

Religious Involvement and Health: Complex Determinism

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Individuals perceive other individuals, communicative displays, and social hierarchies; infer traits, intentions, and emotions; communicate and obfuscate their mental contents; form relationships, unions, and alliances; and search for meaning in events and patterns. Meaning making and sociality are such fundamental components of human nature that they are perceived in the movements of simple inanimate objects. Heider and Simmel (1944), for instance, produced a short film of the movement of a small triangle, a small circle, and a large triangle around and into a large rectangle. The animated film consisted of only these geometric shapes, yet everyone who viewed the film “saw” a social drama complete with intentions, plans, and emotions. Contemporary work in the neurosciences has clearly shown that the human brain is not simply an information-processing organ: It also infers animacy and causality (Scholl & Tremoulet, 2000). It constructs stories to make sense of the inexplicable (Gazzaniga & LeDoux, 1975), and it seeks nurturance and affirmation (cf. Cacioppo et al., in press; Maestripieri, in press). The stories that it constructs to make meaning of the world are not always rational, either as various biases in social cognition and judgment have been identified (e.g., see Kunda, 1999).

Given these features of the human brain, it is unsurprising that throughout human history scholars have identified groups who were in some sense religious (Parrish, 1941), and the vast majority of humans today identify formally with a religion. The articles by George, Ellison, and Larson; Exline; and Pargament (this issue) are a timely call to psychology to address the complex but deterministic social phenomenon called religion.

George et al. (this issue) reviewed evidence that religious involvement is associated with better physical and mental health, and they found that health practices, social support, psychosocial resources (e.g., self esteem, self efficacy), and beliefs such as a sense of meaning or coherence are not sufficient to account entirely for this effect. If religious involvement is timeless and beneficial, why is religious involvement not high for everyone? Pargament (this issue) and Exline (this issue) addressed this question. Pargament noted that some religions are more helpful than others. There are advantageous and disadvantageous aspects of reli-

gion. Religion can be especially helpful to those who society has marginalized, and religious involvement is more helpful when circumstances have exhausted a person’s resources and when it is well integrated into a person’s life. An important subtext of this work is that social scientists should expect interactions rather than main effects involving religion. Exline addressed why the same religion elicits high involvement by some and little or no involvement by others. She suggested that low religious involvement can be due to interpersonal tensions that can result from unshared beliefs and convictions; anger, disappointment, and mistrust toward God; intellectual or emotional strains and confusion that may emerge when trying to adopt a given religious belief system; and problems that arise from the unrealistic pursuit of virtue and perfection.

Although religion is a pervasive and timeless part of human history, these articles make clear that religion is far from a unitary concept. Religion to the layperson means a realm of influence and existence beyond an individual’s control or comprehension (mysticism, supernatural), faithful devotion to a deity, religious beliefs and observances, and a set of normative values and behaviors. British anthropologist Tylor (1871) viewed the essential element in all religion to be a belief in spiritual beings (i.e., “animism”). This belief, Tylor suggested, arose from the human experiences of birth, death, sleep, dreams, trances, and hallucinations—dissociated states that people sought to explain by reference to incorporeal in contrast to natural causal structures.

Attempts by scholars across the centuries to classify religions have met with difficulties because of the vast diversity of religions across history. Among the principles of classification that have been used are (a) normative—distinctions between true religions and false religions based on arbitrary or subjective criteria (e.g., Thomas Aquinas’ distinction between natural and revealed religions), (b) geographical—classifications based on physical locations and communities, (c) ethnographic—linguistic—classifications based on the descent from a common origin, (d) philosophical—distinctions based on speculative and abstract concepts (e.g., Hegel, 1832/1988), (e) morphological—classifications based on stages of development (e.g., Tylor, 1871), (f) phenomenological—classifications based on common elements of experience (e.g., Kristensen,

1960), and (g) attitude toward life (James, 1902). Perhaps the classification system that has had the greatest impact to date on the social sciences is that of the American sociologist Bellah (1970), whose system was organized around symbolization complexity and personal and societal freedom from the environment.

An immediate task of social scientists is to articulate and empirically test natural mechanisms that account for the effects of religious involvement on health. For instance, one can conceptualize religion in general as a multidimensional construct consisting of specifiable and deterministic component processes encompassing personality; values and beliefs (including placebo effects); convictions and certitude; coping and appraisal processes; a search for order, truth, and meaning in life; the development of self-control, self-discipline, and self-knowledge; normative and salubrious behaviors; interpersonal relationships, social networks, and social support; personal and social identities; self-affirmation, group affiliation, and cultural traditions; economic factors; and possibly much more (Hill & Hood, 1999).

