AN ANALYSIS OF THE FIELD OF SPIRITUALITY, RELIGION AND HEALTH (S/RH)

David J. Hufford, Ph.D.

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LEXICAL PROLOGUE

The difficulty of clearly and concisely stating the distinctions and relationships between *spirituality* and *religion* runs through the field of spirituality, religion and health and necessarily through this analysis of the field. The issue will be dealt with in some detail below. But even to begin this essay requires the establishment of a simple and non-controversial convention for the use of the terms. Without suggesting that this solves the problems of terminology I will stipulate the following definitions:

Spirituality = personal relationship to the transcendent
Religion = the community, institutional, aspect of spirituality

Thus spirituality is the more general term, it includes religion, and spirituality is a core aspect of religion. This does not deny that there are "spiritual but not religious" individuals or that extrinsically religious people may not be especially spiritual. For ease of reference I will use "S/R" to indicate the broad domain, and I will use S/RH to indicate the "field of spirituality, religion and health."

ASSIGNMENT

The assignment for this review is to discuss the state of the field of S//RH, including successes but emphasizing current limitations, key problems, methodological shortcomings of current research and related issues relevant to moving the field forward. This greater emphasis on problems should not be taken to indicate fundamental flaws in the field. Considering its abrupt and recent emergence as a field, S/RH has a remarkable track record.

METHOD OF THIS REVIEW

This review began with the assumption that most S/RH studies published through 1999 were identified by Koenig et al. In their *Handbook of Religion and Health*, given their very thorough search strategy(2001:6) which had yielded approximately 1600 references. (Although a small number of references from the year 2000 are included in their bibliography, it seems that the cut-off for thorough coverage was the end of 1999.) To supplement this material, in February 2005 several searches of Ovid MEDLINE were carried out to identify health outcome studies involving spirituality and/or religion for the year's 2000 to the present. These searches combined the search terms "health outcome" OR "pregnancy outcome" OR "exp treatment outcome" OR "Outcome Assessment (Health Care)", with either "spirituality OR Spiritual Therapies" or "religion." The spirituality and the religion searches were carried out separately.

The "spirituality and health" search yielded a total of 323 references. The "religion and health" search yielded 219. Of the total of 542 references, 103 were duplicates, leaving a set of 439 references on spirituality and/or religion and health outcomes, indexed on MEDLINE for the years 2000 through February 2005. These were compared to Koenig et al.'s bibliography and no overlap was found. Further examination showed that the results from the "spirituality" search had included 111 hom(o)eopathy references. A separate search of these references located no use of either "spiritual" or

"religious" terms in the titles or the abstracts, so these were deleted, leaving 328 references. An additional 30 references lacking specific religion or spirituality references were culled, including several referring to traditional African healing practices without specific spiritual references, another topic included by MEDLINE under *Spiritual Therapies*. Several additional references without explicit spirituality or religion content were found on further examination, including several acupuncture studies. These were also removed, leaving a set of 287. Materials already in my files, results from several tightly targeted additional searches (e.g. "spirituality or religion and health"), plus selected references from Koenig et al.'s *The Handbook of Religion and Health* (2001), and Kenneth L. Pargament's *Religious Coping* (1997) were then added manually to complete the set. It is clear that this strategy does not locate every relevant study. However, it does compile materials that may be said to define the core of the field. The problems involved in searching for all relevant work are discussed below under weaknesses of the field (especially **Scope** and **Informatics**).

BACKGROUND

A powerful relationship between spirituality and health has been assumed by most societies through history, until the late nineteenth century in the Western world. The emergence of modern scientific medicine was accompanied by the abandonment of vitalism and an explicit and intentional disentanglement from religion. The growing acceptance of the idea of antipathy between science and religion, urged on by polemics such as Draper's *History of the Conflict Between Religion and Science* (1874) and White's *A History of the Warfare of Science with Theology in Christendom* (1896), encouraged the idea that religion had no appropriate place within medicine. By the time that American medical schools had been reformed along scientific lines, following the Flexner Report in 1911, and medical research in the modern sense had begun to take shape, religion and spirituality had been either expunged from medical attention or neatly submerged as a variety of psychopathology within the new field of psychoanalysis (Hufford 2003). When religion was discussed within medicine it was typically as a problem, as in the beliefs of Jehovah's Witnesses about blood transfusions as an obstacle to good care.

But the S/RH connection was resurgent in the United States by the 1960s, as Neo-Pentecostalism and the Charismatic Movement grew in influence (Harrell 1975). By the mid-1970s Christian healing had a firm place within virtually every denomination. In response to these changes in the larger society, growing consumer pressure, and the implicit connection of spirituality with the emerging interest in "complementary and alternative medicine," medicine's relationship with religion and spirituality had become a central issue in medical research and practice by the 1990's. These historical and social factors that have produced the current interest in S/RH are more than the necessary precursors to scientific research on the topic. They are an integral part of what that research must investigate and come to understand.

Research on the relationships among religion, spirituality and health has grown dramatically over the past decade. It is clear from the literature that many in research, in health care, in the public, and in government, believe that important positive connections have been established and should be vigorously studied. It is also clear that others are

unconvinced and even hostile to the subject. It is not surprising that such a deeply felt subject should be controversial when it makes its way into a field such as medicine. Nor should it be surprising that such a complex topic as spirituality and religion, having been left out of scientific inquiry for so long, should prove difficult to study with the methods of science. Yet there actually can be no serious question about *whether* religion and spirituality have important connections to health.

Religious teachings, values and beliefs are powerful influences for many Americans regarding reproductive health, end of life decisions (just consider the recent Terri Schiavo case!), and behaviors such as smoking and drinking alcohol. Sickness and injury immediately elicit prayer and the fundamentally religious question "Why me?' from a majority of Americans, as they have for people around the world throughout history. Survey data has made it very clear that these connections are salient and important to most Americans. The question is not *whether* connections exist, but rather what are those connections and what are their effects. While some of the basics of religion may be metaphysical, the connections between religious behavior and health are empirical. Empirical questions are subject to scientific inquiry, and empirical questions with high value in society that have bearing on mortality and morbidity *should* be studied scientifically.

CRITICISMS AND RESISTANCE

As S/RH has emerged and become a robust area of research and publication within mainstream academic circles and in the peer-reviewed literature, there has developed a substantial backlash. Just as some were dissatisfied with the predictions of religion's demise in modernity and its absence from serious public discourse, others found those developments good and hopeful for humankind and the current changes maddening. It should be no surprise to find that there are diverse and strongly held views on religion and related topics. I have put this comment here, because it is hard to know whether to consider the vigorous resistance a strength or a problem for the S/RH field. One often wishes the disputes were less partisan and more civil, but we should be glad that strong opinions are expressed and can be responded to. The resistance that prevented research on S/RH was a bad thing. But now that the field has emerged and found substantial support, resistance can have a salutary effect. Both pro and con positions call for scrupulous scholarship and critical thinking. I have intentionally omitted reference here to examples of what I would consider "backlash" simply because it seems healthier not to separate these reactions from the rest of the discourse through which we hope to achieve a better understanding of this fundamental aspect of human behavior.

PROBLEMS AND NEEDS IN SPIRITUALITY, RELIGION AND HEALTH RESEARCH

Scope & Boundaries of the Field

The greatest strength of the S/RH field is the fact that it arises from and reflects powerful cultural forces in American society, and this is also a source of some of the field's major problems. Neither religion nor spirituality died out in America during the twentieth century, despite confident predictions of its demise, and Christianity faced the

twenty-first century as a major force in the modern world. The other religions of the world, both the world religions and "local religions," are also showing great vigor. A part of this process has involved the reconnection of health care with spirituality. Historically related on intimate terms and then intentionally divorced as modern biomedicine developed in the latter half of the nineteenth century, the two domains seem to be engaged in a process of reconciliation. The process has not been led by either medical or religious authorities but rather by popular demand. This dramatic change in attitude and its broad popular support have allowed researchers who value religion and spirituality to pursue research and publication that twenty years ago would have cost them their careers, as pointed out by Sherrill and Larson in their 1994 essay, "The Anti-Tenure Factor in Religious Research...." This popular demand has powerful political dimensions and has allowed rapid changes from the National Institutes of Health to university faculties to the process of peer review in scientific and medical journals. Whether one applauds this shift (many do) or abhors it (as many others do), it is an undeniable and intensely interesting fact of contemporary life. Such a dramatic contradiction of social science predictions deserves study. The question cannot be *whether* spirituality and health should be studied, but must rather be *how* the topic should be studied.

The current configuration of the S/RH field reflects powerful social forces in contemporary America. The rise of religion's salience in American culture allowed those with strong religious commitments an increased voice in public life outside their congregations. This is as true, obviously, of other areas of American life, for example politics, as it is of American health care. In itself this is a good thing as suggested by Stephen L. Carter's provocative work *The Culture of Disbelief: How American Law and Politics Trivialize Religious Devotion* (1993), and in medicine this change has brought to light influential but unexamined aspects of health behavior. But just as in other domains of American life these changes in medicine are shaped by forces of social and cultural construction that are largely invisible to those affected (consider the different impacts in politics and the academic world). These changes have been sudden and dramatic, and the S/RH field has not had an opportunity to develop a rich and critical interdisciplinary discourse. The result is a field that is limited to a few specialties, particularly medicine (speaking broadly, with a special emphasis in psychiatry, primary care, oncology and cardiology) and psychology, and that tends to incorporate the particular religious and spiritual commitments of investigators and their critics in what are intended to be scientific discussions.

The S/RH field is selectively focused on mainline Protestant Christian religion. It emphasizes interventions, but it has carried out primarily epidemiological and other observational research that is difficult to use in the development of specific clinical uses. It has ignored the spiritual and religious interests of large segments of American society in order to remain within what can only be called the most conventional aspects of this new and scientifically unconventional topic. And it has not sought out collaborative intellectual relationships with researchers in obviously relevant fields such as religious studies, the history of religion and the history of medicine, anthropology, philosophy, linguistics and a variety of other disciplines that could be of great assistance to the field. This does not seem to be an intentional exclusion, and it must be said that it has taken those in these related fields a long time to notice the S/RH developments that should have caught their attention at least a decade ago. Perhaps most surprisingly, the S/RH field has

not emphasized collaboration in research and practice with the one discipline that has always labored to understand and deliver S/R "interventions" in health settings, chaplains. This all reflects the sudden, dramatic and unexpected nature of these social and cultural changes. In the sections that follow I will touch on some of the more obvious lacunae in the S/RH field, gaps that must be filled for the field to mature.

NOTE: For the longer sections below I have provided a brief summary of the argument at the beginning.

Scholarship

SUMMARY: Because of the rapid emergence of S/RH as a field, beginning primarily within medicine and psychology, and because disciplines that have traditionally studied religion have not systematically studied issues in terms of relevance to health, S/RH lacks a broad, interdisciplinary base of scholarship. Because of the great cultural and linguistic complexity of S/RH in American society, this lack of scholarship has created serious problems. Many of these are reflected in the "shape" of the field, which entirely omits topics that are conceptually important to the goals of RH research.

