Spirit,” Hiatt (1986) explains, refers to that “noncorporeal and nonmental dimension of the person that is the source of unity and meaning.” Thus, spirituality refers to, “the concepts, attitudes, and behaviors that derive from one’s experience of that dimension” (Hiatt 1986:742). The primary difference between religion and spirituality involves transcendence; “the ability to extend the self beyond the immediate context to achieve new perspectives” (Aldridge 1993:5).

Sociologists, like psychologists and medical professionals, have used concepts such as transcendence and wholeness when attempting to define spirituality. Payne and McFadden (1994), in their work on old age and loneliness, argue that notions of spirituality imply a certain connection, integration, and wholeness. Similarly, Eisenhandler (1994) describes spirituality as “an experience with meaning, an active engagement with ‘symbolic immortality’ that takes a person beyond a narrow band of self-interested concerns” (p. 137).

Idler (1995) isolates the “non-physical” sense of self in an attempt to study the effects on health. Her term, “non-physical self,” is inspired by the work of Charmaz (1991) who speaks of the sick person who manages to define certain qualities of self that are distinct from the body. In essence, Idler hoped to find that those people with a sense of self that transcends the body might also transcend the sense of illness. Transcendence played a role in that it allowed the person to “rise above their problems . . . by putting them in a context in which the physical body does not matter that much.”

According to sociologists (cf. Idler 1995; Poloma & Pendleton 1991), the evidence indicates greater health benefits for more spiritual, rather than religious, characteristics. Medical doctors (Benson 1996; Matthews 1993) also find greater benefits for the transcendent and holistic aspects of spirituality. Levin and Taylor (1997) call for future studies to explore the more “intrap-sychic aspects of religious life” (p. 75). George et al. (2000) clarified the need to isolate religious measures from spiritual ones. They argue that while religious measures tap a person’s beliefs, they do little in terms of investigating that person’s meanings of “the sacred,” a key distinction from religion (p. 106). They also point out the need to create spirituality measures *without* phrasing them in terms of religion, or linking it with religion. Current research, George et al. argue, generally measures only religion, while very few studies attempt to conceptualize religion and spirituality as separate concepts.

Measurement. For many years the measures investigating religion were related to frequency of church or synagogue attendance. While this measure has provided valuable information, current research argues on the inherent flaws within attendance measures. Specifically, a correlation between church or synagogue attendance and health tends not to consider the functional limitations of those not attending (Levin 1989). While Levin and Taylor (1997) do not want to rule out the social benefits associated with involvement, they encourage a broader and more introspective examination (see also Steensland et al. 2000).

Typologies of prayer best represent attempts to move beyond the limitations of attendance measures for religion. Types of prayer have been examined in an attempt to isolate religio-spiritual experiences as impacting one's health. As mentioned, the early works of Benson (1975) looked at repetitive prayer and non-religious meditation, finding prayer to slow a person's heart rate, lower blood pressure, and provide overall comfort. Poloma (1993) outlines four types of prayer (colloquial, petitionary, ritual, meditative), and relates those to prayer experiences (e.g., strong presence of God, deep sense of peace). She finds evidence that it is not necessarily the frequency of prayer, or even the type of prayer that influences life satisfaction, but rather the depth of intimacy one experiences in prayer. Other works have examined prayer, or other forms of religious expression that move beyond the attendance measures, in order to understand the link between religion and health (i.e., Poloma & Pendleton 1989, 1991; Taylor & Chatters 1991; Dossey 1993).

While the focus currently has shifted away from extrinsic religious factors such as attendance, attempts have been made for decades to structure measures that capture spirituality (cf. Doster et al. 2002). Allport and Ross (1967) developed the Religious Orientation Inventory (ROI) in an attempt to measure extrinsic and intrinsic characteristics. While many utilize this scale, others, particularly in psychology, debate the effectiveness (cf. Kirkpatrick & Hood 1990; Gorsuch 1984). Kass et al. (1991) utilized the ROI scale in their study which led to the development of the Index of Core Spiritual Experience (INSPIRIT). Kass et al created a seven item scale which measures "the occurrence of experiences that convince a person God exists and evoke feelings of closeness with God, including the perception that God dwells within" (p. 205). Encouraged by Benson's (1975) relaxation response and psychotherapy research, Kass et al sought to explore what numerous patients were referring to as a "core spiritual experience." Those people reporting spiritual experiences showed an increase in life satisfaction and purpose as well as improved health. The INSPIRIT scale showed internal reliability and validity which led the authors to conclude that core spiritual experiences may indeed contribute to positive psychological health and a reduction of medical symptoms.

Like the shift from measures of attendance to measures of spirituality, current health research, particularly within sociology, is moving away from defining health objectively (such as test results, blood pressure readings, etc.) to

subjective responses regarding health. Idler (1995) argues that, “.individuals are evaluating many areas of their life when assessing their health” (p. 686). Her work suggests that the respondents’ meanings associated with health, or the reality they construct regarding health, provide more insight into the complexities of the self than do exams by a physician. “Broader and more inclusive definitions” of health, and what health means allow respondents to take more into account when assessing their health and well-being (Idler 1999, p. 473). Just as George et al. (2000) argue for more distinct measures of religion and spirituality, this work sees the need for measures of health to move beyond clinical scales to more emotive measures that capture the “active selves creating meaning,” as suggested by Idler (1999, p. 474). Within this line of thought is the increasing use and acceptance of alternative health practices like chiropractic, acupuncture, nutritional supplements and homeopathy.

Religiosity of baby boomer and cold war cohorts. Changes occurring in health and spirituality research have to do with the distinctions drawn between extrinsic religion and intrinsic spirituality. The same distinctions are found in the literature dealing with the changing religious landscape brought on by the influences of the “baby boomers.” This generation (usually defined as those born between 1947 and 1963), having grown up under the conservatism of post-World War II values, are carving out new meanings for religion in America (Roof 1993; Hargrove 1980; Hudnut-Beumler 1994).

According to Gallup polls, church attendance “reached new heights in 1955 and 1958, when 49 percent of Americans said they attended church or synagogue in the past week” (Gallup & Castelli 1989:8). As suburban life expanded, so did the construction and growth of the church. Hargrove (1980) describes the “massification” of churches in the 1950’s as so extensive that, “main-line denominations often parceled out particular subdivisions to one another so that no one denomination would be overextended and no suburb would be ‘unchurched’” (p. 23). Clearly, Americans were attending church, including the young boomers. National surveys reveal that 95 percent of the children born during the post-war years participated in some form of traditional religious services during childhood (Roozen, Carroll & Roof 1995).

During the early to mid-1960’s, following the assassination of John F. Kennedy, the growing civil rights movements in the South, and the shifting views towards women’s roles, the boomers began questioning their parent’s ideologies and breaking from traditional expectations. This questioning of authority extended beyond popular music, civil rights, and political policy, affecting the religious terrain as well. Massive numbers of boomers began to abandon established religious institutions and the religious ideologies of their childhood (Roozen et al. 1995). According to Roof (1992), approximately 58 percent of those boomers with a religious background dropped out for at least two years during adolescence or young adulthood.

