

Religion and Health: Effects, Mechanisms, and Interpretation

Background

Despite the tremendous amount of research over the past two decades on religion, spirituality and health,¹ the relationship between religion and health remains poorly understood today and at times controversial.² Largely unknown are the pathways (mechanisms) by which religion can positively or negatively influence mental, social, and physical health. Also, almost no attention has been paid to the theological interpretation of the findings as to their significance and implications. New spiritual knowledge would be gained and the potential for social and clinical applications would be strengthened from carefully directed and theologically grounded research in this area.

While an incredibly promising field of research, the study of religion and health is at a critical juncture. If high quality studies can illuminate the psychological, social, behavioral, and biological mechanisms by which religion influences or is connected to health, then the field will gain a more solid grounding as scientists, health practitioners, and religious communities better grasp the links of causation between religion and health and can appropriate them to the benefit of others. Equally important is that the practical applications of these findings occur within a solid theological framework, as misinterpretations have been an impediment thus far to the growth of the field and to transforming understanding and practice in mainstream faith communities.³

Effects on Health. There is growing epidemiological data and some evidence from clinical trials that there is more than just an association between religion and health, and that the direction of this relationship is from religion towards health,⁴ but this has still not been empirically established and the mechanism for such a claim remains uncertain. Hundreds of cross-sectional studies show a connection between religion, better mental health and greater well-being.⁵ These studies appear in peer-reviewed journals, and have been reported by different research groups, in different areas of the U.S. and other parts of the world. The findings have been replicated in persons of all ages, races and socioeconomic strata. Scores of prospective studies have also found that religious beliefs and practices predict better mental health across time, with studies ranging in follow-up anywhere from a few months in highly stressed or medically ill populations to many decades in healthy, non-stressed persons living in the community. Despite this growing research base, concern remains that perhaps religious people are either more likely to be mentally healthy in the first place (perhaps based on personality or genetic influences) or that uncontrolled factors are responsible for these associations.⁶

Besides cross-sectional and longitudinal epidemiological studies, a few randomized clinical trials have also been completed in the area of mental health. These studies have examined the effects of religious interventions in depression, bereavement, and anxiety disorders, and have found that these interventions when applied to religious patients result in faster improvement. The findings seem to cross religious lines, in that such studies based in Christian, Muslim, and Buddhist interventions all report positive results. It must be acknowledged, however, that these benefits may result from shared cultural understandings and enhanced therapeutic alliance rather than any distinctly religious dimension of the therapy. Thus, research from prospective studies and randomized clinical trials supports the speculations from cross-sectional studies that religious beliefs and practices may indeed *influence* mental health. This seems quite plausible, since religious beliefs and teachings are generally supportive of social

connectedness and responsibility (love thy neighbor, do good to others, don't steal, be faithful in your marriage), healthy in terms of proscriptions (avoid drugs and alcohol),⁷ and probably increase social contacts and enhance social support.⁸ Religious communities also provide existentially nurturing frameworks for living, promoting optimism regarding the future (belief in an afterlife for some)⁹ and giving people's lives purpose and meaning independent of their health and material circumstances.¹⁰

From a physical health standpoint, dozens of prospective studies have now reported that religious involvement is related to greater longevity, fewer death rates from heart disease, and fewer complications and better survival after surgery.¹¹ The absence of well-designed randomized clinical trials, however, makes it difficult to conclude that religion is actually affecting physical health or whether there are other factors that may account for this relationship. Furthermore, most of the research showing that religion affects health is based on studies of *religious attendance*, where physical health factors and personality factors (such as sociability) may influence the likelihood of religious involvement.

Mechanisms. Scientists in the growing field of psychoneuroimmunology are regularly reporting connections between physiological functions and psychological states (beliefs, cognitions and emotions).¹² Studies show that high stress can increase the risk of cardiac death,¹³ adversely affect cancer survival,¹⁴ and may even influence the rate at which cells age.¹⁵ By reducing stress levels, providing a sense of peace, and bolstering one's support system, religious and spiritual practices may off-set the negative effects of psychosocial stress on immune, endocrine, and cardiovascular functions.¹⁶ An increasing number of cross-sectional studies have found significant associations between immune or endocrine functioning and religious practices, whether those studies have been done in older adults,¹⁷ people with AIDS,¹⁸ or women with breast cancer¹⁹ or fibromyalgia.²⁰

Other factors may also be operative. Because most of the research (and best-designed research) shows that frequency of religious attendance -- an indicator of involvement in the faith community -- is related to better physical health, there may be something about active involvement in a faith community that confers benefits beyond what is typically assessed by standard measures of social support. When people attend religious services, much goes on -- they pray together, sing together, believe together, and become involved in shared religious rituals that may influence health in a variety of ways. The practices of caring and living together formed by this shared life may contribute to the relationship between religion and health. In particular, religious communities frequently promote the caring for others as an expression of faithfulness within their tradition -- whether they feel like it or not, whether it's convenient or not, and even when it costs the person something. This commitment to caring may influence whether people in the community feel that their needs will be met by others or that they are needed by others.

How such factors within religious communities influence immune, endocrine, cardiovascular, and cellular functions remains largely unknown and correlating these findings will require coordinated methodologically sophisticated research that brings multiple disciplines together. There is evidence from studies of volunteers and those involved in altruistic type activities that they experience better physical health outcomes,²¹ especially when volunteering is done within religious settings.²² Thus, religious involvement within a faith community, especially caring type activities, may have both mental and physical health benefits to those who live out their beliefs by giving to others.

Interpretation Improved research methodologies characterized by theologically and contextually informed design allow for more thoughtful interpretation of the empirical findings. Much of the primarily cross-sectional research in religion and health to date has been limited in theological interpretability due to its theologically naive design or lack of interdisciplinary participation in the research analysis. The individualistic focus has frequently lacked contextualization and thereby limited the ability to assess and measure the role of the mechanisms noted above as part of the lived experience of communities formed around common faith commitments.