The field of S/RH research is quite new, not much more than a decade old, but growing rapidly. The study of religion, of course, has existed since ancient times and is well represented in several contemporary fields. But those fields, such as theology, religious studies, and the sociology and the history of religion have paid relatively little attention to healing, almost none to issues of direct clinical relevance. Ironically, the recent surge of interest in spirituality and health has come not from the disciplines that have historically studied religion, but rather from medicine and psychology, disciplines that either ignored or stigmatized the topic in the past. The result is a field of inquiry that, unlike medicine or the sciences, has almost no scholarly infrastructure.

Scholarship, though by definition not science in itself,[1] is essential to a mature scientific field, especially in the life sciences. Such disciplines as ethics and history do not simply use health data to develop their own methods and theories. The work of such disciplines directly shapes and supports the work of the sciences they study. Medicine has evolved along with such fields as the history of medicine, philosophy of medicine, bioethics and medical sociology. This scholarship has been formative and has been necessary to the maturity of the field. For example, medical research and practice have been changed forever by the development of the doctrine of informed consent, a concept rooted in legal and historical context and articulated in its modern form in the 1960s. Partly in response to the revelations of the Nuremberg War Crimes Trials, informed consent affected research design and was further refined after the public revelation of what has been called "the Tuskegee Syphilis Study." Such concepts as clinical equipoise and the inclusion of the patient's view (often largely shaped by religious beliefs and values) in the analysis of risks and benefits, have engaged scholars in both the humanities

[1] *Scholarship* is a complex term. I use it here in its most conventional sense as referring to work in "the humanities" (DeVinne et al. 1982:1098, "*scholar*"), or "orig. esp., in the classics, now in languages, literature, or any non-scientific subject" (Brown 1993:2713).

and the social sciences. And the work of those scholars has shaped medical research and practice in important ways. The maturity of the field of medicine cannot be separated from the scholarship of the humanities and social science fields that comprise its intellectual surround. Today physician scholars, like physician scientists, are increasingly important. Physicians and Ph.D. scholars are colleagues and collaborators, and their disciplines productively engage one another.

Ironically scholarship in the field of S/R and health is scarce, even though it was scholarly research that gave spirituality and health much of its initial impetus. The systematic analyses of religious variables in psychiatric journals by Larson et al. in 1986 and Craigie et al. in 1988 helped to simultaneously establish the importance of religion in the health literature and the inadequacy of its past treatment. But since that time scholars in relevant fields have continued to pay little attention to spirituality and health and spirituality and health researchers have made little progress in broadly incorporating sophisticated scholarship into the field. This should be understood as a natural consequence of the abrupt emergence of the field within medicine, not a criticism of the individuals involved. Nonetheless, those scholars who have studied and written on S/RH topics should receive more attention than they have (for example, Dossey, 1993, 1999, 2000; Frohock 1992; Fuller, 1989, 2001; Gardner 1983).

Language

> **SUMMARY: The S/RH field has experienced major problems in defining and distinguishing *religion* and *spirituality*. These problems result from the lack of a solid base of relevant scholarship and the difficulty of coming to terms with those core aspects of spirituality and religion that led so many academics to predict its demise: a focus on the reality of *spirit* – as opposed to simply “a higher power” or matters of “ultimate concern.”**

Difficulties in dealing with the meaning of the terms *religion* and *spirituality* comprise a serious weakness in the S/RH field. To the extent that these core terms are not used appropriately and consistently, the field will face serious shortcomings in validity and coherence. This weakness arises directly from the lack of scholarly infrastructure noted above. For example, in Larson, Swyers and McCullough’s (editors) *Scientific Research on Spirituality and Health: A Consensus Report* (1997) the “Definitions of Religion and Spirituality section begins with the following statement:

> “An immediate consensus among Panel members was the need to ground definitions of religion and spirituality in scientific and historical scholarship.” (p. 15)

But of 21 panel members, judging from the contributors list, only one has a humanities appointment (holding an endowed chair of Liberal Arts), one is a sociologist and the remainder hold medical or psychology appointments. The panel members are excellent researchers, but that does not make them linguists, historians or philosophers. The resulting definitional criteria suffer from a lack of broad, interdisciplinary scholarship. Both center on “a search for the sacred.... The term ‘sacred’ refers to a divine being or

Ultimate Reality or Ultimate Truth as perceived by the individual." (P. 21) Religion is understood to possibly involve "non-sacred goals" such as "meaning" in a primarily sacred seeking context *plus* "The means and methods of the search" validated and supported by a group. As George et al. say, while approving of them, they are "highly abstract definitions that do not lead to straightforward operationalization" (2000:105). In *The Handbook...* Koenig, Larson and McCullough further develop the concepts from the *Consensus Report*, giving the following definitions:

> *Religion*: Religion is an organized system of beliefs, practices, rituals, and symbols designed (a) to facilitate closeness to the sacred or transcendent (God, higher power, or ultimate truth/reality) and (b) to foster an understanding of one's relationship and responsibility to others living together in a community.
> *Spirituality*: Spirituality is the personal quest for understanding answers to ultimate questions about life, about meaning and about relationship to the sacred or transcendent, which may (*or may not) lead to or arise from the development of religious rituals and the formation of community. (2001:18)

At this point the problem of abstractness and difficulty of operationalizing have not been solved!

There has been a great deal of agonizing over these two terms in the field. It has been recognized that usages in published work are inconsistent, even within the writings of single authors. It has been suggested that due to recent changes *religion* has come to be viewed too narrowly while the meaning of *spiritual* has become "fuzzy" (Zinnbauer et al. 1998). Definitions of the terms have been called "vague and contradictory" (Egbert, 2004:8). There have been complaints that the meanings of each have changed over time (Pargament 1996; Zinnbauer 1997).

The central problem is one that occurs regularly when scientific fields appropriate natural language terms. Natural language is inherently ambiguous. Meanings shift, expand and contract as words travel in different speech communities. For words employed as technical terms this is a problem. Medicine could not use the words *virus* and *bacteria* in the loose, overlapping senses that these technical terms have acquired in ordinary speech. But when the words originate in natural language, and where, as in S/RH, the intent is to understand human behavior through language-based methods (surveys, interviews, etcetera), the issue is different. To the extent that operationalized definitions meet the conceptual criteria of investigators they often lose the meanings that they have in ordinary speech. The result is equivocation and loss of validity. The S/R literature often seems to suggest that investigators are seeking the *correct* meaning of these terms with the assumption that their colloquial usages are somehow incorrect, mistaken like colloquial use of "virus" to mean "germs" in general. But for naturally occurring language the only correct meanings are those found in customary usage, and the correct meaning, as Emblen concisely points out "depends on how the ambient community commonly uses the terms" (Emblen 1992:41). The community usages are

discovered through lexical[2] research that is based on the observation of substantial numbers of naturally occurring usages.

Although some of the published literature discussed includes studies of personal meanings of terms (especially Zinnbauer et al. 1997), I have not found a single lexical study in the S/RH literature. Zinnbauer et al. asked a diverse sample of Pennsylvanians to define spirituality and religiousness and to choose the degree with which respondents would apply each term to themselves, using a 5-point Likert-type scale (551-552). The sample, though diverse, is not representative of any specifically identifiable speech community. More importantly, this method, though interesting, is not lexicology. It does not analyze a corpus of naturally occurring speech. Compare the results of asking the average person for a definition of any word in ordinary speech with those of inferring meaning from a sample of actual usage. There is often a relationship, but there is no reliable and consistent unity of meaning. Giving definitions is not an ordinary speech act, and words laden with strong emotional and cultural connotations are those that are most difficult for speakers to accurately define. One need only compare the effort of giving a definition of a term such as *love* to the task of analyzing naturally occurring uses of the word to understand the difference.

Efforts to arrive at an appropriate definition of spirituality have been most common in the nursing literature (e.g. Emblen, 1992; Dyson, 1997; Narayanasamy, 1999). Several of these have involved the analysis of a corpus of usage by authors of published papers. For instance, Unruh et al. (2002) reviewed the usage of the word *spirituality* in a variety of disciplines. The investigators inferred the inherent definitions in a variety of published works on *spirituality*, and then analyzed usages thematically. This approach is a kind of lexical research, but it investigates the usages of professionals as expressed in the peer-reviewed literature. Such studies describe the meanings of "experts." But what is needed for validity in studies of patient populations is specifically the meanings of *non*-experts. This lexical research is more difficult, since a corpus of research articles is more easily obtained than is one of the naturally occurring speech of ordinary speech communities.

One problem that the expert meanings display is the incorporation of a great deal of description into their definitions, and this is what renders them so complex and abstract. Definitions should state minimum characteristics that are always true of what is being defined. Descriptions note aspects of defined things that are often but not always true. Mammals are *defined* by being warm-blooded vertebrates. They may be *described* as typically livings on land—but some, such as whales, do not. Descriptors are generally probabilistic in this way. The descriptive material is not only unnecessary at the point where definition is needed, it misleadingly bundles theory and interpretation into definition, and this creates bias. For example, the definitions of the *Consensus Conference* and *The Handbook* noted above both use the term *ultimate* in their definition of religion. This comes from the definition of religion used by the famous theologian Paul Tillich: "the object of ultimate concern" (1952). But what if a man is a member of the Methodist Church, but he is more concerned with the wellbeing of his family, or the good of his country, or perhaps even football, than the divine or anything else connected

[2] *lexicology* is the branch of linguistics that studies vocabulary, the meaning of words derived from observations of their usage; *lexicography* is the discipline that creates dictionaries, describing the findings of lexicology.

with his church? Would we say that Methodism is "not his religion"? If you ask him his religion he says "Methodist" or perhaps "Christian." Do we say he is wrong because he doesn't care enough? Maybe he cares quite a bit, but just not *ultimately*. In a similar vein some authors have suggested that while God is a key element in S/R, religion "is whatever an individual takes to be of highest value in his/her life" (Dyson, 1997:1183). This takes a long step away from what is meant by God, and by implication spirituality and religion, in the speech of most Americans, reminiscent though it is of AA's "higher power." When we say "Money is Smith's God," we are speaking metaphorically.

Defining spirituality as a "quest" encounters the same problem. If a woman has found the sacred and rests comfortably within that, perhaps feeling at home, is this no longer her spirituality? Are only "seekers" spiritual? It seems right to apply ultimacy descriptively to religion and questing to spirituality, but they do not belong in a definition that will be used in attempting to elicit information from samples whose understandings derive from colloquial usage.

