

ALL FOR ONE OR ONE FOR ALL? A CROSS-NATIONAL ASSESSMENT OF  
RELIGIOUS PARTICIPATION, PLURALISM, AND LIFE SATISFACTION

by

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(Under the Direction of David Smilde)

ABSTRACT

In this paper I examine the moderating effect of religious pluralism on the relationship between religious participation and life satisfaction. My analysis makes use of Hierarchical Linear Modeling (HLM) and data from the World Values Survey (WVS) to examine the consequences that national religious environments impinge upon individual religious practitioners. Using Wendy Griswold's Cultural Diamond as a theoretical framework, I develop a model of religious pluralism as a cultural object and test the effect that religious pluralism has on life satisfaction across divergent social and cultural contexts. The results of my analysis provide some surprising implications for future studies on religious participation and life satisfaction. The implications of my findings for the sociology of religion and life satisfaction literature are discussed.

INDEX WORDS: Religious Pluralism, Life Satisfaction, Cultural Diamond, Religious Markets, Sacred Canopies, Hierarchical Linear Modeling (HLM)

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## **Chapter 1. Introduction**

Like any social context, religious environments reflected in national contexts can have positive or negative implications for the active and inactive participants that uphold them. The constituents of religious organizations report lower levels of distress and elevated levels of happiness when compared to those without strong social ties (Ellison, Gay, and Glass 1989). Conversely, other scholars suggest that religious participation may lead to feelings of anxiety, disturbance, and fright (Geertz 2000). What is not yet known is whether certain types of national religious environments provide more positive rewards for the religious participants within them. One theory argues that markets of religious competition result in better religious “outcomes” (Finke and Stark 1988). An alternative theory suggests that religious monopolies shelter religious participants in a “sacred canopy” that protects those same participants from losing faith in their own religious group (Berger 1967). Religious economy theorists and secularization theorists alike have focused solely on the effect of religious pluralism on religious participation. No research, as of yet, has directly addressed the rewards, or disturbances, that divergent religious environments provide for the religious participants.

Previous literature documents the positive, tangible outcomes of religious participation in the United States and other post-industrial nations (Ellison 1991; Ellison, Gay, and Glass 1989; Ellison, Jason, Williams, and Jackson 2001; Ferriss 2002; Gee and Veivers 1990; Hadaway 1978; Idler 1987). Ellison et al. (1989) find a significant and positive relationship between religious participation and life satisfaction for a nationally representative sample of the United States. Ferris (2002) finds a positive and significant relationship between religious participation and subjective and objective indicators of the quality of life across multiple years of US data.



Gee and Veevers (1990) find similar results for a nationally representative Canadian sample. All of these studies suggest that religious participation offers more than just the promise of supernatural rewards. Even still, quantitative studies of religion have paid scant attention to the effect – positive or negative – of religious participation on the quality of life in the developing world (see exception, Fazel and Young 1988).

In a similar vein, debate continues regarding the relationship between religious pluralism and religious participation. Some researchers argue that religious pluralism creates a religious market that results in increased levels of religious participation (Finke, Guest, and Stark 1996; Finke and Stark 1988). Others argue that religious pluralism is one of the key contributors to the waning numbers of religious participants throughout the industrialized world (Breault 1989; Chaves and Gorski 2001; Land, Deane, and Blau 1991; Olson 1999; Olson and Hadaway 1999). Amidst this debate, scholarship has not addressed the positive or negative consequences that religious pluralism may hold for the individual religious participant. I will address this gap in the available literature by considering how religious pluralism at the national level influences the relationship between religious participation and life satisfaction.

In the following section I develop a theory of life satisfaction as a product of both religious participation and the national contexts of those same religious participants. I use Wendy Griswold's (1987) cultural diamond as a theoretical and methodological framework to piece together a theory of religious participation as a cultural object that results in measureable rewards such as increased life satisfaction. Despite the intangible, otherworldly rewards often associated with religious participation, in this analysis I will show how religious participation does produce measureable results that will allow us to compare the effectiveness of different types of religious environments.

## **Chapter 2. Theory**

### *The Cultural Object*

Wendy Griswold's cultural diamond is a way to assess the relationship between the creators and receivers of cultural objects as they fit within a larger social world. Griswold defines the cultural object as "shared significance embodied in form, i.e., to an expression of social meanings that is tangible or can be put into words" (1987: 4). For the purposes of this study, I will portray religious participation as a cultural object that is created by religious organizations and actively consumed by religious participants. It is important to note that religious organizations and religious participants simultaneously contribute meaning to the cultural object of religious participation. Orsi makes clear, "Religious theories that emphasize meaning focus on the end-product, a story that is said to link heaven and earth, but the solidity and stability of this dissolves if you focus instead on the processes of religious meaning-making" (2005: 144). Put differently, Orsi challenges researchers to focus not on the end product, meaning, but on the process of contributing meaning to the religious practice.

Wuthnow (1987) insists that analysts cannot fully interpret the meaning of cultural objects without recognizing the subjective biases of their own theoretical lens (see also, Orsi 2005). Griswold's (1987: 17) methodology, in contrast, directs the researcher to define the cultural object based on recognizable similarities and differences, i.e. "genre." Put differently, though we cannot get inside the heads of actors we can come to a reasonable understanding of the practices, specifically the religious practices, in a formal sense. Understanding religious practices via their recognized similarities and differences permits a more comprehensive understanding of the positive and negative consequences that religious participation has for the

average actor. Genre analysis is a way to get beyond the problem of subjectivity as I explain below.

Griswold (1987) has offered the most complete framework for combating the problem of subjectivity in the analysis of the cultural object. Griswold explains, “[T]he analyst makes a decision about genre that has consequences for comparative and causal statements.” She continues, “He sets up a classification by positing boundaries that will allow him to perceive common or varying characteristics among cultural objects within and outside the genre (1987: 19).” In past research, religious participation has been measured as public in the form of participation in religious services (Clemente and Sauer 1976), as private in the form of prayer or meditation (Ellison, Gay, and Glass 1989), or as personal in the form of beliefs and values (Ross 1990). As a cultural object, religious participation is the meeting point of the “shared sensibilities” between a creator’s intention and the audience’s reception (Griswold 1987: 20). Creators, in this instance, are the religious organizations that are responsible for facilitating the otherworldly goals of religious actors (salvation, nirvana, liberation from samsara, etc.), and consequently generating social integration through religious participation (Miller 2002). The audience consists of the active (and inactive) religious participants who simultaneously create and consume (Stark and Bainbridge 1980). Where religious participants convene in a venue created by religious organizations, the end result is religious participation, my cultural object. I will elaborate on religious organizations and religious participants in the sections that follow.

