

DIMENSION DEMENTIA:  
A Universal Approach to Measuring Religiosity

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## INTRODUCTION

The great Roman orator Cicero once claimed that the word *religion* finds its etymological origins in *relegere*, or “attention,” implying that religion is the careful reflection of life’s ultimate questions and concerns.<sup>1</sup> The Christian author Lactantius, dissatisfied with this explanation, argued that the true roots of the word *religion* lie in *religare*, or “binding”; that is, binding to God, binding to scripture, and binding to the path of one’s religion.<sup>2</sup> The question being: how does this translate to the realm of the social sciences?

The dominant paradigm of the social sciences in researching the religious variable has emphasized the latter definition. Measurement, given the post-WWII dominance of behavioralism, has focused on measuring the degree to which individuals adhere to specific religious tenets and beliefs; that is, how one is *bound* (L. *religare*) to their religion. In consequence, various dimensions said to constitute religiosity have been proposed- the majority of which have focused on how religious adherents are bound to their religion through ritual practice and belief.

The sixties and seventies ushered in a new era of creativity in all levels of society and academia was no exception. Scholarship on religiosity, in the social sciences and elsewhere, was marked by sweeping cross-cultural generalizations, giving rise to new ideas and ways to look at the world. One such idea was the *functional approach* to the measurement of religiosity. Echoing the sentiments of Cicero in the former of the above definitions, the functional approach sought to gauge religiosity in terms of what functions religion fulfilled for the individual, particularly in addressing the ultimate questions and concerns of mankind.

Each properly functioning religion, it can be said, provides the same or similar benefits to their adherents as do others, in effect creating a common substructure shared amongst them. With this in mind, hypothetically, determining those commonalities would allow researchers to identify the universal attributes inherent to all religions. The discovery of common functions would open the doors to universal, cross-culturally applicable methods of measurement; therefore, achieving this objective via the functional approach is the focus of the present study.

The following addresses previous scholarship on measures of religiosity, as well as the creation and administration of the *Attempted Universal Measure*, or *AUM*, which attempts to functionally

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<sup>1</sup> Peabody, F.G. 1883. *The Method of the Psychology of Religion*, 324

<sup>2</sup> Muller, Friedrich. 1889. *Natural Religion*, 34-5

measure religiosity based on a fourfold dimensional model proposed by comparative mythologist Joseph Campbell (1968, 2004). Preliminary results are provided and briefly discussed.

#### LITERATURE REVIEW

The body of literature and research on measuring religiosity is vast, reflecting the breadth and scope of the subject itself. The following review explores the relationship between religiosity and political behavior, with an emphasis on the current state of religiosity research in the spheres of the social sciences, as well as the emerging paradigm within the body of research. Justifications for the creation of new measures are discussed briefly, followed by the explication of the functional approach to measuring religiosity; i.e., measuring religious belief in terms of the functions that religion performs for the individual. The functional approach has several implications for measuring religiosity cross-culturally and universally, which are discussed in full. Particular emphasis is placed on Yinger and his *Nondoctrinal Scale* (1969, 1977), one of the avant-garde pioneers of both the functional and universal approaches to measuring religiosity. Other functional measures are reviewed in detail, followed by the measurement of nontraditional cohorts founded on a universal approach. The final sections discuss mythology properly understood, as well as a brief introduction to the work of comparative mythologist Joseph Campbell (1968, 2004), whose research is the theoretical basis for the proposed dimensions of this study.

#### *The Relationship between Religiosity and Political Behavior*

As religiosity often defines the life of an individual holistically, it may be safely understood that the relationship between religiosity and political behavior, as well as other realms of behavior, is inextricably linked. Several studies verify this conventional wisdom via empirical studies, albeit with varying methods; most conclude that their shared influence on one another is, in fact, undivorceable.

Macaluso and Wanat (1979) demonstrate the interconnectivity of religiosity and political behavior by empirically assessing the effects of religiosity on voting turnout, hypothesizing that religiosity is a “major probable source of attitudes of citizen duty” (160). Religiosity, measured here, reflects the methods of its time, however, defining the phenomenon in terms frequency of attendance in worship services. In a word, “individuals who go to church or synagogue every week are high in religiosity, those who rarely go are low in religiosity” (160).

Macaluso and Wanat hypothesize that religiosity “should foster feelings of citizen duty” based on two justifications- that civil obligations return given benefits, in which “major religions likewise tend to sanctify obligations of various types” (reflecting, perhaps, the functional approach to religious measurement as proposed by Yinger; 1969, 1977), as well as the theory that “religiosity should provide a mechanism for the maintenance of a sense of citizen duty once acquired” (160-1). As voter turnout for a single election may be influenced by numerous factors, Macaluso and Wanat measure voting behavior over an extended period of time. Organized religion, they argue, is a “mechanism for maintaining attitudes of citizen duty” and “frequent church attendance should lead people to vote in almost every election” (162). A long-term cohort study was beyond their means; therefore the researchers asked respondents to recall and record their frequency of voting in past elections (162). The denominations of the respondents were also important; more hierarchical, formal, and ritualistic denominations were found to have some effect on voting behavior- though this was largely ignored (162, 164). Macaluso and Wannat’s findings suggest that religiosity clearly impacts voter turnout and, in particular, citizen duty and religiosity combined account for a larger variation in political behavior. They conclude that “religion is an important thread in the fabric of the political system... were there no religious support for political bonds, it is likely that civic participation through voting would drop” (168-9).

As aforementioned, this measure is somewhat outmoded, measuring, as Machalek and Martin (1976) have quipped, the “sociology of churches” rather than the “sociology of religion” (311). Such measures fail to gauge the religiosity of New Age, spiritual, irreligious, atheist, and religiously unaffiliated individuals, as well as a host of others. Furthermore, as seen here, the measure places a biased emphasis on traditional Judeo-Christian values, failing to account for non-Western religions. The study, given modern theoretical and practical advances in studying the religious variable, is rudimentary- though their conclusions cannot be denied.

Wald and Wilcox (2006), in “Getting Religion: Has Political Science Rediscovered the Faith Factor?”, deliver a telling encapsulation of the relationship between religion and the body of political science research, only to conclude that it has been, for lack of a better term, neglectful- particularly when compared with those of other social sciences. As the majority of political scientists view the world through a secular lens, research into religiosity as a major determinant to political behavior has been marginalized- at least in the sphere of political science- despite a resurgence in the 1980s (523). The post-World War II ascendance of the behavioral approach, in the spirit of positivism, has relegated religion into the periphery of the discipline (523). Using a “comprehensive set of religious terms,” the

authors performed a search through a popular political science database, with no chronological boundaries, only to find a total of 35 articles in the *American Political Science Review*- the flagship journal of the discipline- with one of these terms in the title. Only 21 of the 35 articles were “strongly concerned with religion,” indicating the publishing rate of “one article every 4-plus years” (523). To compare, Wald and Wilcox report that “from 1906 to 2002, the *American Journal of Sociology* and *American Sociological Review* each printed four times the number of articles with a religious title term as their political science counterpart” (525).

For what reasons have political scientists visited such inattention on the subfield of religiosity? Although *prima facie*, an “antireligious bias” may be said to “permeate academe in general and political science in particular,” the issue may be far more complex (525). Wald and Wilcox posit four possible explanations for the dearth of material on religion and politics: the disciplinary origins of political science, the social background of its scientists, the complexity of religiosity and its measurement, and the agenda-setting issue attention cycle (525). As far as the origins of political science are concerned, the authors argue that, although Marx, Weber, and Durkheim express the importance of religion in society and politics, “Marx’s reductionist approach to religion captured most of the interest” and, in consequence, “religious forces were perceived as epiphenomenal, fossilized remnants of an *ancien régime*” (525). Furthermore, the architecture of political science has been built on foundations in which “institutional religion was widely perceived not as a constituent element of the democratic order, but as a potential threat that needed to be tamed,” a view which was, from the beginning, maintained by many of America’s founders (526). Similarly, modernization theorists hold that religion remains part of the “traditionalist order,” the fate of which will succumb to both secularizing and privatizing forces (526). The social background of political scientists may be another factor in religion’s marginalization. “Most,” says Wald and Wilcox, “have little interest or involvement in religion” and further perpetuating this indifference, “a lack of familiarity with religion is likely to discourage inquiry” (526). A number of studies reinforce these notions. One such study, performed in 1984, reported that only six percent of political scientists self-identify as “deeply religious,” whereas 53 percent claim to be “indifferent or hostile to religion” (526).

The brunt of the following reviewed literature will illustrate the difficulties in accurately measuring religiosity, and they stand as a testament to the inadequacy of previous scholarship. Further confounding matters is the sheer, behemoth scope of religion, creating an effective “barrier to entry to the topic” (526). Wald and Wilcox report that extensive studies have been administered on doctrinal

differences amongst Christian Protestants with “inconsistent terminology and differing operational definitions,” as well as an overall lack of studies on Catholics, Jews, Muslims, and other religions (527). However, they remind readers that congregations, as recent history illustrates, “form cohesive political communities” which can effectively militate the secular world, particularly through political mobilization (527).

Lastly, the marginalization of the religious within political science may be due, in part, to the issue attention cycle and agenda-setting process of the *American Political Science Review*, as well as other journals. Although it “reflects real-world developments,” religion failed to “command headlines” following World War II (527). It was not until President Kennedy’s Catholicism in the sixties and the Iranian Revolution in the seventies that the notion of religion’s insignificance would be challenged—particularly when the Christian Right developed in reaction to its Islamic theopolitical counterpart to the East (527). Furthermore, interest heightened when “scholars observed the growing power of religion in political conflicts around the globe,” such as the rise of India’s Hindu nationalist party, the ethnic and religious tumult in Bosnia, and the Muslim influx in Europe (527). “In the Americas,” the authors conclude, “the rise of evangelical Christianity has redefined some political alliances while the United States has experienced the increasing salience of religion to candidate and party mobilization” (527).