The combination of the counter-cultural air of anti-establishment, political activism and religious dropout led to paradigm shifts in the meanings associated with spirituality for the boomers. Boomers in the 1960's rejected institutionalized beliefs and sought a more individualistic spirituality combining elements of eastern religion, meditation, native American practices, and often, drugs (Ellwood 1994).

Along with Roof's analysis (1993), other's have examined the boomer's shift towards spirituality. Hegy (1995) argues that what the boomers seek is "enlightened faith." He describes faith and faith development for the boomers as a "process" as opposed to "transmission of doctrine." Hoge, Johnson and Luidens (1994) point out that the boomers returning to church are blurring denominational boundaries typically grounded in doctrinal debates. One of the major differences between the boomers and their parents has to do with matters of conscience, that is, does the church or individual conscience determine beliefs and moral matters?

Alternative health practices. At present, alternative health treatments are entering the mainstream of society with one third of Americans surveyed claiming to have used at least one form of unconventional medicine within the past year (Eisenberg et al. 1993; Reissman 1994). The Journal of the American Medical Association (JAMA) has devoted space to the rising use of alternative practices and the need to integrate these therapies into medical training. A 1992 issue of JAMA reported that the practices to be examined included "nutritional and life-style modifications, counseling and prayer therapies, hands-on healing, acupuncture, homeopathy, and traditional oriental medicine, among others" (Marwick 1992). By 1996, JAMA reported a resolution passed by the American Medical Association Resident Physicians Section that encouraged scientific investigation into alternative medical techniques.

Eisenberg et al. (1993) discovered that the frequency of visits to unconventional medical therapists in 1990 exceeded the number of visits paid to U.S. primary care physicians (425 million visits vs 388 million). Americans were also willing to spend \$10.3 million out of pocket for unconventional therapies. "Unconventional medicine," as defined in the Eisenberg et al. study resembles the National Institute of Health (NIH) distinctions, focusing primarily on acupuncture and chiropractic use. In the process of researching the prevalence, costs and patterns of use for alternative medicine, the authors found higher use among persons 25 to 49 years of age, with relatively high education and income levels.

Schneirov and Geczik (1996) examined alternative health networks, tracing much of the spiritual underpinnings to the countercultural, ecological and alternative food movements of the late 1960's and early 1970's. Approaching alternative health as a new social movement, the authors stress the strength participants draw from the groups which form around alternative health be-

liefs and how these group relations affect the construction of medical and social realities, eventually leading members to new values and beliefs. Schneirov and Geczik expose an alternative network which centers on health concerns of the body (primarily eating habits) but inevitably leads to awareness of other social issues from ecology to animal rights activism to peace issues. Like countercultural figures, participants in the Schneirov and Geczik study have become discontented with the bureaucratic system and seek to challenge modern institutions. A central point made by the authors is that, while examining alternative health networks, it is impossible to exclude the political, social and spiritual foundations on which these groups stand.

The primary distinction between conventional and unconventional therapies has to do with individual responsibility. Western allopathic medicine relies on medication and surgery so there is less need for the patient to be actively involved in the process, but instead is encouraged to put his/her trust in science. Alternative therapies, however, expect the individual to take responsibility for their health whether that be through dietary changes, prayer, participation in meditation classes, or individual research into herbal remedies. We would expect to see these differences evident in perceptions of health.

As the literature reveals, many of the alternative health paradigms can be traced back to the ideals of the 1960's counterculture and for that reason we would expect participation in these movements to be greater among the baby boomers than the cold-war cohort. Similarly we would expect those who participate in alternative health networks to have greater perceptions of health than those respondents who rely on traditional medical treatments.

Hypotheses

The cold war and baby boomer cohorts have been selected for examination because of their cultural attributes. As Berger (1966) suggested, the objective reality of everyday life for an individual results from the meanings that emerge out of one's culture—a process of sharing life with others. McGuire (1988), in her research on healing communities in America, argues that the social construction of medical "realities" must be examined. She concludes that many groups of people have challenged existing paradigms of health illness and healing. In response to her call, the two cohorts presented here offer the opportunity to isolate the construction of meanings regarding religion, health and spirituality. Each age group has constructed different world views based on different life experiences (i.e., World War II and the resulting era of patriotism vs the Vietnam era and the spirit of "counter culture"). Based on the research discussed and this theoretical framework, the following hypotheses are proposed:

- Hyp 1.* Alternative health practices will be positively related with measures of spirituality in both the baby boomer and cold war cohorts.
- Hyp 2.* The positive relationship between alternative health practices and spirituality will be more pronounced for baby boomers than for the cold-war cohort.
- Hyp 3.* Alternative health practices and spirituality will relate positively to one's perceptions of health for both cohorts.
- Hyp 4.* Baby boomers will demonstrate a positive relationship between spirituality and health evaluation, while the cold war cohort will show a positive relationship between religion and health evaluation.
- Hyp 5.* Religiosity and spirituality will not be independent of one another for the total sample for each cohort.

Methods

Sample. The data were gathered by the Gallup organization in 1996. A total of 1200 respondents were randomly contacted for telephone interviews. For the purpose of this research two age categories were constructed in order to compare the age-related dynamics of two distinct generations. The first, the baby boomers, consists of respondents between the ages of 35 and 50 years ($n = 427$). The second category, the cold-war cohort, consists of respondents over 65 years of age who represent the parents of the boomers and the cohort to have experienced the cold-war years as adults ($n = 170$). The later group contains 124 respondents between the age of 65 and 75, with the remaining 46 respondents between 76 and 91 years of age. Respondents ages 18 to 35 were deleted from the sample.

Measures

Spirituality. For the purpose of measuring spirituality, two summative scales were constructed. The first scale, "Spiritual Experience," contains questions consistent with the INSPIRIT scale developed by Kass et al. (1991) as previously discussed. This scale measures the extent to which respondents have actually had an experience as a result of their spiritual lives. Four questions make up this scale: 1) Have you ever felt as though you were very close to or at one with a powerful spiritual presence? 2) Have you ever experienced something that might be described as miraculous? 3) Has it ever seemed as if a great spiritual figure appeared to you, such as God, Jesus, Mary, Elijah or Buddha? 4) Have you had a specific experience that convinced you that God exists? Scores for this scale have an alpha reliability of .5605.

In order to determine whether the individual believes in a relationship between their health and their spirituality, a "Beliefs" scale has been constructed to measure another aspect of spirituality. These include: 1) In your opinion, what connection is there between a person's religious or spiritual life

and their overall state of health? 2) In your opinion, which of these statements come closest to your own opinion?¹ The two questions making up this scale have an alpha reliability of .665.