### *Creating Religious Participation*

Art historian Michael Baxandall (1985) maintains that a researcher can never understand the “true” intentions of the creators of cultural objects. Instead, “To understand [intention] we try to reconstruct both the specific problem [a cultural object] was designed to solve and the

specific circumstances out of which [the creator of the cultural object] was addressing it” (Baxandall 1985: 15). The “specific problem” is what Baxandall calls the “charge.” The specific circumstances: the “brief.” More specifically, the “charge” is the challenge of creating the cultural object. The “brief” is the “local conditions” that stand in the way of the charge. Religious participation is created by religious organizations to be consumed by religious participants who simultaneously assist in the creation (Martinson, Wilkening, and Buttel 1982). To understand the relationship between the creators (religious organizations and religious participants) and the cultural object (religious participation) a researcher must first identify the charge and the brief of the object’s creators; each of these concepts is addressed below.

### Charge

Religious organizations provide more than a building to house religious services. Religious organizations, in a strictly Western understanding of the term, provide a product, religious participation, that serves “to integrate people into society” (Martinson, Wilkening, and Buttel 1982: 48). The specific problem – the charge – of religious organizations is to provide something both of this world and beyond it. The producers of religious participation, however, are not as neatly defined as “religious organizations.” Rational choice theorists point out that the creation of religious participation is a blurry subject because the “consumers [of religious participation] are simultaneously suppliers and producers” (Miller 2002: 437). Measuring the success of these co-creators is easier said than done and is not entirely necessary in order to understand the specific problem religious organizations face. A simpler task is assessing the strategies religious organizations and their various participants employ.

Strategic management theorists argue that the “key to marketing religion is creating the perception of credibility” (Miller 2002: 441). Religious organizations have a goal of attracting

participants. Religious participants have goals that may be of this world or beyond it. In order for either of these groups to achieve their respective goals, religious organizations must successfully portray themselves as more credible than the alternatives. In free religious markets the specific problem of religious organizations is competition with other religious organizations as well as secular alternatives to religion (Nelsen 1981). In a religious monopoly, the specific problem is less apparent. Religious monopolies face threats from secular alternatives and the spread of globalization (Norris and Inglehart 2004). In either scenario – a religious economy or a religious monopoly – the charge of religious organizations is to combat waning levels of religious participation.

For religious participants, the specific problem is to gain profit from religious participation (Stark and Bainbridge 1980). To profit from religious participation means to amass religious rewards; “rewards are anything humans will incur costs to obtain” (Stark and Bainbridge 1980: 115). The rewards offered through religious participation, however, are at times both scarce and/or nonexistent. Some scholars suggest that when religious rewards are not available, religious participants will seek compensators such as the promise of rewards or worldly alternatives: life satisfaction, better health, a sense of community (Ellison, Jason, Williams, and Jackson 2001). Others counter that what scholars call “compensators” are, in fact, still just religious rewards to the average religious practitioner (Smilde 2007). It is important, however, not to conflate consequences with intent (Griswold 1987). In order to separate the consequences of cultural creation from the intentions of cultural creators, it is necessary to examine the specific circumstances – the brief – of religious creators. Identifying the brief is the goal of the next section.

Brief

The specific circumstances through which religious participation is created differ from organization to organization, community to community, and nation to nation. In a context of religious pluralism, religious organizations are forced “to develop effective membership recruitment and retention techniques” in order to attract adherents to their particular church or faith (Stark and Bainbridge 1980: 46). An ongoing debate in the sociology of religion questions whether or not religious pluralism hinders or promotes religious vitality (Chaves and Gorski 2001; Sherkat and Ellison 1999). Proponents of the religious economies model suggest that religious markets generate healthy competition that results in better “products” and increased levels of religious participation (Finke, Guest, and Stark 1996; Finke and Stark 1988). Likewise, supporters of this model maintain that religious monopolies result in shrinking religious involvement due to their complacency and reliance on support from the state (Finke, Guest, and Stark 1996; Finke and Stark 1988; Stark and McCann 1993). According to the market theorists, religious monopolies cannot hope to meet the needs of every potential adherent (Finke and Stark 1988). Any attempt to meet the needs of one market segment will alienate the needs of another. Additionally, in some instances, the state regulation of religion means that the state, rather than the adherents, is the benefactor of religious organizations.

Opponents of the religious economies model maintain that competition among religious organizations generates religious doubt and subsequently limits religious participation (Chaves and Gorski 2001). Like Peter Berger (1967) before them, today’s challengers of the religious economies model suggest that a pluralism of religious worldviews reduces the plausibility of each belief system (Breault 1989; Chaves and Gorski 2001; Land, Deane, and Blau 1991; Olson 1999; Olson and Hadaway 1999). On the other hand, these same theorists profess that religious monopolies generate a sense of assurance and result in heightened levels participation. Phillips

(1998) offers an example of such monopoly effects in the Mormon Church. According to Phillips, participation within the Mormon Church is greatest in Utah and the other states of intermountain region where the population of Mormons is substantially higher than the rest of the US and even constitutes a monopoly in the case of Utah.

Others have found similar evidence that refutes the religious economies model (Breault 1989; Land, Deane, and Blau 1991). Breault (1989) and Land et al. (1991) attribute the positive relationship between religious pluralism and religious participation reported by Finke and Stark (1988) to the high correlation between religious participation and percent Catholic, a control in the Finke and Stark study. Both sides also contest the boundaries used to measure religious pluralism in one another's studies. On the one hand, Finke and Stark claim that counties are too large an area to accurately demonstrate the positive effects of religious participation. On the other hand, challengers maintain that Finke and Stark's (1988) and Finke, Guest and Stark's (1996) argument could not be duplicated using more recent data where the city/county divide is less relevant.<sup>1</sup> This debate is the product of mixed results regarding the way religious pluralism is measured – at the city or county level – and the effect religious pluralism has on religious participation. On the one hand, Finke and Stark (1988) measure religious pluralism at the city level and report a significant and positive effect on religious participation. On the other hand, Breault (1989) and Land et al. (1991) measure religious pluralism at the country level and find a significant and negative effect on religious participation. In lieu of these issues, this study relies on more recent data, measures pluralism at the national level, and is not concerned with level of religious participation, but with the effect of religious pluralism on life satisfaction among religious participants.

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<sup>1</sup> Finke and Stark (1988) use data from the 1906 Religious Bodies Census of the United States while Finke, Guest, and Stark (1996) use data from the 1855 and 1865 New York State Censuses.