The odd thing about the inconsistency, vagueness and worry by investigators over these terms is that they do have consistent, concise meanings in ordinary speech, and they relate to one another in a perfectly ordinary way. We are accustomed to pairs of words such as *learning* and *education*, or *health* and *medicine*, where the former word identifies a broad domain and the second word refers to an institutional aspect of that domain. We know that not everything in education is about learning, and not everything in medicine is about health. In each case there are also financial issues, characteristic social roles, and so forth. Not all learning happens in schools and not all health behavior takes place in clinics or hospitals. *Spirituality* and *religion* stand in the same relation.

Spirituality refers to the domain of *spirit(s)*: God or gods, souls, angels, djinni, demons. In short, this is what was once called the "supernatural" (and still is by many English speakers). When spirituality refers to something else it is by metaphorical extension to other intangible and invisible things, such as ideas, as in "team spirit" or the "spirit of democracy," or as in 17th century chemistry and anatomy where the "*animal spirits*" that move through the nerves are a class of highly refined, invisible particles analogous to those emitted by volatile liquids such as alcohol—thus, "wines and spirits."[3] How can we be confident of this customary meaning? New lexical research would be good, but the existing scholarship is quite adequate. For example, Walter W. Skeat's classic *An Etymological Dictionary of the English Language* (1909) defines spirit as follows:

> breath; the soul, a ghost, enthusiasm, liveliness, a spirituous liquor. (F.–L.) The lit. sense is 'breath,' but the word is hardly to be found with this sense in English. ME.

This definition has the additional benefit of clearly indicating a domain that is conceptually distinct from the referents of psychological language. This is important because so many of the definitions that center on ultimacy and meaning tend to erase the distinctions that ordinary speech makes between spirituality and feeling in general. The following definition is a clear example:

[3] See, for example, Rousseau's account of Thomas Willis' neurology (Rousseau, 1990:107-146).

> I see spirituality as that which allows a person to experience transcendent meaning in life. This is often expressed as a relationship with God, but it can also be about nature, art, music, family, or community--whatever beliefs and values give a person a sense of meaning and purpose in life. (Puchalski, 2000:129)

Another example is the widely used FACIT-SBI, which focuses on purpose and meaning in life, peacefulness and taking comfort in faith. Definitions that focus on broad psychological categories lose specificity and divergent validity, tend to conflate religiosity and spirituality, and they fail to refer directly to what the population at large means by the term.

The distressed patient who feels an illness is punishment by God (a spirit) is referring to a kind of spiritual distress. If they have been cut off from valued opportunities for worship and for pastoral care (institutional sources of spiritual support), they have a religious (and spiritual) problem. It does not matter whether the investigator assumes that all such distress is "really" psychosocial in origin. Calling the distress *spiritual* should not commit us to a theory about the ontological status of the human soul! And whether such distress is ever objectively distinguishable from other anguish is an open empirical question. The meaning, *for the patient*, is spiritual and religious, and that is where our understanding of its causes and remedies has to begin.

It is sometimes suggested that *spirit(s)* comprise a Western category and that some traditions, Buddhism being an often cited example, lack the concept. But as long as the concept is kept simple in definition this is not a valid criticism. The concept of reincarnation in Buddhism may not involve a concept analogous to the Western idea of a soul in some of its versions, but it nonetheless does involve *something* invisible and intangible that is a kind of essence of the person that reincarnates.

Part of the complexity of this topic is that its point of reference, *spirit(s)*, is contested. The investigator can neither observe spirit nor assume that it exists. But that should not be a unique problem. The field has shown the ability to investigate belief in an afterlife and the consequences of that belief, such as its influence on death anxiety (e.g., Alvarado, 1995), without having to take a stand for or against the reality of the afterlife.

Religion, then, is the institutional aspect of spirituality. Religions are institutions organized around the idea of spirit. With this simple definition the criticism that religion, like spirit, is a culture-bound Western term does not hold up. It is sometimes claimed that Buddhism is not a *religion*, sometimes defended on the basis that it is not theistic. Even apart from the fact that much of Buddhist belief and practice around the world *does* involve gods, clearly Buddhism is an institution organized around such ideas as reincarnation and Nirvana and it teaches practices that affect the intangible part of the human, the part that progresses or degenerates, that approaches enlightenment and Nirvana.

The simple definitions of spirituality and religion work cross-culturally and they certainly encompass the domains that S/RH research seeks to address. They are what most English speakers mean when using the words. Despite the simple definitions, these concepts are multidimensional and they have many aspects that can be explored. The description of the beliefs, values and behaviors involved in religion and spirituality is enormous. And if one accepts these definitions as referring to a concept that underlies the behaviors of interest in this field, that does not mean that each survey question about

spirituality or religion needs to use the word, anymore than every question in a health assessment needs to use the word health. Spirituality under this definition could, for example, be readily explored among people who state sincerely that they "are not spiritual," just as surely as we could inquire about a person's affection for his country even if he insisted he was not a "patriot."

Concerns about the difference between spirituality and religion often include the historical assertion that the distinction itself is new. George et al, for example, say that "it is only recently that spirituality began to acquire meanings separate from religion" (2000:103). The source they cite concerning the forces that pried spirituality loose from religion is Philip Sheldrake's book, *Spirituality and History* (1998) in which he gives as the basic meaning of spirituality "the theory and practice of the Christian life" (pp. 40-41). This example illustrates why, during times of religious conformity, spirituality—understood as correct or orthodox spiritual belief and practice—would be coterminous with if not identical to, religion. The development of religious dissent and pluralism lead to a multiplication of spiritual views that, seen from within any orthodox religious framework, will seem eccentric at best and perhaps not "authentically spiritual." But we should not exaggerate the newness of this phenomenon in America. As Robert Fuller points out, in the late 1600's less than 1/3 of colonist adults were church members, and by the time of the Revolutionary War this had dropped to about 15%. Hector St. John de Crevecoeur wrote that "religious indifference is...at present one of the strongest characteristics of the American people" (cited in Fuller 2001:13). Nonetheless, the colonists were avidly spiritual in their orientation, engaging in astrology, divination, folk healing practices that were fundamentally spiritual, decried by colonial clergy as wicked and heretical, and influenced by the Freemasons (most of the men who signed the Declaration of Independence were Masons) and Rosicrucianism. And during the 19th century movements from Transcendentalism to Mesmerism, New thought and spiritualism flowered in the United States (Fuller 2001:13-44; see also Butler, 1990). Spiritual language was widely used in all of these discourses. Whether anyone used the words, many 18th and 19th century Americans clearly were "spiritual but not religious," as that phrase is used today. This strand of unchurched American spirituality is what Sydney Ahlstrom has called "harmonial piety" (1972), and its message, summarized by Fuller as being that "spiritual composure, physical health, and even economic well-being are understood to flow from a person's rapport with the cosmos" (2001:51) is readily recognizable in today's "spiritual but not religious" as well in a number of religious messages.

This history, in contrast to the common historical assertions made in discussions of S/R terminology, should raise the concern that to some extent the tension between the terms reflects the diversity of theological points of view among investigators and implicit biases for or against religious orthodoxy. I will return to this below, in connection with the S/RH field's lack of attention to minority religious views.

S/RH and Complementary and Alternative Medicine (CAM)

SUMMARY: Both S/RH and CAM research have recently emerged among health researchers from a history of neglect, marginalization and stigma, and both currently strive with considerable success for legitimacy. Basically all

> **S/R health interventions (not all S/RH practices) fit the conventional definition of CAM. The best quantitative studies of CAM utilization show strong associations between CAM use and use of prayer. Studies of why patients use CAM indicate that a spiritual point of view is among the strongest reasons. Most CAM practices show a variety of affinities to both spirituality and religion. Both S/RH and CAM researchers are engaged in studies of the prevalence, distribution and health impact of the practices that they are investigating. And both groups are working toward the appropriate integration of the practices they study into clinical medicine. Yet there is a clear and apparently intentional divide between the two research domains. For example, in Koenig et al's *Handbook of Religion and Health* the mention of Eisenberg's survey research summarized below mentions only the figures on the use of prayer and calls the survey topic "unconventional therapies (UT)" citing only the 1993 study which uses *unconventional* in the title and not the 1998 study which employs the term *alternative medicine*. The index entry is under "unconventional." There is only one entry under "alternative medicine," and this leads one to the statement that public demand for "psychosocial-spiritual care that is not being met by traditional sources...has opened the door to a whole host of charlatans and alternative medicine practitioners." (5) Neither the affinities nor the antipathies between these areas is new in America. They are readily traced back to colonial days (Fuller, 1989, 2001). Clearly this situation is itself an important area for future social science investigation, and some resolution is of great importance.**

The fields of S/RH and CAM are clearly concerned with domains that overlap extensively, yet the fields are populated by distinct communities of investigators who often do not even cite one another and who sometimes show an actual antipathy toward each other's approaches. This is a serious weakness with important consequences.

The first large quantitative study of CAM was Cassileth et al's "Contemporary Unorthodox Treatments in Cancer Medicine" (1984). The study, centered on University of Pennsylvania's oncology clinic, found a surprisingly high rate of utilization of unconventional treatments by Penn's patients. The study categorized treatments into seven categories, including a miscellaneous "other" grouping. Of the six named practices, one was classified as "spiritual," and of 378 patients, 100 received spiritual treatment (p, 108).

The next large quantitative studies, carried out by David Eisenberg and his colleagues at Harvard and published in 1993, inquired concerning CAM use in a representative national sample (Eisenberg, 1993). Five years later he published a follow-up study (Eisenberg, 1998). These two studies, based on data gathered in 1990 and 1997 respectively, asked about utilization of CAM within the past twelve months, using a list of 16 well known varieties of CAM. One of the categories was "Spiritual healing" (by others). In 1990 this item received positive responses from 4.2% of respondents. In 1997 it received 7.0%. "Self prayer" for an illness within the past twelve months was asked in both surveys, though not counted in the overall prevalence figures. In 1990 there were 25.2% positive responses, and in 1997 35.1%.

The inclusion of prayer and spiritual healing reflects the standard definition of CAM that has been implicit since the early 1980's and explicit at least since Eisenberg's first study and reinforced by the conclusions of an NIH panel in 1995:

> The broad domain of complementary and alternative medicine (CAM) encompasses all health systems, modalities, and practices other than those intrinsic to the politically dominant health system of a particular society or culture. CAM includes all practices and ideas self-defined by their users as preventing or treating illness or promoting health and well-being. (O'Connor, 1997:60).

Exclusion from conventional bio-medicine is the one defining characteristic shared by all of the modalities that have come to be referred to as CAM. But another element shared by *almost* all is a strong undercurrent of spirituality. This is even true of many forms of what are ordinarily considered material modalities, such as herbalism. From the traditional Chinese medicine (TCM) understanding of herbal treatments as operating through Qi as well as biochemistry, to folk herbalism found in many parts of the United States, the meaning, selection, preparation and use of botanical medicines is consistently associated with explicitly spiritual concepts. For example, herbalist Norma Meyers says

> After 15 years of observing the plants, I have come to believe that herbs work not so much because of biochemistry and nutrition as because of energy fields .... I have two beliefs that have grown out of feeling the energies of the herbs. The first is that these plants were made by the same Creator that made you and me. I was not a religious person when I first came into contact with the plants. But because of their influence on me I have now become a religious, spiritual person. (Conrow and Hecksel 1983:193-95)

The relationship of "energy" and spirituality in this quote is also common, suggesting the resonance between vitalist theories (including also the TCM concept of Qi, Daniel Palmer's "innate intelligence" in chiropractic, the "energetic" aspect of homeopathy, and many others) and spiritual ideas.