If it is clear that these are some of the building blocks out of which the effects of religious involvement are built, the form and structure of the component processes are not. Social scientists, however, have considerable experience and expertise in specifying and measuring component processes, testing whether the measured dimensions capture the variance in religious involvement, and refining multidimensional representations to capture more fully a multifarious construct such as religion. In principle, the various religions that exist could be depicted within a multidimensional space based on the weighting of component processes. Research on religion is still young, however; thus, the component processes are not known, and much of the research is limited to face valid or easy to measure aspects of Euro-American religious practice (cf. Hill & Hood, 1999).

The articles in this volume speak to the potential effects of the various factors outlined previously here. In a remarkable study of one of these potential component processes on health—the power of beliefs—Phillips, Ruth, and Wagner (1993) compared the deaths of 28,169 adult Chinese Americans with those of 412,632 randomly selected, matched White controls. Chinese astrology specifies that a person's fate is influenced by the year of birth. When people who believe in Chinese astrology contract a disease that is associated with the phase of their birth year, they are more likely than others to feel helpless, hopeless, or stoic. Phillips et al. reasoned, therefore, that if these beliefs influenced biological processes and health, Chinese Americans who have a combination of a disease and a birth year that Chinese astrology regards as ill-fated should be more likely to die significantly earlier than matched Whites. Results confirmed this prediction and further revealed

that the more strongly a group is attached to Chinese traditions, the more years of life were lost. These effects were found for nearly all major causes of death.

Once the component processes of religion are specified in a statistically and theoretically rigorous fashion, inquiry needs to move from provocative epidemiological and correlational analyses to experimental analogs and population-based clinical trials to test the effects of each component, and the synergistic effects of multiple components, on individuals in various circumstances (e.g., times of strength, in times of need). Again, interactions rather than main effects are likely to be the rule, and in this light, findings that replicate within a context but fail to generalize across contexts (e.g., populations, extant circumstances) can be viewed as a theoretical challenge rather than a methodological problem (Cacioppo, Berntson, Sheridan, & McClintock, 2000). Fehring, Miller, and Shaw (1997), for instance, found that hope and religiosity were positively correlated with positive moods and were negatively correlated with depression in a sample of older cancer patients. An association between religiosity and depression is not uniformly found, however (Koenig, George, & Peterson, 1998; Strawbridge, Shema, Balfour, Higby, & Kaplan, 1998). A possible reason is suggested in a longitudinal study of 177 community residents in the Netherlands, which showed that religiosity did not predict the incidence of depression but rather predicted the recovery from depression (Braam, Beekman, Deeg, Smit, & van Tilburg, 1997)—an effect that was especially strong among people with poor physical health. As prior research has shown (e.g., Andersen, 1986), a cancer diagnosis typically induces dysphoric to depressive symptomatology, suggesting that the association between religiosity and depression reported by Fehring et al. (1997) may reflect a faster recovery from depression rather than the incidence of depression per se. The relationship, although complex, is intelligible.

Religiosity is related to biological outcomes as well. For instance, Hixson, Gruchow, and Morgan (1998) found in their study of 112 female adults that religiosity predicted systolic and diastolic blood pressure even after controlling for body mass index and health behaviors (e.g., physical activity, smoking, diet, and alcohol consumption). Similar results have been reported for self-esteem, life satisfaction, and hopefulness (e.g., Molassiotis, Van Den Akker, Milligan, & Goldman, 1997). Until experimental paradigms are developed, however, it will be difficult to know what specifically are the causal factors and mechanisms through which religious involvement has its effects on health. As implied by Exline's (this issue) analysis, people whose activity levels (and health) are diminishing and who feel abandoned by God may lessen or terminate their religious involvement, an effect that could contribute spuriously to an association between religious involvement and health. Experimental studies of

the effects of component processes with a continuing eye toward construct validity and theoretical refinement may make it possible to identify better what components of religion are the most helpful to different individuals or to individuals in different circumstances.

In summary, throughout human history, religions have served to bring order, system, and intelligibility to the immeasurable range of human experience. The diversity and complexity of religions across human history and in practice today should serve as a warning when one finds religious involvement treated as a monolithic construct having general main effects. Although it may seem unholy to parse the component processes of religious involvement and test the effects of each (and of various combinations) in experimental paradigms where artifacts (e.g., participants selection) can be controlled, such an approach is essential if we are to move the study of the effects of religion from the unintelligible to the knowable.

Note

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Life Satisfaction and Religiosity in Broad Probability Samples

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Researchers studying the relationship between religiosity and subjective well-being (SWB) usually find that religious people are on average happier and more satisfied (e.g., see Diener, Suh, Lucas, & Smith, 1999,

for a review). In this study, our goal is to examine in broad and representative samples the levels of life satisfaction and happiness among those differing in levels of religiosity and to examine this relationship across