### *Religious Participants as Active Receivers*

Durkheim (1995) first pointed out the positive aspects of religion in his classic work *The Elementary Forms of Religious Life*. Durkheim showed that the tangible, rather than perceived, rewards of religious participation were not found in the theology of any particular religion. Instead, Durkheim argued that the rituals of religious communities worked to strengthen and affirm shared sentiments and collective ideals. In other words, religious participants are not passive receivers (Martinson, Wilkening, and Buttel 1982). Rather, consumers of religious participation engage in an active process that has “positive externalities for members of religious organizations” (Miller 2002: 437). These “positive externalities” are the unintended consequences of religious organizations and yet many have noted that these “unintended consequences” are actively sought by religious participants (see for example, Smilde 2007). Past research has demonstrated that the unintended consequences of religious participation include, among other things, increased well-being and life-satisfaction (Ellison, Gay, and Glass 1989; Ellison, Jason, Williams, and Jackson 2001), lower levels of functional disability and depressive symptomatology among the elderly (Idler 1987), and reduced levels of distress (Ellison, Jason, Williams, and Jackson 2001). These findings are consistent with economic approaches to the sociology of religion that insist religious organizations produce a product – religious participation – that meets the goals of both the sacred and satisfies the needs of the profane (Stark and Bainbridge 1980). Past research, however, has tended to focus only on the positive aspects of religious participation (see for example, Ferriss 2002) and has ignored the notion that religion may “haunt” as much or more than it allays (Orsi 2005). In this analysis I consider the possibility that religious participation may decrease life satisfaction for some even though it may increase life satisfaction for others.



Recent research on the consequences of religious participation has focused on the unique case of religious participation in the United States (Norris and Inglehart 2004). As a result, the majority of research on religious participation and its outcomes reveals only positive implications for the religious individual (Ellison 1991; Ellison, Gay, and Glass 1989; Ellison, Jason, Williams, and Jackson 2001; Ferriss 2002; Hadaway 1978; Idler 1987). The anthropologist Clifford Geertz (2000) points out, however, that religion has the ability to both placate *and* perturb. Geertz calls this the “haunting question,” that is, “whether any faith, however profound, is anywhere near adequate to its ends” (2000: 178). To answer this question, researchers must examine religious participation in its various forms. Research on the effects of religious participation should examine public *and* private forms of religious participation (Idler 1987); it should include both eastern *and* western religious systems (Fazel and Young 1988); and it should address the impact of religious competition or the lack thereof (Voas, Crockett, and Olson 2002). The latter of these issues is addressed vis-a-vis national contexts below.

The sociologist George Homans explains that individuals choose to participate in social interactions when they view the rewards received from “other conforming members” to be greater than the rewards of alternative actions (1974: 103). Though the rewards of religious participation are presumably unintended, like other forms of social interaction, religious participation is no less subject to what Olson (1965) dubbed the “free rider problem” when individual actors come to recognize the secular rewards that stem from their participation in a religious organizations. That is, rationally acting individuals will seek to maximize the rewards and minimize the costs that stem from participation in collective action (Stark and Bainbridge 1980). Conversely, private religiosity is also a key facet of the religious experience (Idler 1987). In order to distinguish between active participants and religious “free riders,” private *and* public

dimensions of religiosity should be taken into consideration. Public religiosity includes participation in religious services, church functions, scriptural studies, and the like. Public religiosity reflects the social aspects of religion. Private religiosity, on the other hand, includes prayer, meditation, and all those parts of religion that incur greater costs to the individual than those provided by religious organizations. Private religiosity is the individual realm of religious participation. This study takes into account both the public and the private aspects of the religious experience; the details of this are discussed in the Methods section below.

### *National Contexts*

“Social worlds” are the divergent contexts where cultural objects are created and received (Griswold 1987). The creators and receivers of cultural objects are both constrained and enabled by their social worlds. Or in this case, religious organizations and religious participants are inhibited and enabled by the social environments that surround them. Religious economies create the opportunity for competition among religious organizations (Finke and Stark 1988). In more secular societies, religious organizations also compete with the lay world for potential adherents (Nelsen 1981). Conversely, religious monopolies function under a sacred canopy that fails to contest their legitimization (Berger 1967). Berger suggests that when a religious organization has a monopoly over a particular context, the members of that particular religious group have no reason to doubt the authority of their religious doctrine. Religious monopolies may be Catholic, Orthodox, Muslim, etc. Whether they operate in a religious economy or a religious monopoly, however, religious organizations are subject to the same structural limitations as any social agent.

In addition to the religious climate, nations vary in wealth, politics, culture, and a number of other societal factors (Norris and Inglehart 2004). Many religious monopolies operate within

extremely wealthy nations (e.g. Luxembourg, Iceland, Belgium), others maneuver in less affluent contexts (e.g. Morocco, Iran, Bangladesh). Likewise, religious pluralism is found amidst some of the world's wealthiest nations (e.g. the United States, the Netherlands, Canada) and some of its poorest (e.g. Uganda, Zimbabwe, Bulgaria). Each of these disparate contexts represent a different brief for the religious organizations and religious participants that simultaneously create the cultural object (Baxandall 1985).

Although we cannot know the “real” intentions of cultural creators (Baxandall 1985), it is imperative for researchers to recognize the different circumstances surrounding the creation and reception of cultural objects. Hougland and Wood (1980) show that the distribution of control is the single best predictor of satisfaction within the church. In the same research, Hougland and Wood provide evidence that church size predicts both involvement and religious identification. The findings of Hougland and Wood illustrate the importance of more finite social contexts in the creation of cultural objects. Accordingly, scholars have debated whether pluralism should be measured at the city level, the county level, or, in the case of this study, the national level (Breault 1989). The key to take from this debate is that societal contexts vary in size. In one instance, every city, county, or nation is a social context for the religious organization and the religious participant. Similarly, every religious organization is simultaneously a social context for the religious participant and the cultural object. This study seeks to examine the interaction effect of religious pluralism on the relationship between religious participation and life satisfaction. Because religious pluralism varies from one nation to the next, I predict that the religious experience will differ between social and cultural contexts as well. A measure of life satisfaction is one way to measure the implications of the religious experience. Recognizing that cultural objects emerge from often opposing contexts is the root of my hypotheses.