In 1998 John Astin published in JAMA a study addressing the question of "Why Patients Use Alternative Medicine" (Astin, 1998). Based on a national sample, this study concluded that:

> the majority of alternative medicine users appear to be doing so not so much as a result of being dissatisfied with conventional medicine but largely because they find these health care alternatives to be more congruent with their own values, beliefs, and philosophical orientations toward health and life. (1548)

The "holistic philosophy of health" that strongly predicted utilization was "The health of my body mind and spirit are related, and whoever takes care of my health should take that into account." (1551).

A second predictive factor obviously associated with spirituality was the statement "I have had a transformational experience that causes me to see the world differently than before." (1551)

The most recent and best data on the strong association and overlap between the S/RH domain and CAM utilization is found in Barnes' et al.'s "Complementary and Alternative Medicine Use Among Adults: United States 2002." This study was based on interviews with 31,044 adults using data from the 2002 National Health Interview Survey (NHIS), conducted by the CDC and the National Center For Health Statistics. It used a more open-ended strategy than the Eisenberg studies, not restricting CAM to the 16 common categories most surveys have used. The study found that when prayer was included 62% of the sample had used CAM within past 12 months. When prayer was excluded, 36% had. Among the most common varieties of CAM used. five were explicitly spiritual in nature: **personal prayer** for health (43%), **prayer by others** (24.4%), natural products (18.9%), breathing exercise (11.6%), participation in **prayer group** for one's own health (9.6%), **meditation** (7.6%), chiropractic (7.5%), **yoga** (5.1%), massage (5.0%), diet-based therapies (3.5%). The other five are often associated with religious and spiritual ideas and groups (e.g., the strong association of Seventh Day Adventism with natural products and diet). Overall, regarding prayer the study concluded that "About 45% of (English-speaking, American) adults used prayer specifically for health concerns during the past 12 months." (Barnes, 2004:6) This is even higher McCaffrey et al's smaller study of prayer for health concerns also published in 2004. That study concluded that

> "An estimated one third of adults used prayer for health concerns in 1998. Most respondents did not discuss prayer with their physicians.... users reported high levels of perceived helpfulness." (Abstract, p. 858) "CAM therapies were associated with increased use of prayer for health concerns...." By strength of association these therapies were "herbal medicine.... relaxation techniques.... guided imagery.... self-help techniques.... folk remedies.... energy therapy.... and chiropractic." (McCaffrey, 2004:860)

A part of the tendency for S/RH researchers to avoid CAM can be found in the salience of "spiritual but not religious" CAM modalities. Therapeutic Touch (TT) is a good example. TT, developed in the 1970's by Dolores Krieger, a professor of nursing at New York University, further illustrates this connection and its relevance to issues in the S/RH field. Krieger began studying with spiritual/psychic healer Dora Kunz who perceived "subtle energies" around living beings and believed that they all possessed an innate healing ability. Kunz had studied Oskar Estebany, a Hungarian healer who used laying-on-of-hands and "felt he was a channel for the spirit of Jesus Christ." Estebany believed his healing was a special gift, but Krieger did not agree. She roughly equated his "healing energy" with *Qi, Reiki* (Japanese)*, prana* (Sanskrit) and other spiritual healing ideas from around world, and developed the specifically non-religious healing practice that she called Therapeutic Touch. (Krieger, 1979) "I became convinced that healing by the laying-on of hands is a natural potential in man, given at least ... the intent to help heal another, and a fairly healthy body (which would indicate an overflow of prana)"

(Krieger 1975:786). *Prana* is a Hindu term for *Brahman*, for the life-force and breath, and it is an important concept in yoga.

Further evidence of the spiritual and religious ramifications of TT can be seen in some of the opposition to it. For example, Donal O'Mathuna, PhD, (Professor of Bioethics and Chemistry, Mount Carmel College of Nursing, Columbus, Ohio.) wrote a negative assessment of TT in the *Physician's Guide to Alternative Medicine* (American-Health-Consultants, 1999) based on scientific issues, but in the *Journal of Christian Nursing* he wrote that the use of TT is wicked and offensive to God because "The Evil One has great powers at his disposal. TT introduces practitioner and patient to a spiritual realm forbidden by God."

Although formal religious healing practices fit comfortably within the CAM definition, the attention of the CAM field seems largely focused on "spiritual but not religious" healing practices such as Therapeutic Touch, Qigong, Reiki and so forth. These are the spiritual health practices that the S/RH field largely avoids. The contrast between this preference and that found in the S/RH field is readily evident in the comparison between the chapters on spiritual healing found in two popular textbooks on CAM.

In Novey's *Clinician's Complete Guide to Complementary/ Alternative Medicine* (2000) the *Spiritual Healing and Prayer* chapter is written by psychiatrist Harold Koenig, a leading researcher in the S/RH field. Koenig discusses intercessory prayer and epidemiological evidence that religious behavior, such as Bible reading, have positive health effects. The interventions he mentions ("Office Applications," page 133) are "prayer and pastoral counseling" and possible support for the patient's religious or spiritual beliefs. Apart from one reference to a study of Buddhist meditation, the chapter concerns Christian belief and practice. The interpretations that Koenig explicitly favors are those that he calls "local naturalistic" rather than "supernaturalistic" (130-131).

Wayne Jonas and Jeffrey Levin's textbook, *Essentials of Complementary and Alternative Medicine* (1999) provides a sharp contrast to Koenig's approach. Seven of the twenty chapters devoted to particular CAM approaches include spiritual aspects: Ayurvedic Medicine, Native American Medicine, Tibetan Medicine, Holistic Nursing, Spiritual Healing (Daniel Benor), Qigong, Meditation and Mindfulness.

Chapter 21, "Spiritual Healing" is written by Daniel J. Benor, M.D. begins with Benor's own definition of spiritual healing: "the systematic purposeful intervention by one or more persons aiming to help (an)other living being (person, animal, plant, or other living system) or beings by means of focused intention, by touch, or by holding the hands near the other being, without application of physical, chemical, or conventional energetic means of intervention" (p. 369). The same definition is given in the book's **Glossary**. The **Glossary** further defines *spiritual energy* as "the cosmic or universal vital force that originates beyond the material level and gives life to physical organisms. (p. 583). Religion is not defined in the glossary. In Appendix A, the list of organizations under "Spiritual Healing" includes just four: Barbara Brennan School of Healing, Healing Touch International, LeShan Healing, and Nurse Healers--Professional Associates International, Inc. but no religious healing organizations. The five suggested readings are Benor's *Healing Research* Vols. I-IV, Brennan's *Hands of Light* (1993), Gerber's *Vibrational Medicine* (1988), LeShan's *The Medium, The Mystic and the Physicist* (1974), and The Qigong Institute's *Qigong Database*.

Benor's overview of spiritual healing is focused on subtle energies (including such as Riechenbach's *odyle* and Reich's *orgone energy*, p. 372). Religion's role in spiritual healing is discussed historically, but current religious healing is largely absent. Terms such as *Charismatic* and *Christian Science* do not appear in the index or **Glossary**.

This book is interesting to compare to the Novey book in this regard. Koenig's chapter on spiritual healing in the Novey book is devoted entirely to conventional religious healing. A variety of other spiritual approaches are covered in other chapters, but are not accessible under *spiritual* in either the index or the table of contents. In the Jonas and Levin book, in contrast, religious approaches are absent, and it is, roughly speaking, "spiritual but not religious" modalities that are emphasized.

Clearly a major source of the division between the S/RH and CAM fields is the contentious division between *religion* and health and *spirituality* and health. This is an interesting cultural clash among investigators, apparently reflecting personal commitments as much as anything else since many have similar professional training. But the conflict is unfortunate because it smuggles personal theological commitments into the scientific discourse and prevents the logical integration of these overlapping fields.

Dramatic S/R Experiences and Health

SUMMARY: During the past thirty years research on dramatic spiritual experiences, such as mystical experiences and "near death experiences has grown rapidly. Much of the research has been carried out by psychologists and physicians (e.g., Moody [MD], Ring [psychologist], Sabom [MD] Greyson [MD], van Lommel [MD]). Historically such experiences have been related to medicine by being consistently assimilated to psychiatric symptomatology (Hufford 1985). Contemporary research has challenged those assumptions of pathology and have shown new associations with health: 1) some of these experiences are triggered by serious health events, often in medical settings (e.g., near death experiences), and 2) positive impact on emotional health (Rees 1970, 1971; Kass, 1991; van Lommel, 2001). Yet S/RH research tends to ignore these experiences in favor of more ordinary, daily spiritual experiences (Fetzer, 1999). This leaves another gap in the field that parallels the preference for religion over spirituality outside the religious context and avoidance of unconventional topics, even when those topics are receiving serious investigation with studies published in peer reviewed journals.

In 1974 sociologist Andrew Greeley published remarkable findings concerning dramatic spiritual experiences of Americans, findings that were headlined "A Nation of Mystics" in some newspapers. Greeley's survey was carried out by the National Opinion Research Center, employing a scientifically selected national sample and in-home interviews with a pre-selected panel of respondents. Two of his questions are of special interest here: "Have you ever felt as though you were very close to a powerful spiritual force that seemed to lift you out of yourself?" (35% said "yes") and "Have you ever felt that you were really in touch with someone who had died?" (27% said yes). Greeley also

used the Bradburn psychological well-being scale (1969) to look for an association between these experiences and emotional health, and found a strong and positive relationship. The following year Raymond Moody's book *Life After Life* introduced the term "near death experience" (NDE) and launched a substantial stream of study, much of it carried out by physicians, that linked these experiences to spiritual transformation and psychological health effects (see, for example, van Lommel, 2001 in the *Lancet*; and the *Journal of Near-Death Studies*, *passim*).

Greeley's question regarding "contact with the dead" followed an important turning point in grief literature when Dewi Rees, a physican, published a study in the *British Medical Journal* (1971; originally his MD Thesis, 1970) showing that compellingly real experiences of a "visit" by the deceased spouse are very common among the bereaved, that they appear normal and are associated with healthy resolution of grief. By the mid-1970s these experiences had become well know in the grief literature. They are obviously spiritual experiences and are often transforming for those who have them (Rees, 2001).

