

Journal of Cross-Cultural Psychology

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

Believing, Bonding, Behaving, and Belonging : The Big Four Religious Dimensions and Cultural Variation

Vassilis Saroglou

Journal of Cross-Cultural Psychology 2011 42: 1320 originally published online 2 September 2011

DOI: 10.1177/0022022111412267

The online version of this article can be found at:

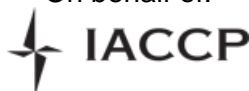
<http://jcc.sagepub.com/content/42/8/1320>

Published by:



<http://www.sagepublications.com>

On behalf of:



[International Association for Cross-Cultural Psychology](#)

Additional services and information for *Journal of Cross-Cultural Psychology* can be found at:

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

Subscriptions: <http://jcc.sagepub.com/subscriptions>

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

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


Citations: <http://jcc.sagepub.com/content/42/8/1320.refs.html>

>> [Version of Record](#) - Oct 10, 2011

[Proof](#) - Sep 2, 2011

[What is This?](#)

Believing, Bonding, Behaving, and Belonging: The Big Four Religious Dimensions and Cultural Variation

Journal of Cross-Cultural Psychology
42(8) 1320–1340
© The Author(s) 2011
Reprints and permission:
sagepub.com/journalsPermissions.nav
DOI: 10.1177/0022022111412267
jccp.sagepub.com


Vassilis Saroglou¹

Abstract

When approaching religion from a cross-cultural psychological perspective, one faces questions regarding the universals and the specifics of religions across cultural contexts. On the basis of previous theorization and research, the author proposes a model that posits four basic dimensions of religion and individual religiosity that are partially distinct although interconnected: believing, bonding, behaving, and belonging. These dimensions are presumably universally present across religions and cultural contexts and delimitate religion from other similar constructs. They reflect distinct psychological processes (cognitive, emotional, moral, and social), respective goals, conversion motives, types of self-transcendence, and mechanisms explaining the religion-health links. However, across cultural and religious groups, these dimensions may differ in content, salience, and ways in which they are interconnected or emphasized, leading to various forms of religiosity, including functional and dysfunctional ones. Within each dimension, there is additional universality (in structure) and cultural variability (in salience) regarding the way religious cognitions, emotions, morality, and identity are processed. This Big Four religious dimensions model may be a powerful tool for studying universals and cultural specifics of the psychological dimensions of religion.

Keywords

religious differences, religious universals, religious dimensions, cultural influences, spirituality

One is often impressed by the immense variability in religious expressions across historical periods, cultures, groups, and individuals. There have been dozens of religions and hundreds of independent religious groups in human history. However, about 72% of today's world population seems to belong to four major religions—that is, Christianity, Islam, Hinduism, and Buddhism (Barrett, 2001). As is the case with many psychological constructs (Norenzayan & Heine, 2005), it seems reasonable to presume that there should be both universals and cultural

¹Université catholique de Louvain, Louvain-la-Neuve, Belgium

Corresponding Author:

Vassilis Saroglou, Université catholique de Louvain, Department of Psychology,
Place du Cardinal Mercier 10, B 1348 Louvain-la-Neuve, Belgium.
Email: vassilis.saroglou@uclouvain.be

specifics to religion and individual religiosity. At first glance, to the point that some aspects of human psychology and specific psychological processes are common to human species (Brown, 1991; Lonner, 1980), universals should also be present in religion across historical, cultural, and religious contexts. At second glance, the very specific forms, predictors, and outcomes of religion and personal religiosity should vary as a function of cultural (e.g., ethnicity, language, civilization zone), historical (e.g., wars, empires, nations, specific events), ecological (e.g., climate, geography), and socioeconomic (e.g., degree of democratization, social equality, wealth) factors, as well as factors specific to religious and denominational differences (e.g., theology, institutional structures, spiritual traditions).

