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PHILOSOPHICAL EXPLORATION

"For They Knew Not What It Was": Rethinking the Tacit Narrative History of Religion and Health Research

Jeff Levin[1]

Abstract Over the past couple of decades, research on religion and health has grown into a thriving field. Misperceptions about the history and scope of this field, however, continue to exist, especially among new investigators and commentators on this research. Contrary to the tacit narrative, published research and writing date to the nineteenth century, programmatic research to the 1950s, and NIH funding to 1990; elite medical journals have embraced this topic for over 100 years; study populations are religiously and sociodemographically diverse; and published findings are mostly positive, consistent with psychosocial theories of health and confirmed by comprehensive reviews and expert panels.

Keywords Religion · Spirituality · Health · Healing · Medicine

In 2009, an article appeared in this journal, entitled, "'And Let Us Make Us a Name': Reflections on the Future of the Religion and Health Field" (Levin 2009a). The paper was an exegetical take on the Biblical story of the prideful people of Shin'ar who constructed the Tower of Babel in order to make themselves a name (Genesis 11:4)—to memorialize their hubris and self-absorption in an everlasting structure that would glorify themselves and their monotonic thinking. The article was written as a gentle warning that the religion and health research field should avoid building its own Tower, should be wary of trying to force-fit all of the work on this topic into a single mold, and ought to embrace a multiplicity of perspectives and approaches. That is, the emerging field should be a place that welcomes all manner of conceptual and theoretical models and a diversity of research questions, hypotheses, and methodologies. This is the best way to ensure that creative

✉ Jeff Levin
jeff_levin@baylor.edu

[1] Institute for Studies of Religion, Baylor University, One Bear Place #97236, Waco, TX 76798, USA

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thinkers and investigators continue to push the envelope and broaden our horizons on how faith and spirituality impact on human well-being.

The present paper is a sequel of sorts to that earlier article. This, too, is a commentary on the state of the religion and health research field, but from a different angle. The concern here, again, is with a kind of monotonic thinking, but of a different type: the almost ubiquitous misreadings of the origins and scope of published empirical research on this subject. As this topic continues to push into the mainstream of medical and population-health research—it is already less marginal and less obscure than it was even 7 years ago—a tacit narrative has taken root which evinces a widespread lack of awareness of the parameters of this field. This includes misperceptions about where this field came from, how much research has been done, and the breadth and depth of this work. There are significant consequences of these misunderstandings for the future of this field. As with the first paper, we begin with a brief *d'rash* (sermon) on a biblical passage that seems to capture the present situation and its implications.

Soon after crossing the Reed Sea and emerging into freedom, the Israelites began to get restless and even nostalgic for their former captivity. Despite the blessing of liberation, the slightest setback led some of the worst offenders among them to complain to Moses that perhaps they should never have left Egypt. So blinded by their impatience and unwarranted sense of victimhood, they even took umbrage over the appearance of *manna*, the mysterious food source which God had miraculously provided to sustain them in the wilderness. We are told, "And when the children of Israel saw it, they said one to another: 'What is it?'—for they knew not what it was. And Moses said unto them: 'It is the bread which the Lord hath given you to eat'" (Exodus 16:15 JPS). This was not simply an understandable lack of knowledge of something that took the people by surprise; Moses already had alerted them ahead of time that God had heard their grumbling and would soon provide them with bread. God kept His word, and the people continued to grumble nonetheless. Their self-narrative told them that they were starving, and when reality proved otherwise it still did not change the narrative.

The lesson: something can be right there in front of one's awareness—such as the *manna* that God blessed the Israelites with—but the mentality of want can be so ingrained that the reality of what is in front of one's eyes is missed. This was true in biblical times for the recently freed Israelites and is true today for the tacit narrative regarding the history of religion and health research.

For most of a century, study results accumulated on a health impact of religious identity, belief, and practice, yet were not "seen." That is, the studies were conducted, results were published in peer-reviewed journals, and sometimes (but usually not) these findings were cited by subsequent studies. All along, it was widely understood that "no one's ever looked at that" or "there's nothing there." Anyone among the small group of investigators actively pursuing empirical research on religion and health back in the 1980s is familiar with these responses when mentioning to a colleague or supervisor that they intended to conduct an analysis on this topic or write a review or commentary. In actuality, even by then at least a couple of hundred research studies and scholarly papers had been published over a period of many decades. Yet, paradoxically, despite all of this published research, it was as if the emergence of this topic as a legitimate field of study "suffered from a sort of collective amnesia on the part of social scientists, epidemiologists, and biomedical professionals whose tacit professional knowledge tends to downplay the role of religious belief and involvement as salient influences on health" (Levin and Vanderpool 1992, p. 84).

Today, now that the existence and scope of this literature are more widely acknowledged, this history has been rewritten such that this scientific interest is described as a new and recent phenomenon. The origins of this area of research are believed to be more or less coterminous with its widespread discovery by academic medicine and the popular media in about the middle 1990s. This field's deep roots going back over a century are missed. Moreover, even among those newly apprised of this body of research findings, there may be scant awareness of the history of the multifaceted and long-standing intersections of religion and medicine going back centuries and millennia (see Levin 2016). But, more significantly, from the perspective of advancing knowledge specifically about religion's impact on physical and mental health, the considerable conceptual and theoretical work and programmatic research over the past 30 years are also overlooked.