Religiosity. The relationship between religion and spirituality is explored in order to understand the extent to which these variables impact one's perceptions of health. Two religiosity scales have been created. The "Religious Activity" scale, with a reliability score of .8125, consists of five "how frequently do you" questions for these activities: read the bible or Holy Scriptures, attend religious or worship services, take part in small prayer group or religious study group, join in evangelism, outreach or mission work, pray or mediate by yourself.

The second scale measures the respondents' approach to methods of prayer. Consistent with Poloma and Gallup (1991) the "Prayer Activities" scale captures five ways in which individuals practice their relationship with a higher power. The questions ask how often do you meditate or try to get in touch with God or your higher power, talk to God in your own words, read from a book of prayers, ask God for material things, and ask God to speak and then wait in silence for God's reply. This scale has an alpha reliability of .6841.

Alternative health practices. As noted previously, the National Institute of Health (NIH) has divided alternative medicines into seven categories (Dyer 1996). Eight practices have been abstracted from these categories to determine the frequency with which respondents participate in alternative health. These include: Acupuncture; Biofeedback; Chiropractic; Massage therapy; Relaxation techniques; Herbal remedies; Homeopathy and Macrobiotics.

A varimax factor rotation collapsed the eight practices into three factors. The factoring follows patterns related to individual responsibility and extent of diagnosis. The "Mainstream Practices" scale consists of acupuncture, chiropractic, herbal remedies and homeopathy. In this scale we find alternative health practices that are making their way into mainstream society while still remaining outside traditional medicine. While a medical diagnosis would probably lead one to seek treatment by herbs, chiropractic, acupuncture or homeopathy, these treatments may also be used by some for the purpose of health maintenance. Individual responsibility is relatively high for these four practices, especially in the case of herbal remedies and homeopathic treatments. While individuals utilizing acupuncture and chiropractic rely on specialists for their care, the individual is involved in the process to the extent that he or she works with the doctor who encourages the individual to participate in his or her health.

¹ Yes responses include: God acts directly through supernatural intervention to heal you or keep you well and, The spiritual nature of your thinking and your relationship with God helps you stay healthy and helps heal you if you are not well. No responses were: God does not act at all to heal or maintain good health and, You do not believe there is a God or higher power.

The "Relaxation" scale, consists of massage therapy and relaxation techniques, and appears to be the most passive of the three factors, involving the least amount of individual responsibility beyond learning to relax. No medical diagnosis is necessary to seek these practices. This scale, more so than the others, suggests a general health maintenance practice rather than a response to a specific illness (though both are, at times, utilized by individuals with serious diagnoses).

The final scale suggests the highest commitment from its participants. The "Extreme Practices" scale consists of biofeedback and macrobiotic diets. In the case of these practices, a medical diagnosis is typically present. The patient's responsibility level is high as is the commitment to treatment.

Perceptions of health. In accordance with the arguments put forth by Idler (1995, 1999), this study utilizes self-ratings of health. Three questions form the dependent variable and have an alpha reliability of .7088. Each question is scored in 5-item likert fashion from "excellent" to "poor," or "definitely true" to "definitely false." The questions include: 1) "Compared to other people your own age, in general, would you say your health is.."; 2) "Are you as healthy as anybody you know?"; and, 3) "You seem to get sick more than other people." In order to correct for the skewness of the health evaluation scale, a log transformation was performed.

Results

Frequencies. Table 1 reveals the demographic and alternative health percentages for each cohort. Both groups show a fairly similar distribution regarding race and gender, with both groups heavily represented by whites and slightly more females than males. However, income differences are striking with far more boomers earning \$40,000 a year and beyond. Education differences also exist, confirming the boomers as the most "schooled" cohort. Also in Table 1 is the frequency with which each age group utilizes alternative health practices. While neither age group tends to use acupuncture, biofeedback or macrobiotic diets to a great extent, the boomers exceed their elders. The differences for chiropractic, massage therapy, relaxation techniques and herbal remedies, however, support literature claims regarding the boomers as the cohort more likely to be attracted to these practices. For all eight measures of alternative health practices, the boomer's affirmative responses surpass the older cohort.

Table 2 displays the spirituality and religiosity frequencies. Concerning the spirituality frequencies, while the percentages are fairly close between cohorts, we see the boomers exceeding the cold war cohort on all measures except the appearance of a spiritual figure. The spiritual experience scale shows that the boomers report more miraculous experiences, more experiences with God and more occasions of feeling close to a spiritual presence.

TABLE 1

**Demographic and Alternative Health Practices Percentages:
The Baby Boomer and Cold War Cohorts**

	Boomers	Cold War
	% (N)	% (N)
<i>Race</i>		
Non-white	15.2 (57)	8.8 (13)
White	84.6 (318)	89.9 (133)
<i>Gender</i>		
Male	43.1 (162)	41.9 (62)
Female	56.9 (214)	58.1 (86)
<i>Income</i>		
Under \$10,000	4.1 (15)	18.2 (27)
\$10K to \$29,999	23.1 (87)	33.8 (50)
\$30K to \$39,999	14.9 (56)	16.9 (25)
\$40K to \$49,999	13.6 (51)	6.1 (9)
\$50K to \$74,999	21.8 (82)	6.8 (10)
\$75K or more	19.1 (72)	6.8 (10)
<i>Education</i>		
Less than high school	5.6 (21)	18.2 (27)
High school grad	25.5 (96)	30.4 (45)
Some college	27.9 (105)	24.3 (36)
Trade/tech training	4.5 (17)	4.1 (6)
College graduate	23.4 (88)	10.1 (15)
Postgraduate work/degree	13.0 (49)	10.8 (16)
<i>Alternative Health Practices</i> (percentages reflect affirmative responses)		
Acupuncture	.8 (3)	0
Biofeedback	.8 (3)	.7 (1)
Chiropractic	6.3 (27)	4.7 (8)
Massage Therapy	26.3 (99)	10.8 (16)
Herbal Remedies	7.7 (29)	6.1 (9)
Homeopathy	2.9 (11)	1.4 (2)
Macrobiotic Diets	4.0 (15)	2.7 (4)

The beliefs scale shows the boomers reporting slightly more belief in the connection between their health and their spirituality and their belief that God helps one to heal. Overall, these frequencies support the image of the boomers as the cohort more likely to respond positively to questions regarding experiential spirituality.