Religion as a Unified But Multidimensional Construct

One of the issues psychological research has constantly dealt with in the past decades has to do with determining the major components, dimensions, or forms of religion and individual religiosity. Of course, one may treat religion as a unidimensional construct. Religion is what humans do in reference to what they consider as (an external) transcendence, and religiosity is the corresponding individual differences construct, with people differing with respect to the presence and intensity of such a tendency. There is indeed strong evidence for the presence of a higher-order factor of religiosity—that is, positive versus negative disposition toward religion, the different religious dimensions being in fact importantly interrelated (Tsang & McCullough, 2003). This is especially the case with data coming from the general population, including both religious and nonreligious people. Moreover, treating religiosity as a unidimensional construct has provided solid findings, often constant across studies, religions, and cultural contexts (Saroglou & Cohen, in press, for a review).

However, beyond evidence for overarching unidimensionality, there is also evidence that religion is a multifacet reality and that religiosity can also be conceived as a multidimensional construct (Hill, 2005). This is more evident when focusing on religious people. Distinguishing between different religious aspects, dimensions, or forms provides nuanced information on how religion works in individuals' lives (Hill, 2005). Furthermore, as it will be argued here, it promises to be useful for the detection and understanding of the psychological specifics of religion and religiosity across different religious and cultural contexts.¹

There is a large array of religious aspects and dimensions that can be distinguished following a variety of classification criteria (for previous classifications of dimensions and corresponding measures, see Hall, Meador, & Koenig, 2008; Hill, 2005; Hill & Hood, 1999). Sociologists of religion have typically distinguished between *beliefs*, *practices* (or behavior), and *affiliation* (or identification) (Voas, 2007), a practice that has been adopted in large international studies (see Billiet, n.d.). In psychological research, it has been found that people differ with respect to their motivations to be religious, which may be either *intrinsic* or *extrinsic* (Allport & Ross, 1967), life trajectories and underlying processes leading to religion (*religious socialization* versus *emotion-based conversion*; Granqvist & Hagekull, 1999), social-cognitive styles of dealing with religious ideas (*symbolic thinking*, *religion-as-quest*, *fundamentalism*, *orthodoxy*; Batson, Schoenrade, & Ventis, 1993; Fontaine, Duriez, Luyten, & Hutsebaut, 2003; Hood, Hill, & Williamson, 2005), degree of (in)dependence from established religious traditions and institutions (*modern spirituality* versus *traditional religiosity*; Zinnbauer & Pargament, 2005), and the emotional quality of being religious and using religion (e.g., *positive* versus *negative* religious coping styles; Pargament, 1997).

These classifications denote specific psychological processes. Because these processes can reasonably be suspected to be universally present, it cannot be excluded that these religious dimensions may be found across various religious and cultural contexts. At the same time,

important culture-related issues are raised. For instance, the distinction between the intrinsic and extrinsic religious orientations has been found among Protestants, Catholics, Orthodox, Jews, Muslims, and Buddhists (see Flere & Lavrič, 2008, for a review). However, the content validity and the cross-religious/cultural validity of the existing measures of these orientations have been seriously questioned (Cohen, Hall, Koenig, & Meador, 2005; Ghorpade, Lackritz, & Moore, 2010; Neyrinck, Lens, Vansteenkiste, & Soenens, 2010). Moreover, extrinsic religion may be less or not relevant in highly secularized societies where being religious can mostly be thought as an intrinsically motivated attitude. Similarly, although it has been argued that spirituality may be a universal dimension of human existence (Dy-Liacco, Piedmont, Murray-Swank, Rodgeron, & Sherman, 2009), methodological and theoretical problems arise when studying spirituality, for instance, among the Chinese (Shek, 2010). How can an individual be autonomous in spiritual issues when belonging to a collectivistic society?

Other aspects—and corresponding measures—of religion, as identified and studied in psychological research, are more religiously/theologically oriented. They focus, for instance, on specific God concepts, specific religious practices, religious maturity, and faith development (see Hill & Hood, 1999, for a review). They can thus be importantly marked by a specific religious and cultural tradition and may not be transposable to other religious and cultural contexts. Finally, other religious dimensions and corresponding measures (see also Cutting & Walsh, 2008, for more recent measures) mix aspects of religiosity itself with possible outcomes or correlates of religion (e.g., “spiritual well-being,” “religious social support,” “sanctification” of different life domains).