### **Chapter 3. Hypotheses**

Based upon the aforementioned research that demonstrates a direct and positive relationship between religious participation and life satisfaction in the United States and Canada, I expect a direct and positive relationship between religious participation and life satisfaction across all nations included in my analysis. The majority of prior research focuses solely on the relationship between religious participation and quality of life indexes in the United States and Canada. There is no evidence to suggest that this relationship should not hold across similar and dissimilar social contexts. Additionally, religious market theories suggest that religious competition forces religious organizations to offer a more desirable product, religious participation, to meet the demands of consumers. On the other hand, opponents of this model argue that religious competition results in decreased levels of religious participation that suggests the product of religious organizations leaves something to be desired. I propose of a test of these competing theories through the following hypotheses:

*H1. Religious participation will have a positive direct effect on life satisfaction.*

*H2a. Religious pluralism will have a positive moderating effect on the relationship between religious participation and life satisfaction.*

*H2b. Religious pluralism will have a negative moderating effect on the relationship between religious participation and life satisfaction.*

## **Chapter 4. Data and Methods**

The data for this analysis comes from the pooled World Values Survey/European Values Survey (WVS/EVS) provided by the World Values Survey Association (WVSA). The WVS/EVS includes representative national surveys of 97 societies containing 88 percent of the world's population. The WVS/EVS includes five waves of surveys, from 1981 to 2007. Each survey is administered by a local field organization under the direction of a WVS associate. A random probability sample of each society's adult population was interviewed using a standardized questionnaire that measures changing values and beliefs about religion, gender roles, work motivations, democracy, government, social capital, political participation, tolerance of other groups, environmental protection, and subjective well-being. Four waves of the WVS/EVS are currently available for use; this study uses data from only the fourth wave.

The fourth wave of the WVS/EVS (1999-2004) includes more than 100,000 cases across 68 countries. The 68 nations in the fourth wave of the WVS/EVS span the gamut from the very rich to the very poor, from the authoritative to the liberal, and cover all of the world's major cultural zones. My decision to use the fourth wave is a result of question inconsistency between waves and the inclusion of more agrarian, authoritarian, and Middle Eastern societies – previously not included – in the fourth wave of the WVS/EVS.

Of the 68 countries in the fourth wave of the world values survey, 55 nations are included in this study. The 55 nations in this study represent those with available data on all of the religious participation variables utilized in my analysis; there is no reason to assume that the 13

missing countries are systematically different in any way from the 55 remaining nations.<sup>2</sup> The 55 nations included in this analysis amount to 80,739 cases; cases per country range from a low of 966 (Belarus and Iceland) to a high of 4604 (Turkey).<sup>3</sup> The Appendix presents the total number of cases for each of the 55 nations included in this analysis. Missing data on the dependent variable, life satisfaction, results in a final N of 80,078. Missing data on other variables was imputed as is discussed below. The means and standard deviations for all of variables in the model are presented in table 1.

### *Level-1 Variables*

#### ***Dependent Variable***

**Life Satisfaction:** Life satisfaction is a measure of a respondent's overall satisfaction with her/his life. The fourth wave survey of the WVS/EVS asked respondents, "All things considered, how satisfied are you with your life as a whole these days?" Responses ranged from a score of (1) Dissatisfied to (10) Satisfied. Prior research has suggested using a scale of multiple questions that get at satisfaction in a number of life's major arenas (i.e. satisfaction at work, satisfaction with family, satisfaction with health and well-being) (Ellison, Gay, and Glass 1989). The fourth wave of the WVS/EVS does not include data beyond a person's overall satisfaction with life. Life satisfaction is the best measure of the worldly consequences associated with religious participation available in the WVS/EVS to test my hypothesis about the relationship between religious participation and the quality of life. The life satisfaction variable is normally distributed about the mean.

#### ***Control Variables***

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<sup>2</sup> The 12 omitted nations include Algeria, Bosnia and Herzegovina, China, Egypt, Indonesia, Israel, Jordan, , Niger, Pakistan, Puerto Rico, Saudi Arabia, Sweden, and Serbia and Montenegro.

<sup>3</sup> Turkey is an exceptional case in the WVS/EVS; Turkey was included in both the World Values Survey and the European Values Survey for 2001 and the 4604 case represent the sum of these two surveys.

**Religious Participation:** Religious participation is a scale of two questions measuring participation in religious services and prayer outside of religious services. The first question, “How often do you attend religious services?” has been recoded into the following response categories: (6) More than once a week, (5) Once a week, (4) Once a month, (3) Religious holidays, (2) Once a year, (1) Never or practically never. The second question, “How often do you pray to God outside of religious services?” was also recoded to include the following response categories: (6) Everyday, (5) More than once a week, (4) Once a week, (3) At least once a month, (2) Less than once a month, (1) Never or practically never. Z-scores were obtained for each measure of religious participation and a scale was created ( $\text{Alpha} = .71$ ).<sup>4</sup> The purpose of using a scale of religious participation is two-fold. First, including both attendance at religious services and prayer outside of religious services covers what each of the world’s major faiths deem religious and reduces the chances that a “religious person” will be overlooked by this study. Secondly, it has been shown that among the elderly, public religiosity plays a greater role in the lives of women, while private religiosity plays a greater role in the lives of men (Idler 1987). Including a multi-item scale of religious participation insures that no group is alienated by this study. Missing data on religious participation was imputed using age, marital status, and number of children.

**Age:** Age is a measure of the respondent’s age, in years, at the time of her/his survey interview. Prior research has found mixed results regarding the relationship between age and life satisfaction. Ellison et al. (2001) found that age has a direct and negative relationship with life satisfaction. Ellison et al. (1989) found that age and life satisfaction have no relationship. It would also make sense to assume that age has a curvilinear relationship with life satisfaction;

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<sup>4</sup> Z-scores represent the number of standard deviations between the raw score and the mean. The scaled measure of religious participation is the sum of the two Z-scores: “How often do you attend religious services?” and “How often do you pray to God outside of religious services?”

that is life satisfaction may increase with age up to a certain point but then begin to decrease as health declines and/or members of the person's social networks begin to pass away. Missing data on age was imputed using mean substitution.

**Gender:** The gender of each respondent is dummy-coded as (1) male and (0) female. Including the gender of the respondent is necessary because the literature suggests that men are less satisfied with their lives overall (Ellison, Jason, Williams, and Jackson 2001). Prior research also reports that men are less likely to actively participate in religious communities (Idler 1987). Missing data on gender was omitted with the reference category (0) female.

Table 1. Means and Standard Deviations for Variables in the Analysis

Variable Names		
Individual-level Variables		
Life satisfaction	6.45	2.55
Religious participation	-0.02	1.70
Age	41.63	16.54
Sex		
Male (female)*	0.48	0.50
Marital status		
Separated/divorced	0.13	0.33
Never married (married)	0.25	0.44
Education	4.32	2.24
Income	4.53	2.26
Country-level Variables		
Pluralism index	0.42	0.22
Religious participation	-0.04	0.94
GDP	11558.1	8831.67

\*Omitted dummy variables in parentheses

**Marital Status:** The marital status of each respondent has been separated into 3 categories and dummy coded. These categories include: married, separated or divorced, and never married. The reference category is married. Missing data on marital status was omitted with the reference category (0) married. Prior research demonstrates that married persons are more satisfied with



their lives than are divorced or separated persons and individuals who have never married (see for example, Clemente and Sauer 1976)

**Income:** Income is a scale of respondents' monetary yearly earnings. For ease of interpretation between countries in the WVS/EVS, income is collapsed into a 10-point ordinal measure: (1) lower step, (2) second step, (3) third step, (4) fourth step, and so on. The first step is indicative of the number of persons living at/below the poverty line in each respective country. The tenth step is the equivalent to an annual income of US \$100,000 or more. The mean income for the sample is between US \$27,501 and US \$35,000. Income is known to have a positive and significant effect on life satisfaction (Ellison, Gay, and Glass 1989). Missing data on income was imputed using available data on age, marital status, and number of children.

