# The Importance of Cognitions in Measuring Spirituality and Religion: The Case for Personal Theological Beliefs

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## Introduction

Early research on religion and health consisted simply of health surveys "in which religion … made only rare 'guest appearances'" (Levin & Schiller, 1987, p. 13), in the form of participants' religious affiliation or denomination. A review of nearly 250 health surveys between 1837 and 1984 measuring some aspect of religion (Levin & Schiller, 1987) revealed that the overwhelming majority of them were confined to comparisons of morbidity and mortality rates across religious denominations (Levin & Markides, 1986).

In the 1960's health researchers began to ask survey participants how often they attended religious services (Levin & Vanderpool, 1987), a measure that became widely known as "church attendance." While Levin and Vanderpool (1987) identified only 27 studies for inclusion in their review of church attendance and health, a recent search of Medline found over 230 articles using the term "church attendance."

Subjective, self-assessments of one's own religiousness also have become common in health research, as have functional religious measures, especially religious coping. (Hall et al., 2008)

Hall et al.'s review of religious measures in health research suggests that existing measures of religious beliefs are complex and difficult to interpret. This is unfortunate since a meta-analysis by Hackney and Sanders (2003) provides limited evidence that beliefs may exert greater influence on mental health than other aspects of religion, such as organized religious activities (church attendance, etc.) or personal devotion (private prayer, personal devotion, etc).

Though only a handful of the studies Hackney and Sanders examined involved beliefs, their findings raise two important questions: First, what is the association between religious beliefs and mental health? And second, to what extent have researchers examined this relation? We will explore both of these questions, starting with the latter.

## Handbook of Religion & Health

Data from the *Handbook of Religion and Health* were used to determine the frequency with which different religious variables are used in research on three kinds of physical and mental health outcomes. The three mental health outcomes (psychological well-being, depression, and anxiety) and the three physical health outcomes (heart disease, hypertension, and cerebrovascular disease) with the greatest number of studies were selected for analysis.

We used 10 of the *Handbook* categories to form the six categories shown in Tables 1 and 2: (1) **Organized Religion** (religious attendance, etc.); **Subjective Religion**, which we combined with the *Handbook*'s religious commitment and intrinsic religiosity; (3) **Religious Affiliation**, which combines denomination affiliation, church membership, and Seventh Day Adventist; (4) **Non-organizational** religion (personal prayer, scripture reading, and religious media); (5) **Religious Coping**; and (6) **Religious Beliefs**.

The number of articles that used each measure were counted and the percent of articles was calculated for each outcome. Some percentages exceed 100% because some studies used more than one measure.

## Common Religious Measures

Table 1 shows the most commonly used measures of religion in research on the three mental-health outcomes. These were organizational religious activities, subjective religion, and religious affiliation. Religious beliefs were measured fairly rarely. Table 2 shows that religious beliefs were examined even less frequently in research on physical health outcomes.

**Table 1.** Percent of Studies Using each Type of Religious Measure by Mental Health Outcome Studied

| Religious Measure | Well-Being (N = 108) | Depression (N = 122) | Anxiety (N = 80) |
|---|---|---|---|
| Organized Religion[1] | 51.9 | 32.0 | 30.0 |
| Subjective Religion | 36.1 | 33.6 | 33.8 |
| Religious Affiliation | 19.4 | 34.4 | 25.0 |
| Non-organizational | 22.2 | 16.4 | 10.0 |
| Religious Coping | 3.9 | 19.7 | 6.3 |
| Religious Beliefs | 9.3 | 9.0 | 21.3/11.3[2] |

[1] Organizational religious activities
[2] Percentage is 11.3% if studies of death anxiety are excluded.