A Model of Big Four Religious Dimensions

For psychological research, especially in the field of cultural and cross-cultural psychology, there is a need to distinguish between basic dimensions of religion/religiosity that (a) are psychologically informed (point to psychological constructs and processes), (b) are not unique to particular religious traditions and do not simply translate theological positions, (c) can serve to study both universals and specifics across religions and cultures, and (d) offer discriminant validity between each other, implying (at least partially) distinct psychological processes, predictors, and consequences.

In the present work, we will argue that a good candidate to fulfill these objectives is a model that distinguishes between four components of religion (I: beliefs; II: rituals/emotions; III: moral rules; and IV: community/group), corresponding psychological dimensions (believing, bonding, behaving, and belonging), and psychological functions (looking for meaning and the truth; experiencing self-transcendent emotions; exerting self-control to behave morally; and belonging to a transhistorical group that solidifies collective self-esteem and ingroup identification). Of course, taken alone, none of the above elements is new. However, our specific argument will be that the above four dimensions (a) are basic components delimitating religion from proximal constructs; (b) translate major distinct dimensions of individual religiosity; (c) can be conceived, across religious and cultural contexts, as religious universals, both in terms of presence and functional equivalence; and (d) are good candidates to study cultural variability in religion, since they differ across contexts in intensity, modes of expression, and ways in which they are inter-related. Moreover, this four-dimension model can be heuristically rich for additional reasons: It nicely encompasses—integrates or summarizes—other models of religious dimensions, and it offers a meaningful organization to the variation in religious forms within each dimension, as well as the variation in the processes explaining the positive and negative effects of religion on individual and social functioning.

Previous theorizing in both psychology and sociology of religion has distinguished between three to six aspects of religion and respective dimensions of religiosity. Across these theoretical

suggestions, there is some variability in the number, label, and specific subcomponents of these dimensions; but there is also a striking consistency in favor of our preference for four components and dimensions (see Table 1).

Initially, Glock (1962) and Verbit (1970) distinguished between five or six dimensions (each of our Dimensions I and II is split into two distinct dimensions). Afterwards, researchers proposed similar classifications, without necessarily citing each other's, or Glock's and Verbit's, work. A notable sociologist of religion, Hervieu-Léger (1999) made significant advancements. She proposed that four major dimensions can be organized as the poles of two bipolar and orthogonal axes. The first axis contrasts emotions with what she calls "culture" (corresponding to beliefs and intellectual and symbolic heritage); the second axis contrasts ethics with community. Hinde (1999) added the idea that religion is typically characterized by the integration of these major components into a well-organized set. Hervieu-Léger (1999) suggested a normative qualification of such integration: Religion works well if all four components are taken into account.

Later, Tarakeshwar, Stanton, and Pargament (2003) suggested that five dimensions (very close to those described by Verbit—morality was not included) could be helpful for studying cultural variability on religion. Atran and Norenzayan (2004; see also Boyer, 2001) advanced ideas from evolutionary psychology that are in favor of some "naturalness" and universality of the major aspects of religion across religions and societies. Finally, data from large international sociological studies suggest the usefulness of a parsimonious model distinguishing between beliefs, practice (or behavior), and affiliation (or identification) (Billiet, n.d.; Voas, 2007). However, this sociological taxonomy focuses on external manifestations of religiosity (adherence to beliefs, frequency of practice, and affiliation or degree of identification) rather than internal dynamics (see below).

Table 2 presents our model that integrates and extends previous work and provides a further framework for cross-cultural research on religion. Below, we will discuss this model that, as it will be argued, is a good candidate for studying religious universals as well as variations within and between religions/cultures.