**Education:** Education is a measure of the respondents highest level of education attained collapsed into an 8-point ordinal measure. Responses include, (1) 'Inadequately completed elementary education,' (2) 'Complete (compulsory) elementary education,' (3) 'Incomplete secondary school: technical/vocational type/(Compulsory) elementary education and basic vocational qualification,' (4) 'Complete secondary school: technical/vocational type/Secondary, intermediate vocational qualification,' (5) 'Incomplete secondary: university preparatory type/Secondary, intermediate general qualification,' (6) Complete secondary: university preparatory type/Full secondary, maturity level certificate,' (7) 'Some university without degree/Higher education – lower-level tertiary certificate,' (8) University with degree/Higher education – upper-level tertiary certificate.' In the United States, education has produced mixed results as a predictor of life satisfaction; this is especially true when income is controlled for (Clemente and Sauer 1976; Ellison, Gay, and Glass 1989; Ellison, Jason, Williams, and Jackson 2001) Missing data on education was imputed using mean substitution.

## *Level-2 Variables*

**Religious Pluralism Index:** The religious pluralism index is calculated as one minus the Herfindahl index of religious group shares. Scores on the religious pluralism index reflect the probability that any two randomly selected individuals from a population belong to different religious groups. The formula is a measure of religious fractionalization:

$$\text{FRACT}_j = 1 - \sum_{i=1}^N s_{ij}^2,$$

where  $s_{ij}$  is the share of group  $i$  ( $i = 1 \dots N$ ) in country  $j$  (Alesina, Devleeschauwer, Easterly, Kurlat, and Wacziarg 2003). Scores of zero indicate a religious monopoly where no two people belong to a different religious group. Scores of one indicate a religious economy where no two people belong to the same religious group. For the 55 nations in this study, scores range from a low of .0035 (Morocco) to a high of .8603 (South Africa). The religious pluralism index for each of the 55 nations in this study can be found in the appendix.

**GDP:** GDP is a measure of each nation's annual Gross Domestic Product (in US dollars) taken from the UNDP Human Development Report 2000 (UNDP 2000). The GDP values of the 55 nations in this study range from a low of \$480 (Tanzania) to a high of \$33,505 (Luxembourg). The GDP for each of the 55 nations included in this study can be found in the appendix. I do not include more recent data on GDP because the fourth wave of the WVS/EVS was gathered between 1999 and 2004. The UNDP Human Development Report 2000 is the same source for GDP used by Norris and Inglehart (2004) in their study of the cross-national trends in secularization using all four waves of the WVS/EVS data.

**Secularization:** Secularization utilizes the same measure of religious participation discussed above, but is aggregated to the national level. Including a society level measure of religious participation is way to control for low levels of religious participation in countries where one

religion has a religious monopoly. This fits with research that suggests religious organizations not only compete with other religious organizations for adherents, but religious organizations must compete with the secular world as well (Nelsen 1981). Including a measure of secularization at the national level is a more conservative means of testing the assumption that alternatives to an individual's own religion threaten the sacred canopy and result in increased levels of religious doubt (Berger 1967).

### *Analytic Strategy*

The analysis proceeds in 5 steps. Using Hierarchical Linear Modeling (HLM), each step tests the between-group and within-group variance in life satisfaction. It is appropriate to use HLM when modeling individual-level outcomes from group-level predictors. Using cross-national data from the WVS/EVS, HLM allows me to demonstrate how national measures of religious pluralism interact with religious participation to influence life satisfaction. When addressing individual outcomes through multi-level data, OLS regression violates the assumption that error terms will be uncorrelated across observations. In other words, HLM provides a better alternative to OLS regression because it accounts for differences both within and between groups.

Model 1 is a one-way ANOVA with random effects for life satisfaction. Model 2 tests the relationship between individual religious participation and life satisfaction. Model 3 is identical to Model 2 but introduces individual level controls into the model. Model 4 adds the religious pluralism index at level-2 to the random coefficients model in the previous step. Model 5 is the complete intercepts and slopes as outcomes model testing the relationship between individual religious participation and the religious pluralism index when controls for individual and society-level characteristics are included. The interaction terms in Model 4 and Model 5

were included after an exploratory analysis at level-2 yielded  $T$ -ratios of 2 or greater for each of the respective interactions included in this analysis.<sup>5</sup> Each of the continuous predictors at level 1 and level 2 are centered on their grand mean.

The one-way ANOVA with random effects in Model 1 provides a point estimate and confidence interval for the grand mean,  $\gamma_{00}$ . This same model also provides information about the outcome variability at each of the two levels. The combined formula for level 1 and level 2,

$$Y_{ij} = \gamma_{00} + u_{0j} + r_{ij},$$

is the estimation of the intercept  $Y_{ij}$  with grand mean  $\gamma_{00}$ ; with a group (level-2) effect,  $u_{0j}$ ; and with a person (level-1) effect,  $r_{ij}$  where  $u_{0j}$  is the random effect associated with unit  $j$  and is assumed to have a mean of zero and a variance of  $\tau_{00}$  (Raudenbush and Bryk 2002: 24).

The random-coefficients regression model in Models 2 and 3 permits the estimation of the variability in both intercepts and slopes over level 2 units. The combined formula for level 1 and level 2,

$$Y_{ij} = \gamma_{00} + \gamma_{10}(X_{ij} - \bar{X}_{.j}) + u_{0j} + u_{1j}(X_{ij} - \bar{X}_{.j}) + r_{ij},$$

implies that the outcome  $Y_{ij}$  is a function of the average regression equation,  $\gamma_{00} + \gamma_{10}(X_{ij} - \bar{X}_{.j})$  plus a random error having three components:  $u_{0j}$ , the random effect of unit  $j$  on the mean;  $u_{1j}(X_{ij} - \bar{X}_{.j})$ , where  $u_{1j}$  is the random effect of unit  $j$  on the slope  $\beta_{1j}$ ; and the level-1 error,  $r_{ij}$  (Raudenbush and Bryk 2002: 27).