**Table 2.** Percent of Studies Using each Type of Religious Measure by Physical Health Outcome Studied

| Religious Measure | Heart Disease (N = 44) | Hypertension (N = 35) | Cerebrovascular Disease (N = 19) |
|---|---|---|---|
| Organized Religion[1] | 4.7 | 31.4 | 21.0 |
| Subjective Religion | 4.7 | 20.0 | 26.3 |
| Religious Affiliation | 74.4 | 31.4 | 36.8 |
| Non-organizational | 4.7 | 11.4 | 5.3 |
| Religious Coping | 4.7 | 5.7 | 5.3 |
| Religious Beliefs | 0.0 | 0.0 | 10.5 |

[1] Organizational religious activities

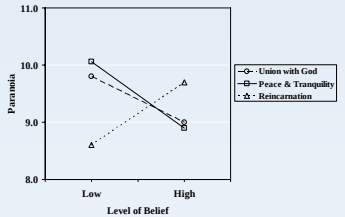
## Criticisms of Religious Measures

"Although knowing that a person belongs to a specific religious denomination implies something about the nature of one's beliefs, it does not provide information about the strength of those beliefs or one's adherence to the practices of that faith" (Flannelly et al., p. 1234). Yet religious affiliation is still widely used in research on religion and health. Hall et al. question the use of organizational religious activity, or "church attendance" in such research because it "may simply function as a proxy for more 'secular' pathways of healthy living," Hall et al., 2008), p. 141). Flannelly et al. (2004) discuss a number of studies that undermine the reliability of "church attendance," and suggest it is not a measure of attendance, per se, but a subjective measure of religiousness. Subjective measures, in turn, have been criticized precisely for their subjectivity, as have been measures of non-organizational religious activity, such as prayer, scripture reading, etc. (Hall et al., 2008). Functional measures, such as religious coping, are a fairly recent approach to examine the pathways by which religion may affect health (Hill & Pargament, 2003). However, Hall et al. caution they may distort the religiousness they measure in some way.

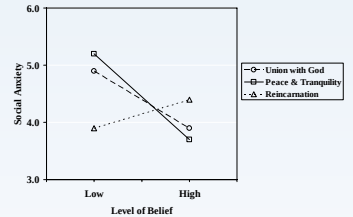
## Religious Beliefs & Psychiatric Symptoms: Recent Findings

The five figures that follow, which are based on findings from a national survey, reveal some interesting associations between beliefs and psychiatric symptoms. The first two figures show that certain beliefs about life-after-death are related to higher, and some to lower, levels of symptoms.

**Association Between Paranoid Ideation and Three Beliefs about Life-After-Death**

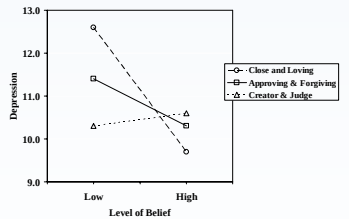



**Association Between Social Anxiety and Three Beliefs about Life-After-Death**

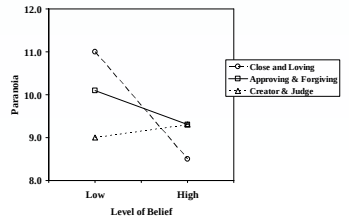



The next two figure shows that certain beliefs about God have a significant salubrious association with psychiatric symptomology, while others have less, or no, association.

**Association Between Depression and Three Beliefs about God**



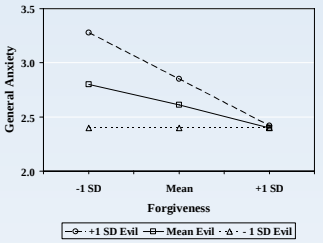

**Association Between Paranoia and Three Beliefs about God**




## Religious Beliefs & Psychiatric Symptoms: Recent Findings

The final figure shows how different beliefs may interact with one another in relation to psychiatric symptomology.

**Interaction of Beliefs that Human Nature is Evil and God is Forgiving on Anxiety**




## Conclusions

Relatively few studies have examined the association between religious beliefs and mental health and even fewer have looked at religious beliefs and physical health. As we have shown here, some belief have stronger associations with psychiatric symptoms than others and some have no association at all.

We think it is important to study beliefs for at least two reasons. The first is that religions are first and foremost, systems of theological beliefs, as well as practices. The second reason is we think beliefs provide a plausible causal mechanism by which religion can directly influence brain function and physical and mental health.

We also think it is vitally important to study psychiatric symptoms, instead of more subjective measures of mental health, because psychiatric symptoms provide a window into primitive structures and functions of the brain.

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