Universal Dimensions and Functions

Believing. A set of some or many beliefs relative to what many people consider as being an (external) transcendence—and its "connection" with humans and the world—is a basic universal component of religion. There is a huge diversity in the way people across cultures and religions conceive and objectify what they think transcends humans and their world. This can include one or several gods and divine beings, nonpersonal divinities, or impersonal forces or principles. Most world religions include the belief in a personal god or, more generally, human-like beings. These supernatural agents combine human-like characteristics (intellect, emotions) with counterintuitive elements such as omniscience, omnipresence, or "body" transformation (Boyer, 2001). Yet in other contexts, such as nontheistic spirituality, people endorse impersonal conceptions of transcendence: 33% of the Europeans believe that "there is some sort of spirit or life force"—in addition to 41% who believe in a personal God (Halman, 2001). Even in "godless" religions such as Buddhism, intermediate divine-like beings are present (Atran & Norenzayan, 2004). Beyond these differences, a universal dimension of religiosity is the belief in some kind of external transcendence—that is, the idea that "something larger and more important than me and the community of all humans (should) exist(s)." In addition, belief in some kind of transcendence is connected with people's meaning-making process (Park, 2005). The above elements constitute a key difference between (a) being atheist, nonreligious, or nonspiritual and (b) being religious and/or spiritual.²

Table 1. Previous Descriptions of the Major Aspects and Dimensions of Religion

| Four basic dimensions | Glock (1962) | Verbit (1970) | Hervieu-Léger (1999) | Hinde (1999) | Tarakshwar et al. (2003) | Atran & Norenzayan (2004) | Voas (2008) and Europ. Soc. Survey |
|-----------------------|--|--|-----------------------------------|---------------------------------|--|---|------------------------------------|
| I | Ideological Intellectual Experiential Ritualistic | Doctrine Knowledge Emotion Ritual | Culture Emotions | Beliefs Narratives Ritual | Ideological Intellectual Experiential Ritualistic | Counterintuitive beliefs Relief from negative emotions | Beliefs Practice/behavior |
| II | Consequential | Ethics Community | Ethics Community | Moral codes Social aspects | Social | Costly commitments Ritualized communion | Affiliation/identity |
| Advances | | | 2 bipolar axes, 6 combinations | An integrated set | Cultural/religious variation | Evolutionary hypotheses | Parsimony, international data |

Table 2. An Integrative Model of the Major Aspects and Dimensions of Religion

| I. Dimensions | 2. Aspects | 3. Products | 4. Goals | 5. Transcendence ^a | 6. Isolation's Consequences | 7. Risks | 8. Health-Related Processes | 9. Dynamics of Variation ^b |
|---------------|------------|-------------|----------|-------------------------------|-----------------------------|------------|-----------------------------|---------------------------------------|
| I. Believing | Beliefs | Dogmas | Truth | Intellectual | Intellectualization | Dogmatism | Meaning | Literal vs. symbolic |
| II. Bonding | Emotions | Rituals | Awe | Experiential | Mysticism | Neurotic R | Emotion. wellbeing | Negative vs. positive |
| III. Behaving | Morality | Norms | Virtue | Moral | Moralization | Rigorousm | Self-control | Self- vs. other-focused |
| IV. Belonging | Identity | Groups | Totality | Social | Rel. as identity | Prejudice | Social enhancement | Exclusive vs. inclusive |

a. Also, motives for conversion.

b. Cultural and religious variation: (a) within individuals and groups, across time; (b) across individuals, groups, and cultures, contemporarily.

Moreover, the believing dimension not only implies specific (religious) beliefs and religion-based meaning-making processes but also implies some affinities between being religious and holding other beliefs such as basic world assumptions (e.g., Buxant, Saroglou, Casalfiore, & Christians, 2007), especially just-world beliefs (e.g., Dalbert, Lipkus, Sallay, & Goch, 2001) and beliefs in the meaningfulness of the world and of personal life (Park, 2005). This has been found to hold for various religions (Saroglou, 2003; Tiliouine & Belgoumidi, 2009; Vilchinsky & Kravetz, 2005).

Note that rather than distinguishing between (a) doctrine, ideology, and (b) knowledge and intellectual aspects as in some of the previous models (see Table 1), here we group attitudes, processes, and products that have to do with the *cognitive* function of religion.