Finally, while the random-coefficients model makes no attempt to model the variability over the level-2 units, the goal of the intercepts and slopes as outcomes model is to explain this

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<sup>5</sup> The interaction, *Religious participation x Pluralism index*, did not produce a  $T$ -ratio of 2 or greater but is included in this analysis because of its fundamental necessity to my theoretical argument.

random variation with characteristics of the level-2 units. The combined equation for level 1 and level 2,

$$Y_{ij} = \gamma_{00} + \gamma_{01}W_j + \gamma_{10}(X_{ij} - \bar{X}_{.j}) + \gamma_{11}W_j (X_{ij} - \bar{X}_{.j}) + u_{0j} + r_{ij},$$

where the slopes  $\beta_{1j}$  vary strictly as a function of  $W_j$  implies a cross-level interaction where the level-1 slope is conditional on the level-2 context (Raudenbush and Bryk 2002: 28).

## Chapter 5. Results and Discussion

The results of the two-level HLM analysis are reported in table 2. The table lists the regression coefficients and their standard errors (in parentheses), first for variables in the between-country model and then for variables in the within-country model. In both instances, life satisfaction is the dependent variable. Model 1 is the fully unconditional model of life satisfaction across all 55 nations. The grand mean life satisfaction is 6.46 indicating that the average person is slightly more satisfied than dissatisfied with her/his life. The variance component for the level-2 intercept is significant indicating significant between-country variability in life satisfaction. In fact, the Intraclass Correlation (ICC) reveals that 21% of the variation in life satisfaction is between countries. Furthermore, a 95% confidence interval for the fixed effect assures us that the true value of life satisfaction falls somewhere between 6.14 and 6.76. Likewise, the plausible values range indicates that 95% of the sample means fall between values of 4.13 and 8.77 on the measure of life satisfaction.

Model 2 is the random-coefficients model testing the effect of religious participation on life satisfaction. The coefficient for religious participation is .06 indicating a positive and significant ( $p < .01$ ) relationship between religious participation and life satisfaction. This model gives support to *Hypothesis 1* where I suggested that religious participation has a positive and direct effect on life satisfaction. Furthermore, this finding implies that the positive relationship between religious participation and life satisfaction reported in previous research is not unique to the United States and/or the rest of the post-industrial world. The model's significant variance component suggests, however, that much of the variability in life satisfaction has yet to be

accounted for. Indeed, religious participation explains just 0.7% of the variance in life satisfaction across the 55 nations in this sample.

Model 3 introduces a battery of individual-level controls into the test of the effect of religious participation on life satisfaction modeled in the previous step. Controlling for age, gender, marital status, education, and income, the effect of religious participation remains positive and significant. In fact, the coefficient on religious participation increases from .06 (in the previous model) to .09 when the aforementioned controls are introduced. This strengthens the support for *Hypothesis 1* that was documented in Model 2. Of the included control variables, only age does not have a significant effect on life satisfaction. This is not surprising given past research that failed to find a significant association between age and life satisfaction (Ellison, Gay, and Glass 1989). Consistent with prior literature, males experience a negative effect on life satisfaction. Increases in both education and income demonstrate a positive effect on life satisfaction. And, married persons are more satisfied with their lives than non-married persons (separate, divorced, or never married). Model 3 indicates that the full array of controls accounts for 7% of the variance in life satisfaction.

The interaction effects included in models 4 and 5 are the result of an exploratory analysis at level 2. Model 4 and Model 5 include the interaction *Religious participation x Pluralism index*. Model 5 controls for interactions between the dummy variable Male and national religious participation, the two dummy variables Separated/divorced and Never Married and GDP, and Income and GDP. The interaction *Religious participation x Pluralism index* is a test of this paper's central hypothesis: religious pluralism will effect (positively or negatively) the relationship between religious participation and life satisfaction. That the exploratory analysis at

Table 2. Country and Individual-level Predictors of Life Satisfaction

	(1)	(2)	(3)	(4)	(5)
Intercept	6.46 ***	6.44 ***	6.61 ***	6.62 ***	6.61 ***
<i>Individual Life Satisfaction</i>	(0.16)	(0.16)	(0.15)	(0.15)	(0.09)
Level-2 Between-Country Controls					
Pluralism index				-0.98 ***	-1.24 ***
				(0.36)	(0.32)
GDP <sup>a</sup>					0.82 ***
					(0.00)
Religious participation					-0.19 **
					(0.08)
<u>Level-1 Individual Controls</u>					
Religious participation		0.06 ***	0.09 ***	0.09 ***	0.09 ***
		(0.01)	(0.01)	(0.01)	(0.01)
<i>Pluralism Index</i>				0.07	0.08
				(0.05)	(0.04)
Age <sup>b</sup>			-0.01	-0.01	-0.01
			(0.00)	(0.00)	(0.00)
Male			-0.08 **	-0.08 **	-0.08 ***
			(0.03)	(0.03)	(0.03)
<i>Religious Participation</i>					-0.09 ***
					(0.02)
Separated/divorced			-0.46 ***	-0.46 ***	-0.47 ***
			(0.04)	(0.04)	(0.04)
<i>GDP<sup>a</sup></i>					-0.09 **
					(0.00)
Never married			-0.10 **	-0.10 **	-0.10 ***
			(0.04)	(0.04)	(0.04)
<i>GDP<sup>a</sup></i>					-0.19 ***
					(0.00)
Education			0.04 ***	0.04 ***	0.04 ***
			(0.01)	(0.01)	(0.01)
Income			0.20 ***	0.20 ***	0.20 ***
			(0.02)	(0.02)	(0.01)
<i>GDP<sup>a</sup></i>					-0.08 ***
					(0.00)
<u>Random Effect</u>					
	<i>Variance Component</i>				
Level-1, $\sigma^2$	5.245	5.214	4.884	4.884	4.884
Level-2, Intercept, $\tau_{00}$	1.400 ***	1.395 ***	1.289 ***	1.196 ***	0.495 ***

Note: Numbers in parantheses are standard errors. <sup>a</sup> GDP multiplied by 10,000 to reduce places to the right of the decimal. <sup>b</sup> Age multiplied by 10 to reduce places to the right of the decimal.

\*\* (p < .05); \*\*\* (p < .01).



level 2 revealed possible interactions between being male and national religious participation is not surprising since research shows that men demonstrate lower levels of religious participation (see for example, Thompson 1991). Likewise, an interaction between marital status and GDP is also consistent with past research (see for example, Peterson 1996).

Model 4 is a test of the effect of religious pluralism on the relationship between religious participation and life satisfaction when controlling for age, gender, marital status, education, and income at the individual level. Because the interaction term *Religious Participation x Pluralism index* is non-significant, we must reject *Hypothesis 2a* and *Hypothesis 2b*; religious pluralism has no effect on the relationship between religious participation and life satisfaction. Note also that the coefficient for religious participation does not vary between models 3 and 4 providing further evidence for the rejection of these hypotheses. The religious pluralism index, however, has a significant ( $p < .01$ ) and negative direct effect on life satisfaction net of the Level-1 controls. As in the previous model, only age fails to produce a significant relationship with life satisfaction. The effect of religious participation, education, and income all remain positive and significant when the religious pluralism index is introduced into the level-2 model. Likewise, being female continues to have a significant and positive effect on life satisfaction as does being married. The intercepts and slopes as outcomes model accounts for 7% of the variance in life satisfaction. According to the variance components for the model, much of the variability in life satisfaction remains unaccounted for.