On the other hand, the religiosity frequencies in Table 2 indicate that the

TABLE 2

Spirituality and Religiosity Frequencies: The Baby Boomer and Cold War Cohorts (percentages reflect affirmative responses)

	Boomer Percent	Cold War Percent
<i>Spiritual Experience Scale</i>		
Miraculous experience	43.9 (165)	39.9 (59)
Spiritual figure appears	10.6 (40)	16.9 (25)
Experience with God	54.3 (204)	52.0 (77)
Close to spiritual presence	54.6 (233)	52.4 (89)
<i>Beliefs Scale</i>		
Spirituality & health connection	80.9 (304)	76.4 (113)
God helps healing	78.5 (295)	79.1 (117)
<i>Religious Activity Scale</i>		
Read Bible or scriptures		
Once a day	15.2 (57)	27.7 (41)
Few times per week	21.8 (82)	18.9 (28)
Few times per month	16.5 (62)	14.9 (22)
Few times per year	15.7 (59)	9.5 (14)
Not at all	30.3 (114)	28.4 (42)
Missing	.5 (2)	.7 (1)
Attend worship services		
Once a day	1.3 (5)	4.7 (7)
Few times per week	27.9 (105)	36.5 (54)
Few times per month	28.5 (107)	23.0 (34)
Few times per year	15.7 (59)	13.5 (20)
Not at all	26.3 (99)	21.6 (32)
Missing	.3 (1)	.7 (1)
Prayer or study group		
Once a day	3.5 (13)	3.4 (5)
Few times per week	16.8 (63)	17.6 (26)
Few times per month	13.0 (49)	14.9 (22)
Few times per year	6.9 (26)	6.8 (10)
Not at all	59.3 (223)	56.8 (84)
Missing	.5 (2)	.7 (1)
Evangelism or outreach		
Once a day	2.9 (11)	2.7 (4)
Few times per week	5.6 (21)	6.1 (9)
Few times per month	8.2 (31)	6.8 (10)
Few times per year	11.2 (42)	4.7 (7)
Not at all	71.8 (270)	78.4 (116)
Missing	.3 (1)	1.4 (2)

TABLE 2 (*Continued*)

	Boomer Percent	Cold War Percent
Pray or meditate by yourself		
Once a day	50.5 (190)	69.2 (101)
Few times per week	19.7 (74)	12.2 (18)
Few times per month	10.9 (41)	2.7 (4)
Few times per year	6.1 (23)	3.4 (5)
Not at all	12.2 (46)	12.2 (18)
Missing	.5 (2)	1.4 (2)
<i>Prayer Activity Scale</i>		
Meditate when praying	56.1 (211)	37.2 (55)
Talk to God in own words	74.2 (279)	68.9 (102)
Ask God for material things	41.8 (157)	43.9 (65)
Read from a book of prayers	22.3 (84)	23.6 (35)
Ask God/wait for reply	22.9 (86)	19.6 (29)

cold war cohort responds more affirmatively to measures of religion. The older cohort is more likely to read the Bible or scriptures on a daily basis. The older cohort also attends services more than the boomers on a daily and weekly basis. The groups' responses are fairly similar regarding participation in a prayer or study group (the cold war group reporting slightly more). The boomer's higher scores for evangelism or outreach support the literature portraying this cohort as highly active and intent on experience and participation (the younger group also possesses more physical agility and mobility). While the cold war group reports higher frequencies of individual prayer or meditation on a daily basis, once the remaining response categories are considered, we find that the boomers pray or meditate alone more frequently. The prayer activity scale shows the boomers to utilize meditation more so during prayer, and to use their own words more frequently. The image of the older cohort as more "religious" than "spiritual" is further supported by the frequency of their use of prayer books, and their tendencies to ask God for material things during prayer.

The data reveal cohort differences. The boomers tend to accept more alternative approaches to health maintenance, particularly massage and relaxation. They use a more meditative style of prayer and tend to talk to God in their own words and pray alone more frequently. Their elders, however, represent the more traditional, religious route including more worship service attendance, as well as utilization of prayer books and the tendency to ask for material things during prayer. While this information is valuable and appears indicative of each cohort, the relationships among these measurement scales can be further understood by examining the bivariate analysis.

Bivariate correlations. While the frequencies reveal descriptive differences between the two groups, it is through bivariate correlations that associational differences are revealed, suggesting the degree to which variables are related. Table 3 contains the results of the bivariate correlations for the two age groups. Concerning alternative health practices, the boomers show an association among the three factored scales. These associations are consistent with the frequency results which showed the boomers as more likely to participate in alternative health practices. In addition, as boomer participation in one form of alternative health increases, so does participation in another form, demonstrating how alternative health practices overlap for this cohort.

Interestingly, for the boomer cohort, there exists no significant correlation between alternative health practices and health evaluation. There is also an absence of significance between alternative health practices and spirituality for this cohort, contrary to the expectations of hypothesis two.

For the cold war cohort, health evaluation is negatively correlated to the extreme practices scale, suggesting that sicker individuals participate in bio-feedback and macrobiotic diets. Again contrary to hypothesis two, the cold war cohort is the group showing significant correlations between alternative health practices and measures of spirituality. The relaxation scale and the mainstream practices scale are both positively related to spiritual experience, while the relaxation scale and the extreme practices scale are positively related to religious activity.

Concerning the demographics and alternative health practices, the boomer results show no significant relationships. For the cold war cohort, the only significant relationships are with race and gender. The negative cold war figures tell us that non-whites are associated with the extreme practices scale and males are associated with the mainstream practices scale. Interestingly, for neither group was income significant.

The health evaluation correlations for both cohorts are few. For both groups we see a negative relationship to prayer, which is consistent with much of the existing prayer research. The negative relationship is not interpreted to mean that prayer somehow causes poor health, but rather, sicker individuals turn to prayer. This negative relationship regarding spiritual experience appears again for the cold war cohort. The same interpretation might be applied to this finding, suggesting that sicker (and older) individuals turn towards spiritual matters. For the boomers, higher health evaluations are associated with whites and greater income levels. For the older group, the income factor is significant but race is not.

Both cohorts show positive correlations between all religio-spiritual measures. Spiritual experience, religious activity, belief and prayer appear significantly related to one another, supporting hypothesis 5 which suggests religion and spirituality to not be completely independent of one another.

TABLE 3

Correlation Matrix: The Baby Boomers and Cold War Cohorts (Boomers are below the diagonal)

	Mainstream Practices	Relaxation	Extreme Practices	Health Evaluation	Spiritual Experience	Religious Activity	Belief	Prayer Activity	Race	Sex	Income	Education
Mainstream	1.0	-.03	-.06	.12	.16	.11	-.002	.03	-.09	-.18	-.11	-.07
Relaxation	.31***	1.0	.05	-.07	.17	.15	.14	.09	-.11	.007	.004	.12
Extreme	.24***	.15**	1.0	-.22**	.02	.18**	.03	.10	-.21**	-.004	.04	-.01
Health Evaluation	.09	.004	-.01	1.0	-.19**	-.04	-.13	-.18**	.06	.002	.29***	.05
Spiritual Experience	.01	.05	.02	-.06	1.0	.52***	.44***	.38***	-.28***	-.06	.28***	-.02
Religious Activity	-.07	-.004	-.06	-.03	.50***	1.0	.53***	.50***	-.29***	.07	-.12	.19
Belief	-.05	-.004	-.06	.02	.43***	.43***	1.0	.39***	-.15	.14	-.23**	-.01
Prayer Activity	-.05	.13**	-.03	-.08	.38***	.50***	.36***	1.0	-.25***	.26***	-.29***	-.12
Race	.07	.02	.01	.11**	-.22***	-.19***	-.16***	-.20***	1.0	-.02	.21**	.13
Sex	.05	.10	.02	-.02	.30***	.14**	.22***	.16***	-.12**	1.0	-.30***	-.19**
Income	.03	-.04	-.08	.29***	-.17***	-.08	-.14**	-.10**	.23***	-.12**	1.0	.45***
Education	.08	.02	.07	.04	-.03	.06	-.09	-.04	.12**	-.09	.34***	1.0

SEX: 0 = Male, 1 = Female. RACE: 0 = Non-white, 1 = White.