Bonding. A second dimension of religion is the emotional dimension. Religion is not only about beliefs but also includes self-transcendent experiences that bond the individual with what it perceives to be the transcendent “reality,” with others, and/or with the inner-self. Most often, this occurs within a ritualized framework, be it private (prayer and meditation) or public (worship, religious ceremonies, or pilgrims), frequent and regular, or exceptional. Even in self-oriented spiritual practices such as meditation, the objective is to connect with a deeper reality that transcends the everyday reality and the self. The existence of religious rituals and the experience of related emotions seem rather universal across cultures and religions. There is of course an enormous diversity of religious rituals that have more specific and distinct functions, correspond to specific moments in life trajectories and specific life events, and elicit various emotions that possibly differ with each experience. The point here is that what is possibly universally common across rituals, religions, and cultures is the emotional self-transcendence people experience (or look for) through religious rituals and the interindividual variability in frequency and intensity of these experiences.

Awe—the emotion of respectful admiration when facing a higher, more important, or deeper reality—may be a prototype of emotions elicited within a religious context (Keltner & Haidt, 2003). This is reminiscent of the classic phenomenological definition of religious experience as combining *tremendum* and *fascinans* components (Otto, 1923). There is also experimental evidence in favor of the opposite causal link: Induction of awe (with nature or childbirth) increases spirituality (Saroglou, Buxant, & Tilquin, 2008) and facilitates spiritual behavioral intentions and spirituality-related feelings among religious people (Van Cappellen & Saroglou, 2009). This is mediated by the increase in endorsing specific world beliefs—that is, trust of others and the world, but not self-worth (Van Cappellen, Iweins, & Saroglou, 2010).

Some theorists conceive the emotional and ritualistic dimensions of religion to be distinct from each other (see Table 1). From our perspective, this is *a priori* understandable. Rituals often have (or had), among others, a magical function: They are (were) accomplished with the conviction or hope that thoughts and acts, if performed correctly, may influence other parts of the external reality without physical contact (see Woolley, 2000). A pragmatic search for magical efficiency through rituals may thus seem, at first glance, far removed from the search for experiencing self-transcendent emotions. Nevertheless, looking for a higher order factor, it is under the *emotional* function of religion that the ritual(istic) dimension fits best. In addition, hope, which motivates a magical-thinking-based ritual, is a self-transcendent emotion. Moreover, all religious rituals include some forms of chanting, gesture, and acting, but not necessarily sermons or teachings.

Behaving. Religion not only is particularly concerned with morality as an external correlate but also includes morality as one of its basic dimensions. Indeed, religion provides specific norms and moral arguments defining right and wrong *from a religious perspective*.

Historically, there has been an overlap, or at least a significant correspondence, between religion's morality and the environing society's moral standards. Even today, within secularized societies, values that are privileged by religion (Saroglou, Delpierre, & Dernelle, 2004) are, to some extent, the same as values that are socially desirable (Schwartz, Verkasalo, Antonovsky, &

Sagiv, 1997). These are values that help enhance social order and reciprocity in altruism, but not necessarily those that put an emphasis on individual autonomy and societal change (Graham & Haidt, 2010; Saroglou et al., 2004; Schwartz & Huismans, 1995).

However, religious and societal moralities are also distinct and partially independent from one another. For instance, studies on children's moral development suggest that the universal moral principles of justice, equity, and nonharm appear very early in childhood (at the age of 3 years) and are independent from, or even, if necessary, in conflict with adults' (religious) norms (Turiel, 2006). A recent study on U.S. citizens' moral reactions relative to decisions of the Supreme Court showed that general moral conviction and religious conviction lead to divergent reactions (Skitka, Bauman, & Lytle, 2009).

Moreover, religion proposes additional norms of at least two kinds. First, it posits higher moral standards than those of the enviroing society such as altruistic sacrifice, humility, or strong self-control of impulsivity-related behaviors (Saroglou, in press). Second, religion provides taboos—that is, absolute values that cannot be traded off (Tetlock, Kristel, Elson, Green, & Lerner, 2000) and are often connected with the need for purity and the respect of the divinity (Graham & Haidt, 2010; Guerra & Giner-Sorolla, 2010). Finally, at the individual level, similar to the connection between religiosity and the belief in the meaningfulness of life and the world, there is an overall positive association between religiosity and willingness to be, and be perceived by others as, moral and virtuous (Batson et al., 1993; Vitell, Bing, Davison, Ammeter, & Novicivec, 2009).