Model 5 is the full intercepts and slopes as outcomes model testing the effect of religious pluralism on the relationship between religious participation and life satisfaction while controlling for GDP and secularization at the country-level and age, gender, marital status, education, and income at the individual level. Model 5 reflects what was evidenced in Model 4:

religious pluralism has no effect on the relationship between religious participation and life satisfaction and we must therefore reject *Hypotheses 2a and 2b*. The results for Model 5 indicate that irrespective of country-level and individual-level controls, religious pluralism continues to have a significant ( $p<.01$ ) and negative direct effect on life satisfaction. Similarly, the effect of religious participation on life satisfaction remains significant ( $p<.01$ ) and positive. Not surprisingly, only age fails to show a significant relationship with life satisfaction. At the individual-level, education and income are again significant and positive with respect to life satisfaction, while male, separated/divorced, and never married demonstrate significant and negative effects on life satisfaction. At the country-level, GDP has a significant and positive relationship with life satisfaction while religious participation has a significant and negative relationship with life satisfaction. The latter finding suggests that in nations whose citizens engage more frequently in religious behaviors, life satisfaction will be reduced. The full model accounts for 7% of the variance in life satisfaction.

Model 5 gives further support to the findings reported in Model 4. That is, *Hypothesis 1* is supported while *Hypothesis 2a* and *Hypothesis 2b* are refuted. The findings of this analysis suggest that religious participation does have a positive effect on life satisfaction. However, the findings of this analysis also show the relationship is more complicated than that. Using HLM reveals that much of the variance in life satisfaction (21% to be exact) is between countries. Indeed, the single largest effect on life satisfaction reported in this analysis is religious pluralism (-1.24). According to my analysis, the most satisfied persons should be married females with high levels of education and reasonable incomes practicing religion amidst little religious competition in countries with a high GDP and low levels of religious participation overall. Religious pluralism has no effect on the experience of religious participation, but my analysis



illustrates the relationship between religious pluralism and secularization for all 55 nations in the analysis. Individuals who live in one of the 9 countries in the lower left quadrant of the graph fit the criteria for greatest life satisfaction according to the results of this analysis. The vertical line represents the grand mean religious participation score for the entire country where low scores represent a high degree of secularization. The horizontal line is again the average score on the

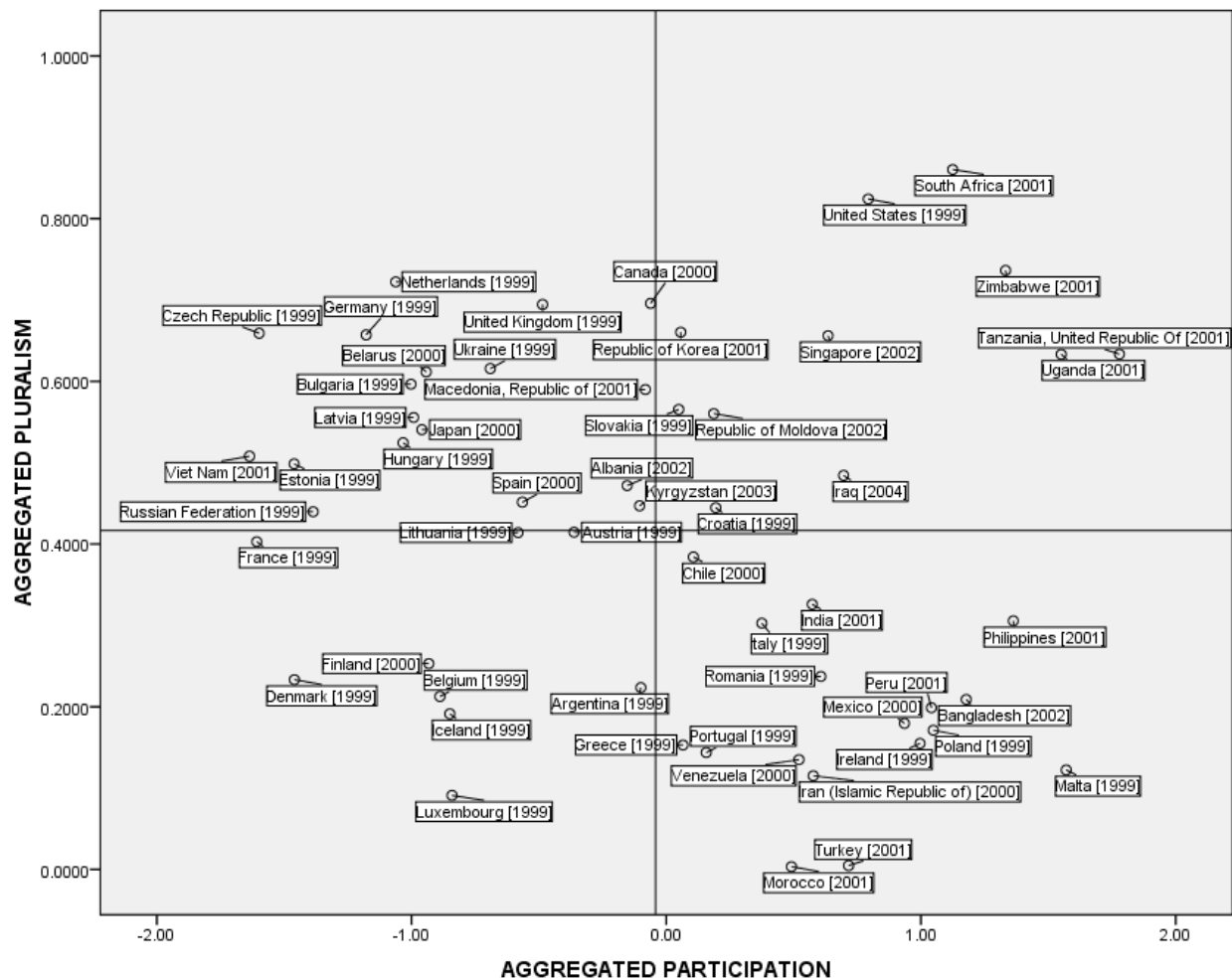


Figure 2: Pluralism and Secularization

pluralism index. Countries in the lower left quadrant are below average in religious participation, indicating a high degree of secularization, and below average in religious pluralism.

