

Saroglou, V. (2014). **Introduction: Studying religion in personality and social psychology.** In V. Saroglou (Ed.), *Religion, personality, and social behavior* (pp. 1-28). New York, NY: Psychology Press.

1 Introduction

Studying Religion in Personality and Social Psychology

Vassilis Saroglou

For centuries, even thousands of years, within each society, individuals have differed from one another in attitudes and behavior about religion. Some have been very religious, some moderately so, whereas others are not interested in religion at all or may oppose it. Additionally, within believers and non-believers, there have been different ways of expressing positive or negative attitudes towards religion. From a *personality and individual differences* psychological perspective, this raises at least two questions. First, why are there individual differences in religious attitudes and behaviors (referred to as religiousness)? Second, do religious attitudes and behaviors reflect and influence cognitions, emotions, and behaviors at the intrapersonal, interpersonal, and social levels? In other words, what is the psychological relevance—determinants, correlates, and outcomes—of religiousness and its forms?

Similarly, *social psychology* is interested in understanding the situational factors that may have an impact on individuals' religious attitudes and behaviors. How personal experiences (e.g., life events), and social events (e.g., 11/9 terrorist attacks) may impact on religious attitudes and behaviors, at personal and group levels. Can researchers understand such effects by focusing on fundamental psychological processes studied experimentally in the laboratory? Also, social psychology is interested in whether religion (religious ideas, texts, feelings, symbols, images, figures, and groups) has an influence on people's cognitions, emotions, and acts relative to other, non-religious, domains. And is this influence relevant to some, many, or all domains of human behavior? As shown in this volume, these domains comprise intra-individual functioning, interpersonal and intergroup relations, morality, prosocial and anti-social behavior, sexuality and family, political, economic, and work-related behavior, as well as social processes involved in mental health and human development.

The two approaches (i.e., personality and social psychology) are in *interaction*, both theoretically and empirically. Overall, persons behave in contexts; and situations impact human behavior but not always similarly for all people (Leary & Hoyle, 2009; Rhodewalt, 2008). In

2 *Vassilis Saroglou*

particular, predictors or outcomes of religiousness may be moderated by, if not fully depend on, situational factors. For instance, religiousness's role with regard to prosocial attitudes may depend on the type of the target person (Blogowska & Saroglou, 2011). Similarly, the impact of religious ideas on social behavior (e.g., submission or rigid morality) may not be present in all persons but only among those with specific individual dispositions (Saroglou, Corneille, & Van Cappellen, 2009; Van Pachterbeke, Freyer, & Saroglou, 2011).

Research on the personality and social psychology of religion **is ongoing** (Batson, Schoenrade, & Ventis, 1993; Beit-Hallahmi & Argyle, 1997). However, in the last 15 years, there has been a substantial increase of interest and investment in such research. Examples are the publication of special issues on religion in key personality, social, and cultural psychology journals (Baumeister, 2002; Emmons & McCullough, 1999; Saroglou & Cohen, 2011; Sedikides, 2010), the inclusion of chapters on religion and personality or culture in reference books (Ashton, 2007; Atran, 2007; Emmons, Barrett, & Schnitker, 2008), and, since 2009, the organization of pre-conferences on the psychology of religion and spirituality at the Society for Personality and Social Psychology annual meetings.

Moreover, as depicted in Figure 1.1, the number of published articles on religion and spirituality in journals listed in PsycINFO and whose title includes “personality” or “social psychology” has increased from 1990 to 2011. Whereas the number of articles that focus specifically on these topics (on titles) follow the more general pattern of increase in the total number of articles published in these journals, the number of articles that integrate religion/spirituality somehow in the study (in abstracts) has increased more than the total number of articles published in these journals. In 2010–2011, the number of articles that included religion/spirituality in the abstract was three times higher than in the early 1990s. Interestingly, the shape of the increase of articles integrating religion parallels the one of articles integrating political issues.

This volume aims to offer an integrated, theory-based, and systematic overview of this recently accumulated empirical research. The present introductory chapter includes five sections corresponding to five objectives. First, operational psychological definitions of religion and religiousness are provided through the description of their basic components/dimensions. Second, the “varieties of religious experiences” (forms of religiousness), to refer here to William James' seminal book (1985 [1902]), are presented by selecting key forms that reflect specific psychological processes. Third, the reader is briefly introduced to methodological issues, mainly research methods, ways of measuring religion as independent variable in experiments, and explicit, but also implicit, measures of individual religiousness. Fourth, issues of occasional misunderstanding related to the evaluation of findings from the social

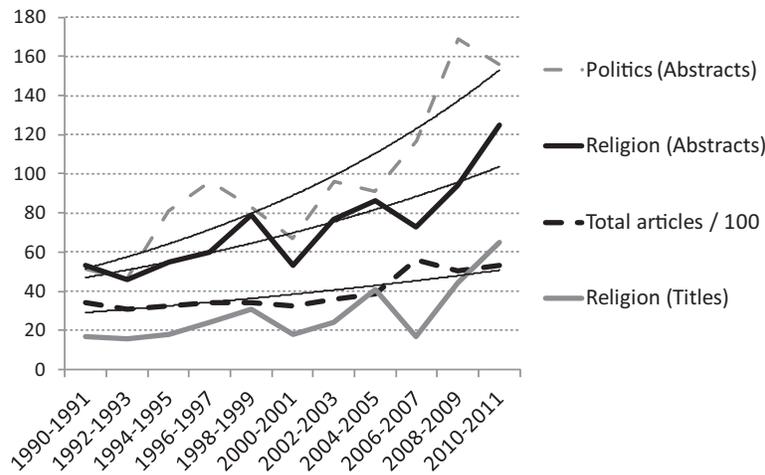


Figure 1.1 Number of articles on religion and spirituality, comparatively to the number of articles on politics and the increase of total number of articles, all published in personality and social psychology journals (1990–2011).