Although once trending toward extinction, a revival of the subfield of religion and politics began in the 1980s. The impetus was largely due to a small group of political scientists who founded the “Caucus for Faith and Politics,” an organization which has since secularized and obtained section status from the APSA. Since that time, its ranks have swelled to approximately 500 political scientists, largely encouraged by scholarship that produced “persuasive evidence of the significance of religion on contemporary American political life” (528). American National Election Studies (ANES) lent further support, developing measurement techniques and strategies in the study of religion and providing valuable data for would-be researchers. Wald and Wilcox describe the popularity of the subfield as tenuous, stating that in order to avoid another disciplinary fallout, “scholars in the subfield must demonstrate scientific payoff and eschew scholarly isolation,” pointing out the strangely concentrated nature and lack of interdisciplinary interest by academicians of religion and politics (528). In order to survive, they caution, the field’s scholars must “tie their work to broader theories of political behavior and change” (529).

In response to the increasing need for an interdisciplinary approach to religiosity, scholars have combined the faith factor with other theories— to both further legitimize the subfield as well as to

explain variables to greater effect. Gaskins *et al.* (2009) approach the measurement of religiosity by combining economic and political theory to study the effects of subjective religiosity on social and economic policy decisions across various levels of societal development. Specifically, they explored the *economics* of religion, combining various theories into a unified theoretical framework (1). Secularization, or modernization theory, according to the authors, states that religion will eventually decline and disappear entirely (2); though the precise causal mechanisms have yet to be determined. The authors contend, however, that recent literature challenges secularization theory- specifically citing empirical evidence that “religious belief and practice have not significantly decreased despite unprecedented levels of modernization and development” (3).

Rather than theoretically grounding their study in modernization theory, however, Gaskins *et al.* explore the *religious markets* model, where “supply-side” elements are formative in the spread of religion- i.e., “religion flourishes when there is religious pluralism and when religious organizations are forced to compete for adherents” (3-4). Such a theory assumes that religions provide certain real-world benefits as well as those of a metaphysical nature; e.g. psychological, societal, and material benefits, and afterlife and doctrinal benefits, respectively (5). This theory reflects the functional approach to measuring religiosity that will be further discussed in the proceeding literature.

Gaskins *et al.* draw a number of conclusions from their study, some of which affirm the tenets of secularization theory by providing the hitherto-needed evidence for an established micro-level foundation (38-9). However, other implications of their findings are more notable for the purposes herein. “The religious poor,” for example, “can be expected to vote for rightest parties if they weigh [the] moral (religious) dimension more heavily than the economic dimension” (41). Furthermore they conclude that “societal development” creates social attitudes among the faithful that are “increasingly in conflict with those held by mainstream society” (40).

Clearly, even a passing reference to the literature on religiosity in political science demonstrates that religion has a powerful and formative influence on the individual, as well as society as a whole. The last few decades have demonstrated apodictic, real-world implications of this relationship, even if empirical measures necessitate an interdisciplinary approach in order to be taken seriously. Such a direction in political science research may prove fruitful in explaining the relationships religion has to variables perhaps yet to be discovered. The bankrupt condition of literature on the subject, within the domain of political science, is simply unacceptable for a discipline that claims to study people, power- and, we may now add- the pious.

*On the Religiosity Paradigm & the Creation of Measures*

Gorsuch (1984) argues persuasively for the emergence of a paradigm within the study of the psychology of religion, solidified in the 1970s, in which “researchers respect one another and use each other’s results rather than being... in competing schools” (228). The importance of such a paradigm cannot be understated- allowing debate and disagreement with common technical jargon while emphasizing two important elements: the emphasis by researchers on measurement and their reliance on questionnaires. The former is obvious given a brief perusal of previous research, in which “at least one emphasis is on constructing, validating, or critiquing a measurement device” (229). The latter is observable in the strict reliance on surveys albeit with varying content and dimensionalities, with the central empirical assumption that “measurement starts with each person’s beliefs and not with his or her group membership” (229-30). In recognizing the paradigmatic emphasis on the construction of measures, Gorsuch warns aspiring researchers to avoid creating new measures unless absolutely necessary (1990).

The creation of new measures of religiosity appears, intuitively, to benefit the body of research on the psychology of religion. Hill & Hood, Jr. (1999) argue, however, that the unnecessary proliferation of new measures and constructs hamper the overall progress in the study of religiosity in two distinct ways- the excessive creation of measures results in a “variety of measures for constructs... when a single existing measure would suffice” as well as the impediment to the body of research “when identically titled scales, whose correlations with each other are not established, are used in research projects” (3). New measures should only be created, then, if specific criteria are met. First, “a new scale should be developed only if it can be argued that a new concept has been developed which is unrelated to factors already found” allowing the creation of scales only “after it is demonstrated to add unique information over and above scales already in existence” (234). Second, a new measure is needed only if there are no “adequate resources available” to measure the proposed concepts, as was the case in Batson’s (1976) hypothesis of *Quest* religion (Gorsuch, 1984; 234-5). Hood and Hill, Jr. (1999) do not necessarily discourage the creation of new measures; however they feel strongly that the majority of currently existing measures remain untapped as sources for valuable research material. Houtman and Heelas (2009) concur, noting the “greater willingness among social scientists to use each other’s toothbrushes than each other’s definitions” (172).

Notwithstanding the above admonitions, Gorsuch (1984) lauds the focus on measurement of religiosity as a boon insofar as “we have produced reasonably effective instruments... [that] have good



content and predictive validity as well as usable reliabilities” (234). Although currently measures contain a “hodgepodge” of items measuring “beliefs, values, and reports of behavior,” such composite scales yield broad and useful predictions (234). However, he cautions, it is this success which may also serve as a bane of religious research. “Measurement,” he explains, “is not a goal unto itself to provide us with interesting studies, but rather a means to lay the background for studying the development and impact of religious phenomena” (235). Yet, if the current paradigm continues to discourage alternative measurement techniques, the success in the measurement area will be its own undoing. As a result, Gorsuch concludes, “*We are ready to go beyond measurement to basic, enduring issues,*” measurement having had its time in the academic limelight (234).

The investigator of the present study justifies the creation of a new measure of religiosity in having met the criteria enumerated by Gorsuch (1984). Previous measures have only partially addressed the proposed dimensions, according to the conceptual definitions grounded in Campbell (1968, 2004), warranting the creation of a meta-measure of previously administered items to fully fit the boundaries of the fourfold model proposed herein.

#### *Unidimensional versus Multidimensional Approaches*

A large portion of the literature on measuring religiosity is devoted to dimensionality. Scholars have debated whether religiosity is, in fact, a singular, unidimensional variable or a multifaceted, multidimensional variable dividable by subdimensions. A five-dimensional framework for measuring religiosity was introduced by Charles Glock (1962) in which he explicitly justifies, on *a priori* theoretical grounds, a multidimensional approach, asserting that “it is scarcely plausible that the various manifestations of religiosity are entirely independent of each other” (Faulkner and DeJong, 1966, 247). J.E. Dittes (1969) reinforces this notion, suggesting that “theoretical considerations argue strongly for a complex multitude of variables within the domain of religion and make the use of ‘religion’ as a single variable appear as conceptual or operational laziness or naiveté” (DeJong, Faulkner, and Warland, 1976, 882). Though some scholars, such as Clayton and Gladden (1974), contend that “religiosity is essentially a single-dimensional phenomenon composed primarily of Ideological Commitment” (141), the former, multidimensional approach seems most appropriate and will be the focus herein.

Charles Glock’s (1962) five-dimensional framework created a springboard for measuring religiosity and was operationalized and empirically tested by Faulkner and DeJong (1966), who endeavored to “develop measures of religiosity for each of the dimensions” and “investigate the nature

of the interrelationship among the five dimensions" (247). The dimensions measured included ideological, intellectual, ritual, experiential, and consequential components, though consequentialism was later removed due to inadequate measurement and poor relationship with other variables. One should note that the consequential portion of the questionnaire had poorly crafted and (comparably-speaking) excessively long questions that increase the likelihood of questionnaire fatigue. The study also concluded significantly high correlations with the ideological dimension, a finding which would come under fire by Clayton and Gladden (1971, 1974) who, arguing for a unidimensional approach to religiosity, asserted that "three of the four items in the intellectual scale, two items on the ritualistic scale, and all or most of the items on the experiential scale are really ideological in nature" (139). Furthermore, Clayton and Gladden criticized Faulkner and DeJong's sample population, Floridian university students, which "reflect[ed] a Western, Christian, Protestant, and perhaps regional style of religious commitment" (141).<sup>3</sup> Though these measurements may more accurately define the religiosity of homogenous populations, they fail to meet the universal criteria sought after by researchers in this field.

By the late seventies, a number of scholars began to swell the ranks of the multidimensional school, acknowledging religiosity as phenomenon far too intricate to be measured unidimensionally (DeJong, Faulkner, Warland, 866). Dittes, in his *Psychology of Religion* (1969), vehemently argued that religion was simply "too complex an arena of human behavior- as diverse and heterogeneous as human behavior- not to include many different and unrelated types of variables" (DeJong, Faulkner, Warland, 866). DeJong, Faulkner, and Warland (1976) address this in designing their measure by conducting a cross-cultural comparison, sampling and assessing the religiosity measures of German and American students (although one may argue that the two offer little variation considering the former is the cradle of Christian Protestantism and the latter its primary residence). Furthermore, DeJong *et al.*'s study does little to test the universality of these measurements, as they focus on the analysis of the "commonalities and differences within the Western Judeo-Christian tradition" (868). In fact, using this measure to assess the religiosity of Muslim populations might produce similar findings, given the shared heritage of the Abrahamic tradition, however Eastern religions (that is, East of the Levant) would, by and large, fail to be measured adequately. This raises an important question: has most empirical research simply measured

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<sup>3</sup> In defense of Faulkner and DeJong, their measurement scales *were* "based on traditional Judeo-Christian beliefs," which may have been appropriate for the *majority* (but not all) of the sample population- adhering to later suggestions by Cornwall, Albrecht, Cunningham, and Pitcher (1986), stating that "more attention should be given to measuring behaviors which are emphasized in the teachings of a particular denomination or sect" (242).

