

# The Counseling Psychologist

<http://tcp.sagepub.com/>

---

## Arrantly Absent: Atheism in Psychological Science From 2001 to 2012

Melanie E. Brewster, Matthew A. Robinson, Riddhi Sandil, Jessica Esposito and Elizabeth Geiger

*The Counseling Psychologist* published online 23 April 2014

DOI: 10.1177/0011000014528051

The online version of this article can be found at:

<http://tcp.sagepub.com/content/early/2014/04/23/0011000014528051>

---

Published by:



<http://www.sagepublications.com>

On behalf of:

Division of Counseling Psychology of the American Psychological Association



Additional services and information for *The Counseling Psychologist* can be found at:

**Email Alerts:** <http://tcp.sagepub.com/cgi/alerts>

**Subscriptions:** <http://tcp.sagepub.com/subscriptions>

**Reprints:** <http://www.sagepub.com/journalsReprints.nav>

**Permissions:** <http://www.sagepub.com/journalsPermissions.nav>

>> [OnlineFirst Version of Record](#) - Apr 23, 2014

# Arrantly Absent: Atheism in Psychological Science From 2001 to 2012

The Counseling Psychologist

1-36

© The Author(s) 2014

Reprints and permissions:

sagepub.com/journalsPermissions.nav

DOI: 10.1177/0011000014528051

tcp.sagepub.com



**Melanie E. Brewster<sup>1</sup>, Matthew A. Robinson<sup>1</sup>,  
Riddhi Sandil<sup>1</sup>, Jessica Esposito<sup>1</sup>, and Elizabeth Geiger<sup>1</sup>**

## Abstract

This study provides a content analysis of the past 12 years (2001-2012) of academic scholarship about atheism and atheist individuals from a social scientific lens in the United States. The content analysis yielded 100 articles across disciplines including psychology, sociology, religious studies, and political science. Although the number of articles about atheism published since 2001 has increased steadily per year ( $n = 0$  in 2001 compared with  $n = 20$  in 2012), the topics discussed in the atheism literature were narrow in scope and involved (a) comparing religious/spiritual (R/S) belief systems to atheism or (b) discussing bias against atheists. In addition, most of the articles were nonempirical (58%). Content analysis data suggest that atheism is an understudied topic in psychological science (31% of the total articles were from psychology), and discourse on atheism is often presented from cognitive and social-psychology perspectives, rather than a counseling psychology lens. Only a handful of the total articles centered on topics related to mental health (e.g., psychological distress and well-being) or counseling and training; however, such studies suggested that atheists have comparable levels of mental health to R/S people, a conclusion that contradicts most prior research on R/S and psychological well-being. Findings from this content analysis suggest that atheist individuals are an underserved and

<sup>1</sup>Teachers College, Columbia University, New York, NY, USA

## Corresponding Author:

Melanie E. Brewster, Teachers College, Columbia University, 525 W 120th Street, Box #102, New York, NY 10027, USA.

Email: melanie.brewster@tc.columbia.edu

understudied group that would benefit from advancements in counseling psychology scholarship specific to their experiences.

### Keywords

atheism, nonreligious, secular humanism, nonbelievers, free thought, content analysis

In the past decade, a flood of pop-atheism literature has permeated U.S. culture, with prominent authors such as Richard Dawkins, Sam Harris, and the late Christopher Hitchens spearheading this deluge (Brewster, 2014). The popularity of these atheist books seemed to baffle journalists, with one candidly expressing that “secularism is suddenly hip, at least in the publishing world” and positing that the phenomenon was a backlash against the perceived rise in religious fundamentalism (Doward, 2006, n.p.). Indeed, the popularity of these authors was symptomatic of larger societal shifts, notably the beginning of *New Atheism*, “a more militant, in-your-face kind of atheism” marked by a drive to bring atheist discourse out of the shadows and into mainstream culture (Stenger, 2009, p. 29). However, the waves of momentum gained by the atheist movement remain largely absent in social science scholarship, psychology broadly, and counseling psychology specifically.

One reason that accounts for psychology’s inattention to atheism may be that the psychological sciences—narrowly, branches of applied psychology—have a complicated history with issues of religiosity, spirituality, and atheism (e.g., Bergin, 1980). Many of the pioneers of counseling and clinical psychology were outspoken atheist humanists who supported placing barriers between clinical practice and religious beliefs (e.g., Ellis, 1971; Hoffer, 1951; Horney, 1965). Notably, Albert Ellis vocally expressed that extreme religiosity—characterized by rigid, absolutist thinking and dogmatism—was “essentially emotional disturbance” (Ellis, 1980, p. 635). Such anti-religion viewpoints largely dominated early theoretical work. Led by researchers such as Allen Bergin, it took until the late 1980s for psychological research on religious and spiritual beliefs to gain traction within the mental health literature. Yet, once these barriers were broken, psychologists rapidly expressed great interest in examining how religion and spirituality affected the human experience and zealously supported the notion that such beliefs were vital dimensions of diversity and identity (McMinn, Hathaway, Woods, & Snow, 2009). Tides dramatically shifted, and even the most vocal atheist psychologists softened their critiques of religion and spirituality.

Indeed, in 2008, the American Psychological Association (APA) even sanctioned the development of a new journal, *Psychology of Religion and Spirituality*.

In stark contrast to the earlier days of counseling and clinical research, decades of psychological literature (and tens-of-thousands of articles) now attend to issues of religiosity and spirituality. Defined loosely, *religiosity* refers to personal beliefs in a God or gods and organized or institutional practices and beliefs (e.g., church attendance, sharing congregational values), whereas *spirituality* is described as a belief in a higher power and/or mystical experiences accompanied by less participation in traditional forms of worship—although scholars lament that these terms are frequently conflated (Zinnbauer et al., 1997). Estimates vary widely, but national surveys suggest that a vast majority of U.S. citizens (between 80% and 95%, depending on the phrasing of the question) report having a religious affiliation and a belief in a God (Gallup & Lindsay, 1999; W. R. Miller & Thoresen, 2003). Ample research points to positive links between religiosity and/or spirituality (R/S)<sup>1</sup> and the promotion of mental health and physical well-being, including improved prognoses for people suffering from cancer, HIV, heart conditions, and other physically compromising conditions (e.g., Greenfield, Vaillant, & Marks, 2009; Michael, Crowther, Schmid, & Allen, 2003; Seeman, Dubin, & Seeman, 2003). However, a tacit message in this research is that if R/S is linked to well-being, and lack of such beliefs—such as beliefs held by people who identify as atheist, agnostic, or R/S apathetic—must be linked to poorer outcomes (Hall, Meador, & Koenig, 2008; Whitley, 2010).

Some scholars have cautioned strongly against the assumption of a direct link between R/S and beneficial mental or physical health outcomes and posit that the veracity of this assumption may be complicated by flaws in the extant research (Hwang, Hammer, & Cragun, 2011; W. R. Miller & Thoresen, 2003). Indeed, recent literature has challenged the methodological robustness of R/S studies, specifically questioning the investigations' construct validity (Hill & Pargament, 2003), analytic issues (Christenfeld, Sloan, Carroll, & Greenland, 2004), and, most importantly, their lack of atheist control samples (Hwang et al., 2011; Kier & Davenport, 2004). If outcome studies are genuinely interested in the mental and physical health links of R/S, it follows that there must be clarity on these methodological issues in future research. One critical step in this direction would be to establish a baseline understanding of individuals who clearly *do not* identify as R/S<sup>2</sup>—namely, atheist people. Thus, the present study aims to redress psychology's inattention to issues of atheism by providing a content analysis of the past 12 years of scholarly research on this topic.

## A Conspicuous Lack of Focus

Although the literature on R/S beliefs is vast and growing in psychology, very few studies include meaningful discussions of nonbelievers and atheist individuals, and the few articles that include atheism do not address nonbelief as a valid diversity issue (D'Andrea & Sprenger, 2007). In reaction to the 2003 special issue in the *American Psychologist* on R/S, Kier and Davenport (2004) critiqued that

[T]he biggest problem with this line of research is that the writers did not seem to provide safeguards that would preclude the general public and the press from taking their conclusions out of context. Given the power of religious fundamentalist groups in this country (and others), such research could be used to support prejudice and discrimination. If one subscribes unthinkingly to the theory that those who are religious are healthy, it is not a far stretch for one to flip this logic into a theory that those who are unreligious are unhealthy, sick, or otherwise impaired. (p. 54)

The conspicuous gap in the R/S literature regarding atheism may be linked to scholars focusing their attention on topics that are unlikely to draw controversy. Within the current religious and conservative sociopolitical climate of the United States, atheism is a contentious topic (Weinrach & Thomas, 1996). However, the fundamental hesitancy of researchers to address atheist issues in psychology is growing increasingly problematic.

Specifically, within counseling psychology, a field that traditionally aligns itself with social justice for minority groups, this lack of attention bodes poorly for our collective ability to provide evidence-based treatments to atheist clients. In the United States, people who identify as atheist are certainly a minority group, but rates of atheist-identified individuals are rising (Kosmin & Keysar, 2008; Zuckerman, 2007). Approximately 4% to 15% of individuals in the United States identify as atheist (Hwang et al., 2011; Kosmin & Keysar, 2008), which translates to a minority group comparable in size with sexual minority (roughly 4%-10%; J. L. Miller & House, 2001), Black/African American, and Asian American populations in the United States (roughly 13% and 5%, respectively; U.S. Census Bureau, U.S. Department of Commerce, 2011).

However, estimates of the rates of atheist identification are notoriously unclear, as the "precise definition of 'atheism' is both a vexed and vexatious issue" (Bullivant, 2013, n.p.). There remains no clear consensus on who atheists are and what they believe (or, rather, what they do not believe). Recent literature presents nonbelief on a spectrum that ranges from *strong atheism* to *weak atheism* (Baggini, 2003). Specifically, "a principled and

informed decision to reject belief in God” or gods would be considered strong atheism (McGrath, 2004, p. 175), whereas someone who lacks a strong belief in, or is unsure of, the existence of God/gods, such as an agnostic, would be considered a weak atheist (Martin, 2007). In operationalizing atheism as an umbrella term, there are several other identifiers that fall within the spectrum of nonbelief. For example, *secular humanism* is defined as an ethical lens through which people are responsible for choosing their own destinies and live considerately toward others, while being disinterested in issues of the supernatural, God/gods, or an afterlife (Grayling, 2013). Aligned with the strongest form of atheism, *new atheism* openly shirks religious beliefs in favor of nonbelief and fights strongly for secularism. Although used less frequently, some atheist people also use labels such as “free thinker,” “bright,” and “nontheist” to supplement their identities as nonbelievers; however, there is little to no distinction between these terms (McGowan, 2013). For the purposes of the present study, atheist will be used as an umbrella term to capture all varieties of nonbelievers.