Note. Articles on religion were identified through the formula “relig* or spiritual* or God or prayer” (in title or abstract) and journals including in their title “personality” or “social psychology” in the PsycINFO database. Articles in politics were identified through “politic*” in abstract in the same journals. The total number of articles published in these journals was divided by 100, to facilitate comparison of tendency curves. The latter are provided, from top to down, for articles in politics (abstracts) and articles in religion (abstracts and titles).

psychological research on religion are discussed: objectivity, reductionism, religion’s causal status, and generalizability. Finally, the chapter closes with a brief overview of the volume’s structure and chapters.

Defining Religion, Religiousness, and their Dimensions

Throughout the history of the psychological study of religion there has been a tension between an emphasis on the *individual* dimension of the connection with what a person perceives as a transcendent entity and the acknowledgment of the *social* dimension of a religious culture (i.e., collective beliefs, rituals, and norms referring to what a group perceives as a transcendent entity). It is legitimate today to acknowledge a relative independence between these two dimensions. People may experience and express their religious attitudes—positive or negative ones—somehow independently from their own or any religious culture (Flanagan & Jupp, 2007). Yet, people deal with religious beliefs, experiences, values, and communities that have been socially shaped and legitimated. Thus, the individual and social dimensions are related (e.g., Wolf, 2005). More than the two-thirds of the world population consist of believers who

4 Vassilis Saroglou

report belonging to established religious traditions and groups (Barrett, 2001).

Religion

I define *religion* as the co-presence of beliefs, ritualized experiences, norms, and group that refer to what people perceive to be a transcendent to humans entity. This definition is sufficiently large to include both established and new religions; forms that are perceived as positive (e.g., recognized religions) or negative (e.g., detrimental cults, Satanism); and traditions regarded as theistic religions (e.g., the three monotheisms), non-theistic religions, or even non-religions (e.g., Buddhism, franc-masonry). At the same time, the scope of this definition is not excessively large. It avoids to assimilate under the term “religion” individual and social realities such as paranormal beliefs, philosophical systems, ultimate concerns, secular rituals, self-transcendent emotions, core values, taboo trade-offs, and moral or political ideologies. These realities may be somewhat proximal to religion (thus, psychologically interesting for comparatively understanding religion; e.g., Saroglou, 2012a) but do not require the co-presence of the four components: beliefs, ritualized experiences, norms, and community.

These four components are universally present across cultures, religions, and societies. However, there is also important cultural, religious, and historical variation in the mean importance attributed to each of them, as well as in the strength of the interrelations between the four components, which leads to cultural variability of religious forms (Saroglou, 2011). For instance, beliefs and morality are more normative in mainstream Protestantism; in Judaism, this is more the case with rituals and community (Cohen, Hall, Koenig, & Meador, 2005).

This definition of religion emphasizing the co-existence of different components may be helpful to personality and social psychologists, who study basic psychological processes that operate across domains of individual and social life. Consequently, scholars may sometimes be prone to reducing the phenomenon under study (e.g., the historically and currently complex relations between Flemish and Walloons in the bilingual and bicultural Belgium) as simply one typical example of their preferred theory and subfield of research (e.g., intergroup conflict). Likewise, they may consider religion as simply an issue of group belongingness; or simply as a meaning-making system; or finally as just one among other conservative ideologies. Each of the above approaches is, of course, important to the understanding of a different aspect of religion. However, it is also, if not more, important to identify the combination of the various psychological mechanisms present in religion. For instance, philosophy, art, and religion all may be helpful for meaning-making or as a response to existential anxiety. Each of the above though may imply

a specific combination of psychological processes involved in meaning-making or coping with existential anxiety.

Religiousness

I define here *religiousness* as the individual differences on being interested in and/or involved with religion. This includes individual differences in attitudes, cognitions, emotions, and/or behavior that refer to what people consider as a transcendent entity. Depending on whether one uses continuous or categorical variables, differences in religiousness can be observed gradually—varying from “not at all” to “totally” interested/involved—or can be summarized categorically—believers/religious and non-believers/non-religious.

Dimensions of Individual Religiousness

Like for religion as a social reality, religiousness as individual differences in attitudes towards religion is multifaceted and can be conceived of as including four major dimensions (four “Bs”): believing, bonding, behaving, and belonging (Saroglou, 2011). Specifically, religiousness includes: (a) believing specific ideas regarding the transcendent entity and its relations with humans and the world; (b) bonding emotionally through private and/or collective rituals with the transcendent entity and then with others; (c) behaving in a way to conform to norms, practices, and values perceived as established by the transcendent; and/or (d) belonging to a group that is self-perceived as eternal and as filled with the presence of the transcendent.

Within individuals, the four dimensions are importantly interrelated, but there are inter-individual and intergroup differences in the mean importance attributed to each of them (Saroglou **with 14 co-authors**, 2013). Additionally, the four dimensions correspond to four major kinds of motivation for religious conversion or deconversion (exiting from or changing religion), i.e., cognitive, emotional, moral, and social motivations. Also, the dimensions point out to four major categories of possible psychological functions of religion having to do, respectively, with meaning-making, emotional regulation, moral self-transcendence, and social identity.

Additional External Indicators

Extensive sociological work distinguishes between (a) individual religiousness (as a global attitude of personal religiousness), (b) religious practice (frequency of collective and/or personal practice—i.e., most often, respectively, religious attendance and prayer/meditation) and (c) affiliation/identification with a particular religion/denomination (Voas,

6 *Vassilis Saroglou*

2007). These three indicators (personal religiousness, religious practice, and religious affiliation) are also well-used in psychological research.

Varieties of Religious Forms

Beyond the four basic dimensions of “subjective” individual religiousness and the additional “objective” indicators of affiliation and religious practice, there exists a variety of forms through which religiousness is expressed. This has historically been a major area of investigation in the psychological study of religion, and has led to the production of a large number of religious constructs, variables, and corresponding measures. Below I will briefly overview what are the major religious forms, following specific criteria of selection and classification.