Before proceeding, it is necessary to make the following point: Raising these issues is not just about underscoring the legacy of those individuals who did this scholarly work and who wish it to be remembered, present author included. More importantly, accurately accounting for the breadth and depth of research studies and other scholarly writing is critical for the expansion and maturation of this field. The tacit and not-so-tacit history and narrative exclude important work whose insights and perspectives could provide useful guidance and direction were they not nearly invisible today.

There is no need to reinvent the wheel, something that has become a norm for this field when it comes to selecting topics for study, positing research hypotheses, designing religious assessment instruments, conducting literature reviews, and setting agendas for follow-up study. So many investigators, especially new investigators, do not appear to be aware of the history of the study of religion and health. Also, regarding empirical research, they do not appear to be aware of what has already been observed and replicated. Further, they do not seem to understand the caveats and nuances of most of this research, and thus risk misinterpreting published findings. Especially egregious are one-off exploratory studies in small non-representative samples that cite almost no literature, offer no hypotheses, and yet seek to "prove"—once and for all—through a meager analysis of a couple of single-item indicators whether religion or spirituality (undefined) is or is not related to health (also undefined). After over a century of empirical research and over 30 years of systematic study, including large-scale, externally funded research programs by prominent academic investigators, this latter approach is not a wise use of resources and should not be acceptable to funding agencies and reputable journals.

This paper seeks to remedy this situation by discussing the forgotten history of the religion and health field. First, the implied narrative is outlined, through an enumerative listing of presumed facts about the origins, scope, and content of religion and health research. Second, the real history is laid out, comprising a point-by-point refutation of each of the "facts" in the previous section. Third, barriers to rethinking the narrative are identified, including differences across disciplines in how this research is undertaken and a visible disparagement of faith and spirituality within institutional medicine. Fourth, some reflections are offered on how we might construct a new narrative on religion and health research in ways that would enrich our perspectives on how to study this vital topic.

The Tacit Narrative

When it comes to assessing the empirical research on religion and health, much is presumed and many of these presumptions are taken as fact. Typically, these manifest either as bemoaning or apologias, on the part of supporters, or as disparagement or dismissal, on the part of skeptics. Not a lot of work has been done and it is mostly unsound and ambiguous, but there is enough of a kernel of promise to suggest that this is worth following up—so goes the "pro" narrative. Not a lot of work has been done and it is mostly unsound and ambiguous, and because this work violates common sense and the laws of science it is not worth following up—so goes the "con" narrative. In both instances, the assumptions are faulty: A lot of work has been done and a lot of what has been done is very sound and the findings are consistent, and this work is quite coherent with what is known about both the instrumental functions of religion and the determinants of personal and population health.

Let us begin with some of the more commonly observed statements of "fact" about religion and health research. All of the following are assertions that the present author has heard or seen *repeatedly*, in person and in print, in academic settings and in media reports. They will be amply familiar to any veteran researcher in this field. These respective claims originate, variously, among skeptics, among supporters, or among both camps. To protect the guilty, these are not being attributed here to any particular individuals. Representative skeptical critiques, some well cited, can be found easily (e.g., Sloan et al. 1999). The aim here is not to single out or embarrass anyone, but to lay the groundwork for the remainder of this essay.

1. The study of religion and health is a new topic of research and intellectual discourse. It is only recently that scientists and scholars, for the first time, have begun exploring the interconnections of faith or religious practice or spirituality with physical or mental health or well-being.
2. Population-based research on religion and health began in earnest only in the past few years and is in its infancy. A few investigators are focusing their work here, through mostly exploratory studies.
3. The US National Institutes of Health (NIH) just recently has taken notice of religion and health research and has begun to acknowledge the subject mostly through initiatives by its alternative medicine office.
4. Within this new field of research, the study of religion and mental health is a neglected area of inquiry. Most research has focused on physical illness, and few studies exist of psychiatric disorders or psychological distress.
5. The literature on religion and health mostly comprises one-off studies and only recently have a few investigators taken a programmatic focus on particular topics.
6. Studies of religion and health are mostly published in inferior or non-peer-reviewed journals. The elite medical journals only recently have been open to this subject, and few studies have passed muster.
7. Published studies of religion and health are mostly exercises in empiricistic number-crunching. There is minimal conceptual development, attention to theoretical or clinical relevance, or positing of models which propose mechanisms by which religious effects can be explained.
8. Studies of religion and health have focused almost exclusively on white US Christians. Members of other faith traditions have been neglected, as have members of other racial or ethnic groups and people of other nationalities.

9. Published studies of religion and health are plagued by pervasive methodological weaknesses, which call into question any positive or statistically significant findings. Moreover, the study of religion in relation to any outcome—not just health—is of questionable validity. It is mainly the product of religious fundamentalists or partisans seeking to justify their agendas, such as physicians praying for patients.
10. Published findings on religion and health are few and mixed. There is thus little possibility of identifying trends or drawing conclusions one way or another.