Despite the dearth of research with this group, a few studies conducted in the United States point to several demographic features of atheists: they tend to reside in the Northeast or West, are well educated, are politically liberal or independent, and are more likely to identify as men and European American (Bainbridge, 2005; Galen, 2009; Kosmin & Keysar, 2008; Zuckerman, 2007). The few studies that have examined personality traits of atheist people suggest that they are more open, nondogmatic, feminist, tolerant of ambiguity (Hunsberger & Altemeyer, 2006), independent (Beit-Hallahmi & Argyle, 1997), comfortable with their bodies (Barna Research Group, 1999), and introverted (Bainbridge, 2005) compared with religious individuals. Although scant, this available research suggests that atheist people comprise a distinct portion of the population, and that the experience of being non-R/S in a predominantly Christian nation is likely laden with unique challenges.

## **Positioning Atheists as a Marginalized Group Within the United States**

Attitudes toward atheists, as compared with R/S individuals, are remarkably unaffirming (Galen, Smith, Knapp, & Wyngarden, 2011). Survey data consistently find that atheists are regarded as “more troubling” than other groups of people on a long list of historically oppressed and marginalized populations, including African Americans, people of Islamic and Jewish faiths, and lesbian, gay, and bisexual (LGB) individuals (Edgell, Gerteis, & Hartmann, 2006). Beyond this, national opinion polls from past and current decades consistently paint individuals in the United States as wary, fearful, or even

disgusted by atheists (Gervais, 2011; Gervais, Shariff, & Norenzayan, 2011). A cognitive thread in these negative attitudes may be that atheists are perceived to be less moral than R/S people due to the fact that most Americans see R/S as the primary means of instilling moral fiber in a person (Galen et al., 2011). However, such attitudes are dangerous as they can translate to systematic oppression of atheists; for example, a 2006 Gallup Poll found that 84% of individuals surveyed endorsed that "America is not ready for an atheist president" and nearly 50% of respondents agreed with the statement "I would disapprove if my child wanted to marry an atheist" (Edgell et al., 2006; Jones, 2006). Relatedly, in a more recent Gallup Poll (Jones, 2012), only 54% of respondents said they would vote for an atheist presidential candidate. Not surprisingly, atheist individuals report having experienced significant discrimination in schools, at their places of employment, within the legal system, and across many other settings (Cragun, Kosmin, Keysar, Hammer, & Nielsen, 2012; Downey, 2004; Swan & Heesacker, 2012). Findings such as these suggest atheists are a marginalized minority group within the United States. Therefore, the hesitancy to include people who identify as atheist in the broader multicultural and social justice discourse remains puzzling and problematic for counseling psychology (D'Andrea & Sprenger, 2007; Whitley, 2010).

*Minority stress theory* (Meyer, 2003) offers a useful lens for discussing the mental health and well-being of atheists in the United States. The theory posits that there are physical and psychological consequences linked with identifying as a member of a socially marginalized group. In short, experiences of discrimination and stigma lead to increased psychological distress and physical health problems—a finding supported empirically across many oppressed groups (see Thoits, 2013). It follows that the marginalization experienced by atheists may also be associated with higher levels of identity-related stress, although this link has not yet been tested empirically with atheists (Weber, Pargament, Kunik, Lomax, & Stanley, 2012). Unsurprisingly, some scholars have drawn parallels between sexual minority people and atheists who both "closet" or choose to conceal their identities as members of stigmatized groups (Brewster, 2013; Siner, 2011). Coming out as atheist involves emerging from invisibility to claim a personal and social identity that carries widespread stigma (Cimino & Smith, 2011). There are few examples of "out" atheists, leaving nonbelieving individuals little opportunity to model their coming out process on the experiences of others. Moreover, the well-known proponents of new atheism (i.e., Richard Dawkins, Sam Harris) are not uniformly embraced by weak atheists or secular humanists who sometimes view these spokespeople as combative, ridiculing, counter-productive, and evangelizing—not as individuals after whom they would want to model

their identities as nonbelievers (Brewster, 2013; Mooney, 2010). Taken together, the interpersonal and sociocultural landscapes for atheists in the United States are bleak and, drawing from research with sexual minority people, may contribute to distress in this population.

If one of the implied messages of the R/S and mental health research (that atheist individuals have poorer psychological outcomes than R/S people) is correct, minority stress theory may prove to be a useful tool for unpacking this finding. However, a first step in this process is to more deeply understand the life experiences of atheist people and begin to view atheism as a valid identity worth including in counseling psychology's legacy of social justice and diversity work. Thus, a thorough compilation and review of recent social science literature about atheism in the United States could begin to address this important void in multicultural scholarship. Moreover, such a review would provide practitioners, scholars, and educators with a springboard to gain the background necessary to work with atheist people.

Although several prior meta and content analyses of R/S literature have been conducted from a social scientific lens (e.g., Ano & Vasconcelles, 2004; Hackney & Sanders, 2003; E. L. Worthington, Kuru, McCullough, & Sandage, 1996), we are unaware of any successful content analysis of atheism literature. Whitley (2010) attempted to conduct a content analysis of atheism and mental health literature by doing a MEDLINE search of articles published from 1965 to 2009. He used the search terms *atheis\**, *religi\**, *mental health*, and *psychiat\** but reported that the search yielded no articles relating to atheism and mental health. This seemingly unsuccessful search of medical and psychiatric journals is telling of the state of atheism research. Whitley argues that it is time for atheism to be treated as a meaningful socio-cultural variable that deserves practical exploration, "especially as it relates to the human condition, suffering, and concepts of personhood" (p. 190). Given the prior focus of Whitley's attempted (and failed) content analysis of medical journals, we decided that a less circumscribed look at *all* peer-reviewed journal articles published from 2001 to 2012 would provide a more comprehensive portrait of current atheist research.

## The Present Study

The exploration of R/S on well-being is a recent, yet enduring, tradition within the social sciences and psychology (W. R. Miller & Thoresen, 2003); however, understanding those who live without R/S also has the potential to provide important insights into the nature of mental health and its relation to systems of beliefs (R/S or secular). The present study aims to elucidate themes within atheism research from the past decade and also detail the



specific methodological and topical contents of these articles. Specifically, information about the demographic compositions of studies on atheism (including race, gender, sexual orientation, education, and geographic location of sample) can help guide further research by identifying subpopulations that have been understudied, revealing methodological trends that have shaped the current body of research, and highlighting underused methodologies. Furthermore, a content analysis can identify the depth and breadth of knowledge across various topics and be used to identify areas where scholarship is sparse.

A content analysis of the literature about atheism and atheist-identified individuals is necessary to inform future counseling psychology theory, research, and interventions with this marginalized population. To this end, the present study aims to enhance our knowledge of the past decade of peer-reviewed journal articles about atheist people and address the following questions:

1. What are the methodological characteristics of empirical research with atheist people? Specifically, what types of designs, sampling approaches, and recruitment methods are generally used?
2. What are the typical demographic compositions of studies with atheist individuals? How are issues of gender, religious affiliation or non-affiliation, race, sexuality, social class, and education addressed and analyzed?
3. What topics are reflected in nonempirical and empirical research about atheism?
4. How have psychology journals begun to address links between atheism and mental health? How has counseling with atheist clients been addressed?

By answering these questions, this content analysis will provide an overview of knowledge about atheist people for counseling psychologists and also elucidate any gaps in the literature that warrant further attention.

## Method

### *Identifying Publications to be Coded*

The research team consisted of two faculty members, one advanced doctoral student, one second-year doctoral student, and one master's student in counseling psychology. To identify articles for the content analysis, we searched the EBSCOhost Academic Search Complete database for articles related to

atheism<sup>3</sup> that had been published between 2001 and 2012. The Academic Search Complete database is considered the most comprehensive scholarly and multidisciplinary database in that it provides access to more than 13,000 journals across academic fields. The following key terms were used in the search: *atheis\** or *irreligio\** or “*secular humanis\**” or *nonbelieve\** or “*non-believe\**” or “*free think\**” or “*free-think\**” or “*free thought*” or “*free-thought*.” In EBSCOhost, an asterisk (\*) is used to search for all words that begin with the letters prior to the asterisk. For example, searching for *atheis\** would also search for *atheism*, *atheists*, *atheistic*, and so on. The search was also limited to scholarly journals written in English. The final search was conducted on July 9, 2013, and resulted in 1,444 articles. When parallel searches for other religious groups and related keywords were conducted, these queries typically yielded more results than our atheism search; specifically, Christian ( $n = 14,499$ ), Jewish ( $n = 7,874$ ), Muslim ( $n = 6,315$ ), Buddhist ( $n = 2,464$ ), and Hindu ( $n = 975$ ).

The 1,444 atheism-focused abstracts were reviewed by the authors for inclusion or exclusion. If there was ambiguity or a disagreement concerning the relevance of an abstract, the full article was retrieved for evaluation. Initially, abstracts were eliminated from the content analysis if they were not clearly related to the study of atheism from a social scientific lens (e.g., “The Implicit Secularism of Martin Buber’s Thought” or “Transhumanist Evangelism in Science Fiction and Popular Science”). Articles were also eliminated if they focused on the experiences of atheist individuals outside the United States. After careful consideration, the authors decided to exclude such studies because (a) religiosity and atheism may be viewed differently across countries and (b) atheist people in the United States are both a minority (in number) and a marginalized group. In other countries, such as the Netherlands, the Czech Republic, or France, approximately one third of the population identifies as nonbelievers, thus nonbelieving is prevalent and less stigmatized (European Commission, 2005). Considering these issues, we deemed that experiences of nonbelievers internationally may not be parallel to those of atheist people in the United States.

The final review of abstracts resulted in 450 publications that appeared to meet the inclusion criteria. These articles were retrieved and reviewed in full.<sup>4</sup> When the full text was reviewed, only 247 articles were relevant to the project and coded (e.g., some were book/film reviews or based on international samples).

The 247 entries were coded along the following levels of focus on atheism: (a) no mention of atheism; (b) atheism or atheist people may have been included but cannot be determined by the article or sample description; (c) major focus of the article is not atheism, but there is some (less

than 10% of content) attention to atheism; for empirical studies, less than 10% of sample identified as atheist; (d) more than a minimal inclusion of atheist content (greater than 10%), but primary focus is not atheism; (e) more than 30% of the empirical sample is atheist, but primary focus is not atheism; (f) more than 50% of empirical sample is atheist, but primary focus is not atheism; (g) focus of analyses is on atheism or the experiences of atheist people; or (h) article focuses on attitudes toward atheism/atheists. Publications with a Level (d) or greater focus on atheism were retained for this project. Specifically, of the total articles reviewed, 10% had a Level (d) focus, 2% had a Level (e) focus, no articles had a Level (f) focus, 53% had a Level (g) focus, and 19% had a Level (h) focus—resulting in 206 articles.. On closer inspection of the final 206 articles, we found that 51% of them came from *Free Inquiry*, a bimonthly magazine published by the Council of Secular Humanism. To preserve the level of scholarly rigor of the articles reviewed, pieces from *Free Inquiry* were excluded (see Supplementary Table S1, available online at [tcp.sagepub.com/supplemental](http://tcp.sagepub.com/supplemental), for a review of these articles). As such, 100 articles were coded beyond this point.