Criteria for Selecting Key Religious Forms

I followed three selection criteria. First, it is important to focus on religious expressions whose differences reflect distinct *psychological processes* (e.g., types of motivation, cognitive style, developmental trajectory, emotional quality) and not religious forms and variables that are too descriptive (e.g., “religious social support”), too theologically informed (e.g., “spiritual awareness”), or too normative (e.g., “mature religious faith”).

Second, it is important for comparative and international research to focus on religious forms that have been detected or are very likely *detectable across various religions, cultures, and societies*. Specific religious expressions that reflect respective distinct psychological processes can be found in many human societies, as far as these psychological processes operate universally. This is not the case with those religious constructs and corresponding measures that are too proximal to a particular theology and spirituality of a particular denomination or religion.

Third, previous research consistently shows that, overall, the measures of various religious constructs are importantly interrelated and point out to a higher order factor of religiousness (Tsang & McCullough, 2003). Thus, these different constructs most often predict similar outcomes. This is in particular the case when a study is carried out on samples whose religiousness represents the global, average religiousness of the population and not the one of “known” groups (e.g., believers or non-believers, people high or low on fundamentalism). I opted thus to present below religious forms that are *known to predict, at least partly, distinct outcomes, or to follow distinct psychological predictors*, even if they may be moderately interrelated with each other in studies with samples of average religiousness.

Major Religious Forms

Intrinsic Versus Extrinsic Religious Orientation

Following a classic typology by Allport and Ross (1967), religiousness may be *intrinsic* or *extrinsic*, that is, respectively, an end in itself, motivated by inherently religious motives, or a mean toward other ends, motivated by other than religious motives. Increasing one's own network of acquaintances or getting prestige by peers are just two examples of extrinsic religious motivations. This classic distinction in religious orientations has led to a large body of research (Batson et al., 1993) and has been identified in various religious and cultural contexts (see studies cited in Flere & Lavrič, 2008). Nevertheless, in recent years, the pertinence of this distinction and the validity of the extrinsic orientation and corresponding measures have been questioned (Neyrinck, Lens, Vansteenkiste, & Soenens, 2010). In addition, extrinsic orientation may have different meanings and higher normativity in non-Protestant than Protestant cultures (Cohen et al., 2005); and, across studies, the existing scales have provided null results, inconsistent results, or findings that are hard to interpret. This is likely because of the enormous variability of the underlying extrinsic motivations. Moreover, as already argued (Saroglou, 2011), measuring extrinsic religious orientation in modern secularized societies may have become less meaningful: most people are today (still) religious due to intrinsic motivation and not because of social pressure or other external factors.

Socialization Versus Conversion; Positive Versus Negative Emotionality

Religiousness may also differ depending on the underlying developmental and relational processes and life's trajectories. An important distinction exists between being religious by *socialization* (i.e. continuity in adolescence and adulthood **with, often secure, parents' religiousness**) or by *conversion* (discovering or rediscovering religion in discontinuity **with, often insecure, parents' non-religiousness or negative religiousness**) (see Granqvist, Chapter 13, this volume). Somehow similarly, religiousness may have built on, and function as a way to cope with, *negative emotionality* or may reflect or have been built on *positive emotionality*. William James (1985 [1902]) has called the former as the religion of the "sick-soul" and the latter as the "healthy-minded religion" (see, in this volume, Burris & Petrican, Chapter 5; Van Cappellen & Rimé, Chapter 6). The former religiousness often implies negative representations of God as controlling and punishing and the use of negative forms of religious coping (i.e., unsuccessful religious means to face adversity), whereas the latter is followed by positive images of God as loving and

8 Vassilis Saroglou

supportive and the use of positive forms of religious coping (Pargament, Fueille, & Burdzy, 2011).

Closed-minded Versus Open-minded Religiousness

Considerable research has focused on closed- versus open-minded forms of religiousness. These forms mainly include *religious fundamentalism*, that is, religious dogmatism combined with right-wing authoritarian structure (Altemeyer & Hunsberger, 2005; Kirkpatrick, Hood, & Hartz, 1991; see also Brandt & Renya, 2010), and *religious orthodoxy*, that is, religious conservatism characterized by literal and simplistic attachment to beliefs, practices, and norms as established by religious authority (Deconchy, 1980; Pancer, Jackson, Hunsberger, Pratt, & Lea, 1995). Somehow on the opposite pole, one can find *religion-as-quest*, that is, religiousness that is characterized by the valorization of doubt, capacity for self-criticism, including of one's own religious tradition, and openness to the possibility that one's own beliefs and faith may change (Batson et al., 1993; see also Batson, Benson, & Vollemecke, 2008).

A more extended model, based on Wulff's (1997) theorization, has resulted on series of studies by Hutsebaut and collaborators that distinguishes between *literal* and *symbolic* ways of being either religious or non-religious (research using the Post-Critical Belief Scale; Fontaine, Duriez, Luyten, & Hutsebaut, 2003). When crossing the two axes (literal vs. symbolic thinking on religious issues; and inclusion vs. exclusion of transcendence), one obtains four quadrants. These include (a) literal believers (orthodox/fundamentalists), but also (b) literal non-believers (atheists fully despising religion as irrational, irrelevant, and dangerous); as well as (c) symbolic believers who interpret symbolically religious ideas, and (d) symbolic non-believers who acknowledge some anthropological value in religion, while rejecting it personally.

Religiosity Versus Spirituality

Ongoing theorization and research especially in the last 15 years have focused on understanding (new) forms of spirituality, namely, individuals' beliefs, emotions, and practices in reference to a reality that is perceived as transcending human existence (Belzen, 2009; Hill & Pargament, 2003; Zinnbauer & Pargament, 2005). At least in contemporary Western societies, marked by secularization, modern spirituality is perceived and experienced as mostly distinct from traditional religiosity, especially as far as the latter importantly refers to an institutionalized religious organization and collective practice through rituals validated by religious authority.