*Western religiosity*, a belief system three thousand years in the making and, furthermore, radically altered since the application of scientific and Enlightenment principles? In other words, do these measurements of religiosity capture the mystic and spiritual capacities of human nature, as normative research should, or does it simply measure a nuanced series of purely Western metaphors? Hill and Hood, Jr. (1999) identify this dilemma clearly and succinctly, cautioning aspiring researchers that “scales to measure non-Protestant religion are less common; in terms of non-Western faith traditions, relevant scales are virtually nonexistent” and “likely to reflect a Christian religious bias” (4). Furthermore, this Christian bias is often exacerbated with the presumably unintended bias of doctrinal literalism, a “persistent flaw in studies of religious belief” which reflects the “bias of the measuring instruments toward a literal-fundamentalistic interpretation of Protestant Christianity” (Hunt, 1972; 42).

DeJong, Faulkner, and Warland conclude that three separate, “generalized conceptualizations” exist within a multidimensional measure of religiosity: generic religiosity, religious knowledge, and social consequences (879). Generic religiosity, as its name suggests, is validated *a se*. The “social consequences” dimension and religiosity have little to do with one another, as recent extremist activity and fundamentalist mobilization often indicates. Furthermore, very rarely is religious knowledge, what Glock (1962) defined as the intellectual dimension, an indicator of religiosity. In fact, a recent Pew Forum on Religion & Public Life found that a profound disparity exists between nonbelievers and the faithful- the former brandishing far more religious knowledge than the latter- leading to humorous article titles to the effect of “Want to Know More About God? Ask an Atheist” (*The Pew Forum*).<sup>4</sup> These three components of so-called religiosity have little correlation with one another, the authors suggest, though their subcomponents are interrelated. This begs an important question: “What constitutes an indicator of religiosity?” (DeJong *et al.*, 882).

As a result of the aforementioned scholarship, there are two general approaches to measuring religiosity vis-à-vis its subdimensions. The first method “attempts to operationalize dimensions that have been conceptually derived” and “selects or constructs items believed to measure them” (Cornwall *et al.*, 1986, 226). The second, a “more directly empirical” approach, involves plugging and chugging “large pools of indicators” of religiosity in an effort to establish mathematical relationships between them (226). Using the latter approach, the authors developed a cross-classification system of three

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<sup>4</sup> Based on that, one might propose that religious knowledge *decreases* as religiosity increases- a measurable relationship conceivable if one recalls the Western development of the *faith versus reason* debate- though such an interaction is not always contentious, it brings to light the notion that faith, the *sine qua non* of religion, is considered antithetical to fact (this is not pejorative and many faithful would agree).

major components of religion; to wit, the cognitive, affective, and behavioral components. These components are examined across two modes: personal and institutional. In effect, six dimensions are produced. Unlike Faulker and Dejong (1966), Cornwall *et al.* deliberately exclude communal, intellectual, experiential, and consequential dimensions- factors which exist on the periphery of religiosity and, the authors contend, are causal products of more integral religious dimensions. In other words, "friendship choices, religious knowledge, and religious experiences both influence and are the *result of* religiosity" (232, emphasis added). One could argue, however, that their six selected primary dimensions are also causally related; *church commitment* or *spiritual commitment* (institutional and personal modes of the *affective* dimension), for example, both *cause religiosity* and are *caused by it*. One is reminded of the conclusion of Blaise Pascal's Wager, which offers instructions in increasing one's religiosity: "You would like to attain faith, and do not know the way... Follow the way by which [others] began; by acting as if they believed, bless yourself with holy water, have Masses said, and so on; by a simple and natural process this will make you believe, and will dull you—will quiet your proudly critical intellect" (Pascal, 68, 1958).

A review of relevant literature on the measurement of religiosity involves a vast amount of scholarship that has led to a greater understanding of its dimensionality and operationalization. However, research has had its shortcomings- specifically in determining what dimensions, if any, constitute religiosity, as well as the universality and applicability of these measures across interreligious and intercultural lines. In order for universality to be reached, scholars must determine core religious elements specific to human nature, rather than Western religious tradition alone. Yinger (1969) produced broad conceptualizations encompassing humanistic ideals loosely tied to the foundations of religiosity- though perhaps too broad (Dejong, Faulkner, and Warland, 1976, 868). A truly universal approach would not only capture the essence of universal human spirituality in all major religious traditions, but also account for the recent phenomena of New Age and Quest religions that are markedly different from organized, "traditional" religions.

#### *The Functional Approach and Universal Implications*

Assessing religiosity in terms of the fulfillment of religious obligations or the degree of belief in particular tenets has proven the predominate paradigm in the psychology of religion. However, reversing this follower-faith dynamic allows researchers to approach measuring religiosity in terms of what functions the religion performs- where "the emphasis is on *use* of religion rather than *content per se*" (Gorsuch, 1984; 229). This approach to measuring religiosity, known as the functional approach, is

grounded in the assumption that the “content of faith is less important than the goals or style of religion” (230). Such a strategy allows researchers to identify dimensions which are inherent in religious belief, providing an alternative approach to traditional measures by focusing on the *use* of religion, as opposed to the degree of belief in religious tenets and values. More importantly, however, identifying the common elements of religion in terms of answering ultimate questions of the human predicament allows researchers to focus on the universal, cross-cultural elements of the phenomenon of religion itself. This approach was first put into practice by Yinger (1969) who, determined to find the core elements of religious belief, constructed a measure of “open-ended, non-doctrinal questions to tap the natural expression of ultimate concern” (88).

Yinger highlights an important observation in research on religiosity and scholarship in general—that measures often reflect the personal values of the researcher, whether they be narrow, negative, or outmoded definitions of religion (a contention also raised by Wald and Wilcox, 2006). Yinger emphasizes the importance of measuring the unadulterated values of the respondent, allowing them to “speak their religions to our unknowing ears” (93). He begins with the empirical assumption that all individuals are, in fact, religious, albeit expressed in varying modes—distinguishing what is “intrinsic” to religion, and what is “part of specific forms for expressing that intrinsicity” (89).

What is the overarching element of religion? According to Yinger, core experiences inherent in human existence leads man to acknowledge evil as a “fundamental fact of existence,” and further, that man, given his cognitive capacity for abstraction and imagination, can “ultimately be saved from evil” (89). All religion is continually evolving, thus researchers must confront the issue of whether religions transform or decline, making, “the development of comparative measures through space and time” not only necessary, but far more valuable in understanding the psychology of religion (90).

Yinger’s operational definition of religiosity reflects this need in devising three categories: the “awareness of and interest in the continuing, recurrent, ‘permanent’ problems of human existence,” the “rights and shared beliefs relevant to that awareness” and the strategy towards a overcoming this predicament, and lastly, “groups organized to heighten that awareness” through the transmission of rites and beliefs (91). This threefold definition combines the aspects of individual character, culture, and group membership, similar to the psychological and sociological dimensions proposed in this study. If these dimensions of religiosity may be accurately deemed “universal and inclusive categories,” it will allow researchers to proceed in identifying patterns, similar to the strategies of structural linguists or

zoologists who, knowing the obvious differences between the bat, lion, and whale, proceeds to classify them together “because of the important differences they share” (98). Yinger claims:

“Only by isolating analytic categories of religious facts that permit comparisons and contrasts, despite the variations in cultural expressions of those categories, can we move from basically descriptive natural history to analytic natural science. I think we shall discover, for example, that knowledge of the distribution of a belief in some fundamental orderliness to the universe, as a religious category, is a more important datum for a science of religion, more predictive of behavior, than knowledge of the several forms by which that belief can be expressed.” Yinger (1969), *A Structural Examination of Religion*, 98

Yinger’s model took considerable flak from Nelsen *et al.* (1976), who contend that using Yinger’s seven non-doctrinal items would create an aggregate index with “poor internal reliability,” as well as a dearth in reported reliability statistics (264). After administering the non-doctrinal measure and more traditional scales of religiosity to southern university students, Nelsen *et al.* performed a principal factor analysis with varimax orthogonal rotation, loading a total of two significant factors; namely, the “endorsement of belief and order” and the “acceptance of the value of suffering” (266). As the two factors related significantly to more traditional measures, Nelsen *et al.* claimed that “this fact challenges the validity of invisible religion as quite apart from denomination-based religiosity” (267).

In his “Comparative Study of the Substructures of Religion” (1977), Yinger advances his universalistic approach with a newfound vigor, equipped with an extended definition of religion wherein all religions rest upon one commonality: “the persistent experience of injustice, suffering, and meaningless” (67). According to Yinger, religion addresses the “*failure* of the human enterprise at its most critical points,” specifying fundamental ways to reduce life’s problems and reconciling the fact that “in spite of it all, meaninglessness, suffering, and injustice continue” (68-9). If veritable, the author posits, these three elements exist in individuals of virtually every society. Yinger pilot tests his measure to 751 university students in Japan, Korea, Thailand, New Zealand, and Australia, with an additional sample of 124 respondents from 11 different countries (69). In devising his measure, he worked closely in cooperation with native speaking professors from each country in order to avoid the pitfalls of linguistic incommensurability inherent in transliterating Western theological language; a limitation he identifies (1969, 90), as does Hunt (1972, 48). Yinger found that the variable of religious identity explained only a fraction of the variance in the non-doctrinal items (i.e., although the religions of respondents varied, it had little effect on their answers), lending credence to the universality of his items.