***p ≤ .001; **p ≤ .05.

Summary. Overall, the bivariate results reveal distinctions between the cohorts. For the boomers, there exist no significant correlations between alternative health practices and either health evaluation or measures of spirituality, as hypothesized. However, the cold war cohort shows positive correlations between two alternative health scales (the relaxation scale and the mainstream scale) and measures of spirituality. There also exist positive correlations between the relaxation scale and the extreme practices scale and religious activity for the elder group. These results reveal that it is within the older cohort that religio-spiritual measures and alternative health practices relate, and not necessarily in the boomer cohort. Also, neither group shows much correlation between health evaluation and religio-spiritual measures. What appear are negative relationships between health evaluation and prayer (for both cohorts), and health evaluation and spirituality (the cold war cohort only).

Regression analyses. While these associations reveal pertinent distinctions regarding the cohorts and the relationship between variables, the actual effects may be suppressed without appropriate controls. Within each cohort, the relative effect of each variable, when controlling for others, may be different. In order to flush out these differences, ordinary least squares regression analysis is used. Table 4 contains the regression results for both cohorts.

Turning first to the cold war cohort, we find no overall significance for the regression equation. With an overall F score significance of .5702, none of the independent variables contribute to an understanding of the dependent variable, health evaluation. The boomer results, however, produce a significant F at $p \leq .0001$. For this cohort, health evaluation can be further understood through an examination of one's spirituality, religion and alternative health practices. An adjusted R square of .09 confirms that, for the boomers, the linear combination of independent variables contribute to the dependent variable. Though the cold war cohort analysis lacks overall significance, the results will be juxtaposed in order to highlight cohort differences.

Significance occurs at the .05 level when the beta for any individual variable is at least twice its standard error (Miner 1983). All of the boomer cohort's independent variables are significant except for the extreme practices scale (biofeedback and macrobiotic diets) and gender. Positive and significant relationships exist for spiritual experience (beta = .02), the belief scale (beta = .09), the mainstream practices scale (acupuncture, chiropractic, herbal remedies and homeopathy) (beta = .09), race (beta = .06) and income (beta = .33). Negative relationships are associated with the prayer scale (beta = $-.06$), religious activity (beta = $-.03$), the relaxation scale (massage and relaxation techniques) (beta = $-.03$), and education (beta = $-.07$). Not surprisingly, health evaluation improves for whites and higher income levels. For the boomers, we find less education to be related to higher health evaluation while education is not significant for the elder group. Gender is not significant in the boomer results.

TABLE 4

**The Effects of Religio-Spiritual Measures on Health Evaluation:
The Baby Boomer and Cold War Cohorts**

Independent Variable	Boomer		Cold War	
	Standard Error	Beta	Standard Error	Beta
Spiritual Experience	.007	.024**	.011	-.104*
Prayer Activity	.005	-.055**	.008	-.156*
Belief	.013	.087**	.027	.121*
Religious Activity	.002	-.034**	.004	.019*
Mainstream Practices	.013		.039	
Relaxation		.091**		.144*
Extreme Practices	.012	-.031**	.02	-.117*
Race	.030	-.011	.083	.014
Sex	.021	.063*	.056	-.220*
Income	.015	.024	.028	.176*
Education	.005	.331**	.012	.129*
	.005	-.069**	.009	.006
	Sig F = 0001		Sig F = .5702	
	Adj R ² = .09		Adj. R ² = .00	

SEX: 0 = Male, 1 = Female. RACE: 0 = Non-white, 1 = White.

* $p \leq .01$; ** $p \leq .001$.

While the bivariate analysis failed to reveal a correlation between health evaluation and alternative health practices (except for the negative correlation involving the extreme practices scale in the cold war cohort), the regression analysis produces a positive relationship, within both cohorts, regarding increased health evaluations and the mainstream practices scale. Similarly, both cohort results show a negative relationship involving the relaxation scale and no significance with the extreme practices scale. It appears that when controlling for all other factors, both cohorts utilize the mainstream practices even as they view their health positively. The opposite is true concerning use of relaxation practices. In this case, it seems that both groups use these techniques (massage and relaxation) more frequently when their health evaluations are lower. These regression results show similarity among the cohorts regarding alternative health practices and the relationship to one's health evaluation, except that the results are significant only for the boomer cohort.

The prayer and belief scales, as they relate to health evaluation, also appear similar for the two cohorts. As with the bivariate correlations, prayer continues to be negatively related to health evaluation, even when controlling

for other factors. The interpretation remains the same—increased prayer seems to be associated with poorer health, but it is significant only for the boomers. Concerning the belief scale, both cohort results demonstrate that belief in the relationship between one's spirituality and one's health positively affects overall health evaluation.

The most significant cohort differences are found in the relationships among health evaluation, spiritual experience and religious activity. For the boomers, as health evaluation increases, spiritual experience increases while religious activity decreases. The cold war results reveal the opposite, though non-significant results. For the elders, as health evaluation increases, spirituality decreases and religious activity increases. In accord with hypothesis 4, significant cohort differences exist regarding the ways in which religio-spiritual measures relate to health evaluations. The assertions of Roof (1993) and Ellwood (1994) regarding the boomers movement away from traditional religious practices and towards spiritual experiences appear to be supported with these findings. We also find support for use of the INSPIRIT scale (Kass et al. 1991), or an equivalent measure which seeks to isolate spiritual experiences as opposed to reliance on religiosity measures.

As the literature review revealed, there exists some relationship between religion and health. Yet, the boomer cohort continues to separate itself from the worship habits of their parent's generation. These results show how each cohort interprets spirituality and religion and that, indeed, they differ significantly regarding their relationships with health. Staying with the interpretation which suggests that negative relationships mean sicker individuals increase their prayer, religiosity or spirituality—the boomers seem to experience the spiritual without poor health and seek out religious activity as health worsens. The opposite happens in the cold war group, religious activity increases with good health evaluations but spiritual experiences coincide with worsening health.

Overall, we find religio-spiritual and alternative health measures to be valuable predictors of subjective health evaluations. The entire equation proved significant for the boomer cohort, indicating that these variables contribute to our understanding of health. While the cold war equation lacked overall significance, the ability to make cohort comparisons remains. The regression findings show relative similarity among the cohorts regarding alternative health measures, prayer and belief. However, the cohorts split when evaluating the role of spiritual experience and religious activity as they relate to health evaluations.