These types of statements receive widespread support because they are reinforced by a disparagement of faith among some opinion leaders in popular culture and in contemporary academic medicine (more on this later). But, also, they are reinforced by the continued failure of the community of religion and health researchers to adequately make their case in an organized and systematic fashion to counter these misperceptions. If there is indeed one dysfunction that can assuredly be attributed to religion and health research, it is the observations that it is "a disheveled literature" (Krause 2011). That is, while positive findings from solidly executed studies exist in large quantity, the field on the whole remains a bit of a mess. This disheveled, messy state of affairs tends to underscore popular perceptions that affirm the ten "facts" noted above.

The Real History

To reiterate, each of these ten statements is false—and emphatically so. The truth is almost completely the opposite of each of these statements. Contrary to the narrative advanced above, published research and writing date to the nineteenth century, programmatic research to the 1950s, and NIH funding to 1990; elite medical journals have embraced this topic for over 100 years; study populations are religiously and sociodemographically diverse; and published findings are mostly positive, consistent with psychosocial theories of health and confirmed by comprehensive reviews and expert panels. These points will now be elaborated in greater detail.

1. Rather than being a brand new topic of research, the study of religion and health—and speculation about their interrelations—is a very old topic of intellectual discourse. A classic essay on faith and healing by Sir William Osler, for example, published in 1910, is well cited (Osler 1910). But the discussion goes back even further: to the nineteenth century (e.g., Billings 1891; Brigham 1835), and even to medieval (e.g., Bar-Sela et al. 1964) and ancient (see Hall 1972) times. A putative impact of faith or spirituality on physical and mental health has been described, advocated, or otherwise written about by Jewish, Christian, and Muslim clerics and medical experts for as long as these religions have existed (see Ferngren 2014).
2. Rather than being in its infancy, population-based research studies by epidemiologists and physicians date to the nineteenth century (see Levin and Schiller 1987). These include substantial bodies of research on overall and cause-specific morbidity and mortality throughout the second half of the twentieth century. Over half of published studies point to a salutary impact of religious participation on each of a variety of diagnostic categories or classes of health outcomes, including heart disease, hypertension and cerebrovascular disease, cancer, all-cause

mortality, physical disability, depression, and anxiety (Koenig et al. 2012; Levin, in press).

3. Rather than having just discovered this subject, the NIH has been aware of and supportive of research on religion and health for decades. The NIH funded a large-scale population study entitled, "Religion, Health, and Psychological Well-Being," beginning in 1990, followed by another national study entitled, "Religious Participation Among Older Blacks and Whites" in 1992. These projects' respective lead investigators had a history of collaboration and, together, their studies produced dozens of peer-reviewed publications (see Taylor et al. 2003). Prior to that, the NIH published a major bibliography in 1980 (see the next item). The first major NIH conference was held in 1995, following—not prior to—these earlier NIH-funded efforts. Note that *none* of these efforts involved the new Office of Alternative Medicine (now known as the National Center for Complementary and Integrative Health). In fact, the Office was not a player in any significant sense in the development of this field or in the NIH's involvement in this subject. The studies, publications, and events just listed were sponsored through normal funding mechanisms primarily by the National Institute on Aging (NIA) and National Institute of Mental Health (NIMH).
4. Rather than being a relatively neglected dimension of this field, the study of religion and mental health has been front and center for decades. In 1980, the NIMH published a comprehensive bibliography entitled, *Religion and Mental Health*, which consisted of *1836 entries* (Summerlin 1980). This publication date was prior to publication of the earliest comprehensive literature reviews of religion and mental health or psychiatric research (e.g., Larson et al. 1986), and indeed prior to the first comprehensive literature reviews of religion and health research in general (Levin and Schiller 1987; Jarvis and Northcott 1987).
5. Rather than being a literature of mostly one-off exploratory studies, serious programmatic research dates back over half a century. The earliest research program on religion and health was the work of Moberg in the early 1950s, which investigated the impact of religious involvement on mental health and well-being outcomes in older adults (e.g., Moberg 1953). In the 1960s and 1970s, Comstock and colleagues at Johns Hopkins University published a series of epidemiologic studies which analyzed effects of religious variables (e.g., Comstock and Partridge 1972). In the 1980s, Markides and colleagues (e.g., Markides 1983) and Taylor and Chatters and colleagues (e.g., Taylor and Chatters 1986) began publishing studies on this subject among Mexican-American and African-American populations, respectively. Subsequently, prolific ongoing research programs were established, including those of Koenig (see Koenig 1999b), Pargament and colleagues (see Pargament 1997), and Krause (see Krause 2008).
6. Rather than being published predominantly in second-tier journals, religion and health studies have appeared in the top journals since the origins of this field over a century ago. Almost every elite medical journal has published papers with findings bearing on religion and health for decades. These date to the *British Medical Journal*, which published Osler's famous essay, "The Faith that Heals," over 100 years ago (Osler 1910), along with other articles in a special issue on spiritual, mental, and faith healing. Also notable is a multipart series on "Religious Healing" published in the *Journal of the American Medical Association* 90 years ago (Paulsen 1926). Since then, the following prominent journals—among many others—have published findings from research studies of religion and health: *New*

England Journal of Medicine, *The Lancet*, *Annals of Internal Medicine*, *American Heart Journal*, *American Journal of Psychiatry*, *American Journal of Epidemiology*, *Archives of Environmental Health*, *British Journal of Cancer*, *Journal of Nervous and Mental Disease*, *American Journal of Medicine*, *Bulletin of the Johns Hopkins Hospital*, *Southern Medical Journal*, *American Journal of Public Health*, *Annals of the NY Academy of Sciences*, and *Archives of Internal Medicine*.