Further studies of Yinger's non-doctrinal measure were performed by a number of scholars. Roof *et al.* (1977) replicated and administered the measure to 113 northeastern university students- albeit determining that the measure loaded onto three factors, rather than Nelsen's two (404). The authors concluded that beliefs toward ultimate concerns are similar in both northern and southern student cohorts, and that "doctrinal and non-doctrinal religious forms appear to covary together," though, they suggest, further investigation is warranted (407). A separate factor analysis by Brown (1981) yielded a total of nine factors, leading to the claim that Yinger's non-doctrinal items exhibit little coherence and are largely political in nature (5). Expanding on Yinger's measure to include a "love and understanding" item, Wright and D'Antonio (1980) oppose the notion of universal elements, or substructures, in religion. Instead, they propose *social-horizontal* and *vertical, numinal-transcendent* components which render a substructure theory inadequate in explaining the "diversity and complexity of religious beliefs and experience" (297).

Despite criticisms, the investigator finds the functional approach to measuring religiosity, grounded in Yinger (1969, 1977), invaluable to the present study. Measurement, in terms of functions inherent to all religions, offers researchers a universal approach that dissolves the candy coating of religious dogma, exposing its inner, universal, and beatific essence.

#### *Other Functional Approaches to Measuring Religiosity*

Measuring religiosity in terms of functionality was employed by Allport and Ross (1967) who, in an effort to determine a relationship between religiosity and social prejudice, conceived and measured the distinction between intrinsic and extrinsic religion, i.e., *using* versus *living* religion, respectively. Here, "two poles of subjective religion" were identified- with most individuals falling somewhere in between (434). Extrinsically-oriented individuals are said to employ religion as a tool, the creed and tenets of which are "lightly held or else selectively shaped to fit more primary needs," for example, "security and solace, sociability and distraction" and "status and self-justification" (434). Intrinsically-oriented individuals, conversely, internalize their religious creeds and tenets, regarding "other needs... as of less ultimate significance," in effect *living* their religion (434). Further reformulation led to the creation of a fourfold typology: intrinsic, extrinsic, indiscriminately proreligious, and indiscriminately antireligious. Allport and Ross devised the *ROS*, or *Religious Orientation Scale*, virtually absent of specific references to Judeo-Christian theology, in order to create a measure with potential universality.

During the same year, Allen and Spilka (1967) devised a measure similar to the *Religious Orientation Scale*, albeit administered via interview (rather than via survey), seeking to test the relationship between religiosity and prejudice, the “apparent paradox of religious belief” (191). Again, the principal investigators sought to understand religiosity through its functionality and fulfillment for the individual. Taking issue with previous measures that gauge religiosity vis-à-vis religious knowledge, participation, and church attendance, they argue that these measures “do not reveal the functional role these observable differences have for the individual” (193-4). In order to determine the way in which religious adherents structure their beliefs subjectively (i.e., how the individual integrates religion into his or her life), orientations were categorized as *committed*, utilizing “an abstract philosophical perspective” and a “flexible framework of commitment,” and *consensual*, reflecting a “typologized, concretistic, restrictive outlook on religion... verbally conforming to ‘traditional’ values and ideals” (205). Interviews were conducted using both semi-structured and open-ended questions tailored towards a traditional Christian perspective, which allowed for a more personal approach to data collection while sacrificing universality (given the Judeo-Christian bias). *Consensual* and *committed* religiosity were assessed via five cognitive components: *content, clarity, complexity, flexibility, and importance*. Each component was accompanied by a bipolar spectrum with corresponding operationalization. For example, *complexity* is defined as “the number of categories, elements, or aspects of religiosity” used by the individual. According to this description, *committed* respondents used a “relatively large number of categories or elements,” as opposed to *consensual* respondents who offer a “relatively small number” of “typologized and global” elements (199).

Perturbed by the persistent bias towards literal-fundamentalist interpretations of Protestant Christianity in previous measures of religiosity, Hunt (1972) set out to devise a measure which would avoid the methodological pitfalls of the “disjunction between theological conceptualization and empirical measurement” on paper-and-pencil surveys (42-3). Enumerating a number of shortcomings, such as the dearth of interdisciplinary collaboration in constructing a “full range of theological and philosophical positions” in one’s measurement inventory, or the “multiplicity of meanings which respondents can attach to the same inventory item,” Hunt attempts to remedy these methodological issues by formulating a “mythical-symbolic measure of religion... independent of a literal-fundamentalistic measure” known as the *LAM* scale; i.e., *Literal, Anti-literal, and Mythological* (43). The *LAM* scale was designed to identify three “meaning-commitment” possibilities. The *literal interpretation* reflects “an individual who has not examined the relation of his religious statements to other cognitive, conative, and affective areas of life” (*nota bene* the *function* of religion; 43). *Anti-literal interpretation*



reflects the rejection of religion as useless to the individual and society, possibly indicating either a rebellion against one's childhood religion, parental authority, or the wholesale dismissal of "Christian-oriented interpretations of life." Lastly, the *mythological interpretation* describes the "reinterpretation of religious statements to seek their deeper symbolic meanings which lie beyond their literal wording," which, the author claims, is the "most mature type of religion" (43-4). Despite solid theoretical grounds and valid, arguably profound observations of the field, the measure is limited in its universal applicability. Namely, the author admits, "these scales seem to be limited to the Christian framework for interpreting religion" (46). Virtually every item contains a reference to Christian dogma, effectively hamstringing its cross-cultural and interreligious usefulness. However, Hunt claims that the methodology may be easily replicated and applied to other religions, "since their teachings and literature may also be interpreted from either literal or symbolic perspectives" (46).

In an effort to determine where religion promotes prosocial behavior, Batson (1976) developed a three dimensional measure of religiosity using the *intrinsic-extrinsic* model created by Allport and Ross (1967). Batson renamed *intrinsic* and *extrinsic* as *Means* and *End* orientations, respectively, adding a third dimension dubbed *Quest* religion. Quest religion describes the capacity for the religious to engage in the "endless process of probing and questioning generated by the tensions, contradictions, and tragedies in their own lives and in society" (32). Quest religion, here, is understood as the continual raising of "ultimate 'whys,' both about the existing social structure and about the structure of life itself," which, the author admits, may not be thought of as traditional religiosity (32). Six measures were utilized in the formulation of his three dimensional model. Ultimately, it demonstrated adequate validity and reliability, and yielded "suggestive" findings, albeit "amenable to other interpretations" (42). Batson raises important concerns in the measurement of religiosity, the most important of which involves the problem of social desirability affecting respondents' answers. He suggests the "need for new evidence based on a broader conceptualization of ways of being religious and less subject to influence by social desirability" (32). Questions on the influence of social desirability on religiosity are also addressed by Watson *et al.* (1986) in a number of separate studies, in which the authors "fail[ed] to replicate Batson's three component structure of religious orientation" (226). In addition, Finney and Malony, Jr. (1985) contend that Batson's Means, End, and Quest dimensions may, in fact, represent an ipsative typology, in effect forcing respondents to choose one type of religious orientation over the other (412).

*Measures of Religiosity in Nontraditional Cohorts*

The universal approach to religiosity proposed by Yinger has led researchers to broaden the sociological compass, expanding the conventional definitions of religion to include privatized, New Age, or spiritual ideologies. Machalek and Martin (1976) extended Yinger's work to include the "invisible, privatized" religions theoretically grounded in Luckmann (1967) in order to demonstrate the "usefulness of inclusive, functional definitions of religiosity" (311). The authors' main contention derives from the fashionable methodological trend of measuring the "sociology of churches" rather than the "sociology of religion" (311). Oftentimes definitions of religion are confined to substantive boundaries, emphasizing certain transcendent, superempirical tenets and specific content pertaining to Western theology; however "inclusive, functional definitions such as Yinger's do not impose on respondents a Christian theological bias about the nature of ultimacy" (312). Yet Machalek and Martin argue that Yinger's definition of religiosity may, in fact, be too broad and use a narrower definition involving *ultimate concerns* and *coping strategies* (314-5). *Ultimate concerns* was dichotomized into *transcendent* and *immanent ultimate concerns*, whereas *coping strategies* was dichotomized into *group-based* and *non-group-based coping strategies*, thereby allowing an important distinction to be made between which Yinger's "sociologically biased" definition fails to provide (318). The authors' findings bolster those of Yinger, both practically and theoretically, by supporting the "contention that people's perceptions of life's ultimate concerns and accompanying coping strategies are not limited to an institutionalized religious context" (320).

With the expansion of the sociological scope to include alternative religions, researchers have begun to forge new paths toward understanding religiosity in nontraditional denominations. Tapp's *Dimensions of Religiosity in a Post-Traditional Group* (1971) explores the religious variable among Unitarian Universalists, an alternative branch of Protestant Christianity and characterized as "post-traditionally religious" (41). Tapp devised eight dimensions of religiosity, employing traditional Christian items with newly developed ones tailored specifically for Unitarian Universalists. "Most striking," the author reports, "is the extent and coherence of post-traditionality," representing a "clear disaffiliation with Christianity" (43). This, Tapp explains, may be a reflection of the Unitarian Universalist "desire that their denomination reflect a universal or humanistic religiousness," (43). Tapp's *sociality values and participation* dimension also reflects a "need for a community of common values"; he ultimately concludes that the multidimensionality of religiosity among Unitarian Universalists is of less breadth

than traditional Christian groups (43, 46). This may indicate that the elements common amongst religions are equally narrow in breadth, widened only by the detailing of doctrine and dogma.

*The Religiosity of the “Irreligious”*

Researchers interested in religion have, given the expanding scope of its definition, even endeavored to calculate the religiosity of those deemed irreligious or nonaffiliated. Campbell and Coles (1973) conceived of eight dimensions to measure the “luxuriant theological undergrowth” flourishing extraneously from organized religion (Martin, 1969). They emphasize the importance of including those nonaffiliated with, or disaffiliated from institutional religion. It is entirely plausible that as religion influences one’s actions, its absence may likewise have an effect. Campbell and Coles propose a two-dimensional operationalization distinguishing between *religious affiliation* and *religiosity*, claiming that the confusion of these two elements has “hampered rather than helped the collection of a cumulative body of data” (152). These dimensions are further dichotomized between member and *non*-member, as well as *religious* and *a-religious*. They theoretically justify this distinction citing previous scholarship, as well as the brief thought exercise fathoming the possibility of an a-religious individual who, by coercion, social pressure, or other reasons maintains an active membership a religious institution (152). Further complexities arise when one factors into account membership in irreligious organizations, such as a local *Freethinkers* chapter or *Atheist Alliance International* (155). Studies such as this indicate the need for universality in religiosity measures, as well as an expansion of the sociological definition of religion to be much more inclusive. Further, they similarly reflect the empirical assumption of Yinger (1969), who stated “I find it helpful to think of everyone- or nearly everyone- being religious, just as nearly everyone speaks a language (90).