Conclusions

Hypothesis 1. Alternative health practices will be positively related with measures of spirituality in both the baby boomer and cold war cohorts. *Con-*

clusion: The bivariate correlations reveal a relationship between spiritual experiences, the mainstream practices scale and the relaxation scale, for the cold war cohort only.

Hypothesis 2. The positive relationship between alternative health practices and spirituality will be more pronounced for baby boomers than for the cold-war cohort. *Conclusion:* The relationship was only evident for the cold war cohort.

Hypothesis 3. Alternative health practices and spirituality will relate positively to one's perceptions of health. *Conclusion:* Bivariate correlations indicated no significance for the boomer cohort. For the cold war cohort, bivariate only revealed significant negative relationships among spirituality and health perceptions, and the "Extreme Practices" scale and health perceptions. Multiple regression analysis revealed positive relationships, in the boomer cohort, for spiritual experience, mainstream practices and health evaluation. For the cold war cohort, the interplay among the independent variables repressed overall equation significance.

Hypothesis 4. Baby boomers will demonstrate a positive relationship between spirituality and health evaluation, while the cold war cohort will show a positive relationship between religion and health. *Conclusion:* Bivariate correlations indicated no significant relationships between these variables for either cohort. Interestingly, a significant negative relationship was found for the cold war cohort between spirituality and health perceptions. However, regression analysis supports this hypothesis—for the boomers, as health evaluation increases, spiritual experiences increase while religious activity decreases. In the cold war analysis no valid regression results were demonstrated.

Hypothesis 5. Religiosity and spirituality will not be independent of one another for the total sample. *Conclusion:* The bivariate correlations support this hypothesis. For both cohorts, as one variable increased, the other decreased, demonstrating that neither cohort experiences one without evidence of the other.

Discussion

As Ellwood (1994) argues, the era of the baby boomers brought with it the collapse of the modern and the emergence of the postmodern. With this new epoch comes the demise of the metanarrative and, inevitably, new constructions of reality. McGuire's (1988) study of healing communities, and Schneirov and Geczik's (1996) look at alternative health networks shed light on the

shifting paradigms concerning health, medicine and the role of spirituality. New meanings are taking form as these groups move away from strict reliance on a western, allotropic medical model to more holistic approaches to health which combine traditional and alternative medicines, individual responsibility and spirituality. Consistent with Berger's (1966) analysis, out of our culture have come new meanings. Similarly, Roof's (1993) analysis of the boomers and religion show tremendous shifts away from religious dogmatism and towards the "process" of spirituality.

This study has produced empirical evidence of the paradigmatic shifts these authors portray and the subsequent cohort differences that spirituality and health research should consider. The cold war cohort continues to practice their religiosity in much the same fashion as they did in the 1950's. Church or synagogue attendance is higher for this cohort, as is use of prayer books and prayer groups, and measures of religion are positively related to health perceptions.

Consistent with Roof's (1994) description of the boomers as fiercely independent and seeking a more experiential and individual spirituality, this younger cohort prays alone more frequently, using their own words and a meditative prayer style, while measures of spirituality are positively related to health perceptions. For both groups there exists a relationship between religio-spiritual matters and perceptions of health, but the meanings associated with religion and spirituality differ.

Concerning alternative health practices, both cohorts show some movement away from strictly allotropic medicine, but the boomer frequencies reveal more participation. Bivariate analyses revealed an association among the three alternative health scales for the boomers suggesting that, as they utilize one form of therapy, they are likely to try others. However, contrary to this studies' hypothesis, it is the older cohort, not the boomers, who show a relationship between alternative health practices and religio-spiritual measures. This finding provides evidence for the shifts occurring in health, from a reliance on the scientific to a more holistic model, particularly as a person ages. While it is the boomers utilizing more forms of alternative health, it is the older cohort who shows that positive relationship, as witnessed by Schneirov and Geczik (1996), between these practices and one's spiritual/religious life.

Considerations for future research. The most important consideration stemming from this study involves the cohort differences concerning spirituality and religion. Cohort analyses are noted by Levin (2002) to be an underutilized arena of study. As suggested by George et al. (2000), utilizing measures of both religion and spirituality not only provides more precise information regarding the health relationship, but also allows for an understanding of the meanings associated with these concepts. Future research might consider the social construction of such terms as "religion," "spirituality" and

even “health” when creating questionnaires. Also, by utilizing subjective health perceptions, there is an attempt to give some freedom to the respondent concerning their view of what constitutes good or bad health. McGuire’s (1988) healing communities remind researchers that health does not necessarily mean absence of disease. In the same way, cultural changes have impacted the semiotics of terms such as religion.

The negative relationships of prayer and health evaluation (both in the bivariate and regression analyses), suggests a need for further inquiry. As Poloma and Gallup (1991) argue, it is not necessarily the case that prayer *causes* dissatisfaction with one’s health, rather it is more likely that individuals who find themselves sick utilize prayer more fervently. The same may be true concerning the negative relationship, found in the regression analysis for both cohorts, of the relaxation scale and health evaluation. It appears that as individuals perceive their health to be worsening, they are prone to increase their prayer and relaxation techniques. Yet quantitative measures such as these leave us to assume such interpretations. Further inquiries, in the form of questions seeking to capture “which came first,” might reveal more information regarding these relationships. To what extent does this increase in prayer and relaxation affect one’s health perceptions after a diagnosis? At this stage we only know that as one increases (poor health), so do the others (prayer and relaxation). Different quantitative approaches, and certainly, longitudinal data, would reveal further insights.

Longitudinal studies would provide further insight into the role of time and aging in health and spirituality research. As previously mentioned, part of the problem with isolated studies in the area of health and spirituality is the missing information regarding “which came first.” With longitudinal research, data could be compiled concerning the extent to which prayer, spirituality or religious activity impact the individual after a medical diagnosis. In the same way, it would reveal how, irrespective of a diagnosis, individuals do or do not change religious or spiritual orientation as they age. According to Cox (1993), studies show that belief in God and belief in the importance of religion increases with age. However, this study has shown that, for the boomers, spirituality ranks more positively than do measures of religion. Longitudinal work would reveal whether, as one ages, he or she tends to grow more traditional in matters of religion and spirituality. The cohort impact could be further understood by tracking respondents over the life course.

As Idler (1995) observed, the knot that is religion and health is a difficult one to untangle. McBride et al. (1988) similarly noted, “spirituality may exert some influence over health, but health is also likely to influence patient’s spiritual experiences, making relationships difficult to untangle” (p. 125). This study has sought to contribute to the ongoing observance and understanding of this knot. At the same time, this work has sought to answer the call put forth by George et al. (2000) who ask for clearer definitions and conceptualizations of religion and spirituality, and for specific subgroups to be

examined in order to flesh out meanings. This work produced significant cohort differences, suggesting that different approaches to health and spirituality arise out of changing cultural conditions. An important aspect of our understanding of the knot is an appreciation of the social construction of meanings. Medical and religious realities have indeed shifted as the baby boomer and cold war cohorts have demonstrated.