There still exists some debate on whether the two, religiosity and spirituality, should be importantly opposed or not, in terms of their

definition (has not spirituality been for centuries an essential, perhaps the most intimate and intrinsic, component of religious experience?) and qualification of their respective outcomes (is spirituality only good and religiosity only bad?). Nevertheless, accumulated research, mostly in Western societies, suggests some general empirical trends. The two dimensions are moderately interrelated and most people perceive themselves as both religious and spiritual; the more a society/group is secularized, the more the two dimensions are distinct from each other (Saroglou (with 13 co-authors), 2012); and the correlates and outcomes of religiosity and spirituality (personality traits, values, social attitudes and behavior) denote several similarities as well as many differences (Saroglou & Muñoz-García, 2008; Saucier & Skrzypińska, 2006). These similarities and differences suggest that modern spirituality emerges as a new form of traditional religiosity that fits better the values of contemporary liberal societies (Saroglou, 2003; Siegers, 2011). For clarity reasons, I use the term “religiousness” as a broad umbrella that includes various forms, including traditional “religiosity” —still vibrant in many non-Western societies—and modern spirituality.

Synthesis: Devotional Versus Coalitional Religion

Integrating the various dichotomies in religious forms, a global distinction emerges between two major aspects of religion: devotional and coalitional (Hansen & Norenzayan, 2006). With the risk of being extremely polarizing and too global, but for the needs of a synthesis, one can conclude that there are forms of religion that are rather extrinsically motivated (i.e., based on social pressure and advantages), focus on the institutional and collective dimensions, and often reflect some closed-mindedness in cognition and morality. These point out to the *coalitional* part of religion. However, there are also forms of religion that are intrinsically motivated (i.e., based on internalization of belief and values), focus on the individual experience and spiritual motives for self-transcendence, and may reflect some open-mindedness in cognition and morality; these forms point out to the *devotional* part of religion.

Note that forms of religiousness reflecting negative versus positive emotionality, presented in Table 1.1 as independent from forms reflecting closed- versus open-mindedness, may in fact be in parallel with the latter. For instance, positive perception of God as supporting autonomy relates to symbolic religious thinking, whereas negative perception of God as controlling relates to literal religious thinking (Soenens et al., 2012).

Note, finally, that there is theoretically a way to consider many of the religious forms as resulting from a categorization that is orthogonal to the one of the four dimensions described earlier in this section (i.e., believing, bonding, behaving, and belonging). As presented in

Table 1.1 Major dimensions and forms of religiousness

	Forms			
	Closed- vs. Open-Mindedness		Negative vs. Positive Emotionality	
Dimensions ¹				
Believing	Literal thinking ²	Symbolic thinking ²		
Bonding			Negative emotions ³	Positive emotions ³
Behaving	Moral self-control	Prosociality		
Belonging	Religious ingroup	Human community		
Forms				
Motivation	Extrinsic ⁴	Intrinsic ⁴		
Trajectory			(Intense) conversion ⁵	Socialization ⁵
External indicators	Affiliation, public practice	Personal prayer/mediation		
Global qualifications				
Common forms	Traditional religiosity ⁶	Modern spirituality ⁷		
	Coalitional	Devotional		
Extreme forms	Orthodoxy, Fundamentalism ⁸	Religion-as-Quest ⁹		
Emotional forms			“Sick-soul”	“Healthy-minded”

Note. Hereafter are examples of key measures that have been used largely in research and internationally. 1: Four Religious Dimensions Scale (Saroglou et al., 2013). 2: Post-Critical Belief Scale (Fontaine et al., 2005). 3: Religious Coping Scale (Pargament et al., 2000). 4: Intrinsic/Extrinsic Scale-Revised (Gorsuch & McPherson, 1989). 5: Socialization- and Emotionally-Based Religiosity Scales (Granqvist & Hagekull, 1999). 6: Santa Clara Strength of Religious Faith Questionnaire (Plante & Boccacini, 1997), Attitude Toward Christianity, Judaism, Islam, and Hinduism Scales (see Francis, 2009), 3-Item Religiosity Index (Saroglou & Mathijsen, 2007). 7: Spiritual Transcendence Scale (Piedmont, 1999). 8: Religious Fundamentalism Scale (Altemeyer & Hunsberger, 1992). 9: Religion-as-Quest Scale (Batson et al., 1993; see Van Pachterbeke et al., 2011 for a scale applicable also to non-religious). Short versions exist for those of the above scales that are long (≥ 20 items).

Table 1, religious people may believe literally or symbolically; have religious experience marked by negative or positive emotionality; behave ethically, being attached to a universal interpersonal morality, or moralistically by favoring a conservative, collectivistic morality; and belong strictly to their religious ingroup or identify with (a) the larger (spiritual) human community.

Forms of Irreligion

Understanding religiousness contributes to also understanding irreligion. For instance, knowing the psychological costs and benefits of being religious may help to look for, respectively, the psychological benefits and costs of being non-religious. Although much less empirically studied, there is also a variety of forms of irreligion (Zuckerman, 2012). People who are irreligious may be agnostics, atheists, militant anti-religious, socialized as secular, “apostates” (those who exit from religion), “deconverts” (those who abandon faith through a process similar to conversion; Streib, Hood, Keller, Csöff, & Silver, 2008), or “liminals” (those inconsistent across time when declaring no religious preference; Lim, MacGregor, & Putnam, 2010).

Understanding thus religion from a personality and social psychological perspective includes, in principle, the psychological study of religion (traditional religion), spirituality (modern forms, possibly independent from traditional institutions), and irreligion. However, psychologists have been more interested in understanding religion than the lack of it. Thus, psychological research that focuses specifically on the various forms of irreligion is rare and has only recently emerged (Hunsberger & Altemeyer, 2006; Zuckerman, 2011).

Research Methods and Measures of Religion and Religiousness

Research Methods

In the past, research on the personality and social psychology of religion has been heavily based on correlational and cross-sectional studies. Experimental and quasi-experimental studies were sporadic (see Batson et al., 1993; Wulff, 1997) but have become increasingly dominant in the past 15 years. There has also been a diversification of alternative data sources and data collection methods than self-reported questionnaires administered to small samples of participants. This in turn led to higher use of complex data analytic strategies.