Other studies have been undertaken to recognize and evaluate both New Age, Spiritual religions; i.e. privatized, non-institutionalized religions flavored by popular, civil religions. Flere and Kirbis (2009) set out to conceptually define the “composite phenomenon” of New Age religions which generally maintain three qualities: the *mystical idea of one’s inner self*, *millenarianism*, and *holism*, or the “approach to truth opposed to the analytical methods of modern science, demanding instead one’s total immersion to comprehend reality” (162). The authors stress the importance of New Age Spirituality to modern conceptions of religiosity, particularly in that it is losing its taboo as a countercultural phenomenon and rapidly entering the mainstream of society (163). Important findings include the inclination by both New Age and traditional groups towards a “single worldview that generally opposes a worldview characterized by irreligiosity, empiricism, and rationalism” (167). This often leads to the

speculation that New Age religion is a “form of contemporary popular religion, one that supplements official religion with views that fit well into existing empirical culture” (167). These results combat the conventionally-held belief that New Age Spirituality is a reaction to radicalism, a “child of the Enlightenment,” or that it “rejects traditionalist views” (167).

Houtman and Heelas (2009), in their cross-cultural comparison of Christian religiosity and New Age Spirituality, draw similar conclusions, asserting that “New Age spirituality is in fact quite closely related to theistic Christian religiosity,” though the study is limited (172). In addition, the authors highlight the predictions of Heelas and Woodhead in *The Spiritual Revolution*:

“The expectation would be that in the West those forms of religion that tell their followers to live their lives in conformity with external principles to the neglect of the cultivation of their unique subjective-lives will be in decline. Many churches and chapels are likely to fall into this category. By contrast, those forms of spirituality in the West that help people to live in accordance with the deepest, scared dimensions of their own unique lives can be expected to be growing.” (2005, 5)

Neff (2006), with the consensus of a panel of experts, employed the *Fetzer Multidimensional Spirituality Measure*, which was “developed to provide relatively brief measures for a number of dimensions” (449). While his research predominantly revolves around the utility of the *Fetzer Measure*, the author suggests the possibility that *spirituality* may be a unidimensional, “global factor” (458). After a brief review of recent literature, it may be safely assumed that New Age religion and Spirituality will continue to flourish in years to come in an effort to understand the universality of religiosity.

The universal approach to measuring religiosity, particularly by means of functionality, has cultivated a distinct and successful alternative to traditional doctrine and value surveys. Based on the belief that all religions satisfy similar needs and harbor a similar elemental substratum, social scientists have begun to recognize religions in terms of their similarities, allowing for the measure of evolving religions regardless of, as Yinger puts it, “space and time” (1969; 91). Simply calculating historically-concretized articles of faith and “traditional” values, as static and unchanging, subjects researchers to the Diderotian *fallacy of the ephemeral*, or the “mistake made by a transitory being who believes in the immutability of things” (Diderot, 120, 1956). Perhaps this is articulated most eloquently in *Fontenelle’s Rose: de mémoire de rose on n’a jamais vu mourir un jardinier* (120).<sup>5</sup> In this case, however, it is the social scientist that is *fleeting* and the religion which *slowly evolves*.

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<sup>5</sup> “So far as any rose could remember, no gardener had ever died.”

### *Understanding Mythology in an Academic Context*

Joseph Campbell (1904-1987) was an American philosopher, author, and comparative mythologist with a penchant for discovering the divinity of every mythological narrative- from his childhood favorites in Native American lore to the Arthurian tales of Medieval Christendom. His most famous work, *The Hero with a Thousand Faces* (1949), proposed that an underlying substratum exists in every mythology, demonstrating this claim by comparing the various thematic elements they shared. Campbell's creation of a universal mythological framework, what he dubbed the *Monomyth* (originally coined by James Joyce), tied together the narratives of the world's religions- whether they be widespread or esoteric- and weaves his literary theory into a tapestry of modern psychology incorporating, in particular, Carl Gustav Jung's theory of the archetypes of the collective unconscious (Grim, 2003, 918).

Before going further, it is important to understand *myth* and *mythology* in an academic context. "Today the word 'myth' is often used to describe something that is simply not true," although this meaning has entered popular currency only recently (Armstrong, 2005, 7). The notion that *myth* connotes falsity began in the Greek tradition, when the "study of philosophy... caused a rift between *mythos* and *logos*," that is, revelation and reason, capacities in the human being that "had hitherto been complimentary" (102). In this sense, *myth* is a label rarely applied to one's own faith; as Campbell succinctly puts it, "*mythology* is what we call someone else's religion." Applying the scientific principles of the Enlightenment to Western religion, via Biblical criticism, philosophy, and other disciplines, the schism between *logos* and *mythos* widened as we increasingly approached history scientifically (7). However, mythologists continually stress that academic appropriations of the term *mythology* do not connote falsities, but rather "an art form that points beyond history to what is timeless in human existence" (7). *Myths* may or may not be factual, scientifically-verifiable, historical events, but "an event which, in some sense, had happened once, but which also happens all the time" (7). Understanding *myth* in this context is integral to approaching and measuring religiosity, particularly when measuring cross-culturally applicable, universal dimensions.

### *The Four Functions of Religious Mythology*

Campbell (1968, 2004) proposed a "fourfold interpretative schema" to understand the four functions of a mythological narrative- narratives which, if institutionalized, become organized religion

(Grim, 2003, 918). Campbell's four functions include: the *mystical* (or *metaphysical*), the *cosmological*, the *sociological*, and the *pedagogical* (or *psychological*).

According to Campbell, the *mystical or metaphysical function* of religious myth, which he grounds in the writings of Rudolf Otto, "is to waken and maintain in the individual an experience of awe, humility, and respect, in recognition of that ultimate mystery" (1968, 609); in other words, this function of religion breaths divinity into the life of the individual, instilling in one a sense of wonder at the mystery and source of being- whatever *it* may be. This is the "insight basic to all metaphysical discourse," he claims, "only when the names and forms, the masks of God, have dissolved" (611)- echoing the sentiments of Yinger's (1969) notion of the underlying substructure inherent to all religion.

It may be argued that the *mystical or metaphysical function* of mythology may be fulfilled in nontraditional religions, as well as the worldviews of the irreligious. Hitchens (2007) conveys this notion succinctly, stating that a "dislike or distrust of superstition and the supernatural need not mean there is a deafness to the marvelous and the mysterious" (123). Joseph Conrad, in an author's note to his novel *The Shadow Line: A Confession*, eloquently delivers this apprehension in full:

"All my moral and intellectual being is penetrated by an invincible conviction that whatever falls under the dominion of our senses must be in nature and, however exceptional, cannot differ in its essence from all the other effects of this visible and tangible world of which we are a self-conscious part. The world of the living contains enough marvels and mysteries as it is; marvels and mysteries acting upon our emotions and intelligence in ways so inexplicable that it would almost justify the conception of life as an enchanted state. No, I am too firm in my consciousness of the marvelous to be ever fascinated by the mere supernatural, which (take it any way you like) is but a manufactured article, the fabrication of minds insensitive to the intimate delicacies of our relation to the dead and to the living, in their countless multitudes; a desecration of our tenderest memories; an outrage on our dignity." (1924)

The *cosmological function* of myth "presents an image of the cosmos, an image of the universe round about" which will "explain everything you come into contact with in the universe around you" (2004, 7-8). The mythological narrative- whether the six-day creation of the Book of Genesis, the world egg of Shinto, or the rending of Father Sky from Mother Earth in Native American and African lore- provides for the individual the image of the cosmos in its totality, typically involving an anthropocentric universe. That is, humans who comprehend the cosmological function understand the cosmos and their place in it, "whether regarded in its spatial or its temporal, physical, or biological aspect" (1968, 620) - this is the second function of religion and mythology. Weiss (1974) extended a similar notion, arguing that religion "presupposes in every culture a cosmology- a set of ideas about the universe" (381).

The third, *sociological function* of religious myth "validates and maintains a certain sociological system" and a "shared set of rights and wrongs, proprieties or improprieties, on which your particular social unit depends for its existence" (2004, 8). Campbell argued that mythologies create and maintain a certain social order- e.g., a hierarchy, caste, system of ethics, etc. Oftentimes, these are apodictic and mandatory of the pious; what Nietzsche describes, in his *Also Sprach Zarathustra*, as the dragon named "Thou Shalt" (1896). Campbell references John Dewey in his *Living Philosophies* (1931), describing the sociological function in terms of the Christian orientation:

"Christianity proffered a fixed revelation of absolute, unchanging Being and truth; and the revelation was elaborated into a system of definite rules and ends for the direction of life. Hence 'morals' were conceived as a code of laws, the same everywhere and at all times. The good life was one lived in fixed adherence to fixed principles" (1931, 26)

Lastly, the fourth function of mythology is the *psychological or pedagogical*- which provides the "centering and harmonization of the individual" in reconciliation with the "basic psychological problems of youth, maturity, age, and death" (1968, 623; 2004, 25). In this sense, each mythological system provides a compass to the individual for navigating life's hardships and crises. The relationship the psychological function has to the other functions of mythology cannot be understated, as it provides for the individual "a way to connect the inner psychological world to the external world of phenomena" (107). This, Campbell claims, is "the most constant of the four functions across cultures" (10), a notion also asserted by Yinger (1977), who placed tremendous emphasis on the psychological state of the religious individual in coming to terms with the perpetual "threat of suffering, meaningless, and injustice" (68).