Belonging. The fourth dimension of religiosity—that is, belonging—is perhaps the most obvious to observe, but it may be quite difficult to detect the religious characteristics of this dimension comparatively to that belonging related to any kind of group or community. Indeed, religious groups, communities, and traditions constitute just one of many possibilities people have to satisfy their need to belong, hold, and profit from a social identity. Moreover, across historical periods and geographical contexts, religious beliefs, rituals/emotions, and moral rules are organized, discussed, and shared as normative within the framework of religious communities. This may explain why there is typically an affinity between personal religiosity and collectivism, in both individualistic and collectivistic societies (Saroglou & Cohen, in press, for review). Furthermore, religious identification with a major tradition, a denomination, or a specific group, or self-identifying as a “believer” or a “spiritual person,” is also a basic dimension of individual religiosity.

Religious communities present additional characteristics. They include some kind of authority (person, symbol, process, or institution) that is, to some extent, a point of reference for what is normative and provides validation for what is new. Religious communities also include narratives and/or symbols that purport to unify a glorious past with the present and a glorious and eternal future. They may thus be unique as groups by perceiving themselves as fully transhistorical. Such a dynamic may be helpful to maintain cohesiveness and enhance a positive social identity and collective self-esteem.

Dimensions delimitating religion from related constructs. The four components allow us to delimitate religion from other similar social and psychological domains. For instance, *paranormal beliefs* share with religion the belief in extrahuman entities as well as a propensity for magical, intuitive, and holistic rather than analytic thinking (Aarnio & Lindeman, 2007; Peltzer, 2003). They both also include some ritual (e.g., consulting horoscopes, visiting a medium). The community and moral dimensions, however, are missing from paranormal beliefs. Similarly, *philosophical systems* share with religion an interest in existential questions and a propensity for integrative intellectual systems, possibly having consequences for morality, but they lack the emotional/ritual dimension required to become a religion. *Sport* has its own rituals, communities, and collective emotions, but beliefs are weak and certainly do not extend to the “big” human questions. *Art* and music imply their own rituals and aesthetic emotions, probably help in a

meaning-making process, and may also include some community spirit; however, ethics do not belong at the core business of art.

Affirming the co-presence of the four dimensions in religion is more subtle and specific than simply stating that there exist cognitive, emotional, moral, and social elements within religion. This would be trivial, since many social realities (e.g., family, work, politics, and culture) also imply the co-existence and integration of these four dimensions. It is the specific goals that qualify these four dimensions as religious (see Table 2, column 4). Indeed, religion implies (I) meaning-making by aiming to find the “truth,” (II) experiencing self-transcendence (“awe” being a prototype emotion) through private and/or public rituals, (III) taking decisions and behaving in a way to achieve “virtue,” and (IV) belonging to groups whose quality is the integration between a (glorious) past, present, and eternal future, aiming thus to experience “totality.” Consequently, religion implies four kinds of self-transcendence (see Table 2, column 5): intellectual (ideas relative to the big existential issues), experiential (awe with respect to a larger and more important reality), moral (willingness to achieve irreproachable virtue), and social (belonging to a cultural group with a glorious history and ambitious future goals).

Interrelations and distinctiveness. It is reasonable to expect the four dimensions to be inter-related to a significant degree. As noted earlier, religious measures are most often, especially when administered to a population with a high variability of religiosity (i.e., including both religious and nonreligious individuals), greatly intercorrelated, even though they are intended to measure distinct religious dimensions. This is primarily because every religious measure, independently of its specific content, is also a simple reflection of strong versus weak proreligious attitudes or dispositions (see Tsang & McCullough, 2003).