Today, personality and social psychological research on religion is also based on: observer ratings, implicit and behavioral measures and

outcomes of religiousness, diaries and diary analytic methods, content analysis of books, websites, archival files, and interviews, psychobiographies and case studies, internet studies and experiments, field studies, priming techniques, behavioral genetic analyses of twin data, psychophysiological measures and neuroimaging, longitudinal studies, methods applied to children, quantitative meta-analyses of past studies, cross-cultural and cross-religious comparative research, and multilevel analyses distinguishing the individual and the group/country levels in large international data. A main objective of the present volume is to review evidence accumulated through this exciting body of research.

Social psychological experiments on religion typically investigate three kinds of question. First, scholars study the situational influences on religiousness and its forms—overall effects or in interaction with individual dispositional characteristics. For instance, do people more strongly attach to supernatural entities after their mortality has been salient in the laboratory? Are all or some kinds of participant sensitive to such effects? Second, researchers study the effects of religious stimulation on intra-individual functioning and social attitudes and behavior—again in general, or in interaction with participants' individual characteristics. For instance, do religious ideas (conscious or nonconscious) increase submission to the experimenter and social conformity, to do moral or immoral acts, and, if so, among whom? Third, scholars investigate the differential outcomes of religiousness and different religious forms as a function of situational variables. For instance, does religiosity (or religious fundamentalism vs. quest) lead to prosocial behavior similarly when the target person is an ingroup member, a stranger, or an outgroup member?

Below, I focus on two kinds of methodological issue that are of particular interest for those who are familiar with personality and social psychological research in general but may be unfamiliar with how to operationalize religion as an independent variable and how to measure religiousness as an individual difference construct.

Religion as Independent Variable

Religion in general (e.g., a set of various religious words or images) or specific religious ideas, images, figures, places, and symbols has been used in psychological research in order to investigate religion's capacity to activate or shape theoretically relevant cognitions, emotions, attitudes, and behaviors. In some studies, these religious material might also vary in valence (positive or negative), moral quality (texts praising **prosocial** or legitimizing aggression), or the key facet of religion that is activated (coalitional versus devotional). Specifically, dozens of very recent studies in the last **six** years have used priming techniques to present supraliminally or subliminally participants with religious material;

in this case, religious ideas influence participants' cognitions, feelings, and behavior (Galen, 2012, Tables 2 and 3).

Various trends emerge from the accumulation of these priming studies in the last years. First, some social outcomes (e.g., prosociality) are rather consistent across studies, countries, and religions (Clobert & Saroglou, *in press*; Pichon, Boccato, & Saroglou, 2007; Shariff & Norenzayan, 2007). Second, even single, distinct in content, words (e.g., "God" vs. "religion"; "prayer" vs. "mosque" or "synagogue", reflecting respectively devotional versus coalitional religion) are sufficient to activate automatically distinct social attitudes (Ginges, Hansen, & Norenzayan, 2009; Preston, Ritter, & Hernandez, 2010). Third, in several (but not all) priming studies, the effects are independent from participants' individual religiousness. In other words, they are present also among non-believers. This suggests that implicit, automatic associations between religion and some relevant constructs are part of general social cognition and produce their effects relatively independently from the correspondence between the individual centrality of religious concepts and the associated construct. Finally, there is an increasing interest for investigating the effects of "hetero-religious" priming, i.e., whether participants of a given religious background are also influenced by primes of different than their own religion (Buddhist or Muslim primes among Christians: Clobert & Saroglou, *in press*; Vilaythong, Lindner, & Nosek, 2011). Similarly, there is interest on whether psychological needs manipulated in the lab will increase belief in supernatural beings from other than one's own religion (Norenzayan & Hansen, 2006; Vail et al., 2012).

Measures of Religiousness

Almost exclusively religiousness and its forms, as well as more specific religious constructs, have been measured through questionnaires. This is not surprising, since the nature of religiousness resembles attitudes, beliefs, and values. However, even if rarely, one can also find in recent research alternative measures such as implicit and projective, quasi-behavioral measures.

Scales

There exists a large array of religious and spiritual scales. These include measures of general religious attitudes, various forms of religiousness, and various aspects of spirituality. Table 1.1 lists examples of key measures that have been widely used in research and across different cultural/religious contexts. In addition, there exist measures of more specific religious constructs studied regularly in psychological research such as religious coping, God images, attachment to God, religious and

spiritual development, religious doubt, mysticism, and prayer (see for a list of measures: Hill & Hood, 1999; and for updates: Cutting & Walsh, 2008; Kapuscinski, & Masters, 2010).

In addition to typical concerns for psychometric qualities, specific considerations are of interest for a researcher or a student interested in selecting a measure of religiousness. Except if one focuses on groups of known (e.g., clearly high or no) religiousness, most studies are carried out on samples whose average religiousness reflects that of the general population. It is important thus to use measures that can be applied to participants varying in religiousness, that is, both believers and non-believers. Non-believers may find it meaningless and upsetting to answer a series of long multi-item scales that distinguish between many different religious and spiritual dimensions, forms, and practices with items that, in addition, presume respondents are religious. This may not only produce inaccurate responding (the non- or low religious may react by exaggerating their negative answers), but also reduce variability in the data because of the accumulation of scores at the extreme low end of religious continuous measures.

Note also that, if studying religiousness and related psychological processes is not the unique objective of the study, then few-item indexes of religiousness may work almost equally well than multi-item and multidimensional religious measures. Indeed, in samples with participants of average religiousness, various religious measures are often interrelated and provide similar results (Tsang & McCullough, 2003; Wolf, 2005). However, if the sample includes many highly religious participants, it is also important to avoid making upsetting these participants when answering to items that only include global and probably meaningless for them statements (e.g., “How religious are you?”). This situation too will likely decrease response variability. In this case, it is reasonable to use specific measures detailing distinct religious constructs.