It should be noted, however, that according to Campbell (1968, 2004), the second and third functions of religiosity- i.e., the cosmological and sociological, respectively- are jeopardized vis-à-vis the emergence of science and secular institutions. "In our present world, the cosmological and the sociological functions have been taken away from us"; our present cosmology is "in the hands of science," and morality is viewed as subjective to the individual, rather than an "immutable truth handed down from the mountain" (2004, 9, 25). Problems arise when a static, immutable image of the cosmos is confronted with the continual and ever-accelerating process of change in the world; making any established cosmology, if understood literally, one not of "accord but disaccord" (1968, 614). Campbell recounted an important moment in which, for him, the discord between modern science and traditional cosmology was most prominent: the *Apollo 8* Moon flight was quietly navigating its lunar path on Christmas Eve, when the crew began to recite the book of *Genesis* in celebration of the holiday. "Here

they were, reading these ancient words that had nothing to do with the cosmos they were flying through, describing a flat three-layer cake of a universe” (2004, 7). One can only speculate on his attitude towards the first meal on the Moon itself- Buzz Aldrin’s communion wafer. Furthermore, the scientific revolutions of human history (e.g. Columbus, Copernicus, Newton, Kant, Laplace, Galileo, Darwin, etc.) have directly affronted deeply-entrenched religious cosmologies (614-20, 1968).

Yinger (1969) also argued that these dimensions would be replaced by secular institutions and values as individuals “develop strong faith in the possibilities of the United Nations and the long-run potentials of science as the way to solve man’s problems” (92). Charlton (2007) calls upon the artists of our time for a contemporary mythogenesis to reconcile modern science with the human experience. Furthermore, the secular encroachment on the sociological and cosmological functions may account for the separatist ideologies of religious fundamentalists who fashion revivalist movements in a “conscious, organized opposition to the disruption of those traditions and orthodoxies” (Ammerman, 1991, 14).

Interestingly, the rapid advances in scientific and social institutions have given rise to *Singularitarianism*, *Transhumanism*, and even *Biological Immortalism*, separate but not mutually exclusive grassroots movements with quasi-religious undertones, in which science and technology are the Providence of man, used to “liberate the human race from its biological constraints” (Bostrom, 2004, 1). Such movements illustrate the metamorphosis of religion within the cocoon of scientific advancement- even going so far as to precipitate their own technological eschaton.

“These are the four functions of mythology,” Campbell asserts, “and if they are successful, you get a sense of everything- yourself, your society, your universe, and the mystery beyond- as one great unit (2004, 55). This is the *holism* of the fourfold typology, similarly identified as a component of *New Age Spirituality* by Flere and Kirbis (2009), or an “approach to truth opposed to the analytical methods of modern science, demanding instead one’s total immersion to comprehend reality” (162). The functions acknowledge the core spiritual and religious attributes of human beings (i.e. the *macrocosmic*, *mesocosmic*, and *microcosmic*) in a fashion similar to functional approaches by social scientists. The effect is the creation of usable, potentially universal dimensions of religiosity which, true to Campbell’s research and Yinger’s objective, span across all mass belief systems and their mythological narratives. To identify the degree in which religion performs these functions in the individual would effectively demonstrate his or her level of religiosity, in terms of functional approaches to its measurement.



## METHOD &amp; DATA

The majority of the scholarship on religiosity approaches the variable as a multidimensional phenomenon, although most studies have failed to achieve cross-cultural and interreligious applicability. As a result, the brunt of research in the psychology of religion has been dominated by the lens of Western monotheism, specifically Judeo-Christian theology. Few researchers have attempted to create a universally acceptable measure (e.g. Yinger, 1969) that emphasizes the religious and spiritual capacity in the individual, rather than the degree of adherence to specific religious tenets. In order to conceptualize and operationalize the universal dimensions of religiosity, it was decided to approach the religious variable not in terms of the individual's fulfillment of his or her religious obligations, but rather the religion's fulfillment in the life of an individual- i.e. what the religion provides for the individual. Thus, the present research rests on the empirical assumption that religiosity may be measured in terms of the fulfillment of its functions in the individual and that all religions fulfill basic needs. The theoretical groundings of this research rest in the literary theory of comparative mythologist Joseph Campbell, who proposed four functions of religion- to wit, the mystical, cosmological, sociological, and psychological- these functions constitute the four dimensions conceptualized in defining religiosity (Campbell, 1968, 2004).

As discussed, previous research on religiosity has been categorized according to several factors- studies of religiosity which "may overlap with general psychology but are of particular interest in the psychology of religion," measures which have "generated a reasonably consistent programmatic research tradition," and studies which have "commanded extensive investigation within the psychology of religion" (Hill & Hood, Jr. 1999, 5). After reviewing Hill & Hood, Jr.'s typology, research categories and their corresponding studies were selected in a manner representative, at least theoretically, of the four established dimensions of religiosity. These include scales of beliefs and practices, religious attitudes, religious orientation, religious development, moral values and personal characteristics, religious coping and problem-solving, mysticism, god concept, views of afterlife, and divine intervention and attribution.

The category of *beliefs and practices* focuses on specific doctrinal tenets. Although representative of a Judeo-Christian bias, some of the measures offered relatively universal items (e.g. humanistic morality, liberal belief, nondoctrinal scales) potentially relating to all four proposed dimensions of religiosity. Measures of *religious attitudes* include several studies on social and political beliefs which had the potential to measure the *sociological dimension* (e.g. attitudes towards Christian women, social-religious-political scales). The *religious development* and *religious coping and problem*

*solving* categories offered measures which relate to the proposed *psychological dimension*. The *moral values and personal characteristics* category offered measures related to both the *psychological* and *sociological dimensions*, relating to subjective belief and religiously founded moral norms, respectively. The *spirituality and mysticism* category offers measures directly relating to the *mystical dimension* and the *god concept, views of afterlife, and divine intervention and attribution* categories, in potentially measuring beliefs about the order of the universe (metaphysical, scientific, or otherwise), directly related to the *cosmological dimension*.

Also included were constructs involving phenomena relevant, in part, to the study of religiosity. Given the scope of the religious variable, virtually any psychological measure offers valuable pieces to the religiosity puzzle; thus, measures of authoritarianism, dogmatism, and the locus of control were included among relevant studies (489). All of the selections made were theoretically justified to reflect chosen dimensions, based on the category descriptions and content of Hill & Hood, Jr.'s chapter prefaces. This process yielded a selection of 35 relevant constructs, out of a total 126 studies, creating an initial pool of potential measures (see Appendix A).

Following the creation of this pool, each category was screened for potentially useful measures. This screening involved an examination of each measure, including a description of the survey and its theoretical foundations, practical considerations in administering the questionnaire, and reported reliability and validity. Only those measures which met specific criteria were chosen; namely, a sound reliability and validity, a universal approach absent of Judeo-Christian bias, usable survey items, and overall relevance to selected dimensions.

A number of different tests were used to report the reliability and validity of the measures. Test-retest reliability coefficients ranged from .79 to .93, with the exception of the *Multidimensional Locus of Control Scale* (Levenson, 1974), which was eventually removed for irrelevancy. Internal consistency was measured using both Cronbach's alpha coefficient, as well as the Kuder-Richardson formula, for several of the measures; those in which half or more of the subscales or factors were below a .60 cutoff were discarded- though many of the measures were far higher than this criterion. No reported interrater reliabilities fell below .88. A number of measures also furnished sound convergent and discriminant construct validity in predicting correlations with other measures. In addition, face validity was established in some cases by subjecting measures to a review by theologians, theological seminary students, and in one particular instance, the dean of a Bible college (Brown & Lowe, 1951). The lowest

split-half reliability coefficient reported was .81. It should be noted that these figures represent the latest, modified editions of each measure.

Studies lacking a recorded reliability and validity were discarded, as were those measures predominantly composed of Judeo-Christian theological language and explicit references to monotheism (e.g., Hell, Messiah, Bible). Those measures which, upon further examination, were no longer relevant to the research question were discarded. A total of four measures were removed.

Once measures were selected, their individual survey items were formatted, pooled, and subjected to a similar screening to the one mentioned above- removing irrelevant, religion-specific, or poorly worded questions. Items were categorized using the conceptual definitions of the four dimensions, each representing a particular function of religion- those items which failed to identify under said dimensions were discarded. Reverse-scored items were retained unmodified. A total of 17 measures remained following this process, with approximately 95 items (see Appendix B). In order to retain the reliability and validity of the items while creating a meta-measure composed entirely in Likert response format, those measures which utilized formats other than five or seven point Likert scales were removed- reducing the number of measures to a mere dozen and a total of 66 items. For parsimony, redundant items were eliminated.

Following further research, one additional measure was added. Yinger's *Nondoctrinal Religion Scale* (1969) was the only exception to the reliability/validity criteria, having reported no internal consistency reliabilities, and subsequent studies replicating the measure reported poor internal consistency reliabilities as well as arguing for both unidimensional and multidimensional interpretations (Hill & Hood, Jr. 1999, 38). The *Nondoctrinal Religion Scale* contains universal items devised through a functional approach to measurement, although they only partially gauge the precise dimensions proposed by the present study. The researcher finds the inclusion of this measure as theoretically justified.