NDEs and the bereavement "visits" are just two of the categories that are logically appropriate for S/RH study, but that have been largely ignored. In 1991, Kass and colleagues, published an article in the *Journal for the Scientific Study of Religion* entitled "Health outcomes and a new index of spiritual experience," in which they presented new instrument which they called Index of Core Spiritual Experience (INSPIRIT). The instrument utilized Greeley's mysticism question and explicitly referred to "near death experiences." It linked scores on INSPIRIT, in a sample of medically ill patients, to emotional and medical outcomes.

In *The Handbook* (Koenig, 2001) INSPIRIT receives a brief paragraph noting its correlation with religiousness, but there is no discussion of the health implications of the experiences tapped by the instrument. *The Handbook* also has a section on "Measures of Mysticism" (507-508, Hood, 1975; Levin, 1993; Mathew, 1995) but again discusses the three instruments noted only in terms of their use as indications of religiosity and/or spirituality. This seems to assume that such experiences are a product of belief, but much of the current data suggests the opposite, that these experiences shape and change belief. *The Handbook* has few other references to spiritual experiences, and where there are such references they do not refer to the kind of intense experience discussed above. For example, in a section of "Religion and Immune Function" the study cited which investigated "religious experience" used watching a film about Mother Teresa as the "religious experience." (288).

The documented relationship of intense, even mystical, spiritual experiences to health should make them of great interest in S/RH research, but that is not the case. Literature searches in PYCHInfo and MEDLINE for the period since the Kass article introduced INSPIRIT in conjunction with health outcomes in 1991 yielded only 6 studies (Dedert, 2004; Springer, 2003; Hodges, 2002; Baider, 2001; McBride, 1998; VandeCreek, 1995), although there were 13 dissertations. My initial searches on S/RH yielded only three references to "spiritual experience." Two of those referred to "the experience of being religious," and one used the Fetzer-NIA instrument with its Daily Spiritual Experience subscale. The Fetzer-NIA Daily Spiritual Experience section states that it is intended to "assess aspects of day-to-day spiritual experience for an ordinary person, and should not be confused with measures of extraordinary experiences (such as

near-death or out-of-body experiences) which may tap something quite different and have a different relationship to health outcomes" (11). The instrument does not contain any measures for the extraordinary experiences, except for the ambiguous "Have you had a religious or spiritual experience that changed your life?" (68) The ambiguity of this item is underscored by the authors' comment "The origin of these items [about life changing experience] is unclear... Researchers disagree about what these items measure," but they do go on to state that "further research regarding ... life-changing religious/spiritual events is highly recommended." (66) My analysis of the literature strongly supports their statement!

Minority Religions Including Roman Catholicism, The "Spiritual But Not Religious," And "Folk Religions"

> **SUMMARY: It is widely recognized that the S/RH literature is focused on mainline denominations of Protestant Christianity. This has deflected attention from several areas of importance in health research: the S/RH issues of new immigrants and ethnic minorities in the United States; the ancient and vigorous Roman Catholic tradition of liturgical healing and healing through the intercession of the saints; and most S/RH researchers have shown a negative bias toward the health ideas and practices of the "spiritual but not religious." Taken together these trends underemphasize somewhere around half of Americans who have S/RH beliefs and values.**

It is not surprising that Protestant Christianity receives most of S/RH researchers' attention. Christianity is the dominant religion in the United States, and Protestants are the largest religious group, generally reported as somewhat more than 50% of the entire population. However, the practice of aggregating most non-Catholic Christians under the heading *Protestant* is questionable, resulting in a category that is very diverse demographically and doctrinally. If the specifics of S/R belief are important (and if the entire domain is important the specifics seem likely to be also), then the collective categories of Christian and Protestant should be disaggregated. When this is done one finds that Catholics are the largest group, at about 24% compared to Baptists, the next largest denomination, at about 16% (Adherents.com, 2005 (accessed)), making Catholicism the largest religious group in America.

CATHOLICISM: Catholicism has the longest continued tradition of spiritual healing and commentary on medical practice of any branch of Christianity in the world. Its theology and traditions of practice are very distinct. And since the development of the Charismatic movement in Catholicism in the late 1950's, Catholicism also includes most of the healing practices found in Protestant denominations. Catholicism is also recognized as having exerted major influence in a number of medical policy areas such as reproductive health and end-of-life care. Catholics are often included in epidemiological studies, but studies of distinctively Catholic healing practices, such as pilgrimages linked to devotion to the Saints, are largely absent from the S/RH literature. My MEDLINE searches yielded only four references citing Catholicism (Kemkes-Grottenthaler, 2003; Latkovic, 2001; Panicola, 2001; Ryan, 2003), and none of these referred to distinctive Catholic spiritual practices. *The Handbook* (Koenig, 2001) mentions pilgrimage, a major

and well-known aspect of Catholic healing practice, only five times. The first is in the historical timeline referring to Lourdes (46), another is under "faith healing" referring to pilgrims at Lourdes as "desperate" (55), and a third is in connection with two "debunking" books on religious healing (Rose, 1971; Nolen, 1974) (64). But then, remarkably, there are two mentions of the only study of Catholic pilgrimage noted in the book, Morris' 1982 study which, using the Beck Depression Inventory, found that a group of chronically ill pilgrims to Lourdes went from "mild depressive symptoms to virtually no symptoms" at 10-month follow-up (132, 152). Millions of Americans and others visit healing shrines in the Americas and Europe, and there is a large literature on pilgrimage in the social scientific study of religion and among religion scholars. The differences between "faith healing" and these Catholic practices are substantial. My own ethnographic work on pilgrimage suggests that the majority of pilgrims find support in coping with illness and many explicitly deny that they are primarily concerned with the possibility of a miraculous physical healing (Hufford, 1985). Yet even Pargament's excellent book on religouos coping (1997) has only asingle reference to Catholicism and coping, and that involves Catholic Charismatic practice. The rich and varied healing practices of Catholics offer a major opportunity for S/RH research, but have as yet received very little attention.

SPIRITUAL BUT NOT RELIGIOUS: To return to the prevalence of spiritual viewpoints in America, surveys estimate those who say they are "spiritual but not religious" at between 20% (Blum, 2001) and 30% (Gallup-Or, 2001), compared to Baptists, the next largest group at about 16% (Adherents.com, 2005 (accessed)), making the spiritual-but-not-religious second only to Catholicism among spiritual groups in America. It has been suggested that this group is a mere hodgepodge of uninformed opinions, defying analysis. It has also been assumed that this group represents a recent development in American spirituality. I have already discussed the historical depth of this viewpoint in America (above under **Language**). Historians and religious studies scholars have also shown that within this group there are consistent themes and shared values (Batson, 1976; Ahsltrom, 1972; Fuller, 1989, 2001). Despite the salience of the spiritual-but-not-religious group in America, the S/RH literature tends to disparage this viewpoint. *The Handbook* refers to this form of spirituality as "unmoored spirituality" in contrast to "spirituality moored to an established religious tradition" (18). The authors subdivide spirituality categories in a way that results in a low estimate of this group's size, and illustrates it with references to crystals, astrology and Shirley MacLaine (19). And George et al. in 2000 stated that

> So long as most individuals do not distinguish between religion and spirituality, separating these concepts operationally will be impossible. Of course, we can study individuals who report that they are spiritual but not religious—there are a few studies of this kind (e.g. Legere, 1984; Roof, 1993). But such studies will not generate distinct, broadly applicable measures of religiousness and spirituality. (In theory we could also study individuals who describe themselves as religious but not spiritual, but research suggests that the numbers of such persons are too small for meaningful analysis.) (104)

The bias against "unmoored spirituality" appears linked both to problems defining the terms *spirituality* and *religion* and to the disconnect between S/RH and CAM research noted above. The practices of the spiritual-but-not-religious are often those linked to CAM in the literature. But it is important to note that many of the core spiritual practices of this group are also found among church members, constituting a sort of "folk religion" level that has always existed within congregations despite the best efforts of clergy. Based on my own fieldwork and a careful examination of survey data it seems certain that some who self-identify as spiritual-but-not-religious attend some variety of services regularly and some would even indicate a denominational affiliation or preference if asked.

FOLK RELIGIONS AND HEALTH: The religious and health beliefs of ethnic minorities and new immigrants currently receive substantial attention in the medical and nursing literature, and training in cultural competence has been mandated for medical education. A recent editorial in *The New England Journal of Medicine* noted "pronouncements by the Institute of Medicine and the American Medical Association, among other organizations, that cultural competence is necessary for the effective practice of medicine," and that religion, of course, is an aspect of culture (Betancourt, 2004). All works about diverse cultural groups written for health professionals include prominent attention to the religious dimension and the closely related "folk medical" practices of each group. One of the most noted recent publications on the topic of cultural diversity and health care was Anne Fadiman's *The Spirit Catches You and You Fall Down: A Hmong Child and Her American Doctors, and the Collision of Two Cultures* (1997) which focuses on tragic medical outcomes that center on differences in spiritual belief between the parents of the patient and her doctors. This case, which is factual, is similar to several other cases that have gained prominence in the national media over the past ten years.

Cross-cultural research on religion and health comprises a long-standing research domain in anthropology that could be an important area of S/RH collaboration, especially since much of the work has focused on the operation of religious healing traditions such as the Afro-Cuban *santeria* and *curanderismo(a)* as a mental health resource within certain neighborhoods (Baez, 2001; De Cupere, 2001; Forman, 2000; Gomberg, 2003; Hunt, 2000; Luna, 2003; Najm, 2003; Padilla, 2001; Trotter, 2001; Tsemberis, 2000). Yet my S/RH search in MEDLINE yielded only one article published since 2000. In *The Handbook* there is almost no mention of these religious groups, and where they are noted the references are implicitly negative.

This is an area of S/RH that clearly has health consequences, that requires both study and the development of ethically sound interventions, and that is supported by most major medical and nursing education organizations. It is not necessary to consider these religious beliefs and practices as positive forces in health, although cultural competence would suggest that we ought not assume the opposite either! But whether their effects are a net positive or negative value regarding health outcomes, there is no doubt that they do have such effects and that those effects are investigable. Yet this topic has received almost no attention in the standard S/RH literature.

Description

The S/RH field suffers from several gaps in description. The specific beliefs of S/R groups and their particular effects on health have received cursory treatment. Beliefs tend to be described globally (e.g., "belief in God"), and in general, though often included in survey instruments, belief has not received much attention as a specific variable. For example, George et al. note that the Fetzer/NIA conference group that developed the Fetzer/NIA multidimensional measurement "did not recommend" religious/spiritual belief "as particularly important for understanding the links between religion/spirituality and health" (2000: 106). Although the relationship of prayer to various health measures has frequently been investigated, the S/RH literature devotes little attention to the specifics of prayer belief and practice, although there is solid social science research that suggests the scope, variety and importance of the distinct forms (Poloma & Gallup, 1991). Also the very high prevalence among Americans of the belief that healing prayer is effective (generally well above 60% of respondents stating this belief in most relevant surveys) has elicited little attention among S/RH investigators. Clearly beliefs about the efficacy of prayer comprise a major perceived resource among American patients, and the impact of that belief must influence both decision-making and coping. Certainly a great deal of religiously motivated non-compliance with medical regimens stems in part from these beliefs, and there is good reason to associate these beliefs with coping behaviors also. But the specific beliefs themselves and they ways that patients arrive at and maintain those beliefs has received very little attention in the S/RH literature. The Fetzer/NIA instrument section on "Beliefs" has seven questions, and all but one ("Do you believe there is life after death?") are general, largely metaphysical beliefs (e.g., "God's goodness and love are greater than we can possibly imagine.") (1999:32). Although several studies have supported the connection of specific beliefs to mental health (e.g., Alvarado, 1995; Schafer, 1997), the description and utilization of specific beliefs in an understudied area in S/RH.