References

- Aldridge, D. (1993). Is There Evidence For Spiritual Healing? *Advances: The Journal of Mind-Body Health*, 9, 4–21.
- Allport, G.W., and Ross, J.M. (1967). Personal Religious Orientation and Prejudice. *Journal of Personality and Social Psychology*, 5, 432–443.
- Benor, D.J., and Benor, R. (1993). Spiritual Healing, Assuming the Spiritual is Real. *Advances: The Journal of Mind-Body Health*, 9, 22–29.
- Benson, H. (1975). *The Relaxation Response*. New York: William Morrow.
- Benson, H. (1996). *Timeless Healing: The Power and Biology of Belief*. New York: Scribner.
- Berger, P.L. and Luckmann, T. (1966). *The Social Construction of Reality: A Treatise in the Sociology of Knowledge*. New York: Doubleday & Company.
- Betsworth, R.G. (1980). *The Radical Movement of the 1960's*. Metuchen, New Jersey: Scarecrow Press.
- Byrd, R.C. (1988). Positive Therapeutic Effects of Intercessory Prayer in a Coronary Care Unit Population. *Southern Medical Journal*, 81, 826–29.
- Charmaz, K. (1991). *Good Days, Bad Days: The Self in Chronic Illness and Time*. New Brunswick: Rutgers University Press.
- Cox, H.G. (1993). *Later Life: The Realities of Aging*. New Jersey: Prentice Hall.
- Dossey, L. (1993). *Healing Words: The Power and the Practice of Medicine*. New York: Harper Collins Publishers.
- Doster, J.A., Harvey, M.B., Riley, C.A., Goven, A.J., and Moorefield, R. (2002). Spirituality and Cardiovascular Risk. *Journal of Religion and Health*, 41, 69–79.
- Durkheim, E. (1951). *Suicide*. Translated by John A. Spaulding and George Simpson. Free Press.
- Dyer, K.A. (1996). Recognizing the Potential of Alternative Medical Treatments. *Journal of the American Medical Association*, 275.
- Eisenberg, D.M., Kessler, R.C., Foster, C., Norlock, F.E., Calkins, D.R., and Delbanco, T.L. (1993). Unconventional Medicine in the United States: Prevalence, Costs and Patterns of Use. *The New England Journal of Medicine*, January, 246–252.
- Eisenhandler, S.A. (1994). A Social Milieu for Spirituality in the Lives of Older Adults, in *Aging and the Religious Dimension*. T.L. Eugene & S.A. Eisenhandler (Eds.), Westport, Connecticut: Auburn House.
- Ellis, J.B., and Smith, P.C., (1991). Spiritual Well-being, Social Desirability and Reasons for Living: Is There a Connection? *International Journal of Social Psychiatry*, 37, 57–63.
- Ellison, C.G., Boardman, J.D., Williams, D.R., and Jackson, J.S., (2001). Religious Involvement, Stress, and Mental Health: Findings From the 1995 Detroit Area Study. *Social Forces*, 80, 215–249.
- Ellwood, R.S. (1994). *The Sixties Spiritual Awakening: American Religion Moving from Modern to Postmodern*. New Brunswick, N.J.: Rutgers University Press.
- Emblen, J.D. (1992). Religion and Spirituality Defined According to Current Use in Nursing Literature. *Journal of Professional Nursing*, 8, 41–47.
- Ferraro, K.F., and Albrecht-Jenson, C.M., (1991). Does Religion Influence Adult Health? *Journal for the Scientific Study of Religion*, 30, 193–202.
- Gallup, Jr., and G., Castelli, J., (1989). *The People's Religion*. New York: Macmillan Publishing Co.
- George, L.K., Larson, D.B., Koenig, H., and McCullough, M.E., (2000). Spirituality and Health:

- What We Know, What We Need To Know. *Journal of Social and Clinical Psychology*, 19, 102–116.
- Gorsuch, R.L. (1984). Measurement: The Boon or Bane of Investigating Religion? *American Psychologist*, 39, 228–236.
- Hargrove, B., (1980). *Religion for a Dislocated Generation*. Valley Forge, PA: Judson Press.
- Hegy, P., (1995). Baby Boomers and the Transmission of Faith. *America*, 172, 5–8 & 27–28.
- Hiatt, J., (1986). Spirituality, Medicine and Healing. *Southern Medical Journal*, 79, 736–43.
- Hill, P.C. (2000). Measurement Issues and Scales in the Scientific Study of Religion and Spirituality: A Levels of Evidence Approach. Unpublished Manuscript. Grove City College, Grove City, PA.
- Hill, P.C. and Hood, R.W. (1999) (Eds.) *Measures of Religiosity*. Birmingham, AL: Religious Education Press.
- Hill, P.C., Pargament, K.L., Hood, R.W., McCullough, Jr. M.E., Swyers, J.P., Larson, D.B., & Zinnbauer, B.J. (2000). Conceptualizing Religion and Spirituality: Points of Commonality, Points of Departure." *Journal for the Theory of Social Behaviour*, 30:51–77.
- Hoge, D.R., Johnson, B., and Luidens, D., (1994). *Vanishing Boundaries: The Religion of Main-line Protestant Baby Boomers*. Louisville, KY: Westminster John Knox Press.
- Hudnut-Beumler, J., (1994). *Looking for God in the Suburbs: The Religion of the American Dream and its Critics, 1945–1965*. N.J.: Rutgers University Press.
- Idler, E.L., (1987). Religious Involvement and Health of the Elderly: Some Hypotheses and an Initial Test. *Social Forces*, 66, 226–238.
- Idler, E.L., (1992). Self-Assessed Health and Mortality: A Review of Studies. *International Review of Health Psychology*, 1, 33–54.
- Idler, E.L., (1994). *Cohesiveness and Coherence: Religion and the Health of the Elderly*. New York: Garland Publishing, Inc.
- Idler, E.L., (1995). Religion, Health, and Nonphysical Senses of Self. *Social Forces*, 74, 683–704.
- Idler, E.L., (1999). The Meanings of Self-Ratings of Health. *Research on Aging*, 21, 458–476.
- Jarvis, G.K., and Northcott, H.C., (1987). Religion and Differences in Morbidity and Mortality. *Social Science in Medicine*, 25, 813–824.
- Jeffers F.C., and Nichols, C.R., (1961). The Relationship of Activities and Attitudes to Physical Well-being in Older People. *Journal of Gerontology*, 16, 53–56.
- Kass, J.D., Friedman, R., Leserman, J., Zuttermeister, P.C., and Benson, H., (1991). Health Outcomes and a New Index of Spiritual Experience. *Journal for the Scientific Study of Religion*, 30, 203–211.
- Kaplan, B.H., (1976). A Note on Religious Beliefs and Coronary Heart Disease. *Journal of South Carolina Medical Association*, 72, 60–64.
- Kirkpatrick, L.A., and Hood, R.W., (1990). Intrinsic-Extrinsic Religious Orientation: The Boon or Bane of Contemporary Psychology of Religion? *Jr. for the Scientific Study of Religion*, 29, 442–462.
- Koenig, H.G. (1999). *The Healing Power of Faith: Science Explores Medicine's Last Great Frontier*. New York: Simon & Schuster.
- Koenig, H.G., Smiley, M., and Ploch-Gonzales, J.A., (1988). *Religion, Health and Aging*. New York: Greenwood Press.
- Larson, D.B., Wood, G.G., and Larson, S.S., (1993). A Paradigm Shift in Medicine Toward Spirituality? *Advances: The Journal of Mind-Body Health*, 9, 39–49.
- Levin, J.S., (1989). Religious factors in Aging, Adjustment and Health: A Theoretical Overview. In *Religion, Aging and Health: A Global Perspective*. W. M. Clements (Ed.), New York: Haworth.
- Levin, J.S., (Ed.), (1994a). *Religion in Aging and Health: Theoretical Foundations and Methodological Frontiers*. Thousand Oaks: Sage Publications.
- Levin, J.S. (1994b). Religion and Health: Is There An Association, Is It Valid, And Is It Causal? *Social Science and Medicine*, 38, 1475–1482.
- Levin, J.S. (1998). Religion, Health, and Psychological Well-Being in Older Adults. *Journal of Aging and Health*, 10, 504–531.
- Levin, J.S., (2002). Prayer, Love and Transcendence: An Epidemiologic Perspective. Presented at the 16th Annual Conference on Social Structures and Aging. Pennsylvania State University, State College, PA (Oct.).
- Levin, J.S., and Markides, K.S., (1985). Religion and Health in Mexican Americans. *Journal of Religion and Health*, 24, 60–69.