#### *The Attempted Universal Measure (AUM)*

The remaining measures were integrated into the construction of the *Attempted Universal Measure*, or *AUM* (Crawford, 2011), a self-report instrument comprised of 44 items constructed to measure the mystical, cosmological, sociological, and psychological dimensions of religiosity. Fullerton and Hunsberger's *Christian Orthodoxy Scale* (1982, 1989) was included in the measure, separate from the *AUM*, for comparison purposes. Each item on the *AUM* and *Christian Orthodoxy Scale* is

accompanied by a seven-point Likert scale, ranging from “strongly disagree” to “strongly agree,” and respondents are offered a “neutral” response option; i.e., “neither agree nor disagree.” The final section of the measure includes basic demographic items (e.g. sex, level of parental education, age) as well as political items (e.g. external and internal political efficacy, citizenship, political ideology). Flavored by Yinger (1969), one item measures the membership and attendance of an “organization or community that addresses man’s ultimate questions or concerns,” and includes examples such as a *church*, *mosque*, or *freethinkers organization* (Crawford, 2011). Great care was taken in constructing an easily navigable survey to ease the cognitive burden of respondents, in accordance with survey swami Don A. Dillman (2007), as well as slight modifications to survey items without distorting their pre-established reliabilities (see Appendix C).

The opening question asks the respondent for their religious affiliation, with a list of 22 options, as well as an open ended “other” option. Respondents were asked to “check all that apply,” in order to accommodate combinatory religious orientations. In addition, the list was exhaustive of world religions and included irreligious or atheistic response options. Respondents were instructed to employ whatever definition of “God” they find suitable. Further instructions define “religion” or “faith” as “the worldview which addresses life’s ultimate concerns” (Crawford, 2011). The purpose of these efforts were to establish a subject-researcher trust relationship, particularly for nontraditional religious (or nonreligious) orientations, by acknowledging and validating *all* worldviews. In theory, such efforts would warrant serious attention for the measure by theists, nontheists, and atheists alike.

A small convenience sample was taken consisting of 36 students in a lower level, undergraduate political science course. All participants in the study were students at a private Catholic university in the northeast. The mean age of respondents was approximately 24, though this figure gravitates towards 20-21 with the removal of outliers. A slight female majority was also represented (62.7 percent) and the sample overall maintained a slightly liberal bias in self-identified political ideology. On average, respondents measured slightly higher levels of internal and external political efficacy (falling in between the “neither agree nor disagree” and “somewhat agree” response options of items 45 and 70, respectively).

#### PRELIMINARY FINDINGS

The self-identified religious orientations of the respondents (n=36) indicated a large proportion of Catholics (44 percent [n=16]) as well as four Protestants and four individuals identifying as “Christian-

Other.” Three respondents identified themselves as atheist and one individual was reported from each of the following orientations: Buddhism, Spiritualism, Agnosticism, and the “Other” category (responding to the open-ended option with “Mennonite”). In addition, four combinatorial orientations were reported: *Catholic-Spiritual*, *Catholic-Buddhist*, *Spiritual-Other*, and two individuals who identified as *Catholic-Other*.

As discussed, the *AUM* was designed to measure a fourfold dimensionality of religiosity comprised of the *mystical or metaphysical dimension*, *cosmological dimension*, *sociological dimension*, and *psychological or pedagogical dimension*. Internal reliability for each proposed dimension was calculated using Cronbach’s alpha coefficients. Due to the reverse-phrasing of survey items, responses to items 3, 4, 5, 8, 10, 13, 17, 18, 19, 22, 23, 25, 34, 35, and 39 were recoded prior to computing Cronbach’s alpha.

The *mystical dimension*, measured by items 1 through 10, is conceptually defined as the capacity to which religion invokes in the individual a sense of awe, wonder, respect, and humility in affirmation of the wonder of the universe. Preliminary findings report a Cronbach’s alpha of .839, which increased to .863, after removing item 3 for poor interitem correlation.

The *cosmological dimension*, measured by items 11 through 22, is conceptually defined as the extent to which religion establishes for the individual an order and composition of the universe, providing both physical and metaphysical boundaries in accordance with religious doctrine. The Cronbach’s alpha coefficient was initially measured at .851. Following the removal of items 12, 13, 22 (which produced poor interitem consistency), the coefficient increased to .911.

The *sociological dimension*, measured by items 23 through 34, is conceptually defined as the extent to which religion establishes a social order, socioreligious hierarchy, moral norms, and traditional roles for the social unit of the individual. The initial Cronbach’s alpha reported a coefficient of .819, increasing to .873 following the removal of items 23, 29, and 34, which produced poor interitem correlation.

Lastly, the *psychological dimension*, measured by items 35 through 44, is conceptually defined as the capacity to which religion addresses the harmonization and centering of the psyche in the individual, providing comfort and guidance throughout life’s stages and crises. This dimension initially reported a Cronbach’s alpha of .859, increasing to .883 following the removal of items 42 and 43 (again, for poor interitem consistency).

## DISCUSSION

Preliminary findings in administering the *AUM* show promise. High internal consistency of the four dimensions (following the removal of a select number of items) has been established in Cronbach's alpha coefficients of .839, .911, .873, and .859. Each dimension measured in the *AUM* represents a function of religion theorized by Campbell (1968, 2004), mirroring the functional approach to the measurement of religiosity employed by Yinger (1969, 1977) *et al.* According to this approach, as religions and their mythological narratives wax, wane, and evolve over millennia, these belief systems maintain an underlying substructure that fulfills specific functions necessary to both the individual and society. This substructure is layered in religion-specific tenets and doctrinal dogma- what Campbell described as the *masks of God* (1968). Challenging conventional wisdom, irreligious, nontraditional, or atheistic belief systems may offer holistic worldviews which perform similar functions, whether through secular institutions or the Providence of science, hinting towards similar commonalities with their religious counterparts. The *AUM* attempts to tap that inherent substructure.

It should be emphasized, however, that this is a preliminary measure. Further investigation is necessary to confirm the accuracy and effectiveness of the functional approach and, in particular, the *AUM*. Like language and law, religion has spread to the farthest corners of the earth- evolving and adapting to fit the societies of which it permeates and enlightening their inhabitants with answers to life's ultimate questions. We must determine humanity's *questions*, rather than religion's *answers*, to measure religiosity in a truly universal manner.

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**APPENDIX A: PRELIMINARY MEASURE POOL****I. Mystical/Metaphysical Function**

1. Religious Experience Questionnaire (Edwards, 1976)
2. Religious Experience Episodes Measure (Hood, 1970; Rosegrant, 1976)
3. World-Spirit Orientation Scale (Hsieh, 1981)
4. Religion and Philosophy of Life Attitudes Scale (Funk, 1955, 1958)
5. Index of Core Spiritual Experiences (Kass *et al.*, 1991)
6. Mysticism Scale (Hood, 1975)
7. Spiritual Assessment Inventory (Hall & Edwards, 1996)
8. Free Will-Determinism Scale (Stroessner & Green, 1990)
9. Multidimensional Locus of Control Scales (Levenson, 1974; Levenson & Miller, 1976)
10. Purpose in Life Test (Crumbaugh & Maholick, 1964)

**II. Cosmological Function**

1. Certainty in Religious Belief Scale (Thouless, 1935)
2. Inventory of Religious Belief (Brown & Lowe, 1951)
3. Inventory of Religious Concepts (Dunkel, 1947)
4. Loving and Controlling God Scales (Benson & Spilka, 1973)
5. Nearness to God Scale (Gorsuch & Smith, 1983)
6. Attributions of Responsibility to God Scale (Gorsuch & Smith, 1983)
7. Belief in Divine Intervention Scale (Degelman & Lynn, 1995)
8. God as a Causal Agent Scale (Ritzema & Young, 1983)

**III. Sociological Function**

1. Humanistic Morality & Liberal Belief Scale (Kaldestad, 1992)
2. Attitudes toward Christian Women Scale (Postovoit, 1990)
3. Religious Values Scale (Morrow, Worthington & McCullough, 1993)
4. Social-Religious-Political Scale (Katz, 1984, 1988)
5. Christian Moral Values Scale (Francis & Greer, 1990, 1992)
6. Value Profile (Bales & Couch, 1969)

**IV. Psychological/Pedagogical Function**

1. Faith Development Interview Guide (Fowler, 1981)
2. Faith Development Scale (Fowler) (Barnes, Doyle, & Johnson, 1989)
3. Faith Maturity Scale (Benson, Donahue, & Erickson, 1993)
4. Religious Index of Maturing Survey (Marthai, 1980)
5. Religious Coping Activities Scale (Pargament *et al.*, 1990)
6. Religious Problem-Solving Scale (Pargament *et al.*, 1988)
7. Belief in Afterlife Scale (Osarchuk & Tatz, 1973)
8. Death Acceptance Scale (Ray & Najman, 1974)
9. Death Anxiety Scale (Templer, 1970)
10. Death Perspective Scales (Spilka *et al.*, 1977)

## APPENDIX B: FINAL MEASURE & ITEM POOL

### I. Mystical Function

1. There are spiritual realities of some kind. (Thouless, 1935)
2. Matter is the sole reality. (Thouless, 1935) \*
3. I rarely or never think of myself being part of the universe. (Martai, 1980) \*
4. Indicate whether you agree or disagree with this statement: "God dwells within you." (Kass et al., 1991)
5. [I have experienced] An overwhelming experience of love. (Kass et al., 1991)
6. [I have experienced] An experience of profound inner peace. (Kass et al., 1991)
7. [I have experienced] An experience of complete joy and ecstasy (Kass et al., 1991)
8. [I have experienced] A feeling of unity with the earth and all living beings. (Kass et al., 1991)
9. [I have experienced] An experience of God's energy or presence. (Kass et al., 1991)
10. Many people who have claimed to feel the presence of God were probably just experiencing their own emotions. (Ritzema & Young, 1983) \*
11. God is constantly with us. (Gorsuch & Smith, 1983)
12. God exists in all of us. (Gorsuch & Smith, 1983)
13. I am sometimes very conscious of the presence of God. (Gorsuch & Smith, 1983)
14. Every day I see evidence that God is active in the world. (Benson, Donahue, & Erikson, 1993)
15. Do you have or have you had important religious experiences? (Fowler, 1981)