## **Chapter 6. Conclusion**

In this analysis, I used Hierarchical Linear Modeling (HLM) to test the effect of religious participation on life satisfaction and the effect of religious pluralism on the relationship between religious participation and life satisfaction. Indeed, religious participation does have positive externalities for religious participants across divergent social contexts. Furthermore, religious pluralism has a large and negative effect on life satisfaction although religious pluralism does not appear to alter the relationship between religious participation and life satisfaction. The findings of this analysis have important implications not only for the sociology of religion and the life satisfaction literature, but for scholars of culture, politics, and identity formation as well.

Although religious pluralism has no effect on the relationship between religious participation and life satisfaction, these findings do not necessarily refute Peter Berger's (1967: 41) proclamation that religious monopolies create sacred canopies that deflect potential threats to the religious memory or the counter of the religious economies theorists that religious pluralism results in a much-improved religious product (Finke and Stark 1988). In actuality, it may be that the effect of religious pluralism on the experience of religious participation is confounded by waning levels of participation. That is, individuals who may have experienced the effects of religious pluralism negatively may have simply ceased to be active religious participants.

Second, even though life satisfaction is highest in nations with the slightest religious participation, life satisfaction remains highest among the religious participants within those boundaries. My findings suggest that secularization, and not the degree of religious pluralism, *may* fuel the ability of creators to generate an experience of religious participation that results in positive implications for the consumer. To be certain, an interaction between individual

religious participation and secularization must be tested. Significant findings would be in direct contrast to prior research that has shown religious competition to foster religious vitality and thus increase the positive effects of religious participation. Future research should look at the moderating effect of secularization, or Westernization, on the relationship between individual religious participation and life satisfaction. Third, my theoretical framework and subsequent findings show that culture can be measured quantitatively and that national contexts can weigh on personal outlooks. More specifically, the findings of my analysis suggest that the most satisfied religious participants are practicing religion in a highly secularized, highly affluent, religious monopoly. Put differently, people appear to be most satisfied with a lack of cultural diversity.

Figure 1 and Figure 2, above, highlight the relationship between GDP and religious pluralism and secularization and religious pluralism. Eight countries are below the mean on religious pluralism and religious participation but above the mean on GDP.<sup>6</sup> Future research should consider what makes these countries qualitatively different from the other 47 countries in the analysis and whether the religious experience is truly more meaningful for the inhabitants of these lands or whether the dissatisfied participant has simply ceased to be religious. For starters, all but one of these eight nations, Argentina, is located in Western or Northern Europe. Secondly, five of the eight are Roman Catholic monopolies while the other three (Denmark, Finland, and Iceland) are predominantly Lutheran. Future research should seek to unravel why living in a highly religious area seems to be a detriment to life satisfaction. A possible explanation is that, together, religious pluralism and high levels of religious participation within a national context produce religious conflicts that concern the religious and non-religious, alike.

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<sup>6</sup> Listed alphabetically, Argentina, Austria, Belgium, Denmark, Finland, France, Iceland, and Luxembourg

Due to limitations with the data, this analysis does not account for several of the known predictors of life satisfaction, most notably subjective well-being. Future research should seek to test the robustness of this study's findings under the rigor of additional controls. Likewise, future research should also examine the relationship between religious pluralism and the other positive externalities of religious participation. This study focuses on only one aspect of life satisfaction, but Ellison et al. (1989) demonstrated that satisfaction varies from one domain to the next (i.e. family life, work life, leisure activities, friendships). Levels of distress and overall mental health (Ellison, Jason, Williams, and Jackson 2001) should also be considered as outcome variables.

The results of this analysis are a step toward understanding the relationship between religious participation and religious pluralism, but they are just that, a step. Using a cross-national sample of more than 80,000 respondents, this study has demonstrated that religious pluralism does not appear to have a positive or negative effect on the religious experience. But, it is clear that the direct effects of religious pluralism on life satisfaction are noteworthy in themselves. It is possible that a national measure of religious pluralism is the reason for my negative findings; however, it seems unlikely that with ever-increasing rates of globalization that even the minutest religious communities do not have some exposure to religious and secular alternatives. That said, future research should test these findings at different levels of analysis (i.e. city, county, state) and across different periods of time. The relationship between cultural objects and their receivers is a complex one, but clearly defined "charges" and "briefs" will help us unwrap them.

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Appendix. Values for Religious Pluralism Index and GDP for Countries in the Sample

Country	Pluralism			Country	Pluralism		
	N	Index	GDP		N	Index	GDP
Albania	998	0.4719	2,804	Latvia	1010	0.5556	5,728
Argentina	1268	0.2236	12,013	Lithuania	1000	0.4141	6,436
Austria	1517	0.4146	23,166	Luxembourg	1201	0.0911	33,505
Bangladesh	1479	0.2090	1,361	Macedonia	1052	0.5899	4,254
Belarus	966	0.6116	6,319	Malta	1001	0.1223	16,447
Belgium	1897	0.2127	23,223	Mexico	1506	0.1796	7,704
Bulgaria	982	0.5965	4,809	Moldova	977	0.5603	1,947
Canada	1929	0.6958	23,582	Morocco	2261	0.0035	3,305
Chile	1193	0.3841	8,787	Netherlands	1003	0.7222	22,176
Croatia	997	0.4447	6,749	Peru	1490	0.1988	4,282
Czech Republic	1900	0.6591	12,362	Philippines	1200	0.3056	3,555
Denmark	1015	0.2333	24,218	Poland	1085	0.1712	7,619
Estonia	991	0.4985	7,682	Portugal	995	0.1438	14,701
Finland	1033	0.2531	20,847	Romania	1119	0.2373	5,648
France	1605	0.4029	21,175	Russia	2480	0.4398	6,460
Germany	2022	0.6571	22,169	Singapore	1512	0.6561	24,210
Greece	1133	0.1530	13,943	Slovakia	1318	0.5655	9,699
Hungary	995	0.5244	10,232	South Africa	2995	0.8603	8,488
Iceland	966	0.1913	25,110	Spain	2379	0.4514	16,212
India	1980	0.3260	2,077	Tanzania	1145	0.6334	480
Iran	2504	0.1152	5,121	Turkey	4604	0.0049	6,422
Iraq	2325	0.4844	3,197	Uganda	1002	0.6332	1,074
Ireland	1006	0.1550	21,482	Ukraine	1157	0.6157	3,194
Italy	1982	0.3027	20,585	United Kingdom	1981	0.6944	20,336
Japan	1316	0.5406	23,257	United States	1200	0.8241	29,605
Republic of Korea	1173	0.6604	13,478	Venezuela	1198	0.1350	5,808
Kyrgyzstan	1043	0.4470	2,317	Vietnam	992	0.5080	1,689
				Zimbabwe	1000	0.7363	2,669

Note: Countries are listed alphabetically; number of countries = 55.