Quality of life (QOL) is a kind of medical outcome that might be expected to be especially open to S/R effects, and QOL is a topic that requires a combination of quantitative and qualitative approaches by definition. QOL studies in S/RH are beginning, especially among cancer patients (Brady, 1999; Carlson, 2003; Demierre, 2003; Tate, 2002), but QOL has not yet received the attention that it deserves.

The lack of belief description is related to the lack of ethnographic, qualitative and historical work within the S/RH literature, because these forms of scholarship are heavily committed to description. When such methodologies are noted in the contemporary S/RH literature it is typically assumed that their usefulness is largely for the generation of hypotheses (e.g., Koenig et al., 2001: 482). Although they are useful in this way they are also very helpful in extending and clarifying the findings of quantitative studies and as studies in their own right (Press, 2005).

Assessment Of S/R In Health Settings

If the spirituality-religion-health connections, whatever they may be, are to have clinical importance, then some information about the patient's S/R will have to be elicited. This much should be non-controversial. If a patient is a Jehovah's Witness, it is important to know that. And if they are, it will be important to know whether they accept the denomination's total rejection of blood and blood products or, as for some patients,

whether they reject only whole blood, or whether they are undecided. If a patient wishes support from a member of the clergy but is not a current member of any religious denomination, it is important to know that. Given that it has been documented that most American patients want S/R issues raised at appropriate times (Ehman, 1999; MacLean, 2003), and that physicians rarely raise them (Monroe, 2003), it seems that the development of an efficient, sensitive and effective means of S/R assessment is a pressing need. Furthermore, The JCAHO and the Committee on Accreditation of Rehabilitation Facilities (CARF) have now mandated spiritual assessments for health care institutions. Spiritual assessment has been widely discussed and practiced in nursing for years . In fact, in the United Kingdom "The view that nurses should be competent to assess the spiritual needs of patients...is so widely accepted that it is expressed as a requirement for registration (UKCC 2000)." (Draper, 2002:1)

Given the amount of time and effort that has been put into developing S/R measures for research, it seems that the resources for developing reliable and valid assessment tools are readily available. For these reasons it surprising to see how little rigorous development has taken place! Although *The Handbook* (Koenig, et al. 2001) discusses clinical applications for doctors, nurses and others, including taking a religious history (441-447), the discussion seems to assume that assessment is linked to some degree of spiritual intervention. This ranges from "Support or Encourage Religious Beliefs" (441-442) and "View Chaplains as part of the Health Care Team" (442) to "Be Ready to Step in When Clergy Are Unavailable" [442-443 to "Use Advanced Spiritual Interventions Cautiously" (443)]. But it seems that no research is cited that directly relates to assessment itself, as opposed to patients interest in spiritual intervention or the care provider's willingness to raise spirituality as a topic. For clinical use it would seem that some aspect of "spiritual need" should be a feature of assessment, but neither term appears in the index of *The Handbook*, and my combined MEDLINE searches yielded only five references to "spiritual need" or "spiritual distress," only one suggested an assessment tool, but it offered only an educational framework for such a tool (Narayanasamy, 2004. ASSET). Most of the assessment tools that have been published in the S/RH literature have not been tested (e.g., Anandarajah, HOPE; 2001; Galek, 2005), although most authors publishing assessment tools seem to hope for research on them. Puchalski (2000) states that she has trained "roughly 4,000" people in 1½ to 2 hour workshops in the use of her FICA spiritual assessment tool. She also says that she has instruments for the evaluation of the various aspects of the FICA, but "we're just beginning those studies." (Puchalski, 2000:134-135) However, my 2005 MEDLINE search on Puchalski found no reports of studies evaluating this tool.

The importance of rigorous research on the proposed assessments is underscored by Koenig's comment that "simply taking a spiritual history is often the intervention" (2001:30) and others have suggested the same thing (e.g., Puchalski, 2000, 2004).

These are strong empirical claims, and only systematic research can evaluate them. This aspect of S/RH would benefit from a closer association with the instrument development efforts described above. The development of S/RH assessment would also benefit from being linked to the current efforts to develop cultural assessments, of which S/R assessment would seem to be a logical part.

Personnel: Who Should Provide Attention To S/R In Health Settings?

The issue of who should provide S/RH assessment and/or "intervention" in health care settings has been a subject of some controversy. Nurses have generally assumed that this is, at least at times, a nursing task. Some nurses have called this assumption into question (Draper, 2002:1), while others have vigorously defended it (Swinton, 2002). The same is true now in medicine, as illustrated by the responses to Anadaraja's publication regarding his HOPE assessment tool (Anandarajah, 2001). In the same issue of *American Family Physician* Harold Koenig endorsed the role of the physician in doing spiritual assessment, stating that "While providing spiritual advice or direction is best left to the chaplain or the patient's clergy, the spiritual assessment should not be left to others" (2001:30). In the same issue of *AFP* Richard Sloan and Emilia Bagiella argue that "the absence of compelling empiric evidence and the substantial ethical concerns raised suggest that, at the very least, it is premature to recommend making religious and spiritual activities adjunctive to medical treatments" (Sloan, 2001).

It seems intuitive that the issue of who delivers any sort of assessment or intervention (and in what role) will make some difference in the activity's impact. Furthermore, there is a substantial history now both of faith-based organizations delivering biomedical health care (Westberg, 1984) and of a variety of providers delivering S/R assessment and "interventions." It is surprising, therefore, that so little research has been done on the question who can and should deliver which S/RH activities. There has been some evaluation of health programs operated by or through faith-based organizations. A literature review conducted in 2004 found 28 descriptions of such programs that reported effects, and found evidence to support their effectiveness (DeHaven, 2004). However, given the number and variety of such programs much more research is needed.

In nursing, the Parish nursing concept, initiated by Rev. Granger Westberg, combines health care with spiritual orientation, and there are now at least hundreds of parish nurse programs around the country. And yet my combined MEDLINE search found only a single reference to Parish nursing, and *The Handbook* states that "There is almost no research on how successful parish nurse programs have been." (Koenig et al, 2001: 475)

Of course chaplains have the longest record of providing spiritual interventions. Modern hospital chaplaincy dates from the 1920's when Clinical Pastoral Education (CPE) started in a mental hospital in Worcester, Massachusetts, largely through the work of Anton T. Boisen and Richard C. Cabot. As Sloane, van der Creek and several colleagues recently noted in a letter to the *New England Journal of Medicine* in 2000, CPE certified chaplains are present in health care specifically to provide such spiritual care as is needed. Chaplaincy practice is the primary "spiritual intervention" found in the American health care system, so we might have expected S/RH research to be heavily focused on Chaplaincy, but it is not.

In 1987, Elisabeth McSherry, M.D., called "appropriate measurement and research" critical for "patient care and chaplain department survival" (McSherry 1987: 3,10-11). In 2001, Koenig, Larson and McCullough described the financial pressures and dwindling support for hospital chaplaincy programs, and stated that systematic research is necessary to reverse this trend (*Handbook* 451-453). They called for the efforts of chaplains to be supplemented by "outside institutions to provide expertise on study

design, project operation, and data analysis" (453). Both McSherry and Koenig et al. call for the development of modern, valid and appropriate measurement techniques. And yet my combined MEDLINE S/RH search from 2000 to the present yielded only 25 references to chaplains. Among these 25 chaplaincy references, 19 were from a single special issue of the *Journal of Health Care Chaplaincy*. Most of these noted the need for chaplaincy to "become more scientific," but also expressed concern that this could lead to what one author called "ministry by the numbers" (Millspaugh 2002). Many expressed concern for an over-reliance on quantitative research methods, posing the question for chaplaincy of "What actually constitutes acceptable evidence, who decides, and why? (Swinton 2002). The challenge, as described by W.J. Baugh, is to answer this question: "Are there true definable outcomes that can be validated when our primary task is dealing with matters of the heart and soul?" (2002:11)

The remaining 6 articles came from other issues of that journal or one other pastoral care journal. Although four of these articles make reference to the "discipline for pastoral care giving" ("a discipline based, outcome-oriented model for chaplaincy;" (Lucas, 2001), none report actual studies utilizing this model or any other objective research tool.

Judging from these articles, and other work with chaplains, there is a legitimate concern for qualitative and ethnographic research to balance quantitatively oriented research tools and designs. Resistance within the profession, which must partially account for the lack of research in the field, suggests that sensitive and chaplain-specific tools, complemented by sophisticated qualitative research methods, are needed. Since Chaplains are trained religious professionals who are already located in many health care settings, who have accreditation and certification procedures in place, and who work as liaison to other clergy in the community, they ought to be the first line for providing spiritual assessment and interventions. There are not enough chaplains to provide all of the S/RH care for which patients have expressed a desire, but rigorous outcomes research showing that chaplaincy care is effective would be a crucial step in increasing their numbers. It seems, therefore, that the lack of such research is a glaring omission in the S/RH field.

Informatics

Information science, or *informatics*, is of enormous importance in today's scientific fields. The high volume of research publications, the growing inter-disciplinary links and the rapid rate at which new information is developing, coupled with new methods of digitally storing, organizing and retrieving that information in relational databases, have placed informatics at the center of scientific work. Informatics is a kind of scholarship and relies heavily on additional scholarship from many fields. Spirituality and health as a field has largely relied on existing informatics structures, such as MEDLINE, and these are inadequate for the organization and accessioning of this unique body of materials. Efforts to work within this structure have resulted in ad hoc conceptualizations and nomenclature that further impede a coherent picture of the topic.

As the searches done for this analysis have shown, MEDLINE attempts to act on the difference between *spirituality* and *religion*, but the attempt fails because the distinction and the apparent boundaries of the spirituality category are not yet developed in a coherent and valid manner. For example, in MEDLINE "homeopathy" and

"Medicine – Traditional African" are included under *spiritual therapies*. But in the articles returned in my 2000-2005 search, none of the homeopathy articles and very few of the African articles included any explicit spiritual reference. It is certainly true that much traditional African medicine has spiritual roots. It is also true that the vitalism implicit in homeopathy has a resonance with spiritual ideas. But that does not make it useful to equate these terms useful with "Spiritual Therapies." Another problem is the inclusion of "Faith Healing" as the ***sole religious healing*** reference under Spiritual Therapies. This is another indication of the need for greater linguistic and cultural sophistication. At the same time that much extraneous literature was returned in my S/RH searches, many pertinent items were omitted. In part this is because inclusion of periodicals in MEDLINE is based on overall medical relevance, and many of the journals that publish S/RH studies do not publish enough other studies relevant to medicine to qualify for inclusion. MEDLINE is helpful, but not adequate for spirituality-religion-health-outcomes searches.