7. Rather than being a literature of scattered exercises in number-crunching, published findings on religion and health especially from population-based studies have long focused on important theoretical issues and have addressed potential mediating or other factors which may help to explain these findings. The use of religious involvement as a variable or construct in data analyses is simply garden-variety psychosocial-epidemiologic research. That is, results are consistent with what is well known about the social, psychosocial, and behavioral determinants of population health (Idler 2014). Positive effects of religiousness on physical or mental health fit into theoretical models of human well-being and are consistent with behavioral, clinical, and biomedical studies and observations as well (see, e.g., the multifactorial etiologic model of geriatric depression proposed by Koenig [1995]). Considerable research links religious involvement with physiological and pathophysiological markers and processes, such as the recent studies which associate religious participation with greater leukocyte telomere length (Hill et al. 2016; Koenig et al. 2016), a marker of cellular longevity.
8. Rather than being a literature of findings predominantly from white US Christians, the research base for religion and health is quite diverse. While there are a plurality of studies of white US Christians, this literature encompasses studies of all races, ethnicities, nationalities, and religions, especially among gerontological and geriatric studies (Levin 1997). Indeed, studies have been conducted on six continents. This myth is especially persistent, yet is easily countered by a perusal of the table of thousands of published studies at the back of the most recent edition of Oxford University Press' *Handbook of Religion and Health* (Koenig et al. 2012).
9. Rather than being plagued by pervasive methodological challenges, the best studies of religion and health have been methodologically vetted repeatedly, including by expert panels beginning in the 1990s (e.g., Larson et al. 1997; National Institute on Aging and the Fetzer Institute 1995). Much of the skeptical critique is based on a questioning of any and all empirical social and behavioral research on religion, on the grounds that study of this phenomenon is impossible because it entails assessment of concepts too subjective or imaginary to assess. Such criticism is an unfounded critique of empirical social and behavioral research in general, which is based on assessment of subjective states, beliefs, attitudes, and so on. Moreover, it evinces an unfamiliarity with over half a century of research using scores of validated measures of religious identity, beliefs, attitudes, behaviors, and experiences by sociologists and psychologists (see Hill and Hood 1999) to link dimensions of religiousness to outcomes such as political preference, sexual activity, criminal behavior, contraceptive usage, social support, fertility, marital happiness, attitudes toward the environment, and much more (see Levin et al. 1996). Additionally, most of the best research on religion and health is the product of a diverse group of senior investigators, of various religious backgrounds including "none of the above." Among the top tier of veteran investigators, none that the present author knows of would qualify as a religious fundamentalist or as

committed to using their research studies to seek religious conversions, as if that were even possible.

10. Rather than there being no basis for any reliable conclusions, the idea that religion is a generally salutary influence on human health is strongly supported by many hundreds of well-vetted studies of various disease and well-being outcomes (see Koenig et al. 2012; Levin, in press). The majority of published studies have produced results indicating a statistically significant and salutary (positive) association, regardless of outcome, study design, or population characteristics; for some outcomes, results are strongly positive (see Koenig et al. 2012). For mental health, this was already recognized nearly half a century ago by Rodney Stark (1971), notwithstanding a widespread belief at the time that religious commitment promoted psychopathology. Stark's conclusion was not appreciably different than what was later found in more specialized systematic reviews (e.g., Gartner et al. 1991) and meta-analyses (e.g., Witter et al. 1985), which found at least moderate associations between religious and health- and well-being-related variables depending upon the particular outcomes under review.

Despite the demonstrable falsity of the most commonly observed assertions, the accepted narrative for this field is intimately tied into these false "facts." We therefore need to construct a new narrative. This is a critical task for the field, as it will enable us to envision and create a future not reachable as an extension of the current narrative. This narrative supports a never-ending stream of exploratory, atheoretical, context-less analyses, rather than programmatic work that advances knowledge by building on previous streams of work. It is a self-fulfilling prophecy in a sense. But there are barriers to constructing a more realistic narrative, grounded in the multiplicity of disciplinary approaches to this research and in transdisciplinary biomedical perspectives which disparage faith and spirituality in general.