### Coding Form

To establish a coding procedure for the present study, we modified the coding form used by Huang and colleagues' (2010) recent content analysis of literature about LGB people of color. Considering posited similarities between sexual minority individuals and atheists (Siner, 2011), and the dearth of quality research with both populations, items on the original coding form provided a strong foundation for our form. However, the coding form was tailored for use with atheist and R/S content (e.g., incorporating checkboxes for religious groups to whom atheists were compared), and the applicability of this coding scheme was examined with 30 randomly selected articles. The research team broke into three coding pairs who independently coded their assigned articles and identified any relevant modifications to the form. The team then met as a group to discuss the proposed changes and integrated them into a final version of the coding form. As a result of this process, the team incorporated more specific options for topics of focus (e.g., attitudes toward atheists, existential issues, defining atheism) and questions to capture the within-group nuances of atheist identification (e.g., were atheists also addressed as free thinkers, brights, or secular humanists?). In the end, the coding form contained a series of questions about the focus on atheism, type of research and methodologies used, demographic features of participants, topics addressed, and discipline from which the article originated. This final

**Table 1.** Distribution of Articles by Year ( $n = 100$ ).

| Publication year | $n$ and % |
|------------------|-----------|
| 2001             | 0         |
| 2002             | 2         |
| 2003             | 2         |
| 2004             | 3         |
| 2005             | 3         |
| 2006             | 3         |
| 2007             | 7         |
| 2008             | 10        |
| 2009             | 14        |
| 2010             | 17        |
| 2011             | 19        |
| 2012             | 20        |

coding form was converted into an electronic survey hosted by Qualtrics and the coding pairs entered the data electronically into an online database.

All 100 articles were coded based on whether they were nonempirical (e.g., literature review, editorial) or empirical (quantitative or qualitative study with data) and by their year of publication, journal of publication, the discipline of the journal in which they were published, and the topics addressed in the article. Empirical articles ( $n = 42$ ) were further coded for methodology (e.g., study design, sampling strategies) and the demographic composition of participants (e.g., race, gender). The full texts of these articles were obtained and reviewed independently by each of the three coding pairs. Authors coded the articles independently and then met with their coding partners to discuss the level of agreement for each coding point. Agreement was calculated as the percentage of coding agreement on a particular article divided by the total number of possible codings per article. As such, the average level of agreement was 99.1% (range = 91.4%-100.0%;  $Mdn = 99.5\%$ ). When coding discrepancies emerged, the coding partners discussed final codings through consensus. If consensus on any of the data points could not be reached in the coding pair, all authors discussed the article and came to a group consensus.

## Results

As evidenced in Table 1, 79%<sup>5</sup> ( $n = 79$ ) of the articles coded for this study were published during or after 2008. The highest number of publications occurred in 2012 ( $n = 20$ ), and the least number of articles was published in

2001 ( $n = 0$ ). With regard to publication trends, the yearly number of publications has tended to increase steadily since 2007.

Regarding place of publication, of the total 100 articles coded for this study, 4 articles were each published in *The International Journal of Philosophy and Religion* and *Mental Health, Religion and Culture*, and 3 articles were each published in the *Journal for the Scientific Study of Religion*, *Journal of Contemporary Religion*, and *Religion*. Other journals that were represented with 2 articles each were *Intelligence*, *Implicit Religion*, *Journal of Religious Health*, and *Interdisciplinary Journal of Research on Religion*.

Forty-two empirical studies were included in the present study. Of those, 37 (88%) were cross-sectional and 4 (9.5%) were longitudinal. One study (2.5%) did not specify whether the data collected were cross-sectional or longitudinal. Most of the empirical articles were nonexperimental quantitative studies ( $n = 31$ , 74%). Although rarely, intervention, qualitative, and mixed-methods studies were also represented in the sample ( $n = 11$ , 26%). The remaining 58 studies were nonempirical articles comprised mainly of theoretical or conceptual pieces ( $n = 29$ , 50%), editorials or commentaries ( $n = 21$ , 36%), and literature reviews ( $n = 8$ , 14%).

### Questions 1 and 2: Methodological and Demographic Characteristics of Empirical Studies

**Sample size and sampling procedures.** Among the studies that provided information on sample sizes ( $n = 32$ , 76%), samples ranged from 15 to 54,461 participants ( $M = 5,211.2$ ,  $Mdn = 351$ ,  $SD = 12,702.8$ ). The remaining studies were not clear about the size of their sample or used secondary data. With regard to sampling procedures, 22 studies (52%) used convenience sampling, 13 (31%) analyzed data from secondary sources (e.g., General Social Survey), 4 (10%) used random sampling from specific locations/organizations, and 3 studies (7%) did not specify their sampling procedure.

As evidenced in Table 2, most studies used a national sample, and almost 1 in 3 did not report the geographic location of their sample. It should be noted that the Southeast and Northwest were the least represented in this study, with only 7% ( $n = 3$ ) of the articles reporting samples from these regions.

Online strategies (Table 3) were most commonly used to recruit participants. The majority of the studies either provided unclear descriptions of recruitment locations (e.g., “2008 American National Election Study”), or did not describe their recruitment procedures. Other recruitment strategies used were recruiting through atheist organizations, random digit dialing, snowball strategies, clinical settings, atheist events, and religious organizations. It

**Table 2.** Geographic Location of Sample Used in Empirical Studies ( $n = 42$ ).

| Geographic Location                             | <i>n</i> | %     |
|---|----------|-------|
| National  | 16       | 38.10 |
| Southwest (e.g., New Mexico, Arizona)           | 7        | 16.67 |
| Midwest (e.g., Ohio, Nebraska, Illinois)        | 5        | 11.90 |
| Northeast (e.g., New York, New England)         | 5        | 11.90 |
| Southeast (e.g., Virginia, Alabama, Florida)    | 2        | 4.76  |
| Northwest (e.g., Washington, Idaho, Oregon)     | 1        | 2.38  |
| Other (e.g., Canada, Australia, United Kingdom) | 7        | 16.67 |
| Location unspecified                            | 12       | 28.57 |

Note. Percentages do not equal 100 because some studies examined more than one geographic location. The “other” category was included when the majority of the sample was from the United States.

**Table 3.** Recruitment Procedures Used in Empirical Studies ( $n = 42$ ).

| Recruitment procedure                              | <i>n</i> | %     |
|--|----------|-------|
| Internet   | 15       | 35.71 |
| Atheist organization (in person)                   | 4        | 9.52  |
| Random digit dialing                               | 4        | 9.52  |
| Snowball sample                                    | 3        | 7.14  |
| Clinical setting                                   | 3        | 7.14  |
| Atheist event                                      | 2        | 4.76  |
| Religious organizations                            | 1        | 2.38  |
| Media ads  | 0        | 0     |
| Venue (e.g., coffee shop, bookstore)               | 0        | 0     |
| Flyers   | 0        | 0     |
| Other (e.g., course participation, secondary data) | 16       | 38.10 |
| Not specified                                      | 11       | 26.19 |

Note. Percentages do not equal 100 because some studies used more than one procedure.

should be noted that some studies used more than one procedure to aid their recruitment efforts. In terms of data collection methods, most studies used paper or online self-report surveys ( $n = 25$ , 60%). Other methods of data collection included were in person interviews ( $n = 7$ , 17%), phone interviews ( $n = 5$ , 12%), and unique procedures such as “textual analysis” ( $n = 7$ , 17%). Physiological/neurological data collections were used least frequently ( $n = 2$ , 5%), and 10 studies (24%) did not describe their data collection methods.

**Table 4.** Racial and Ethnic Composition of Participants Across Studies that Reported this Data ( $n = 17$ ).

| <i>n</i> | White<br>% | Black<br>% | Latino/a<br>% | Asian<br>% | Native<br>% | Multiracial<br>% | Other<br>% |
|----------|------------|------------|---------------|------------|-------------|------------------|------------|
| 10,627   | 89         | <1         | 3             | 2          | —           | 5                | 5          |
| 370      | 72         | —          | —             | —          | —           | —                | —          |
| 275      | 86         | 2          | <1            | 7          | —           | —                | —          |
| 167      | 89         | —          | —             | —          | —           | —                | —          |
| 165      | 78         | 12         | 4             | 2          | —           | —                | 4          |
| 142      | 100        | —          | —             | —          | —           | —                | —          |
| 140      | 94         | 5          | —             | —          | —           | —                | 1          |
| 134      | 88         | —          | 3             | —          | 1           | 2                | 6          |
| 82       | 97         | —          | —             | —          | —           | —                | —          |
| 73       | 62         | 23         | 4             | 7          | —           | —                | 4          |
| 62       | 89         | 2          | 3             | 6          | —           | —                | —          |
| 55       | 67         | 6          | 16            | 1          | —           | 9                | —          |
| 40       | 92         | 3          | 5             | —          | —           | —                | —          |
| 37       | 100        | —          | —             | —          | —           | —                | —          |
| 16       | 94         | 6          | —             | —          | —           | —                | —          |
| —        | 73         | 15         | 12            | —          | —           | —                | —          |
| —        | 76         | 11         | 12            | —          | —           | —                | —          |

Note. Not all studies reported information about the racial and ethnic composition of their sample. Some studies provided *ns*, whereas others provided percentages.

*Assessment and analysis of demographic characteristics.* Of the 42 empirical articles included in this study, 20 articles (48%) reported the gender of study participants *and* conducted analyses involving gender, 11 (26%) did not report the gender of the study participants, and another 11 articles (26%) reported the gender of participants but did not conduct any analyses involving gender. Glaringly, 98% ( $n = 41$ ) of the 42 empirical articles included in this study did not assess the sexual orientation of participants. Information on age was presented in various ways across articles. Eleven of the articles reported a mean age; among these studies, the average age reported was 37.7 years ( $Mdn = 44.1$ ). The remaining articles reported age as a range but often supplied nonspecific age information (such as “over 65” or “18-25”) making the calculation of an average age for these studies impossible.

Only 17 of the 42 empirical articles reported the racial and ethnic composition of their sample. The majority of respondents in each article was White, with an 85% average percentage of White respondents across studies. As presented in Table 4, 11 studies reported including African American respon-

**Table 5.** Other Religious Groups Used in Sample of Empirical Studies ( $n = 42$ ).

| Religious groups                                | <i>n</i> | %     |
|---|----------|-------|
| Protestant Christian (e.g., Methodist, Baptist) | 26       | 61.90 |
| Catholic  | 11       | 26.19 |
| Jewish  | 8        | 19.05 |
| Buddhist  | 5        | 11.90 |
| Believer  | 5        | 11.90 |
| Islam   | 4        | 9.52  |
| Spiritual                                       | 4        | 9.52  |
| Religious                                       | 4        | 9.52  |
| Hinduism  | 1        | 2.38  |
| Baha'i  | —        | —     |
| Sikhism   | —        | —     |
| Pagan/Wiccan                                    | —        | —     |
| Native/Indigenous                               | —        | —     |
| Other (e.g., religious nonchurch attenders)     | 9        | 21.43 |
| No other religious groups included              | 3        | 7.14  |

Note. Percentages do not equal 100 because some studies examined more than one religious group.

dents in their sample, 10 reported including Latino/as, and 6 reported including Asian Americans.