Increased support for religion and health research, with emphases on contextual and longitudinal models while building on the strengths of previous work, offers significant possibilities. Developing these emphases within spirituality and health research allows us to interpret the findings in a way that helps us to better understand the causative pathways and mechanisms responsible for the associations found to date. Cross-disciplinary engagement in research design and analysis, so as to implement a more truly interdisciplinary understanding of the relationship between religion and health, is needed at this point in the religion and health movement. While such engagement is advised in many intellectual and research efforts, advancement of the field of religion and health necessitates such engagement if we are going to make substantive strides in interpreting the empirical findings with regard to mechanisms and causation. Support for research with an intentional interdisciplinary commitment to design and analysis is needed in order to enhance interpretability of spirituality and health findings and thereby generate scientifically new and societally transforming information.

Relevance Today

The focus of this RFP touches on the growing societal concern over changing demographics and issues related to providing health care to older adults in the community as Medicare and Medicaid budgets are increasingly strained. Consider the following statement made in April 2005 at a Health Care Congress sponsored by the Wall Street Journal and CNBC in Washington, DC, by director of the Congressional Budget Office, Douglas Holtz-Eakin:

“There are no silver bullets. There is no single item—technology, disease management, tort law – that is likely to prove to be the answer to aligning incentives, providing high-quality care at reasonable costs, and financing it in a way that’s economically viable...Rising health-care costs represent the central domestic issue at this time. [Over the next 50 years, if nothing is done] the cost of Medicare and Medicaid will rise from 4% of the gross domestic product (GDP) to 20% -- the current size of the entire federal budget.”²³

The dilemma of providing health care to an increasing number of older adults living in the community will be a common problem faced by religious institutions and health care organizations alike. Faith communities – which historically were the primary organizations that cared for the sick and needy -- will need to supplement where government support of health care falls short, developing health ministries within their congregations that provide lay caring for those within and outside their membership who desperately need help. The results of research supported by this RFP will help to identify the health benefits of involvement in faith communities and health ministries, both for the individual lay caregiver and for the faith community as a whole [and perhaps for the surrounding community as well]. Thus, we believe that this research will help to more completely elucidate the mechanism by which religious involvement influences physical health and longevity (while focusing on that aspect of religious involvement most consistently correlated with better health).

Description of Research

As noted above, frequency of religious attendance *in particular* has been associated with better mental and physical health in numerous studies, and is the most consistent aspect of religion/spirituality related to better mental health, physical health and greater longevity. Even after controlling for psychological, social, and behavioral factors, an unbiased NIH review panel reported that there typically remains about 25% of the variance in physical health outcome that is unexplained despite exhaustive control of relevant covariates.²⁴

This RFP solicits research proposals that seek “deeper” reasons for the religion-health relationship that could help explain the large amount of variance that remains unexplained. In particular, this RFP focuses on research that examines the contribution of context and caring as part of the mechanism that accounts for the effects of religion on health, in particular the effects of membership and activity within a faith community. Are communities with a high density of religiously involved persons (i.e., those with greater “spiritual capital”) more likely to have interconnections between individuals in the community, a greater level of trust, and a greater capacity to provide care for the needs (emotional and physical health) of those in the community -- outside and independent of formal health care systems? Do religious organizations, by encouraging members to love and care for one another (and members actually doing this), increase a community’s capacity to foster trust and interconnections between members? How might such factors influence the health of people in that community, and help to explain the religion-health relationship on the individual level?

We define “religious communities” as communities where religious membership, attendance, and involvement are high. We define “secular communities” as communities where religious involvement is low. Is social capital (measured by degree of perceived social support, level of trust, frequency of volunteering to meet others needs, donations to non-profits, etc.) greater in religious vs. secular communities? Does this help explain why the “health” of religious communities and of individuals in those communities is better than in secular communities? If so, is there a critical threshold of religious involvement necessary before social capital reaches a level so that it begins to affect the health of that community and of individual members? How does the size and composition of a community influence this threshold? How does the inflow and outflow of new people into the community influence it? Is the threshold the same in faith communities made up primarily of older members; what about those communities made up primarily of younger members; what about in intergenerational faith communities, where persons of all ages are involved?

Related research questions that fall within the scope of this RFP include:

(1) On the individual level, how does spiritually motivated “lay caring”²⁵ influence physical health, in terms of immune function, endocrine function, cardiovascular function, and cellular aging for those providing the care? What is the mechanism by which such health effects occur? (i.e., reduction of perceived stress; increased perception social support; greater sense of purpose and meaning)

(2) On the individual level, what are the broader health benefits of lay caring, where health is defined as more than just physical health, but as human flourishing (the experience of joy, peace,

hope, ability to forgive, gratefulness, and other positive emotions and character traits, across the life cycle from childhood to old age), and how might these affect physical health?

(3) On the individual level, what factors influence the stresses involved in lay caring (caring by family members, volunteers, and even health professionals), and specifically, how do religious beliefs counteract those stresses or inspire individuals to perform such actions regardless of the challenges involved?

(4) On the community level, how does lay caring within faith communities influence community health (in terms of illness detection, need for health care, likelihood of having health insurance, obesity levels, crime rates, drug and alcohol abuse, sexually transmitted disease rates, teenage pregnancy, divorce rates, high school dropout rates, college graduation rates, conflict within local government, etc.)

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- ²⁵ Lay members of religious organizations volunteering to help care for the emotional, social, or physical needs (including practical needs such as home cleaning, yard work, grocery shopping, rides to doctor, etc.) of less fortunate members of the faith community or of those out side the faith community