Barriers to Rethinking the Narrative

The widespread lack of awareness of the real back-story of religion and health research is also due in part to the fragmented nature of the constituencies conducting this research. These disciplines and fields have different agendas and thus interpret the reasons to do this sort of research and the meaning of observed findings in different ways. Investigators speak at cross-purposes to each other and, until recent years, may not have been fully aware that distinctive programs of research on religion and health exist. This manifests, in part, in inconsistent patterns of cross-citation of studies and reviews among these disciplines and fields. This is not the case among the most established researchers, most of whom have a lengthy history of collaboration across disciplines and fields—many of these investigators themselves fall into multiple categories (e.g., sociologist and gerontologist). But, for the most part, published work on this subject fits the following patterns.

Among *sociologists*, religion and health research mostly has drawn on large national population surveys, with an aim to vet various mid-range theories in order to understand how religion contributes to health and well-being (e.g., Idler 1987). Also, there has been a substantial interest in parsing methodological issues in conducting this research and interpreting findings. For example, some sociologists have given careful attention to testing theoretical models with special emphasis on complex interactions (e.g., Ellison and Fan

2008); others have focused on potential bidirectional effects between religion and health (e.g., Kelley-Moore and Ferraro 2001). Sociologists especially have taken the lead in studies of religion and mortality, drawing on theories and methods taken from social demography (e.g., Hummer et al. 1999; Musick et al. 2004). Also, sociologists have made more concerted efforts to investigate these relationships in understudied populations, such as among racial and ethnic minorities (e.g., Brown and Gary 1994; Sternthal et al. 2012).

Among *psychologists*, special attention has been paid to mind–body connections that may underlie religion–health connections, including cognitive, affective, and behavioral pathways or mechanisms (e.g., McCullough and Willoughby 2009; Oman and Thoresen 2005). Research has focused more on outcomes of clinical or mental health relevance, and experimental designs and recruited samples have been the norm (e.g., Emmons and McCullough 2003; Rosmarin et al. 2009). Research studies and commentaries have taken a more clinical and therapeutic focus and have emphasized topics related to the use of religious resources for adjustment to challenging life circumstances (e.g., Park 2005), such as in the literatures on aging (e.g., McFadden 1999), religious coping (e.g., Pargament 1997), and post-surgical recovery (e.g., Ai et al. 1998). Another emphasis has been on how religion serves as a resource for human flourishing (e.g., Myers 2008).

Among *gerontologists*, an important focus of religion and health research has been on charting the impact of religion on the aging process with an eye to needs assessment—that is, as related to caregiving or service delivery or via basic research that maps how religion serves to help people respond to the challenges of aging over time. This focus dates to the earliest work in religious gerontology (e.g., Maves 1960). Accordingly, longitudinal research has been the gold standard and attention to theoretical issues has waxed and waned (see Levin et al. 2011), as particular theories of psychosocial aging (e.g., disengagement theory) have themselves waxed and waned. The emphasis here, on the whole, has been more pragmatic and applied than in sociology and more communally contexted than in psychology (see George, in press), although sociologists (e.g., Krause 2008; Ardelt 2003) and psychologists (e.g., McFadden 1996) are among the leading contributors to this research. Topics are chosen and analyses are performed with more of an eye to producing findings that may benefit the personal and social well-being of older adults (beginning with Moberg 1953) and those experiencing age-related physical or psychological challenges as they experience senescence and approach death (e.g., Payne 1980).

Among *epidemiologists*, the main focus of religion and health research for decades has been on issues related to population risk and prevention. The primary concern here has been to quantify the extent to which religious identity and practice serve to elevate or protect against subsequent morbidity, mortality, or disability (Levin 1994, 1996). Large probability samples representative of regional, national, or global populations are the gold standard. Examples include analyses of religion from the well-known Alameda County, California (Strawbridge et al. 1997); Washington County, Maryland (Comstock and Partridge 1972); and Evans County, Georgia (Graham et al. 1978), studies and from the New Haven sample of the EPESE (Idler and Kasl 1997) study. Interest does exist in theory and mechanisms (e.g., Levin 1996), especially among those sociologists who also conduct epidemiologic research (e.g., Idler 1987; George et al. 2002), but in general these interests are secondary to simply identifying and describing the impact of dimensions of religious participation on population rates of disease, physical or mental. This has been the primary focus of research since the "epidemiology of religion" was first proposed as a field of study (Levin and Vanderpool 1987). Conceptual and interpretive work is less commonly seen, in keeping with its de-emphasis in epidemiology, which is a more applied discipline. But epidemiologists have made important contributions here as well (e.g., Van Ness 2003).

Among *physicians*, religion and health research has been mostly about looking for impacts on more intrinsically medical topics. These include studies of religion in relation to clinical outcomes (see Koenig 1999b) and biomedical markers (e.g., Ironson et al. 2002), as well as research on facets of the healthcare encounter (see Puchalski 2001), including the doctor–patient relationship (e.g., Puchalski and Ferrell 2010), physician spirituality (e.g., Curlin et al. 2005), and parameters of hospitalization and healthcare use (e.g., Koenig and Larson 1998). Analysis of data from clinical and community samples is the norm, although teams of academic physicians have made use of large population samples for sophisticated longitudinal analyses (e.g., Koenig et al. 1999). It also is among physicians that one sees greater interest in commenting upon the controversial literature on clinical trials of distant prayer, either favorably (e.g., Krucoff and Crater 2009; Dossey 2008; Dossey and Hufford 2005) or skeptically (e.g., Benson et al. 2006; Koenig 1999a).