With regard to the educational level of participants, 48% ( $n = 20$ ) of the studies presented this information. All of these studies consisted of participants who had at least some college education. In addition, five studies consisted of a sample of 100% undergraduate students and two consisted of a sample of 100% graduate students. The remaining studies had a mix of participants ranging from having a high school diploma to a graduate or professional degree. Relatedly, only 19% ( $n = 8$ ) of the empirical publications included in this study assessed the social class of the participants. This information was gathered by asking participants to report their salary or household income.

Nonbelief or religious belief was typically assessed using participants' self-identification ( $n = 36$ , 86%). Four articles (9%) examined religious behaviors (e.g., church attendance) and 8 articles (19%) did not specify how belief and nonbelief were assessed. As noted in Table 5, of the 42 empirical articles included in this study, the most frequent religious groups studied along with atheists were Protestant Christians, Catholic, Jews, and Buddhists.

Referring to Table 6, the most frequent label used for a nonbelieving group discussed alongside atheists in empirical studies was agnostic. This



**Table 6.** Nonreligious Groups Discussed/Analyzed Along With Atheists in Empirical Studies ( $n = 42$ ).

| Religious groups                          | <i>n</i> | %     |
|---|----------|-------|
| Agnostic                                  | 23       | 54.76 |
| Spiritual but not religious               | 7        | 13.64 |
| Nonbelievers                              | 5        | 11.90 |
| Secular humanists                         | 4        | 9.52  |
| New atheists                              | 2        | 4.76  |
| Free thinkers                             | —        | —     |
| Brights                                   | —        | —     |
| Other (e.g., nonaffiliated, nonreligious) | 15       | 35.71 |
| No other nonreligious groups included     | 4        | 9.52  |

Note. Percentages do not equal 100 because some studies looked at more than one nonreligious group.

was followed by studies that provided unclear descriptors of participants' affiliation (e.g., nonreligious, unchurched people. Studies provided little to no elaboration on what these labels signified but were often behaviorally based; for instance, someone who stopped attending church or no longer had a religious affiliation was classified as a nonbeliever. Other populations represented were "spiritual but not religious," secular humanist, nonbelievers, and new atheists.

### *Question 3: Topics of Focus and Article Disciplines*

Table 7 highlights the topics of focus covered in the 42 empirical and 58 nonempirical articles included in this study. Each article could have more than one topic of focus. The most frequent topics of focus in nonempirical publications were attitudes toward atheists, articles focused on sociocultural perceptions and portrayals of atheists; spirituality and religiosity, articles centered on comparing R/S people or beliefs with those of atheist people or the beliefs of nonbelievers; bias in treatment, articles addressing discrimination of atheists; and defining atheism, articles centered on deconstructing what it means to be a nonbeliever, and similarities and/or differences between subgroups of atheist people such as agnostics or humanists. The top four topics of focus in empirical publications were spirituality and religiosity; attitudes toward atheists; other topics (e.g., cognitive science, intelligence), and stereotypes and stigma, articles centered on examining negative portrayals of atheists.

**Table 7.** Topics Addressed in Empirical and Nonempirical Studies.

| General Theme           | Specific Topic                                | Empirical<br>(N=42) |       | Nonempirical<br>(N=58) |       |
|-------------------------|---|---------------------|-------|------------------------|-------|
|                         |   | <i>n</i>            | %     | <i>n</i>               | %     |
| Belief systems          | Attitudes toward atheists                     | 13                  | 30.95 | 37                     | 63.79 |
|                         | Defining atheism                              | 2                   | 4.76  | 20                     | 34.48 |
|                         | Moral issues                                  | 4                   | 9.52  | 15                     | 25.86 |
|                         | Spirituality and religiosity                  | 19                  | 45.24 | 36                     | 62.07 |
| Counseling and research | Counseling and therapy                        | 3                   | 7.14  | 3                      | 5.17  |
|                         | Research agenda                               | 1                   | 2.38  | 6                      | 10.34 |
|                         | Training issues                               | 2                   | 4.76  | 4                      | 6.90  |
| Developmental issues    | Child   | —                   | —     | —                      | —     |
|                         | Young adults                                  | 1                   | 2.38  | 2                      | 3.45  |
|                         | Adults  | 3                   | 7.14  | —                      | —     |
|                         | Elderly and aging                             | 1                   | 2.38  | —                      | —     |
| Discrimination          | Bias in treatment                             | 7                   | 16.67 | 20                     | 34.48 |
|                         | Hate crimes and harassment                    | —                   | —     | 3                      | 5.17  |
|                         | Stereotypes and stigma                        | 9                   | 21.43 | 14                     | 24.14 |
| End of life             | End of life concerns                          | 4                   | 9.52  | 2                      | 3.45  |
|                         | Existential issues                            | 5                   | 11.90 | 8                      | 13.79 |
|                         | Grief, loss, bereavement                      | 1                   | 2.38  | —                      | —     |
| Family and groups       | Group dynamics                                | 1                   | 2.38  | 3                      | 5.17  |
|                         | Parenting and family issues                   | 4                   | 9.52  | —                      | —     |
|                         | Relationships                                 | 1                   | 2.38  | —                      | —     |
| Identity                | Ability/disability status                     | —                   | —     | 1                      | 1.72  |
|                         | Culture                                       | 3                   | 7.14  | 10                     | 17.24 |
|                         | Ethnic minority issues                        | —                   | —     | 1                      | 1.72  |
|                         | Gender issues                                 | 4                   | 9.52  | 4                      | 6.90  |
|                         | Identity development                          | 7                   | 16.67 | 2                      | 3.45  |
|                         | LGBTQ issues                                  | 1                   | 2.38  | —                      | —     |
| Mental health           | Alcohol and drugs                             | 1                   | 2.38  | —                      | —     |
|                         | Psychological distress                        | 7                   | 16.67 | 2                      | 3.45  |
|                         | Psychological well-being                      | 8                   | 19.05 | 5                      | 8.62  |
| Social justice          | Legal/civil liberty issues                    | 1                   | 2.38  | 8                      | 13.79 |
|                         | Politics                                      | 4                   | 9.52  | 8                      | 13.79 |
|                         | Social justice and activism                   | 1                   | 2.38  | 6                      | 10.34 |
| Other                   | Health and Medicine                           | 2                   | 4.76  | 4                      | 6.90  |
|                         | Methodology                                   | 1                   | 2.38  | 5                      | 8.62  |
|                         | University Climate                            | —                   | —     | 2                      | 3.45  |
|                         | Other (e.g., cognitive science, intelligence) | 14                  | 33.33 | 9                      | 15.52 |

Note. Percentages do not equal 100 because some studies looked at more than one topic. LGBTQ = lesbian, gay, bisexual, transgender, queer.

**Table 8.** Article Discipline for Empirical and Nonempirical Studies.

| Discipline                                      | Empirical<br>( <i>n</i> = 42) |       | Nonempirical<br>( <i>n</i> = 58) |       |
|---|-------------------------------|-------|----------------------------------|-------|
|   | <i>n</i>                      | %     | <i>n</i>                         | %     |
| Earth sciences                                  | 1                             | 2.38  | 0                                | 0     |
| Education                                       | 0                             | 0     | 2                                | 3.45  |
| Health science                                  | 2                             | 4.76  | 3                                | 5.17  |
| Journalism, media studies,<br>and communication | 1                             | 2.38  | 0                                | 0     |
| Law   | 0                             | 0     | 8                                | 13.79 |
| Philosophy                                      | 0                             | 0     | 10                               | 17.24 |
| Political science                               | 1                             | 2.38  | 5                                | 8.62  |
| Psychology                                      | 22                            | 52.38 | 9                                | 15.52 |
| Religion  | 4                             | 9.52  | 15                               | 25.86 |
| Sociology                                       | 11                            | 26.19 | 6                                | 10.34 |
| Earth sciences                                  | 1                             | 2.38  | 0                                | 0     |
| Education                                       | 0                             | 0     | 2                                | 3.45  |
| Health science                                  | 2                             | 4.76  | 3                                | 5.17  |
| Journalism, media studies,<br>and communication | 1                             | 2.38  | 0                                | 0     |
| Law   | 0                             | 0     | 8                                | 13.79 |
| Philosophy                                      | 0                             | 0     | 10                               | 17.24 |
| Political science                               | 1                             | 2.38  | 5                                | 8.62  |
| Psychology                                      | 22                            | 52.38 | 9                                | 15.52 |
| Religion  | 4                             | 9.52  | 15                               | 25.86 |
| Sociology                                       | 11                            | 26.19 | 6                                | 10.34 |

The academic disciplines of the journals were also coded and are reported in Table 8. Of the 58 nonempirical articles included in this study, 34 were aligned with the field of religion, philosophy and psychology. For empirical studies, 37 publications from religion, psychology, and sociology were represented in the articles included for this study. Disciplines such as journalism, law, and health sciences were also represented.

#### *Question 4: Deeper Exploration of Psychology Articles, Mental Health, and Counseling*

Drawing from Table 8, we found that a large porportion of the total articles in this content analysis were from psychological disciplines. The top journals

represented for psychology articles were *Mental Health, Religion, & Culture* ( $n = 4$ ), *Intelligence* ( $n = 2$ ), and the *Annual Review of Psychology* ( $n = 2$ ). Only two journals focused exclusively on clinical work were present, *Counseling and Values* and *Psychotherapy Research*, each with only one article. To get a better sense of the topics and themes that these psychology articles addressed, we examined the set of 31 articles separately; we present these findings next.

Of the 42 total empirical articles included in the content analysis, a large percentage were from psychology-related journals; however, psychology-related journals contributed a significantly lower proportion of nonempirical articles. Of the 31 psychology articles, the top themes—described previously—were *spirituality and religiosity* ( $n = 19$ ), *attitudes toward atheists* ( $n = 13$ ), “*other*” ( $n = 12$ ; for example, articles that were very specific in focus, mostly empirical related to atheism and its correlates to neuroscience, intelligence, and specific cognitive science tasks), and *psychological well-being* ( $n = 9$ ). Beyond these themes, other topics that emerged 6 to 7 times in the content analysis of the 31 psychology articles were *bias in treatment of atheists* (e.g., discrimination), *stereotypes and stigma* (e.g., articles exploring specifically negative attitudes toward atheists), *culture, existential issues* (e.g., meaning of life, mortality, freedom, and responsibility), *identity development* (e.g., how one becomes atheist or R/S), *moral issues* (e.g., examining where/how values develop), and *psychological distress* (e.g., depression, anxiety, mental illness, and its relation to atheism).