Similar problems exist in the other major informatics source for the field, Koenig et al's *Handbook of Religion and Health* (2001). Although this is the most complete reference work available on the literature of spirituality and health, its organization and access tools are inadequate. For example, the 1600 plus studies located for the *Handbook* are listed in a bibliography, and also listed in an appendix by health outcome, with a concise characterization of design and a numerical score for study quality (pp. 513-589), but there is no way to directly locate any of them in the text of the book. There is no author index, and the bibliography does not carry any indication of where in the book each listed publication is discussed. It is necessary to use chapter titles and visually scan the text in the effort to locate citations. So the commentary in the book is accessible more as in a textbook than a reference work. Similarly Pargament's thorough treatment of the psychology of religious coping (1999) is organized as a textbook rather than a reference work.

The Handbook also illustrates some of the language problems noted above that arise when science is decoupled from scholarship, in this case inappropriate word usage implicitly advancing controversial views. In discussing a study of bereavement behavior the authors say that "the most prevalent belief expressed in the study was spiritualism (the belief that there is a spirit that occupies the body and that leaves the body at death)" (342). This is *not* an accurate statement of the meaning of spiritualism at any time in the past one hundred years. Spiritualism, the practice of systematically communicating with the spirits of deceased persons, often through mediums, is found in many cultures around the world, and enjoyed considerable popularity in the 19th century in the United States and Europe. In the U.S. it is a highly stigmatized practice except in a few communities where it is a part of folk religious practice (e.g., Haitian *Voodoo*, Cuban *Santeria* and Puerto Rican *Espiritismo*). Although a variety of forms of spiritualism are popular throughout Latin America, combining 19th century European spiritualist teachings (Kardecism), with indigenous religions, the traditions of enslaved Africans, and Catholicism, most Christian teaching in the United States rejects spiritualism as contrary to Divine Law. The *Handbook* definition is not simply mistaken, it serves to stigmatize one of the most widely held spiritual beliefs in the world, a belief common to the vast majority of Christians: the belief in a human soul and

afterlife. Ironically, the most widespread spiritualist religions in the United States, primarily found among Caribbean immigrants, are almost entirely absent from *The Handbook*!

The point is not the validity of the authors' implicit theological point, but rather the way in which word usage carries a great deal of hidden freight. As these examples show, the meanings of words, implicit and explicit, are central to the conduct of valid research and analysis. Because the field of spirituality and health lacks a well established scholarship that carefully attends to language these debates over basic spirituality issues lack conceptual clarity and focus. The solution is to recognize the language of spirituality and health as a major aspect of the field itself, and to ground an understanding of that language in a rigorous empirical manner, utilizing the expertise of those disciplines that have studied such issues over the past century. While an area of research in its own right, such language work is also crucial for the development of a solid, coherent, and accessible informatics infrastructure for the field. Priority needs to be given to the development of S/RH databases and bibliographies, including the concordances and other tools that such an enterprise entails.

STRENGTHS OF THE FIELD OF SPIRITUALITY AND HEALTH RESEARCH

By characterizing the following five areas as strengths of the field I mean that in each domain serious investigators have produced a substantial body of published work, that methods are becoming more rigorous, and generally the field is moving in the right direction. I do not mean that in any of these areas the field is fully mature, but that is not to be expected in such a relatively new area of research.

Publication Trends

The strength of the field at present is perhaps best shown by the fact that between 1990 and the year 2000 the number of references in a 1-year search of MEDLINE rose almost 5-fold (from 50+ to 250+) for *spiritual* and *spirituality* and roughly doubled (from 300+ to 700+) for religion and its cognates. The increase was such that MEDLINE began adding more journals in the subject area (as a result, subsequent increases are not comparable). Similar increases have occurred in the general literature. A search of Gale's *Onefile*, by 5 year intervals from 1985 through 1999, showed for *religion* a rise from 2211 (1985-1989) to 6497 (1995-1999), and for *spirituality* from 323 to 929. "Across the board ... surveys confirm a remarkable rise in spiritual concern." (Gallup & Jones, 2000: 27) During the 1990's special spirituality and health sections or editions of scientific journals appeared, including the *American Journal of Physical Medicine and Rehabilitation*, *Annals of Behavioral Medicine,* the *Journal of Contemporary Criminal Justice*, the *Journal of Health Psychology*, the *Journal of Marital and Family Therapy*, *Psycho-oncology*, and *Twin Research*. Substantial publication in a broad array of peer reviewed journals is the mark of a maturing field, and this has been achieved by spirituality and health. There is no doubt that medical researchers, physicians, nurses and the general public have a strong and growing interest in spirituality and health.

This publishing activity includes a variety of materials from editorials to original research, to reviews and meta-analyses and practice recommendations. The bulk of the research is comprised of epidemiological studies relating Protestant Christianity to a

variety of health outcomes. Cross-sectional studies still comprise the greatest part of the literature, but a growing number of longitudinal, prospective and even experimental studies are now being produced.

Physical Health and S/R Associations Are Supported by Improved Study Design and Evaluation

The field has reached the point at which reviews of the literature, some of them quite sophisticated, are helping to assess trends. In 2002 Townsend and colleagues published a review of "all RCTs published from 1966 to 1999 and all non-RCTs published from 1996 to 1999 that assessed a relationship between religion and measurable health outcome" (Townsend, 2002:429). Excluding studies that dealt with "non-religious spirituality, ethical issues, coping, well-being, or life satisfaction" the authors concluded that "religious activities appear to benefit blood pressure, immune function, depression, and mortality." (The exclusion of "non-religious spirituality" is typical of the literature and is one of its weaknesses.) This generally supports the conclusions of the very large review that forms the basis of *The Handbook of Religion And Health* (Koenig et al, 2001).

George and colleagues, in the same year, reviewed research on the relationship of religious involvement "with better physical health, better mental health, and longer survival," paying special attention to the role of "health practices, social support, psychosocial resources such as self-esteem and self-efficacy, and belief structures such as sense of coherence" (George, 2002: 190) and the ability of these mediating factors to account for the variance observed. They concluded that these psycho-social factors do not, by themselves account for all of the effects reported. The following year Seeman and colleagues examined potential biological mediators and reached a similar conclusion, in a review that added experimental studies of meditation. (Seeman, 2003) In the same special issue of *American Psychologist* Powell et al. carried out a review that excluded all studies that lacked controls for potential confounders, that were cross-sectional, that employed inadequate measures (either S/R or health), that lacked statistical analysis or that utilized cohorts previously reported on. In this conservative review that included studies for design and required multiple supports for the hypotheses considered, the authors concluded that "In healthy participants, there is a strong, consistent, prospective, and often graded reduction in risk of mortality in church/service attenders. This reduction is approximately 25% after adjustment for confounders. Spirituality protects against death largely mediated by the healthy lifestyle it encourages.... there are consistent failures to support the hypotheses that religion or spirituality slows the progression of cancer or improves recovery from acute illness.... The authors conclude that church/service attendance protects healthy people against death." (Powell, 2003:36). The rigor of this review is important in that it begins to provide specificity and discrimination among the various hypotheses entertained in the field. The lack of support for the effect on cancer progression is especially important given widespread speculation on this subject for at least several decades, both within medicine and among the public. Neither the positive nor the negative conclusions can be considered definitive, and the review calls for more rigorously designed studies. But it is important that the body of studies and the methods developed for assessing them has progressed to this point of specific, if tentative, conclusions.

A further strength in the current literature is the appearance of some well designed studies that go beyond the Judeo-Christian tradition. This not only adds diversity and better grounds for generalization of findings, it also supports research on interventions such as yoga and meditation that are more amenable to experimental design than are church attendance or self-prayer. Examples are Mindfulness Meditation in the treatment of psoriasis (Kabat-Zinn, 1998), yoga for carpal tunnel syndrome (Garfinkle, 1998), and Transcendental Meditation in the treatment of mild hypertension in a sample of African American males (Schneider, 1995).

The addition of more specific biological health measures is another indication of maturation in the field. For example, changes in salivary cortisol as a stress marker were measured in response to Transcendental Meditation among cancer patients, (Carlson, 2004; Carlson, 2003), and in relation to measures of spirituality and religion among HIV patients (Ironson, 2002). In 1999 a conference on psychoneuroimmunology and religion was held at Duke University, and out of that conference *The Link Between Religion and Health: Psychoneuroimmunology and the Faith Factor* (Koenig, 2002) was published, further advancing the concept of biological markers of stress and immune system function.

One final aspect of methodology in the field that I consider a strength—although many others consider a great weakness—has been the willingness to undertake systematic study of the belief that intercessory prayer can affect health through pathways currently unknown to science. Although first investigated by Francis Galton in 1883 in his *Inquiries into Human Faculty and Its Development (*277-294), it was not until the 1960s that a blinded and controlled trial, albeit with small numbers, was attempted (Collipp, 1969). Almost another twenty years passed before cardiologist Randolph Byrd tried such an experiment with reasonably large numbers of subjects (Byrd, 1988). With subsequent studies (Harris et al, 1999; Krucoff et al, 2001; Cha et al, 2001, among others) has come growing controversy. Criticisms have ranged from statistical issues and ethical challenges (Sloan, 2000; Sloan, 2001; Sloan, 2001; Sloan, 2002; Sloan, 1999), to implicit theological objections (Chibnall 2001), to accusations of fraud in one case. The criticisms are interesting, reflecting as they do the highly charged emotional and cultural issues touched on by such studies, and the statistical challenges have scientific merit—not that they are definitive. Why, then, count these studies as a *strength* of the field? Because beliefs in the efficacy of prayer *apart from conventional psychological pathways* are beliefs that make an empirical claim. The metaphysical dimensions of such claims (e.g., Divine intervention) may be beyond scientific inquiry, but the claim that when prayers are uttered certain things become more likely is an empirical claim that must be investigable. And given the very widespread public belief in intercessory prayer as capable of operating by *spiritual as well as other* means, it seems reasonable and an indication of open-mindedness in the scientific community that some researchers will give the subject a try and that some editors and peer reviewers will look thoughtfully at the results. The results of such studies will always be subject to some constraints on interpretation. For example, negative results could always be explained by God's unwillingness to participate. But it does not seem impossible in principle to develop sufficiently rigorous designs such that a robust positive effect would be detectable if present. This is what I see as a strength, a bold willingness to experiment with novel efforts to bring together science and religion. Even the controversy indicates strength, and

we should watch with interest to see whether advocates of these experiments can produce compelling results. We shouldn't expect single definitive experiments that change all minds at once, but we are already seeing the evolution of thought on the subject, pro and con, and that is a good thing for intellectual inquiry.