In the *complementary and alternative medicine* community, the overriding interest in religion (or spirituality) and health is to interpret what findings tell us about human consciousness and its impact on the body, on physiology, and on healing (see Jonas and Crawford 2003). There appears to be minimal interest in theory, as social or behavioral scientists might define this, nor in conducting population-based research studies of well populations, and only modest interest in detailed methodological discussion or critique, unless related to clinical trials of prayer and distant healing (e.g., Benor 2002). Indeed, there is considerable interest in the experimental evidence for non-local effects of prayer, healing intention, and energy medicine. The best of this work, both original studies and review or commentary pieces, by physicians and nurses and scientists, is insightful and provocative (e.g., Dossey 1993; Engebretson and Wardell 2007; Schlitz et al. 2003). The worst misinterprets findings from the other categories of religion and health research as providing evidence for or against healing of disease, which they do not, or confounds them with the prayer studies, which they are not.

Another factor working against acknowledgment of the rich, multifaceted, and long-standing history of religion and health research has been, paradoxically, that it is, in fact, not new. If there were some recent singular discovery that kicked off this work, identified with a single individual, then perhaps it would be easier to recognize the origins and trajectory of this field. But neither is the case. The earliest work to come to widespread attention in the 1980s from among the current cohort of investigators included a set of widely cited literature reviews (including Larson et al. 1986; Levin and Schiller 1987; Levin and Vanderpool 1987; Koenig et al. 1988), programmatic research on selected ethnic-minority populations (e.g., Markides 1983; Taylor and Chatters 1986), and a few influential theoretical papers (notably Idler 1987). These works were summarizing, commenting on, or building on volumes of studies that already existed, had been published over a period of decades, and yet were not widely recognized as a "literature." The emerging field of religion and health research thus has been more a work of rediscovery than of invention. The pioneers in this scholarly field were Amundsens and not Edisons, and there were many of them from several disciplines.

What was new or novel here is not the idea that the religious and the medical may be related, but rather the presumption by so many defenders of the status quo in biomedicine that they are not (see Levin 2009b). The two concepts have been intrinsically intertwined throughout history and across cultures (Ferngren 2014; Levin 2016). Only in the past century or so, in the West, have we forced them apart—something that prior generations might have found improbable or odd. Martin Marty understood this when he noted, "Modernity produces divisions. It separates the spheres of life. The processes of modernity

tend to chop up aspects of existence that most people wish they could keep together, to see whole" (Marty 1982a, p. 27).

Yet another possible factor in the estrangement of the religious and the medical has been the observation that physicians are less formally religious than the patients that they treat and are thus dismissive of a salutary function of faith. This has been widely accepted, but recent empirical research has suggested that the association is complex and that in some ways physicians are just as spiritually engaged, or more so, than the general population (e.g., Curlin et al. 2005). At the least, there are significant differences by medical specialty (Curlin et al. 2007a), so the situation may not be as bleak (from a religious perspective) as it is often portrayed. While individual physicians or clinical psychologists may continue to make biased judgments about patient faith and spirituality (see Houts and Graham 1986), there are large numbers of medical professionals who publicly attest to faith and its potentially positive role in the clinical setting (Curlin et al. 2007b) and who support accommodating the spiritual needs of their clientele within accepted professional and ethical boundaries (Post et al. 2000; Curlin et al. 2006). For academic physicians and religion and health researchers, there may no longer be an "anti-tenure factor" as famously observed over 20 years ago (Sherrill and Larson 1994)—a career kiss of death for daring to pursue this subject—but, still, it would be overstatement to claim that faith and spirituality are widely accepted as legitimate subject matter by the medical mainstream.

Interestingly, this was not always the case. Physicians (and scientists) were at one time largely people of faith, broadly defined (see Amundsen and Ferngren 1982a, b; Numbers and Sawyer 1982). This is still so in many places, outside of the West (see, e.g., Ravindra 1991). Marty, again, has weighed in insightfully: "Histories that cover the first thousands of years of human experience do not need separate chapters for religion over against health/medicine. They do not, that is, until the last chapter, which covers events in the most recent century or two" (Marty 1982a, pp. 27–28). Accordingly, a review published in the *British Medical Journal* in 1905 had this to say: "The interdependence of religion and health, which may both be regarded as inherent birthrights of mankind, is a broad fact which is generally accepted and which is capable of easy demonstration" (Review 1905, p. 1047). So what happened to change this?