***Mental health and counseling.*** Of the 31 psychology articles, articles that contained content focused on mental health topics (dimensions of psychological well-being and distress) and counseling psychology topics (counseling, therapy, and training) are explored in further detail in Table 9. Regarding mental health and atheism, general trends in the studies suggest that there is not a clear link between atheism and mental health. Most of the empirical studies that included both atheist and R/S participants found no group differences in dimensions of psychological well-being or distress (e.g., Baker & Cruickshank, 2009; Caldwell-Harris, Wilson, LoTempio, & Beit-Hallahmi, 2011; Horning, Davis, Stirrat, & Cornwell, 2011; Toburen & Meier, 2010; Tonigan, Miller, & Schermer, 2002). Three studies found evidence of a curvilinear relationship between certainty of beliefs (R/S or atheist) and dimensions of psychological well-being, such that very religious and atheist individuals fare better than people who are less certain of their religious beliefs, are spiritual but not religious, or are agnostic (Galen, 2009; Galen & Kloet, 2011; Mochon, Norton, & Ariely, 2011). One study found that R/S coping was more effective in promoting stress-related growth than secular

**Table 9.** Mental Health and Counseling Specific Findings.

| Author and year   | Type         | Topics  | Findings and/or suggestions  |
|---|--------------|---|--|
| Mental health   |              |   |  |
| Baker and Cruickshank (2009)                                | Empirical    | Depressive symptoms are compared across R/S groups and nonbelievers                                 | Influence of religious saliency and practice is compared quantitatively across Christians, Muslims, atheists, and agnostics. No significant differences in depressive symptoms were found across groups.   |
| Caldwell-Harris, Wilson, LoTempio, and Beit-Hallahmi (2011) | Empirical    | Well-being, awe, and magical thinking group differences between atheists, Christians, and Buddhists | Group comparisons were conducted for atheists, Christians, and Buddhists; groups were similar in reported levels of well-being, empathy, and other personality scales. Major differences were found on scores for magical ideation, where atheists scored much lower. Supporting the "stereotype that atheists are logical, skeptical, and nonconformist, but not as cynical and joyless" as previously thought.   |
| Galen (2009)  | Empirical    | Group differences in nonreligious identity are important for mental health                          | Survey of 5,831 nonreligious people who identified as spiritual, agnostic, atheist, or humanist; explored group differences across well-being and personality variables. Those identified as spiritual or agnostic scored the lowest on life satisfaction and emotional stability and the lowest on certainty of their nonbelief in God; atheists and agnostics scored the lowest on agreeableness; atheists and humanists scored the highest on emotional stability. Findings suggest that degree of certainty in nonbelief may be important. |
| Galen and Kloet (2011)                                      | Empirical    | Differences in life satisfaction, emotional stability for R/S and nonbelievers                      | With 991 participants, researchers found evidence for a curvilinear relationship between certainty of beliefs (religious or atheist) and low certainty, such that people who were confidently religious or atheist reported greater life satisfaction and emotional stability than those who were unsurely religious or agnostic. This pattern suggests that confidence in one's worldview may be more important for mental health than religious beliefs themselves.  |
| Horning, Davis, Stirrat, and Cornwell (2011)                | Empirical    | Well-being group differences between nonbelieving and religious older adults                        | 134 nonbelieving (atheist and agnostic) older adults and R/S adults were compared on well-being, social support, locus of control, coping behaviors, and meaning in life. There were no significant group differences for well-being, satisfaction, or locus of control. R/S group scored higher on meaning in life and had more social supports. Nonbelievers scored higher on use of humor for coping.   |
| Lizardi and Gearing (2010)                                  | Nonempirical | Religious differences and suicide; literature review  | Literature review was conducted on peer-reviewed journals focusing on religion and suicide within Native American and African religions, Buddhists, as well as among atheists and agnostics. Conclude that more research is needed to determine whether there are differences in suicide risk.   |

(continued)

**Table 9. (continued)**

| Author and year                                    | Type         | Topics   | Findings and/or suggestions  |
|--|--------------|--|--|
| Mochon, Norton, and Ariely (2011)                  | Empirical    | Links between religiosity, nonbelief, and SWB                                      | With 6,465 participants, quantitatively replicated findings of a positive relation between religiousness and SWB, but this finding is complicated by strength of belief. Fervent religious believers have greater SWB, but those with weaker religious beliefs have lower SWB than those who do not subscribe to any religious beliefs—atheists and agnostics. Such a finding suggests that strength of belief (whether R/S or atheist) is more important to SWB than content of the belief. |
| Park, Edmondson, and Blank (2009)                  | Empirical    | Religious and nonreligious pathways to stress-related growth in cancer survivors   | 172 young to middle-aged cancer survivors were compared on the outcomes of using religious coping or secular coping to deal with their diagnosis and treatment. The religious coping pathway was a much stronger predictor in stress-related growth than the secular pathway.  |
| Toburen and Meier (2010)                           | Empirical    | Links between religiosity and anxiety  | Experimentally tested 62 undergraduate students, Christian and nonbelievers (atheist, agnostic, and "other"), on the impact God-related priming had on their anxiety during a complicated cognitive task. God-related priming caused a rise in anxiety but also higher persistence in completing a task. The same pattern of anxiety and persistence was found across Christians and nonbelievers.   |
| Tonigan, Miller, and Schermer (2002)               | Empirical    | Atheists, agnostics, and Alcoholics Anonymous (AA)                                 | Large-scale, longitudinal study assessed the differences between nonbelievers and R/S people in success of their AA treatment. No group differences were found in abstinence or drinking intensity, but R/S AA members were more likely to sustain their attendance at AA meetings than nonbelievers.  |
| Weber, Pargament, Kunik, Lomax, and Stanley (2012) | Nonempirical | Psychological distress among nonbelievers; literature review and call for research | 14 articles (mostly international or pre-2001) comparing nonbelievers and believers on psychological distress are reviewed. Greater certainty in one's belief system (R/S or atheist) is found to be linked to psychological health. Nonbelievers are found to have one well-documented source of stress: negative stigma. Recommendations for future research are provided.   |
| Whitley (2010)                                     | Nonempirical | Atheism and mental health; call for research                                       | Mental health literature has failed to examine atheism as an individual-exposure variable. Considering how important R/S beliefs are to processing the human condition, personhood, and suffering, investigation of how atheism relates to these experiences is critical.  |

(continued)

**Table 9. (continued)**

| Author and year  | Type         | Topics   | Findings and/or suggestions  |
|--|--------------|--|--|
| Counseling, therapy, and training<br>D'Andrea and Sprengrer (2007) | Nonempirical | Atheism issues in counseling; call for training                        | Counseling professionals must begin to address atheism within the broader multicultural competency training discourse. Counselors must learn to competently work with nonbelieving clients, while honoring differences and validating their experiences.   |
| Gregory, Pomerantz, Pettibone, and Segrist (2008)                  | Empirical    | Impact of therapists' R/S or atheist background on prospective clients | Participants were given five vignettes in which hypothetical psychologists (all the same) different only across R/S beliefs and told to pick a therapist. Participants were more likely to pick an R/S therapist than an atheist therapist, particularly when the participant was R/S himself or herself.  |
| Hwang (2008)   | Nonempirical | Atheist people with disabilities; call for research                    | R/S and health literature has failed to include atheist people. When clinicians work with atheist people with disabilities, they should be aware that clinical assessments related to "meaning" or "purpose" in life, for instance, may interpreted differently by nonbelievers. More research is needed, and R/S practitioners should check their biases about atheists.  |
| Magaldi-Dopman, Park-Taylor, and Ponterotto (2011)                 | Empirical    | Therapists' R/S or nonbelieving identities and clinical work           | A grounded theory study with 16 therapists from R/S and nonbelieving backgrounds. Results revealed that their identities interacted complexly with their clinical work, and their therapeutic training programs did not prepare them for dealing with R/S content in sessions. Suggest a need to explore therapist and client R/S biases and how these affect clinical work.   |
| Smith-Stoner (2007)  | Empirical    | End of life preferences for atheists; call for training                | A qualitative study with 88 atheists in palliative care revealed suggestions for clinicians working with this population. First, participants expressed a desire for clinicians to respect their nonbelief and not force prayer or references to higher powers; second, participants expressed deep desire to find meaning, maintain connections to important people, and appreciate the natural world through their dying experience. Authors suggest future research on this understudied topic. |

*Note.* Articles were drawn from the pool of 31 psychology articles. One relevant article included in this table, Galen (2009), is an empirical article from the magazine *Free Inquiry* and was not included in the overall content analysis. R/S = religious/spiritual; SWB = subjective well-being.

coping (Park et al., 2009), and one study found that nonbelievers who were firm in their disbelief in God fared better on many psychological outcomes than spiritual individuals who were uncertain of their beliefs (Galen, 2009). Nonempirical pieces on mental health and counseling were primarily (a) calls for better research on atheism and/or (b) calls for more clinical training to promote effective work with atheist clients.

## Discussion

This content analysis aimed to explore the methodological patterns, demographic features of samples, and topics of focus that were represented in the past 12 years of social science scholarship about atheism and atheist people. Findings from the study dramatically highlight the dearth of scholarship about atheism—with only 100 scholarly articles published about atheism from 2001 to 2012—as compared with research on R/S broadly or even R/S subgroups more specifically. These data underscore the near invisibility of nonbelieving people in academic research. However, our analysis also reveals that literature on atheism and the experiences of atheist people is continuing to grow—indeed, no articles were published in 2001, whereas 20 articles were published in 2012. Findings from this study highlight methodologies, populations, and topics that are understudied. Although mental health research has focused heavily on the benefits of R/S beliefs in recent years, links between dimensions of psychological well-being and distress remain largely unexplored for atheists; these data and their implications are outlined. Finally, areas for mental health professionals and counseling psychologists to forge new research and clinical directions are also suggested.

### *How Were the Studies Designed and Participants Recruited?*

Nonempirical studies comprised the majority (58%) of the scholarship reviewed in this study, with theoretical/conceptual pieces and editorials/commentaries as the most common type of nonempirical article. Empirical studies, making up 42% of the content, were primarily (88%) cross-sectional in design. Considering the wealth of empirical research about R/S in recent decades (e.g., Ano & Vasconcelles, 2004; Hackney & Sanders, 2003), the paucity of studies about atheism are glaring in comparison. Moreover, the type of empirical scholarship available should begin to diversify. Specifically, integration of longitudinal work into quantitative studies of atheism can begin to supplant cross-sectional, correlative studies by examining developmental processes, temporal relations, and testing the causal links between variables of interest. In addition, 74% of the empirical research used



quantitative methodologies; thus, utilizing qualitative or mixed method approaches may be critical for deepening the breadth of data and strengthening theory with atheist populations. Longitudinal and qualitative designs may be particularly salient for atheism research, as available literature suggests that process of religious deconversion to secularism is very individualized and often takes years to complete (Streib, Hood, Keller, Csoff, & Silver, 2009).