Overall, I suggest that, at least in a study where religiousness takes an important part in the hypotheses, an investigator include measures of (a) general, personal, intrinsic religiousness, (b) frequency of collective vs. private religious practice, (b) closed- vs. open minded religious attitudes (e.g., fundamentalism or quest), and (d) spirituality, as being independent from traditional religiosity. The above, although considerably interrelated, have consistently been found to predict distinct pattern of personality traits (Saroglou, 2010), values (Saroglou & Muñoz-García, 2008), and social behavior (Hunsberger & Jackson, 2005; Saroglou (with 14 co-authors), 2013). An obvious additional precaution is to check for the relevance of the measure’s items with respect to the participants’ religious affiliation or religious background.

Finally, the positioning of measures of religiousness in a survey protocol or in an experiment is a sensitive issue. Existing research suggests that simple administration of even few-item measures of religiousness at

the beginning of a study acts as a religious prime (Ginges et al., 2009). Measuring individual differences on religiousness before measuring their outcomes or correlates induces the risk of increasing social desirability and conformity to religious stereotypes (e.g., I am religious, so I want to be perceived as prosocial; or I am religious, so I am of course prosocial). Ideally, individual religiousness should be measured much earlier (weeks ago) than the main experiment (e.g., with a brief religious measure hidden in a large set of measures). Alternatively, since pre-experimental administration is not always practically possible, measures of religiousness should be administered post-experimentally but after a distractor task. In surveys, such measures should be included at the very end of session.

Implicit Measures

Explicit measures of religiousness may to some extent be affected by social desirability and, in particular, impression management (Sedikides & Gebauer, 2010). Although research also shows that the relation between explicit religious measures and external outcomes is not totally due to social desirability (results most often remain significant after controlling for social desirability; Lewis, 1999, 2000; McCullough, Emmons, & Tsang, 2002; Regnerus & Uecker, 2007; Saroglou, Pichon, Trompette, Verschueren, & Dernelle, 2005), it is of interest also to implement alternative measures of religiousness such as implicit, projective, and behavioral ones.

The Implicit Association test typically uses reaction time as an indicator of a given construct when comparing pairs congruent with the construct (targets and attributes) with pairs incongruent with the construct. Implicit measures of religiousness have been in use. For instance, LaBouff, Rowatt, Johnson, Thedford, and Tsang (2010) found that some people made the associations of religious terms with the self and of non-religious terms with others more quickly than the associations of non-religious terms with the self and religious terms with others; these people were higher in several explicit measures of religiousness. Moreover, explicit and implicit measures of religiousness predicted similar social attitudes (antigay prejudice). In another study, after exposure to an argument against the existence of God, participants associated less quickly religious target words with words denoting truth versus words denoting non-truth (e.g., *true, real, valid* vs. *fake, false, untrue*); again, this implicit measure of religious belief was related to an explicit measure of religiousness (Shariff, Cohen, & Norenzayan, 2008). Other implicit associations apply to the concept of God. Meier, Hauser, Robinson, Friesen, and Schjeldahl (2007) found that participants implicitly used the metaphor of verticality and automatically associated God with “up” and devil with “down;” these implicit associations were stronger among believers.

In the above studies, there was a correspondence between explicit and implicit measures of religiousness and their respective outcomes. Interestingly, these two kinds of measure may produce different findings, which is informative of underlying process. In a recent experiment, when primed with death, believers and non-believers explicitly defended more strongly their respective religious and non-religious beliefs (i.e., supernatural entities exist vs. not). However, when the beliefs were measured implicitly, death priming increased all participants' beliefs in religious supernatural entities, regardless of their prior religious commitments (Jong, Halberstadt, & Bluemke, *in press*). In other words, even non-believers endorsed theistic belief. In another recent study, preferences of one's own religious group comparatively to other religions were found in children when measured both implicitly and explicitly. However, adults, likely being more aware of social desirability demands, showed implicit but not explicit preferences (Heiphetz, Spelke, & Banaji, *in press*).

(Indirect) Behavioral Measures

Measuring religiousness behaviorally in general, and in particular as a dependent variable in lab experiments, is difficult, as such measures are sparse. Nevertheless, like the implicit measures, they may have the advantage, comparatively to self-report measures of religious attitudes and behaviors, of providing psychologically subtler and less socially desirable information. Indeed, over-reporting religious attendance, in comparison to objective indicators, is observed in Canada and the US, countries where religion is highly socially valued (but not in Europe; Brenner, 2011; Hadaway, Marler, & Chaves, 1993).

Behavioral intentions are easier to measure. For instance, in two recent studies, participants were asked to report their willingness to visit different destinations, including spiritual ones: Tibet or the way of Saint James of Compostela. They were asked so after induction of positive emotions (Van Cappellen & Saroglou, 2012) or memories of sexual experiences (Rigo & Saroglou, 2013). Other, more direct, religious behaviors can be investigated in the lab. For instance, God's closeness after activating attachment needs was tested in 5–7-year-old children, by asking them to place a God symbol on a two-dimensional felt board (Granqvist, Ljungdahl, & Dickie, 2007).

Interpreting Findings and Drawing Conclusions

Psychological research and findings on religion sometimes raise skepticism among outsiders about objectivity and reductionism. Moreover, among “insiders” (i.e., psychology researchers, students, reviewers), there exists occasionally some confusion, or at least debate, about: the status of spirituality within individual differences; the causal status of

religion/religiousness with respect to human behavior; and the universal versus culturally specific nature of religion. I will comment briefly on these issues.

Objectivity

Psychological research on religion focuses on issues that researchers, students, and the public may feel personally relevant, be they religious, agnostics, or atheists. This invites prudence in deriving hypotheses, designing a study, interpreting results, and drawing conclusions. Fortunately, the more this research involves scholars from different cultural, religious, and convictional backgrounds, and the more findings are replicated through different methods, across samples from various cultural and religious contexts, and by independent laboratories, the more the reliability of findings and conclusions increases. The present volume was attentive to the sensitivity of these issues.