This issue, of course, is far too complicated than can be covered adequately in a few lines. But a couple of contributing factors can be identified. For one, the de-spiritualization of medicine, healing, and understandings of human well-being was surely encouraged by the very real successes of biomedicine which define humans as solely or primarily physical beings—as a physical body alone—and thus sanction treatment by mechanical means, as one would repair a machine, albeit an exceptionally complex one (see Eckstein 1970). Secondly, this development was reinforced by the ascendancy of theories in psychiatry (e.g., Freud 1961) and psychology (e.g., Ellis 1988) which marginalize, stigmatize, and even pathologize expressions of faith and spirituality. Medicine, and, by extension, medical research, have become the domain of "specialists without spirit" (Hewa and Hetherington 1995). We therefore now debate the possibility of linkages between things—health and religion—that, as noted, were once seen as interconnected, across cultures, across religions, across philosophical schools of medicine, and throughout history (see, e.g., Ferngren 2014; Marty and Vaux 1982).

Constructing a New Narrative

In light of the long-standing conversation between the faith-based and medical domains, what can we learn from what came before us? By that, specifically, is meant before the emergence of the contemporary field of religion and health research. What can we learn from pioneering and contemporary medical, psychiatric, pastoral, theological, and scientific figures whose insights bear on the relations between spirit and flesh? Can we identify signal pieces of wisdom from them that still hold true and that can guide our efforts? Here, in an unsystematic sampling, are a dozen notable selections that underscore observations made in the present paper.

1. *There is historical precedent for a link between religion and health.* "Connecting health/medicine with religion is not difficult, even if many moderns have forgotten how they intertwine" (Marty 1982b, p. 3).
2. *There is substantial research evidence supportive of a religion–health connection.* "While medical professionals have been privately assuming and publicly stating for years that religion is detrimental to mental health, when I actually looked at the available empirical research on the relationship between religion and health, the findings were overwhelmingly positive" (Larson 1995, p. 18).
3. *Evidence especially supports a salutary impact of religion on mental health.* "… religion and the church make contributions to mental health whose full significance is not always realized" (Hiltner 1943, p. 22).
4. *Reconciliation with God can serve to heal lives that suffer with psychopathology.* "All of us are familiar with the misanthropic, the hypomanic, and the angry as well as the cyclothymic personalities that are encountered in our everyday activities. It is just such an affective tonus that is changed by salvation" (Wilson 1972, p. 385).
5. *Religion is of clinical significance for both preventing and healing psychological distress.* "Among all my patients in the second half of life—that is to say, over thirty-five—there has not been one whose problem in the last resort was not that of finding a religious outlook on life. It is safe to say that every one of them fell ill because he had lost that which the living religions of every age have given to their followers, and none of them has been really healed who did not regain his religious outlook" (Jung 1933, p. 229).
6. *The salutogenic function of religion is consistent with what is known about human psychology.* "When the psychiatrist says, 'We must integrate this life,' religion replies, 'I am the integration you need. As a master sentiment, I am able to dominate the nerve network, gating all impulses to accord with my generic motivation; I can dwell deep in the solar plexus; I can knit fragments together; I reach to the roots'" (Allport 1963, p. 191).
7. *Religion contributes to peace of mind and psychological well-being.* "In the religious sphere, the classical expression for wholeness is 'the peace of God' which, according to St. Paul, exceeds all *nous* (rational understanding), and which is able to safeguard the heart (the center of personality) and the *noemata* (acts of rational understanding)" (Tillich 1981, p. 39).
8. *The potential magnitude of religion's contribution to well-being is profound.* "We shall see how infinitely passionate a thing religion at its highest flights can be…. This sort of happiness in the absolute and everlasting is what we find nowhere but in religion. It is parted off from all mere animal happiness, all mere enjoyment of the present, by that element of solemnity…" (James 1958, pp. 53–54).

9. *It is in the best interest of physicians and therapists to draw on religious resources in treating patients.* "… when a patient stands on the firm ground of religious belief, there can be no objection to making use of the therapeutic effect of his religious conviction and thereby drawing on his spiritual resources" (Frankl 1984, pp. 141–142).
10. *The therapeutic value of faith should not be perceived as a threat to clinicians.* "The faith that heals is only one of the mental states that can affect bodily functions…. [but] it in no way detracts from the effectiveness of scientifically based medical and surgical procedures. Rather, it suggests ways of supplementing them" (Frank 1975, p. 130).
11. *To disvalue faith may have serious consequences.* "Doctors who ignore the mental and spiritual dimensions of their patients will never be able to teach about health or practice genuine preventive medicine" (Weil 1988, p. 115).
12. *The consequences of ignoring faith do not just threaten the well-being of patients, but the viability of medicine as a healing profession.* "Modern medicine has become one of the most spiritually malnourished professions in our society. Because medicine has so thoroughly disowned the spiritual component to healing, most healers throughout history would view the profession today as inherently perverse" (Dossey 1998, p. 33).

Notwithstanding these supportive statements, as well as the successful cumulation of empirical evidence for a religious factor in personal and population health, both physical and mental, this area of research is still treated as marginal within sectors of academic medicine and science. The presence of thousands of research studies on this subject does not seem to have moved the needle as far as might have been expected for a more secular topic. Perhaps this is not surprising, given the contentiousness of faith and religion in the public square and in its historic encounter with science and medicine.

In tracking first-hand the emergence of this research field over the past three and half decades, as well as the responses to this emergence, three types of reactions can be observed. Each is an idealized response to the sort of marginality conjured by idea of what could be termed faith as a problematic for medicine—that is, as a source of concepts (or variance, to use a statistical term) brought to bear on matters of medical concern, such as health or healing.