Regarding participant sampling, 52% of the studies used convenience sampling and 31% analyzed data from secondary sources (i.e., the general social survey). Of recruitment strategies utilized, Internet recruitment was the most common. Glaringly, more than 50% of the studies either did not provide any description of their recruitment process, or these descriptions were extremely unclear. Some of these omissions may be due to the use of secondary data analysis. Researchers may erroneously assume that if they are using secondary data, it is unimportant to specify how these participants were originally recruited. In addition, randomized sampling was used rarely, although such sampling strategies could be fruitful in the future to promote greater gender, racial, and social class diversity. Excessive reliance on convenience sampling may continue to garner “easy to reach” samples that are composed largely of White and middle class participants.

As a deliberate aside, it is important to note that atheist individuals were infrequently (2% of the studies) recruited from religious organizations. Although recruiting from religious or spiritual organizations for atheist people may at first seem counter-intuitive, utilizing such venues may be critical for reaching atheist people who are “less out” among family members and their communities. Most of the studies recruited from websites specific to atheist causes, atheist organizations, atheist events, or snowball sampling—all strategies that require participants to be, at least a little, open about their atheist identity. Considering that 59% of the studies used paper or online self-report surveys—which can be often completed at one’s leisure in the privacy of his or her home—limiting recruitment to individuals from atheist groups/communities seems unnecessary. There may be something unique about individuals who are affiliated with atheist groups and able to be “out” as nonbelievers. Thus, continuing to overlook less “out” atheists in empirical studies may paint the nonreligious as a more homogeneous and outspoken group than they actually are.

### *Who Is Represented in Empirical Studies?*

As a whole, findings from this study suggest that atheist individuals in empirical studies from the past decade tend to be composed of highly educated,

White respondents in their 40s. This finding aligns partially with available demographic data about atheists in the United States (Galen, 2009; Kosmin & Keysar, 2008). As presented in Table 4, the most underrepresented racial and ethnic groups were Asian Americans, Native Americans, and multiracial individuals. Unfortunately, many studies supplied very poor demographic descriptions of their samples—specifically, only 48% of the studies reported any data on education level, 2% reported data on sexual orientation, 19% reported any data on social class, 26% provided a mean age of their sample, and 40% indicated racial composition of their samples. Considering the paucity of research with atheist individuals, it is alarming that extant studies do not provide more comprehensive descriptions of their participants. Without detailed demographic information, little can be said about the generalizability of the findings and challenges to replicating findings with subgroups of the population will persist.

For studies analyzing the R/S affiliations of study participants alongside atheist participants, Protestant Christians were by far the most common (62%), followed by Catholics (29%). Very few studies compared atheist participants with R/S participants not from Judeo-Christian faiths (e.g., Buddhist, Muslim). Such a finding suggests that almost any comparisons made between atheists and “religious people” have involved participants who identify as Christian. A heavy focus on the experiences of those in the Judeo-Christian majority is a common critique within the broader R/S literatures; further, such a focus continues to negate the experiences of individuals from marginalized or minority R/S groups and atheists (Kier & Davenport, 2004; E. L. Worthington et al., 1996). It seems peculiar that atheism-focused researchers, cognizant of marginalization, would continue to perpetuate such bias. Indeed, there may be notable differences or similarities between nonreligious people and those from faiths that are not Judeo-Christian in nature, but this topic remains unexamined.

Another critique of studies that compared atheist individuals with R/S people was the fuzziness in the assessment of R/S identification. Eighteen percent of the studies included in this content analysis did not specify how belief was assessed, or looked at church attendance as a determinant of religious belief. Considering that many individuals may attend religious services out of familial or social obligation, but not faith (Barna Research Group, 1999), using church attendance as an indicator of R/S beliefs seems problematic.

Last, in some studies, atheist people were permitted to further specify their identities (e.g., new atheist, secular humanist) and were then compared with one another, or, atheists were compared with individuals who identified with other nonreligious descriptors (agnostic, unchurched). As discussed

previously, some scholars have claimed that the term *atheist* captures a broad range of nonbelievers, from people who (a) firmly reject belief in a God/gods (e.g., new atheists) to those who (b) are more agnostic and unsure of the existence of a God/gods (Martin, 2007). When there is already widespread confusion and a lack of uniformity regarding definitions, labels, and classification systems of “nonbelievers”—few interpretable results can be drawn from studies comparing atheist subgroups.

### *What Topics Were Addressed?*

A few notable patterns emerged from the review of topics in both empirical and nonempirical literature. First, the top three most common topics assessed in the empirical studies were attitudes toward atheists, comparisons of R/S people with atheists, and psychological well-being, followed by stereotypes/stigma, bias in treatment, identity development, and psychological distress. Considering that multiple topics could be selected per article, it is clear that several of these themes occurred within single articles (e.g., an article addressing “attitudes toward atheists” would also likely include the themes of “stereotypes/stigma” and “bias in treatment”). Most empirical studies about atheism or atheist people in the past 10 years have focused on (a) how atheist people are similar or dissimilar to R/S (primarily Christian) people, (b) how the broader society feels about atheist individuals, and (c) how belief systems (R/S or atheist) affect mental health. Although these subjects are important to address, the narrow scope of these topics also suggests that there may be a bias regarding what topics researchers perceive as the most relevant to examine. For example, few studies looked at relationships, parenting and family dynamics, workplace climate, or developmental issues. Only a small handful of studies focused explicitly on counseling, therapy, or training issues—a finding that is especially disheartening in light of the (sparse) extant research that suggests that therapists are unprepared to treat atheism as a serious element of client diversity in counseling (D’Andrea & Sprenger, 2007).

Alarming, no empirical studies attended to racial and ethnic minority issues, and only one study examined lesbian, gay, bisexual, transgender, queer (LGBTQ) issues—findings that align closely with the homogeneous demographic composition found in the empirical studies reviewed. Lack of focus on LGBTQ issues was particularly surprising, in that some theoretical work has begun to link the coming out processes of sexual minority and atheist people (Brewster, 2013; Cimino & Smith, 2011; Silverman, 2003; Siner, 2011). Such general inattention to issues of diversity within atheism research inadvertently suggests that atheist identity exists in a vacuum in which no other personal identities intersect or inform lived experiences. Moreover,

topics of grief, end of life, and existential issues were rarely addressed empirically—although, it is commonly assumed that individuals turn to their R/S belief systems when coping with elements of the human condition (Whitley, 2010). Why are researchers not curious about how those *without* a belief in God/gods handle such situations? Undoubtedly, the narrow scope of these topics does not reflect the full range of atheist individuals' life experiences.

Patterns within the nonempirical literature paralleled those of the empirical studies, with a few notable divergences. *R/S compared with atheism* and *attitudes toward atheists*, both appeared as top themes; however, for nonempirical articles, *defining atheism*, *bias in treatment*, *moral issues*, and *stereotypes and stigma*, also emerged as top themes while psychological well-being did not. This suggests that, for nonempirical articles, there has been a much greater focus on atheism within a broader sociopolitical framework. Such a trend can be further contextualized by the academic disciplines of the journals. Indeed, most nonempirical articles (e.g., theoretical/conceptual pieces) came from journals that were from the fields of religion and philosophy. As such, the primary theorizing about atheism—what defines atheism? who is atheist?—has not typically been spearheaded by psychologists but, instead, by theologians and activists. This pattern in nonempirical studies is alarming, considering that a majority of the empirical studies about atheism came from psychological journals. In essence, our field is testing models and examining important psychosocial and mental health variables with a population for whom we have spent little time operationalizing theoretical constructs for the purposes of psychological study. Considering counseling psychology's rich history of construct refinement and measurement (R. L. Worthington & Whittaker, 2006), as well as identity development and social justice work (Moradi et al., 2009), beginning to theorize religious deconversion, nonbelief broadly, and atheism specifically, is tantamount to our mission as a field.

### *Implications for Mental Health and Counseling Psychology*

Although decades of research have pointed to clear positive associations between levels of R/S and mental health (e.g., W. R. Miller & Thoresen, 2003), findings from the present content analysis suggest that these results may have more nuance than acknowledged previously. Indeed, the veracity of such simple claims—more religion is good, and less religion is bad—may be troubled by recent findings from parallel studies that include atheist participants alongside R/S participants (Weber et al., 2012). Although small in number, the few studies assessing group differences on dimensions of psychological well-being and distress that have included both R/S and nonbelievers (e.g., participants who firmly identify as atheist or agnostic, rather

than participants who are “less R/S” or “do not attend church”) have not generally supported such a clear relationship. Recent quantitative studies report no difference between atheists and R/S people on depressive symptoms, well-being, life satisfaction, locus of control, empathy, or ability to abstain from alcohol (Baker & Cruickshank, 2009; Caldwell-Harris et al., 2011; Galen & Kloet, 2011; Horning et al., 2011; Mochon et al., 2011). Such findings parallel those reported in international samples in which atheists either score very similarly to R/S participants on dimensions of psychological well-being or distress, or report *less* distress than R/S participants (for a review, see Weber et al., 2012).

Most notably, three large-scale studies have begun to tease apart some of the common findings about belief and mental health. Such studies found a curvilinear relationship between strength of beliefs (either religious conviction *or* commitment to atheism and nonbelief) and mental health. In these studies, participants who were either confidently religious or firmly atheist had higher levels of well-being than those who were less certain of their religious faiths or were unsurely agnostic (Galen & Kloet, 2011; Mochon et al., 2011). In a third study, by Galen (2009), various “degrees” of nonreligious—from spiritual but not religious, to agnostic, to firmly atheist—were compared and similar patterns emerged. Participants who were “less certain” of their nonreligious beliefs (e.g., spiritual and/or agnostic) scored lower on life satisfaction and emotional stability than those who were firmly atheist. These patterns suggest that confidence in one’s beliefs and worldviews may be much more important for mental health than the content of these beliefs. Taken together, the content analysis revealed that, in terms of psychological health, those who are firmly atheist look quite similar to R/S individuals who are strong in their faiths.

Glaringly few studies reviewed in the present study focused on issues of psychotherapy or training counseling professionals to work with atheists. The handful of articles that did begin to address this topic tended to lament the lack of research on atheism within psychology and called for future studies to redress this void in the multicultural scholarship (e.g., D’Andrea & Sprenger, 2007; Gregory, Pomerantz, Pettibone, & Segrist, 2008; Hwang, 2008; Magaldi-Dopman, Park-Taylor, & Ponterotto, 2011). As highlighted previously, atheists are a marginalized group and often face severe sociocultural stigma and discrimination within the United States (e.g., Swan & Heesacker, 2012); being able to process such events with a well-trained mental health professional could be extremely beneficial for many nonbelievers. However, unless graduate training programs begin to actively address atheism as a valid aspect of multiculturalism and diversity, many clinicians will not be given the opportunity to explore and understand their biases about this group

(Magaldi-Dopman et al., 2011). Specifically, counselors should not endorse the stereotype that atheist clients lack morality because they do not hold religious or spiritual beliefs; indeed, moral beliefs can develop from a wide array of sources outside religious doctrine.