### II. Cosmological Function

1. The world was created by God. (Thouless, 1935)
2. Evil is a reality. (Thouless, 1935)
3. We human beings know little or nothing about the end of the world. (Kaldestad, 1992) \*
4. People's life on earth is just as important as a possible life after death. (Kaldestad, 1992)
5. God created man separate and distinct from animals. (Brown & Lowe, 1951)
6. The idea of God is unnecessary in our enlightened age. (Brown & Lowe, 1951) \*
7. There is no life after death. (Brown & Lowe, 1951) \*
8. I believe the scriptures of my faith are completely true. (Morrow, Worthington, & McCullough, 1993)
9. I see myself as part of a master plan. (Martai, 1980)
10. I have no doubts about religious miracles. (Martai, 1980)
11. My religion does not really give me a sense of reality. (Martai, 1980) \*
12. I sometimes wonder why God lets terrible things happen to people. (Funk, 1955) \*
13. It is hard to reconcile science with religion. (Funk, 1955) \*
14. We make our own heaven or hell here on earth. (Funk, 1955) \*
15. Earthly existence is the only existence we have. (Osarchuk & Tatz, 1973) \*
16. Enjoy yourself on earth, for death signals the end of all existence. (Osarchuk & Tatz, 1973)
17. Enjoy yourself on earth, for death signals the end of all existence. (Osarchuk & Tatz, 1973)
18. We will never be united with those deceased whom we knew and loved. (Osarchuk & Tatz, 1973) \*
19. There must be an afterlife of some sort. (Osarchuk & Tatz, 1973)
20. God does not intervene directly in our lives. (Degelman & Lynn, 1995) \*
21. God sometimes directly intervenes to change the course of damaging weather conditions like hurricanes. (Degelman & Lynn, 1995)
22. Real miracles of healing from God do not occur today. (Degelman & Lynn, 1995) \*
23. Miracles happen much more frequently than most people suspect. (Ritzema & Young, 1983)
24. God does miraculously heal diseases. (Ritzema & Young, 1983)
25. One thing I don't like is the tendency that some people have to call everything they don't understand a miracle. (Ritzema & Young, 1983) \*
26. I do not understand how a loving God can allow so much pain and suffering in the world. (Benson, Donahue, & Erikson, 1993) \*
27. I believe that I must obey God's rules and commandments in order to be saved. (Benson, Donahue, & Erikson, 1993)
28. Is there a "plan" for human lives? Are we—individually or as a species—determined or affected in our lives by power beyond human control? (Fowler, 1981)

### III. Sociological Function

1. I do not believe in religiously founded, absolute moral norms. (Kaldestad, 1992) \*
2. It is better to evaluate each situation and use reasonable judgment than to obey absolute moral norms. (Kaldestad, 1992) \*
3. Knowledge, insight, and reason ought to guide people's behaviors more than religious, moral norms. (Kaldestad, 1992) \*
4. People can from their own life experiences develop their own values for good and evil behaviors. (Kaldestad, 1992) \*
5. I keep well informed about my local religious group and I have some influence on its decisions. (Morrow, Worthington, & McCullough, 1993)
6. I enjoy being with people whose attitudes toward my faith's scriptures are similar to my own. (Morrow, Worthington, & McCullough, 1993)
7. What other members of my religious group expect of me is important. (Morrow, Worthington, & McCullough, 1993)
8. I avoid doing things that members of my local religious group would disapprove of. (Morrow, Worthington, & McCullough, 1993)
9. The standards of my local religious group guide me in making decisions. (Morrow, Worthington, & McCullough, 1993)

10. If I have a conflict with what my local religious group tells me is right, I go along with the religious group. (Morrow, Worthington, & McCullough, 1993)
11. One should obey the leader(s) of one's organized religion. (e.g., Pope, President of denomination, or other leader). (Morrow, Worthington, & McCullough, 1993)
12. It is a religious obligation for children to obey their parents. (Morrow, Worthington, & McCullough, 1993)
13. I enjoy spending time with others of my religious affiliation. (Morrow, Worthington, & McCullough, 1993)
14. One should follow the guidance of one's pastor, priest, or rabbi without question or complaint. (Morrow, Worthington, & McCullough, 1993)
15. When considering marriage it is important to take the religious affiliation of one's future spouse into consideration. (Katz, 1984)
16. I am often conscious of my affiliation to a certain religious denomination. (Katz, 1984)
17. Without religion morality breaks down. (Fowler, 1981)
18. It is often hard to understand why people are disloyal to their family and religion. (Barnes, Doyle, & Johnson, 1989)
19. I try to apply my faith to political and social issues. (Benson, Donahue, & Erikson, 1993)
20. I feel God's presence in my relationships with other people. (Benson, Donahue, & Erikson, 1993)
21. I think Christians must be about the business of creating international understanding and harmony. (Benson, Donahue, & Erikson, 1993)
22. My religion has helped me be more open in my relationships with other people. (Martai, 1980)
23. I believe that religion is of little use in present-day society. (Funk, 1955) \*
24. Religion has too often been used to promote prejudice. (Funk, 1955) \*
25. Promoting a better world is more important to me than religion is. (Funk, 1955) \*
26. I am very sensitive to what God is teaching me in my relationships with other people. (Hall & Edwards, 1996)

#### IV. Psychological Function

1. I think a person can be happy and enjoy life without believing in God. (Brown & Lowe, 1951) \*
2. It is important to me to conform to my religious standards of behavior. (Morrow, Worthington, & McCullough, 1993)
3. Religious beliefs influence all my dealings in life. (Morrow, Worthington, & McCullough, 1993)
4. I spend time trying to grow in understanding of my faith. (Morrow, Worthington, & McCullough, 1993)
5. My religious beliefs lie behind my whole approach to life. (Morrow, Worthington, & McCullough, 1993)
6. I depend on my faith's scriptures to help me make decisions in conflict situations. (Morrow, Worthington, & McCullough, 1993)
7. I have experienced the usefulness of my faith's scriptures in my daily life. (Morrow, Worthington, & McCullough, 1993)
8. My faith shapes how I think and act each and every day. (Benson, Donahue, & Erikson, 1993)
9. My faith helps me know right from wrong. (Benson, Donahue, & Erikson, 1993)
10. I seek out opportunities to help me grow spiritually. (Benson, Donahue, & Erikson, 1993)
11. As I grow older, my understanding of God changes. (Benson, Donahue, & Erikson, 1993)
12. My religious beliefs play a vital role when I make everyday choices. (Martai, 1980)
13. My religion does not fully satisfy me. (Martai, 1980) \*
14. My religion is growing daily within me. (Martai, 1980)
15. My religion gives me a wholeness to living. (Martai, 1980)
16. I am actively trying to decide by reading or other means what the truth is about religion. (Funk, 1955) \*
17. I am in danger of losing my faith. (Funk, 1955) \*
18. I might be happier if I did not believe in my religion. (Funk, 1955) \*
19. I believe that religious faith is better than logic for solving life's important problems. (Funk, 1955)
20. Although basically I believe in my religion, my faith often wavers. (Funk, 1955) \*
21. I wish I was perfectly sure of my belief in God. (Funk, 1955) \*
22. Religion has brought me peace of mind. (Funk, 1955)
23. Religion helps me to be a better person. (Funk, 1955)
24. My faith showed me different ways to handle the problem. (Pargament et al., 1990)
25. I often completely withdraw from God. (Hall & Edwards, 1996) \*
26. I feel very close to God in prayer, during public worship, or at important moments in my life. (Edwards, 1976)
27. I'm usually skeptical when someone tells me that they're convinced that God did something to change their attitudes or beliefs. (Ritzema & Young, 1983) \*
28. God grants comfort and strength to those who are loyal and faithful. (Barnes, Doyle, & Johnson, 1989)

\* Indicates Reverse-Score











	Strongly Disagree ▼	Moderately Disagree ▼	Somewhat Disagree ▼	Neither ▼	Somewhat Agree ▼	Moderately Agree ▼	Strongly Agree ▼
61. Despite what many people believe, there is no such thing as a God who is aware of Man's actions.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
62. Jesus was crucified, died, and was buried but on the third day He arose from the dead.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
63. In all likelihood there is no such thing as a God-given immortal soul in Man which lives on after death.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
64. If there ever was such a person as Jesus of Nazareth, he is dead now and will never walk the earth again.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
65. Jesus miraculously changed real water into real wine.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

66. There is a God who is concerned with everyone's actions.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
67. Jesus' death on the cross, if it actually occurred, did nothing in and of itself to save Mankind.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
68. There is really no reason to hold to the idea that Jesus was born of a virgin. Jesus' life showed better than anything else that he was exceptional, so why rely on old myths that don't make sense.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
69. The Resurrection proves beyond a doubt that Jesus was the Christ or Messiah of God.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
70. I can influence the political affairs of my government.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**INSTRUCTIONS: Please complete the remaining questions using the responses and space provided, so we can know a little more about you.**

71. Are you a U.S. citizen?

Yes

No

72. IF YES TO (71), are you registered to vote?

Yes

No

73. IF YES TO (72), under what party are you registered?

Democrat

Independent

Republican

Other: \_\_\_\_\_

74. Politically, I consider myself:

- Very Conservative
- Conservative
- Moderate
- Liberal
- Very Liberal

75. Are you a member of an organization or community that addresses man's ultimate questions and concerns (e.g. church, synagogue, mosque, atheist alliance, freethinkers)?

- Yes
- No

76. IF YES TO (75), how often do you attend that organization?

- More than once a week.
- About once a week.
- About once a month.
- Only a few times a year, if at all.

77. What is the highest level of education one of your parents has attained?

- Some high school
- Completed high school
- Some college
- Associate's Degree
- Bachelor's Degree
- Master's Degree
- Doctorate Degree

78. What is your sex?

- Male
- Female

79. What year were you born?

\_\_\_\_\_ Year of Birth

80. What is your academic major(s)?

\_\_\_\_\_ Major

\_\_\_\_\_ Major

81. What, if any, are your academic minors?

\_\_\_\_\_ Minor

\_\_\_\_\_ Minor

\_\_\_\_\_ Minor

\_\_\_\_\_ Minor