For example, let us consider the contentious research literature on a healing power of prayer and on non-local healing in general. This involves the set of controversial clinical trials that have efforted to identify whether double-blinded absent (i.e., distant) prayer or non-contact healing via a projected subtle bioenergy or a conscious healing intention exhibits measurable therapeutic effects at a statistically significant level beyond what is observed in a control group. While this literature as a whole includes many methodologically limited or flawed studies (see Benor 2002), careful meta-analysis has identified a modest but significant salutogenic effect (e.g., Roe et al. 2015). Of all of the research studies that fall under the heading of religion or spirituality and health, these are surely the most infamous and have garnered the most media attention and scientific blowback.

Three responses or approaches to the presence of these studies of a putative healing power of prayer/energy/intention and of their positive findings—and indeed of findings bearing on the more general subject of religion and health—can be observed. These are (1) *reactive*: a defensive apologetics—assertions that this is or is not true, or must be or cannot be true, on mostly emotional grounds; (2) *quixotic*: an ideological crusade—efforts to prove or disprove either the "pro" or "con" position on the basis of a single flawed

experiment, something highly unlikely if not impossible especially if a given hypothesis involves concepts not amenable to validation using the methods of naturalistic science; and (3) *dispassionate*: a deep description—commitment to systematically unpacking which people or social groups are more or less likely to experience this phenomenon, as well as where and when it occurs, under what circumstances, what are its antecedents and its outcomes, what it means in the worldview of those experiencing it, and how they explain or understand it. The first two approaches are not mature scholarly responses; only the third approach is an authentically scholarly response, and it ought to be a model for how to engage this subject.

As noted, the first response or approach (defensive apologetics) is overly emotional and not contributory of any deep understanding. This is not how or why scientists do scientific research, including on medical or health outcomes. Instead, we bring new information (data, including quantitative data) to bear, via systematic study (using various methodologies), to address discrete questions posed by theory or clinical observations or known population-health status. If an apparent observation or claim seems to go against what was presumed before, possibly because of limited information, then it can be tested or validated empirically—a more dispassionate approach than simply shouting down the competing claim. Ironically, this approach characterizes much of the most strident critique of the religion and health research literature, a critique that purports to be based on rationality.

The second response or approach (ideological crusade) is naïve, usually presented by folks who appear to have a limited understanding of the questions in play or of how science progresses, especially observational research. There is something messianic about this approach, notably in the idea that a single study, no matter how haphazardly constructed, can serve as the final word on a subject. This is a model that is presumed to be borrowed (with fatal misperception) from experimental science, and thus, anyway, would not apply to population-based social, behavioral, or epidemiologic research questions. Even applied to something like randomized clinical trials of the healing power of prayer, there is too much possible variation in the experimental variable (prayer), across religions and cultures, and in the dependent variable (healing), across disease categories, to make a single trial, no matter how expertly conducted, the last word on the subject. Moreover, applied to a hypothesis such as the possibility that God answers prayers for healing, such research is probably doomed—this is not a question that any scientific study is capable of addressing, much less actually proving or ruling out. Further, the appeal to pedigree that is sometimes observed (e.g., "this study must be true because we're from [insert prestigious university here]") is not helpful and can be taken as a sign of insecurity.

The third response or approach (deep description) is best. For religion and health—or prayer and healing—or anything else that seeks to identify potential determinants of well-being in human populations, we should begin by setting an intention to dispassionately explore the conceptual, theoretical, and sociodemographic boundaries of the phenomenon. Before proceeding and getting too far along, we need to first be clear on what the constructs are that we are interested in, why specifically this is so, how we expect them to be associated and why, how we plan to assess them, and what the appropriate design and procedures are to accomplish this in a controlled or unbiased fashion. Further, for population-based research, we also must be clear about the population under study and the concomitant sample characteristics, and should consider how that group of people may or may not be representative of the larger or intended population—and thus be temperate in our conclusions. Confronted with new findings that challenge our previous assumptions, this should make for an ideal outline of how to respond. Yet, sadly, and obviously, this approach is less the norm that it ought to be.

In sum, notwithstanding narratives which misstate the history and scope of published research on religion and health, on the part of both supporters and skeptics, the state of the field is becoming quite well established and empirical evidence is substantial. Published research and writing are by now well into their third century, with productive programs of research by top investigators and elite universities into their fourth decade and NIH grant funding into its second quarter century. Almost every top medical journal has published findings on this subject, and the samples and populations used in theses studies are, on the whole, religiously and sociodemographically diverse. Finally, published findings are mostly positive and statistically significant, consistent with psychosocial theories of clinical and population health and confirmed by published systematic reviews and by reports from expert panels. New investigators are encouraged to familiarize themselves with this work and to establish their own research programs which build on these findings. This is the best way to assure that the religion and health research field continues to produce new knowledge about the determinants of health and healing in people and populations.

Compliance with Ethical Standards

Conflict of interest The author declares that he has no conflict of interest.

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