To work competently with atheist clients, D'Andrea and Sprenger (2007) recommended that counselors honor differences between R/S beliefs and atheism (but also avoid making assumptions about how nonbelieving people see the world), validate experiences of oppression, and focus on personal responsibility in therapeutic interventions. Counselors should avoid using reassurances that may typically soothe R/S clients, such as "things happen for a reason" or "events are all part of a larger plan" as such statements stem from R/S faith. Atheist people tend to believe that they are responsible for creating meaning and purpose in their lives; therapists may benefit from using an existential-humanistic or rational emotive behavior therapy framework in clinical work (Ellis, 1980).

### *Limitations and Future Directions*

Results of this content analysis should be interpreted in acknowledgment of a few limitations. First, the articles analyzed focused only on atheism as discussed from a U.S. framework and/or studies that were composed primarily of participants who resided in the United States. This decision was made on two counts: (a) Religiosity and atheism may be viewed differently across countries and (b) atheist people in the United States are both a minority and a marginalized group. In other countries, where rates of atheist identification are higher, nonbelief is less stigmatized (European Commission, 2005). Considering these issues, we deemed that experiences of atheists internationally may not be parallel to those of nonbelievers in the United States. However, a review of atheist literature from throughout the world could provide interesting cross-cultural information that may shed light on atheist or R/S identity development and relevant sociopolitical discourse.

A second limitation of the study is linked back to larger scholarly tensions surrounding the definitions and categorizations of atheist people (Bullivant, 2013). In deciding whether articles were relevant to atheism (and thus coded in this analysis), we made no assumptions about participant identification or sample composition. As such, if a study's sample was composed of Christians, Muslims, and "nonchurch attenders," we would *not* assume that nonchurch attenders were atheist. However, it is possible that some studies with unclear sample descriptions did actually contain atheist-identified people and were filtered out of the content analysis. We strongly encourage authors to provide greater details about the identifications of "nonreligious" people in their

samples. One cannot assume that engaging in religious services or a spiritual community is synonymous with having R/S beliefs; conversely, someone who claims to be nonreligious may not identify as atheist. Last, if and when a large enough “nonreligious” sample becomes available, it will be important for psychologists to begin to tease apart the nuances in identification between the various nonbelieving groups (e.g., atheists, hard atheists, agnostics, secular humanists, spiritual but not religious).

A number of vexations in conducting content analyses, pointedly discussed by Huang and colleagues (2010) in their review of literature about LGB people of color, also surfaced in this study. Many studies did not describe data collection methods, sampling procedures, location of the sample, gender, age, sexual orientation, race or ethnicity, education level, or social class. For those studies that did report some of this information, level of detail provided was often inconsistent or insufficient (e.g., age might be defined as “over 40 years old”). As a field, we must make sure that authors report and reviewers/editors request full descriptions of methodology and sample compositions.

Taken together, this content analysis served to deepen knowledge of the past decade of academic scholarship about atheism and atheist people in the United States. By outlining methodologies, populations, and topics of focus that were discussed (and not discussed) in the conceptual and empirical scholarship, we hope to provide future directions for theory and research with atheist people. In reviewing literature on links between atheism, R/S, and mental health, we hope that this analysis has clarified some of the complexities in findings about psychological well-being and systems of beliefs. We also anticipate that this compilation and review of recent literature will begin to address an important void in multicultural scholarship and centralize the experiences of nonbelieving people in the United States. Findings from this study can serve to enrich the vast body of R/S literature by providing more information about the unique experiences of those who do not identify as religious, spiritual, or believers. Finally, this content analysis can provide practitioners, scholars, and educators with a springboard to gain the background necessary to work with atheist people.

### **Declaration of Conflicting Interests**

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

### **Funding**

The author(s) received no financial support for the research, authorship, and/or publication of this article.



## Notes

1. We acknowledge that there are differences between religious and spiritual beliefs, but use this terminology and abbreviation purposefully to highlight the conflation of these terms in extant psychological research (Zinnbauer et al., 1997).
2. As aptly outlined by Hwang, Hammer, and Cragun (2011), studies looking at the relationship between religiosity/spirituality (R/S) and health usually rely on self-report measures of R/S that use Likert-type scales ranging from *low* to *high* levels of R/S. They argue further that although there may be some truth that higher scores on these measures could indicate greater levels of R/S, we cannot infer by extension that low scores on measures of religiosity or spirituality can be automatically reverse-coded to indicate greater tendency toward atheism or secularity.
3. For comparison, an EBSCOhost search of peer-reviewed R/S-related articles published between 2001 and 2012 was also conducted (search terms used: *relig\* or spirit\**). The search yielded 132,851 articles. Although a careful inspection of each of these articles would have significantly culled this number, it is still clear that a vast amount of scholarship on R/S was published in the last decade.
4. One article from the original 450 could not be located.
5. For readability, all percentages were rounded to whole numbers. Unrounded percentages are presented in the tables.

## References

- Ano, G. G., & Vasconcelles, E. B. (2004). Religious coping and psychological adjustment to stress: A meta-analysis. *Journal of Clinical Psychology, 61*, 461-480. doi:10.1001/jclp.20049
- Baggini, J. (2003). *Atheism: A short introduction*. New York, NY: Oxford University Press.
- Bainbridge, W. S. (2005). Atheism. *Interdisciplinary Journal of Research on Religion, 1*, 11-24.
- Baker, P., & Cruickshank, J. (2009). I am happy in my faith: The influence of religious affiliation, saliency, and practice on depressive symptoms and treatment preference. *Mental Health, Religion & Culture, 12*, 339-357.
- Barna Research Group. (1999). *Atheists and agnostics infiltrating Christian churches*. Available from <http://www.barna.org>
- Beit-Hallahmi, B., & Argyle, M. (1997). *The psychology of religious behavior, belief and experience*. London, England: Routledge.
- Bergin, A. (1980). Psychotherapy and religious values. *Journal of Consulting and Clinical Psychology, 48*, 95-105.
- Brewster, M. E. (2013). Atheism, gender, and sexuality. In S. Bullivant & M. Ruse (Eds.), *The Oxford handbook of atheism* (pp. 511-524). Oxford, UK: Oxford University Press.
- Brewster, M. E. (2014). *Atheists in America*. New York, NY: Columbia University Press.
- Bullivant, S. (2013). Defining "atheism." In S. Bullivant & M. Ruse (Eds.), *The Oxford handbook of atheism* (pp. 11-21). Oxford, UK: Oxford University Press.



- Caldwell-Harris, C. L., Wilson, A. L., LoTempio, E., & Beit-Hallahmi, B. (2011). Exploring the atheist personality: Well-being, awe, and magical thinking in atheists, Buddhists, and Christians. *Mental Health, Religion & Culture, 14*, 659-672.
- Christenfeld, N. J., Sloan, R. P., Carroll, D., & Greenland, S. (2004). Risk factors, confounding, and the illusion of statistical control. *Psychosomatic Medicine, 66*, 868-875. doi:10.1097/01.psy.0000140008.70959.41
- Cimino, R., & Smith, C. (2011). The new atheism and the formation of the imagined secularist community. *Journal of Media and Religion, 10*, 24-38. doi:10.1080/15348423.2011.549391
- Cragun, R. T., Kosmin, B., Keysar, A., Hammer, J. H., & Nielsen, M. (2012). On the receiving end: Discrimination toward the non-religious in the United States. *Journal of Contemporary Religion, 27*, 105-127.
- D'Andrea, L. M., & Sprenger, J. (2007). Atheism and nonspirituality as diversity issues in counseling. *Counseling & Values, 51*, 149-158. doi:10.1002/j.2161-007X.2007.tb00072.x
- Doward, J. (2006). Atheists top book charts by deconstructing God: In the wake of one religious sensation, The Da Vinci Code, publishers are scoring a second success with sceptics. *The Guardian, The Observer*. Retrieved from <http://www.guardian.co.uk/uk/2006/oct/29/books.religion>
- Downey, M. (2004). Discrimination against the facts atheists. *Free Inquiry, 24*, 41-43.
- Edgell, P., Gerteis, J., & Hartmann, D. (2006). Atheists as "other": Moral boundaries and cultural membership in American society. *American Sociological Review, 71*, 211-234. doi:10.1177/000312240607100203
- Ellis, A. (1971). *The case against religion: A psychotherapist's view*. New York, NY: Institute for Rational Living.
- Ellis, A. (1980). Psychotherapy and atheistic values: A response to A.E. Bergin's "Psychotherapy and religious values. *Journal of Consulting and Clinical Psychology, 48*, 635-639.
- European Commission. (2005). *The numbers of nonbelievers growing in Europe*. Retrieved from <http://humanistfederation.eu/humanism-secularism/our-numbers-are-large-and-growing/>
- Galen, L. W. (2009). Profiles of the godless. *Free Inquiry, 29*, 41-45.
- Galen, L. W., & Kloet, J. D. (2011). Mental well-being in the religious and the non-religious: Evidence for a curvilinear relationship. *Mental Health, Religion & Culture, 14*, 673-689.
- Galen, L. W., Smith, C. M., Knapp, N., & Wyngarden, N. (2011). Perceptions of religious and nonreligious targets: Exploring the effects of perceivers' religious fundamentalism. *Journal of Applied Social Psychology, 41*, 2123-2143.
- Gallup, G., Jr., & Lindsay, D. M. (1999). *Surveying the religious landscape: Trends in U.S. beliefs*. Harrisburg, PA: Morehouse.
- Gervais, W. M. (2011). Finding the faithless: Perceived atheist prevalence reduces anti-atheist prejudice. *Personality and Social Psychology Bulletin, 37*, 543-556. doi:10.1177/0146167211399583
- Gervais, W. M., Shariff, A. F., & Norenzayan, A. (2011). Do you believe in atheists? Distrust is central to anti-atheist prejudice. *Journal of Personal and Social Psychology, 101*, 1189-1206.