Reductionism

Scholars from other scientific disciplines are sometimes suspicious on whether psychology can study successfully such a complex phenomenon as religion without reducing it; or without having a personal experience of faith and religion. Both suspicions are unjustified. First, reductionism is by definition what each behavioral and social scientific discipline is expected to do, applying its own methodology to study a particular object. No sole discipline can fully explain a complex phenomenon. Second, even science as a multidisciplinary global enterprise is reductionist by principle. Psychologists, sociologists, and other scientists investigate and arrive at principles determining, at least partly, why people fall in love and with whom. Such knowledge is not sufficient to preclude the perception of the falling-in-love process as important, personally significant, and somewhat mysterious. Finally, the psychology of religion, like for instance the psychology of sport, may benefit from the personal experience of insiders but this is neither a necessary nor a sufficient condition; and it may present disadvantages too (e.g., eagerness to accept confirming evidence and to neglect disconfirming one). The same remarks apply, of course, to outsiders, that is, scholars who do not practice religion or sport.

Religion/Spirituality's Status within Individual Differences

Scholars and the public sometimes favor the idea that spirituality, as a broad term encompassing religious and non-religious forms, is (a) a universal and fundamental dimension of human existence and (b) a basic trait of personality, possibly additional to the existing major personality traits. For several reasons (Saroglou, 2011), most personality and

social psychologists agree that this is not the case. The existential quest is certainly a universal human dimension, with individual differences on intensity, frequency, and forms. The same is true for many psychological needs. Spirituality and religion may have been, at least till now, present in all human societies. However, there are many people defining themselves as non-religious and non-spiritual, which is not a sign of psychological dysfunction. In addition, spirituality constitutes a specific way to deal with, or provide specific answers to, universal existential questions. Therefore, spirituality does not constitute a fundamental dimension of human functioning—at least no more than atheism, to take the opposite end of the continuum.

Unlike individual differences in basic and fundamental human dimensions (e.g., personal identity, personality traits, emotional intelligence, attachment), being spiritual is, strictly speaking, similar to being sporty. Lack of sport practice and sport-related beliefs does not mean missing an important part of what constitutes a person. On the contrary, missing a sense of identity or attachment bond does—at least for psychology. Finally, theory and empirical evidence suggest that religiousness/spirituality is rather a *sui generis* individual difference, closer, even if not restricted, to values and social attitudes rather than to personality traits (Saroglou, 2010; see also Ashton & Lee, Chapter 2, this volume).

Causality

The specificity of the psychological study of religion is to understand the *psychological* mechanisms that can explain why religion or religiousness co-occurs with, follows, or precedes other psychological characteristics and behaviors. Efforts to identify the psychological variables or processes that may statistically explain (in regressions and meditational analyses) in full the relations between religion and other outcomes are more than welcome. Having a successful explanatory model in which religious variables do not have additional power constitutes an ideal and not a limitation for a researcher. As psychologists, we need to understand for what reasons religious attitudes and behavior influence human behavior. It is thus misleading to confound statistical analyses and psychological understanding and conclude, for instance, that religion has no causal role on human behavior if its power has been fully explained in meditational analyses; or, on the contrary, that religion has “unique” power if its predictiveness remained significant beyond the effects of other predictor variables. Opposing religion’s causal role with “secular” psychological mechanisms (Galen, 2012) is psychologically rather meaningless (Myers, 2012; Saroglou, 2012b).

The question of uniqueness of the processes under study is an interesting issue. Indeed, it is theoretically important to understand what the specific combination of common psychological processes is that makes

religion's role with regard to different outcomes to be unique (i.e., different from other combinations of common psychological processes). Other than religion, domains of human activity may lead to similar effects. For instance, both religious supernatural beings and secular authorities increase moral behavior (Shariff & Norenzayan, 2007). However, they very likely do it through different combinations of underlying psychological mechanisms.

Generalizability

Scholars may sometimes perceive religion and religiousness as too personal and intimate, too individualized; or as too culturally specific (Belzen & Lewis, 2010). Undoubtedly, there is a large variability in religious expressions across religions, cultures, and historical periods. Religion interacts with many other non-religious, country-level cultural dimensions, which results in a large variety of culturally specific outcomes (Saroglou & Cohen, 2011; see also Johnson & Cohen, Chapter 15, this volume). However, and although systematic cross-cultural psychological research on religion is only emerging, there is also evidence that, to some extent, universals may exist in the psychological characteristics, predictors, functions, and effects of religion across cultures, religions, and societies (Saroglou, 2011; Saroglou & Cohen, 2013). Adopting thus in the psychology of religion excessive cultural relativism or excessive cultural universalism is empirically premature and seems unjustified.

A related issue is the question of whose religiousness has been studied through decades of personality and social psychological research. As in other domains of research, most studies on religion were carried out in Western contexts with most often participants of Christian (predominantly Protestant, but also Catholic) background. Fortunately, however, in the last 10–15 years, studies, including experimental ones, with participants of other religious background and/or from non-Western cultural contexts have started to accumulate. Finally, the main body of scientific knowledge has relied on the “average” religiousness of “average” people. This is not necessarily a problem, as it provides a reasonably good global picture. Note, however, that the psychology of champions supplies additional information to what we know from the sport psychology of the average citizen. Similarly, the psychology of central religious figures (e.g., current or historical models) could add precious knowledge.

The Present Volume

In addition to current handbooks on psychology of/and religion/spirituality (Hood, Hill, & Spilka, 2009; Paloutzian & Park, 2013; Pargament, Koenig, & Perez, 2013), there exist more specific reference volumes that focus on religion and spirituality from a developmental (Roehlkepartain,

King, Wagener, & Benson, 2006), health/clinical (Koenig, King, & Carson, 2012), and neurocognitive (McNamara, 2006), but not social psychological, perspective. The present book aims thus to be distinct by (a) exclusively focusing on personality and social psychology as applied to the study of religion, (b) providing thoughtful and integrative review of the most recent empirical, especially experimental, evidence, and (c) including many chapters that are unique in topic, content, and treatment.