Mental Health & S/R

Despite Larson's early work on religious variables and mental health included in psychiatric journals but not commented on (Larson, 1986; Larson, 1992), research in S/R and mental health has not kept pace with physical health studies, or has tended to be subsumed within studies of coping, well-being, life satisfaction, and so forth. For example, in a (non-systematic) review article based on data extracted from the review of 1600 studies done for *The Handbook of Religion and Health* (Koenig, 2001) Koenig, Larson and McCullough state that "Nearly 850 studies have been conducted in medically ill patients or older persons with chronic disabilities," and they conclude that "Religious involvement appears to enable the sick, particularly those with serious and disabling medical illness, to cope better and experience psychological growth from their negative health experiences, rather than be defeated or overcome by them." (Koenig, 2001).

In contrast to the literature on S/R and mental health among the physically ill, Koenig et al. (2001) found only 16 studies involving religion and severe mental illness (216-217). Of those only two were clinical trials and both involved small numbers (28 and 20). As important as the mental health of the physically ill and disabled is, this approach leaves a gap in the literature. As Corrigan et al. note, while numerous studies relate "religiousness and spirituality with health and well-being, far fewer studies have examined this phenomenon for people with serious mental illness" (Corrigan, 2003:487). However, studies are now beginning to address S/R in the context of serious psychiatric illness (Baetz, 2002; Corrigan, 2003).

It should also be noted that the numerous publications throughout the 20th century suggesting strong religious belief as either a sign of or risk for psychotic illness (for example, Dittes, 1971; Clark, 1981; Watters, 1992) have now been subjected to the same kind of careful review and criticism as positive religion and health studies are, and as a group they have been shown to be scientifically weak, inconsistent with other findings (for example,Wilson, 1998), and lacking in valid causal attributions (Koenig, 2001:156-165).

Coping

Kenneth Pargament's *The Psychology of Religious Coping Theory, Research and Practice* (Pargament, 1997) reviews the psychology of religion literature on coping behaviors and places them within a rich setting of theory and practical application. Although religious coping does not always involve explicit health outcomes, a review of the studies summarized in the book reveals that the largest category of challenges to coping that have been studied is comprised of illness, injury, disability and death. That, together with the fact that ability to cope is a mental health parameter, makes religious coping a central domain of religion and health research. Pargament's book documents a wide array of research that predicts and describes ways of religious coping, and in his chapter on "Religion and the Outcomes of Coping" he summarizes the research as follows: "The sizes of the religious effects of most research studies are fairly modest....

(But) In the majority of studies, across diverse groups dealing with diverse problems, religious coping emerges as an important predictor of adjustment" (p. 312).

Coping is a complex construct. In a sense anything one does that helps (or is intended to help) deal with a problem could be considered coping, but such a definition would render the concept almost meaningless from a research perspective. Methods for the study of coping vary, but many of them involve either asking subjects how they cope or having them choose from a list of coping strategies. These methods make it difficult to distinguish between varying meanings of the term (the lexical dimension) and varying ways of trying to adapt/adjust to difficult circumstances. It is not surprising, then, that rates of religious coping show wide variation depending on the research design used. Koenig and colleagues in *The Handbook of Religion and Health* state that reported rates vary from "1% to 42% (depending on the population and the part of the world in which the subjects live)" (2001:79). Nonetheless, the quantity and variety of religious coping indicates that the use of religious and spiritual ideas and behaviors is a widely used method of trying "get through" difficulties, and that people believe that it helps.

In the review based on the literature search done for *The Handbook* (2001) (Koenig, 2001), Koenig et al. conclude that "When people become physically ill, many rely heavily on religious beliefs and practices to relieve stress, retain a sense of control, and maintain hope and their sense of meaning and purpose in life. Religious involvement appears to enable the sick, particularly those with serious and disabling medical illness, to cope better and experience psychological growth from their negative health experiences, rather than be defeated or overcome by them." Although circumstantial, the research evidence suggests that these efforts are often effective.

Religious coping and health continues to be a popular topic in spirituality and health research. In the 287 relevant citations yielded by my combined MEDLINE searches from 2000 to the present 25 deal with some aspect of coping. Some of these studies are beginning to delineate differences in religious coping styles that align with different groups. For example, in a study of chronic pain patients Dunn and colleagues found that "Older women and older people of minority racial background reported using religious coping strategies to manage their pain more often than did older Caucasian men" (Dunn, 2004:19).

Instrument Development (Within Christianity)

David Larson, in his 1986 review of religious variables in the psychiatry literature (Larson, 1986) found that fewer than 3% of his sample of more than 2000 quantitative studies used a religious measure as a central variable, and only one of these employed a multi-dimensional, statistically valid questionnaire. This despite the fact that even in 1986 there existed a substantial number of important religion and spirituality instruments. And even when religious or spiritual measures have been shown to have strong predictive value they were generally reported without discussion.

Since that time there has been a dramatic increase in the use of religious and spiritual variables in health research, for both mental and physical health, and in the development of such measures specifically tailored to use in a health setting.

Because the problematic distinction between religion and spirituality is central to spirituality and health research, the intrinsic/extrinsic religiosity (I/ER) measures in Allport and Ross's classic religious orientation scale (ROS) (Allport, 1967) has been of

continuing importance in the field. I/ER does not map perfectly on the spirituality-religion distinction, but it is clearly related, so spirituality and religion measures have been consistently influenced by the ROS and efforts to refine its distinctions (Burris, 1999), including the development of new I/ER measures (Egbert, 2004:9-11). Hoge's intrinsic religious motivation measure (IRMS) is an early variant on the ROS and continues to be influential and used in health research. For example, Sherman and Simonton have found it reliable and valid in health related research (Sherman, 2001).

In their chapter on measurement methods Koenig et al. (2001:495-510) describe dozens of instruments relating to various aspects of religiosity (e.g., religious belief, religious affiliation, organizational religiosity, religious well-being, spiritual well-being, and spiritual involvement, among others). Hill and Hood, in their *Measures of Religiosity* (Hill, 1999) provide even more. Not all of these instruments are equally valuable, and all reflect to some extent the ongoing developments in terminology in the field. As long as there is uncertainty about the meanings of *religion* and *spirituality*, measures of those concepts will face validity problems. But the use of these scales in health research will be a part of the solution to that problem. The greatest difficulty, therefore, is the fact that so many researchers in spirituality and health do not use existing, tested instruments. Not all studies require formal instruments, but many do and those would benefit from familiarity with the tools that have been established for their reliability, consistency, validity and psychometric properties.

Several recent instruments deserve specific mention with regard to health outcomes research. The Duke University Religion Index (DUREL) is a brief, 5-item scale that has one item each for organization and non-organizational religiosity and three for intrinsic religiosity (Koenig, 1997). In a study of cancer patients the three intrinsic religiosity questions were found to be reliably related to IR on Hoge's IRMS (Sherman, 2000). The index of Core Spiritual Experiences (INSPIRIT) is a broader measure that still relates well to intrinsic religion measures (Kass, 1991). One of the most important recently developed instruments is the Fetzer-NIA measure (Fetzer, 1999). First published in 1999 and reprinted in 2003 this set of scales was developed by a group of prominent social scientists engaged in spirituality and health research (Idler, 2000). The scales are contained in an 88 page booklet available free from Fetzer or downloadable from the Internet. It contains long and short forms, with explanation, background and discussion for 12 dimensions: Daily Spiritual Experiences; Meaning; Values; Beliefs; Forgiveness; Private Religious Practice; Religious/Spiritual Coping; Religious Support; Religious/Spiritual History; Commitment; Organizational Religiousness; and Religious Preference. It also includes a brief combined version of the scales, the Brief Multidimensional Measure of Religiousness/Spirituality (BMMRS) with a total of 38 items. According to the new Preface in the 2003 reprint, more than 3000 copies had been distributed, and 80% of recipients had rated the instruments as useful. The most popular subscales, according to the Preface, are the Religious/Spiritual Coping and the Daily Spiritual Experiences Scales (DSES). Of special importance is the fact that an abbreviated version has been included in the general Social Survey of the National Opinion Research Center (Idler, 2003). The breadth, wide spread use and easy availability of this instrument(s) makes it of great importance for spirituality and health research. I would agree, though, with Koenig et al. (2001:506-507), that this otherwise very good instrument is weakened by the incorporation of a variety of items that are

questionable as religion or spirituality measures including some, such as feelings of peace and harmony, which can directly indicate mental health. This virtually ensures some level of apparent association between spirituality as measured by this instrument and mental health. This kind of problem is characteristic of the conceptual difficulty of separating distinctively spiritual characteristics from psychological characteristics.

Because no single instrument can be fully suited to all samples, it is a strength of the field that new measures are being developed (or revised) for use in particular populations. For example, Lukwago and colleagues have published a set of brief scales to measure collectivism, religiosity, racial pride, and time orientation in urban African American women (Lukwago, 2001) that includes both borrowed and new scales, and Jagers and Smith published a twenty-item measure specifically oriented to African Americans, which Egbert et al. suggest may be useful in health related studies (Egbert, 2004). Instruments for other groups are also being developed. For example, Mokuau and colleagues have tested a revised version of the Fetzer/NIA BMMRS in a native Hawaiian population (Mokuau, 2001).

Instruments for specific disease groups are also being developed. For example, the Santa Clara Strength of Religious Faith Questionnaire (SCSORF) (Sherman, 2001) is a reliable and valid measure for cancer patients that has been evaluated in well-defined samples of breast cancer patients, and healthy young adults, and shows good retest reliability and internal consistency for IR, OR and NOR. In 2002 Meraviglia et al. published a prayer scale adapted for people with cancer that was tested in a sample of 32 people with a variety of cancers. (Meraviglia, 2002) Also, in 2002 Ironson et al. published the Ironson-Woods SR Index (Sense of Peace, Faith in God, Religious Behavior, and Compassionate View of Others) for use with HIV/AIDS patients, in a study in which aspects of the measure were correlated with a variety of health related factors including longevity, less distress and lower cortisol levels. Existing instruments are also being evaluated with regard to specific diseases. Sherman et al. tested the DUREL instrument in two groups of cancer patients and found good internal consistency. Comparison to other measures showed good convergent and divergent validity, and the authors concluded that the DUREL (which they called DRI) is useful with cancer patients. (Sherman et al., 2000))

The ongoing development of more specific instruments, evaluated in appropriate samples, and extending beyond the general population is an important indication of the strength of the field. A persistent problem in instrument development results from the language/terminology problems discussed above. When inadequate definitions of *spirituality* and *religion* are employed, the validity of measures suffers.

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