- Grayling, A. C. (2013). *The God argument: The case against religion and for humanism*. New York, NY: Bloomsbury.
- Greenfield, E. A., Vaillant, G. E., & Marks, N. F. (2009). Do formal religious participation and spiritual perceptions have independent linkages with diverse dimensions of psychological well-being? *Journal of Health and Social Behavior*, 50, 196-212. doi:10.1177/002214650905000206
- Gregory, C., Pomerantz, A. M., Pettibone, J. C., & Segrist, D. J. (2008). The effect of psychologists' disclosure of personal religious background on prospective clients. *Mental Health, Religion and Culture*, 11, 369-373.
- Hackney, C. H., & Sanders, G. S. (2003). Religiosity and mental health: A meta-analysis of recent studies. *Journal for the Scientific Study of Religion*, 42, 43-55. doi:10.1111/1468-5906.t01-100160
- Hall, D. E., Meador, K. G., & Koenig, H. G. (2008). Measuring religiousness in health research: Review and critique. *Journal of Religion & Health*, 47, 134-163. doi:10.1007/s10943-008-9165-2
- Hill, P. C., & Pargament, K. I. (2003). Advances in the conceptualization and measurement of religion and spirituality. *American Psychologist*, 58, 64-74. doi:10.1037/0003-066X.58.1.64
- Hoffer, E. (1951). *The true believer*. New York, NY: Harper.
- Horney, K. (1965). *Collected writings*. New York, NY: W. W. Norton.
- Horning, S. M., Davis, H. P., Stirrat, M., & Cornwell, R. E. (2011). Atheistic, agnostic, and religious older adults on well-being and coping behaviors. *Journal of Aging Studies*, 25, 177-188.
- Huang, Y. P., Brewster, M. E., Moradi, B., Goodman, M. B., Wiseman, M. C., & Martin, A. (2010). Content analysis of literature about LGB people of color: 1998-2007. *The Counseling Psychologist*, 38, 363-396. doi:10.1177/0011000009335255
- Hunsberger, B. E., & Altemeyer, B. (2006). *Atheists: A groundbreaking study of America's nonbelievers*. New York, NY: Prometheus.
- Hwang, K. (2008). Atheists with disabilities: A neglected minority in religion and rehabilitation research. *Journal of Religion, Disability & Health*, 12, 186-192.
- Hwang, K., Hammer, J., & Cragun, R. (2011). Extending religion-health research to secular minorities: Issues and concerns. *Journal of Religion & Health*, 50, 608-622. doi:10.1007/s10943-009-9296-0
- Jones, J. M. (2006, October 3). *Six in 10 Americans think U.S. ready for a female president: Vast majority think country would not accept atheist or gay president*. Retrieved from <http://www.gallup.com/poll/24832/Six-Americans-Think-US-Ready-Female-President.aspx>
- Jones, J. M. (2012, June 21). *Atheists, Muslims see most bias as presidential candidates: Two-thirds would vote for gay or lesbian*. Retrieved from <http://www.gallup.com/poll/155285/Atheists-Muslims-Bias-Presidential-Candidates.aspx>
- Kier, K. J., & Davenport, D. D. (2004). Unaddressed problems in the study of spirituality and health. *American Psychologist*, 59, 53-54.
- Kosmin, B. A., & Keysar, A. (2008). *American religious identification survey summary report*. Retrieved from [http://www.americanreligionsurvey.org/reports/ARIS\\_Report\\_2008.pdf](http://www.americanreligionsurvey.org/reports/ARIS_Report_2008.pdf)

- Lizardi, D., & Gearing, R. E. (2010). Religion and suicide: Buddhism, Native American and African religions, atheism, and agnosticism. *Journal of Religion and Health, 49*, 377-384.
- Magaldi-Dopman, D., Park-Taylor, J., & Ponterotto, J. G. (2011). Psychotherapists' spiritual, religious, atheist, or agnostic identity and their practice of psychotherapy: A grounded theory study. *Psychotherapy Research, 21*, 286-303.
- Martin, M. (2007). *The Cambridge companion to atheism*. Boston: Cambridge University Press.
- McGowan, D. (2013). *Atheism for dummies*. New York, NY: Wiley.
- McGrath, A. (2004). *The twilight of atheism: The rise and fall of disbelief in the modern world*. New York, NY: Doubleday.
- McMinn, M. R., Hathaway, W. L., Woods, S. W., & Snow, K. N. (2009). What American Psychological Association leaders have to say about Psychology of Religion and Spirituality. *Psychology of Religion and Spirituality, 1*, 3-13.
- Meyer, I. H. (2003). Prejudice, social stress, and mental health in lesbian, gay, and bisexual populations: Conceptual issues and research evidence. *Psychological Bulletin, 129*, 674-697. doi:10.1037/0033-2909.129.5.674
- Michael, S. T., Crowther, M. R., Schmid, B., & Allen, R. S. (2003). Widowhood and spirituality: Coping responses to bereavement. *Journal of Women & Aging, 15*, 145-165. doi:10.1300/J074v15n02\_09
- Miller, J. L., & House, R. M. (2001). Counseling gay, lesbian, and bisexual clients. In D. Capuzzi & D. R., Gross (Eds.), *Introduction to the counseling profession* (pp. 386-414). Boston, MA: Allyn & Bacon.
- Miller, W. R., & Thoresen, C. E. (2003). Spirituality, religion, and health. *American Psychologist, 58*, 24-35. doi:10.1037/0003-066X.58.1.24
- Mochon, D., Norton, M. I., & Ariely, D. (2011). Who benefits from religion? *Social Indicators Research, 101*, 1-15.
- Mooney, C. (2010, March 22). *My free inquiry interview: Why we need religious moderates*. Retrieved from <http://blogs.discovermagazine.com/intersection/2010/03/22/my-free-inquiry-interview-why-we-need-religious-moderates/#.UxqZLfSwKbl>
- Moradi, B., Mohr, J. J., Worthington, R. L., & Fassinger, R. E. (2009). Counseling psychology research on sexual (orientation) minority issues: Conceptual and methodological challenges and opportunities. *Journal of Counseling Psychology, 56*, 5. doi:10.1037/a0014572
- Park, C. L., Edmondson, D., & Blank, T. O. (2009). Religious and Non-Religious Pathways to Stress-Related Growth in Cancer Survivors. *Applied Psychology: Health and Well-Being, 1*, 321-335. doi:10.1111/j.1758-0854.2009.01009.x
- Seeman, T. E., Dubin, L. F., & Seeman, M. (2003). Religiosity/spirituality and health: A critical review of the evidence for biological pathways. *American Psychologist, 58*, 53. doi:10.1037/0003-066X.58.1.53
- Silverman, D. (2003). *Coming Out—Atheism: The Other Closet*. Retrieved from <http://atheists.org/page.aspx?pid=329>
- Siner, S. E. (2011). A theory of atheist student identity development. *Journal of the Indiana University Student Personnel Association, 14*-21.

- Smith-Stoner, M. (2007). End-of-life preferences for atheists. *Journal of Palliative Medicine*, 10, 923-928.
- Stenger, V. J. (2009). *The new atheism*. New York, NY: Prometheus Books.
- Streib, H., Hood, R., Keller, B., Csoff, R. M., & Silver, S. (2009). *Deconversion: Qualitative and quantitative results from cross-cultural research in Germany and the United States of America*. Göttingen, Germany: Vandenhoeck & Ruprecht.
- Swan, L. K., & Heesacker, M. (2012). Anti-atheist bias in the United States: Testing two critical assumptions. *Secularism and Nonreligion*, 1, 32-42.
- Thoits, P. A. (2013). Self, identity, stress, and mental health. In C. S. Aneshensel, J. C. Phelan, & A. Bierman (Eds.), *Handbook of the sociology of mental health* (pp. 357-377). The Netherlands: Springer.
- Toburen, T., & Meier, B. P. (2010). Priming God-related concepts increases anxiety and task persistence. *Journal of Social and Clinical Psychology*, 29, 127-143.
- Tonigan, J. S., Miller, W. R., & Schermer, C. (2002). Atheists, agnostics and alcoholics anonymous. *Journal of Studies on Alcohol and Drugs*, 63, 534-541.
- U.S. Census Bureau, U.S. Department of Commerce. (2011). *Race in the United States*. Retrieved from <http://www.census.gov/population/race/>
- Weber, S. R., Pargament, K. I., Kunik, M. E., Lomax II, J. W., & Stanley, M. A. (2012). Psychological distress among religious nonbelievers: A systematic review. *Journal of Religion and Health*, 51, 72-86. doi:10.1007/s10943-011-9541-1
- Weinrach, S. G., & Thomas, K. R. (1996). The counseling profession's commitment to diversity-sensitive counseling: A critical reassessment. *Journal of Counseling & Development*, 74, 472-477. doi:10.1002/j.1556-6676.1996.tb01895.x
- Whitley, R. (2010). Atheism and mental health. *Harvard Review of Psychiatry*, 18, 190-194. doi:10.3109/10673221003747674
- Worthington, E. L., Kuru, T. A., McCullough, M. E., & Sandage, S. J. (1996). Empirical research on religion and psychotherapeutic processes and outcomes: A 10-year review and research prospectus. *Psychological Bulletin*, 119, 448-487.
- Worthington, R. L., & Whittaker, T. A. (2006). Scale development research a content analysis and recommendations for best practices. *The Counseling Psychologist*, 34, 806-838.
- Zinnbauer, B. J., Pargament, K. I., Cole, B., Rye, M. S., Butter, E. M., Belavich, T. G., & Kadar, J. L. (1997). Religion and spirituality: Unfuzzifying the fuzzy. *Journal for the Scientific Study of Religion*, 36, 549-564.
- Zuckerman, P. (2007). Atheism: Contemporary numbers and patterns. In M. Martin (Ed.), *The Cambridge companion to atheism* (pp. 47-65). doi:10.1017/CCOL0521842700.004

## Author Biographies

**Melanie Elyse Brewster** is an Assistant Professor of Psychology and Education at Teachers College, Columbia University. She received her Ph.D in Counseling Psychology from the University of Florida. Her scholarly interests are rooted in the mental health correlates of stigmatization and marginalization for queer and nonreligious populations in the United States.

**Matthew Robinson** is a doctoral candidate in the Counseling Psychology program at Teachers College, Columbia University. He received his master's degree in counseling psychology from the University of Kansas. His scholarly interests include LGB parenting and families, minority stress among individuals marginalized by sexual orientation and gender identities, identity intersectionality, and complex trauma including how multicultural variables affect trauma and recovery.

**Riddhi Sandil** is a Lecturer and Ed.M. Program Coordinator in the Department of Counseling and Clinical Psychology at Teachers College, Columbia University. She received her Ph.D. in Counseling Psychology from the University of Iowa and is a Licensed Psychologist. Her scholarly interests include counseling expectations of racial and ethnic minorities (in particular South Asian Women and South Asian sexual minorities), complex trauma and its impact on women's well-being and minority stress.

**Jessica Esposito** is a third year doctoral student in the Counseling Psychology program at Teachers College, Columbia University. She received her bachelor's degree in Psychology and Fine Arts from Stonehill College in 2008 and earned her master's degree in Mental Health Counseling from Boston College in 2011. As the research director of the Marginalization, Mental Health, and Empowerment Team, Jessica's research focuses on minority stress among individuals with chronic health conditions, HIV/AIDS, disability, religiosity/atheism, and LGBTQ issues.

**Elizabeth Geiger** is currently a masters student in the psychological counseling program at Teachers College, Columbia University and a member of the Marginalization, Mental Health, and Empowerment Team. She graduated from Muhlenberg College with a focus in psychology and woman studies. Her research interests consist of intersectionality of personal identities and mental health, learning disabilities, and feminist therapy.