The chapter titles are clear. The reader can easily anticipate with what kinds of question each chapter is concerned. Therefore, I will avoid discussing each chapter in length. Rather, I will introduce below the structure of the volume and, for each chapter, highlight key issues.

Part I concerns the psychological understanding of religion at the intra-individual level, what refers to personality traits, self-needs, cognition, and emotions. Part II extends this understanding to the interpersonal, intergroup, and social spheres. This means knowledge about how religion interferes with prosocial behavior, intergroup relations, prejudice, and antisocial behavior, values and morality, sexuality and family, political preferences, as well social factors that influence mental health and well-being. Finally, religion's psychological functions do not operate identically across all humans. Part III focuses on three typical moderators of human psychology, i.e., age and developmental changes, gender and related psychological differences, as well as culture and national contexts.

In Chapter 2, Ashton and Lee review recent research on religiousness and personality (Five-Factor and HEXACO models) and extend the scope of the chapter on other individual differences (intelligence and education) as well as on genetic influences on religious attitudes. They also clarify the status of religiousness within individual differences as a whole. In Chapter 3, Sedikides and Gebauer propose an original integration of, mostly experimental, research having focused on the key needs related to the self and the way religion seems to satisfy or at least allows dealing with them. They convincingly argue for the role of religion regarding self-enhancing and agentic needs; and they show the importance of integrating the individual level of analysis with the country level of analysis.

Religion's functions are both cognitive and emotional in nature. In Chapter 4, Gervais examines religious cognition (e.g., God perception) as being part of broader common social cognition, built on the interaction between the social cognitive mechanisms that enable humans to perceive, represent, and reason about minds in the world and social cognitive mechanisms that enable cultural learning. The links between religion and emotions are treated in two distinct chapters, one focusing on negative emotions, the other focusing on positive ones. In Chapter 5, Burriss and Petrican thoughtfully integrate evidence from various research areas, including neurophysiological and neurocognitive research, that help them to detail the complex links of religion in general, and religious experience in particular, with negative emotionality and its regulation.

They astutely point out religion's capacity to transform negative emotions into positive experience and vice versa. In Chapter 6, Van Cappellen and Rimé scrutinize the individual and social effects of positive emotions and their sharing, as experienced in collective rituals that comprise music and movement synchronization. They also review recent experimental evidence that attests also for the opposite causal direction where induction of self-transcendent positive emotions influences spirituality and related outcomes.

Chapters 7 and 8 deal with the classic big questions on the bright (pro-sociality) and dark (prejudice) sides of social attitudes and behaviors as a function of religion. Both chapters clearly adopt an original perspective. In Chapter 7, Preston, Salomon, and Ritter propose an integrative synthesis of the existing research on the role of situational factors that importantly moderate religion's effects on prosocial attitudes and behavior; and clarify the specificities of various sub-theories on religious prosociality having recently emerged from an evolutionary psychology perspective. In Chapter 8, Rowatt, Carpenter, and Haggard integrate the existing substantial research on religion/religiousness and prejudice towards a variety of outgroups, in terms of explicit and implicit attitudes and behavior, into classic and more contemporary (e.g., terror management and evolutionary) psychological theories on prejudice and discrimination.

Religious morality has to do with (pro)social concerns at the interpersonal and intergroup levels, but also with other concerns that have to do with societal norms emphasizing group loyalty and purity toward the divine. This is a common underlying feature in the next three chapters. Roccas and Elster, in Chapter 9, review research from a large number of studies across nations and religions that provide a coherent picture on how religiousness and forms of it reflect specific value hierarchies. They also examine the role of religion on the correspondence between values and behavior and on dealing with multiple identities implying conflicting values. Li and Cohen, in Chapter 10, focus on the way religion influences sexual attitudes and behavior, as well as family issues, mainly marriage and parenthood. They propose an evolutionary understanding of the role religion has played with regard to mating, sexuality, and family. In Chapter 11, Malka reviews key evidence from both US and international studies and analyzes important new data that clarify how individual religiousness or religious denomination lead to specific political preferences. These refer to conservatism versus liberalism in two major domains: the moral (sex and family) and economic (government intervention in economic life) spheres.

A chapter on health may be less common in social psychology books. However, it is of interest to examine how several kinds of social factor, related to the individual, the (religious) group, or the culture, may influence and explain different aspects of mental health and well-being of believers and religious practitioners. This is successfully done in Chapter

12 by Hayward and Krause who demonstrate how the religious dimensions of belonging, being, and believing impact well-being.

Religion and its psychological determinants and outcomes are not static. Important developments are observed at different age periods. In Chapter 13, Granqvist finely reviews research on religion and cognitive, emotional, and social development across the lifespan, with a particular emphasis on childhood and adolescent. He integrates the above three domains of development in order to understand how the link between religion and attachment to significant others evolves with age. In addition to age, gender also moderates religiousness. In Chapter 14, Francis and Penny review classic and contemporary psychological and sociological theories that intend to elucidate a rather pervasive phenomenon, at least in Western Christianity: Why do women seem to be more religious than men? Is it due to psychological or sociological factors? Is this gender effect independent from the aspect of religiousness measured? Does it extend to other religions? No doubt, the last question underlines the importance of having Chapter 15 dealing with religion and culture. Johnson and Cohen analyze different forms that take the relations between religion, being itself a cultural system, with other, non-religious, cultural components of the “national” culture; and they introduce intriguing questions for future research that concern the reciprocal links between religion and increasing globalization.

The concluding Chapter 16 provides an integration of psychological theories and empirical evidence that may help researchers to understand (a) why there are important and pervasive individual differences in religiousness, and (b) what are the specificities in the way religion is involved with common and universal psychological processes and functions. The chapter concludes with directions for future research.

Acknowledgments

The writing of this chapter benefited from Grant ARC08/13-013 from the Communauté Française de Belgique. I am grateful to Constantine Sedikides for very helpful comments on an earlier version of the chapter.

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