- Levin, J.S., and Schiller, P.L., (1987). Is There a Religious Factor in Health? *Journal of Religion and Health*, 26, 9–36.
- Levin, J.S., and Taylor, R.J., (1997). Age Differences in Patterns and Correlates of the Frequency of Prayer. *The Gerontologist*, 37, 75–81.
- Levin, J.S., Vanderpool, H.Y., (1987). Is Frequent Religious Attendance Really Conducive to Better Health?: Towards an Epidemiology of Religion. *Social Science and Medicine*, 24, 589–900.
- Marwick, C., (1992). Alternative Therapies Study Moves Into New Phase. *Journal of the American Medical Association*, 268.
- Matthews, D., (1993). *The Faith Factor*. New York, New York: Penguin Putnam, Inc.
- May, E.T., (1988). *Homeward Bound: American Families in the Cold War Era*. New York: Basic Books, Inc.
- McBride, J.L., Arthur, G., Brooks, R., and Pilkington, L., (1998). The Relationship Between a Patient's Spirituality and Health Experiences. *Family Medicine*, 30, 122–126.
- McGuire, M.B. (1988). *Ritual Healing in Suburban America*. New Brunswick: Rutgers University Press.
- Micozzi, M.S. (1996). The Need to Teach Alternative Medicine. *The Chronicle of Higher Education*, 42, 48.
- Miller, T., (1991). *The Hippies and American Values*. Knoxville: The University of Tennessee Press.
- Mirer, T.W. (1983). *Economic Statistics and Econometrics*. New York: Macmillan Pub.
- Office of Alternative Medicine. (1997). <http://altmed.od.nih.gov/oam/about/general.shtml> (Sept.).
- Payne, B.P., and McFadden, S.H., (1994). From Loneliness to Solitude: Religious and Spiritual Journeys, in *Aging and the Religious Dimension*. L.E. Thomas & S.A. Eisenhandler (Eds.), Westport, Connecticut: Auburn House.
- Poloma, M.M. (1993). The Effects of Prayer on Mental Well-Being. *Second Opinion* 18:37–51.
- Poloma, M.M. and Gallup Jr., G.H., (1991). *Varieties of Prayer: A Survey Report*. Philadelphia PA: Trinity Press International.
- Poloma, M.M., and Pendleton, B.F., (1989). Exploring Types of Prayer and Quality of Life: A Research Note. *Review of Religious Research*, 31, 46–53.
- Poloma, M.M., and Pendleton, B.F., (1991). The Effects of Prayer and Prayer Experiences on Measures of General Well-Being. *Journal of Psychology and Theology*, 19, 71–83.
- Reed, P. (1986). Religiousness in Terminally Ill and Healthy Adults. *Research in Nursing and Health*, 9, 35–41.
- Reissman, F., (1994). Alternative Health Movements. *Social Policy*, 24, 53–57.
- Roof, W.C., (1993). *A Generation of Seekers: The Spiritual Journeys of the Baby Boom Generation*. San Francisco: Harper Collins.
- Roozen, D.A., Carroll, J.W., and Roof, W.C., (1995). Fifty Years of Religious Change in the United States, in *The Post War Generation and Established Religion*, W.C. Roof, J.W. Carroll, & D.A. Roozen (Eds.), San Francisco: Westview Press.
- Schneirov, M., and Geczik, J.D., (1996). A Diagnosis For Our Times: Alternative Health's Submerged Networks and the Transformation of Identities. *The Sociological Quarterly*, 37, 627–644.
- Sherrill, K.A., and Larson, D.B., (1994). The Anti-Tenure Factor in Religious Research in Clinical Epidemiology and Aging, in *Religion in Aging and Health*, J.S. Levin (Ed.), Thousand Oaks: Sage Publication.
- Silverman, M., (2000). The Meaning of Healthy and Not Healthy: Older African Americans and Whites with Chronic Illness. *Journal of Cross-Cultural Gerontology*, 15, 39–156.
- Slater, W., Hall, T.W., and Edwards, K.J. (2001). Measuring Religion and Spirituality: Where are We and Where are We Going? *Journal of Psychology and Theology* 29, 4–21.
- Steensland, B., Park, J.Z., Regnerus, M.D., Robinson, L.D., Wilcox, W.B., and Woodberry, R.D., (2000). The Measure of American Religion: Toward Improving the State of the Art. *Social Forces*, 79, 291–318.
- Taylor, R.J., and Chatters, L.M., (1991). Non-organizational Religious Participation Among Elderly Blacks. *Journal of Gerontology: Social Sciences* 46, S103–S111.
- Thomas, L.E., and Eisenhandler, S.A. (Eds.), (1994). *Aging and the Religious Dimension*. Westport, Connecticut: Auburn House.
- Zuckerman, D.M., (1984). Psychosocial Predictors of Mortality Among the Elderly Poor. *American Journal of Epidemiology*, 119, 410–423.