In addition, a key characteristic of these four religious dimensions is that they are inter-related. This is because in religion, beliefs, emotions, rituals, community, and moral rules coalesce to form a more or less integrated set (Hinde, 1999). For instance, rituals simultaneously play a role in activating specific emotions expected to be in accordance with the corresponding religious beliefs, lead to willingness to morally behave in accordance with these beliefs and emotions, and increase a group’s cohesiveness and identification. Similarly, moral decisions to change one’s own behavior are amplified through special beliefs (e.g., God is forgiveness) and rituals (e.g., confession, purification) activating self-conscious emotions (e.g., guilt, shame, and pride). Finally, religious beliefs are not simple cognitions contributing to meaning-making processes; they are emotionally celebrated through rituals, have a strong moral connotation (people are interested in God knowing what is right for them, but not on God knowing how to repair their car), and are shared by group members.

Nevertheless, beliefs, practices, emotions, and affiliation—our alliterative four basic dimensions—are distinct religious dimensions that should differ in terms of their predictors, underlying psychological processes (e.g., affinities with specific personality traits), and outcomes. An interesting example is the variety of motives that lead to religious conversion. A classic model in the psychology of conversion (Lofland & Skonovd, 1981) distinguishes between six different pathways leading to religious conversion that can be read in light of our four basic dimensions: “intellectual,” “mystical,” “experiential,” “affectional,” “revivalistic,” and “coercive” conversions (see also work by Hervieu-Léger, 1999). Another interesting example is religious prosociality, which more clearly depends on personal religiosity and religious beliefs than public religious practice (e.g., Markstrom, Huey, Stiles, & Krause, 2010; Smith, 2009). This is probably attributable to the intrinsic character of the believing dimension, whereas practicing in contexts with social pressure may reflect extrinsic motivations. However, donation and philanthropy are better correlated with public religious practice than personal religiosity and beliefs, probably because of the direct effect of religious preaching and demand for charity during religious rituals (Bekkers & Wiepking, 2007).

Cultural and Religious Variation

Content variability within each dimension. Interesting cultural variability exists in the content of specific religious beliefs. For example, anthropological evidence suggests some correspondence between cultures with benevolent versus malevolent divinities and supportive versus rejecting parental educational styles (Lambert, Triandis, & Wolf, 1959; Rohner, 1975). East-Asian Canadians were found to be, for cultural reasons having to do with the perception of causality, more likely than European Canadians to attribute events to fate. Christians, compared to the nonreligious, did the same, but for religious reasons—that is, belief in God (Norenzayan & Lee, 2010). Consequences of monotheism compared to polytheism have been largely discussed. The former is believed to have contributed to rationality and modern progress (Stark, 2003) but is also suspected of dogmatism and intolerance (Assmann, 2009). However, there exists no systematic comparative psychological research providing empirical confirmation of these hypotheses. The interplay between culture, religion, and specific beliefs is an issue worthy of full investigation.

There is also considerable cultural and religious variability in the rituals that are privileged across groups and the specific emotions that are elicited. For instance, Tsai, Miao, and Seppala (2007) found that high arousal positive states (e.g., excitement) are valued less and low arousal positive states (e.g., calm) are valued more in Buddhism compared to Christianity. These differences were consistent across old fundamental texts (Gospels and Lotus Sutra), contemporary self-help books, and reports of practitioners from the two religions. Kim-Prieto and Diener (2009, Study 1) compared Christian, Buddhist, Muslim, Hindu, and Jewish participants from about 40 nations on the frequency with which they experience nine discrete emotions. Christians reported more love, whereas Muslims more sadness and shame. These studies suggest that religious preferences for specific emotions may parallel cultural specifics in emotions. However, one cannot exclude the alternative idea that religious emotions complement what culture emphasizes in emotions. For instance, in collectivistic societies people may need to practice meditation and experience interiority in order to transcend group barriers and focus on the individual self. In individualistic cultures, people may need collective rituals to transcend the self's limits and isolation and experience collective emotions of belonging to larger groups.

Again, there is some interesting variability among religious/cultural contexts in the way religion and religiosity are linked to moral values, judgments, feelings, and behaviors. For instance, although forgiveness is highly valued across the major religions, compared to Jews, Protestants' religiosity more strongly reflects the importance to forgive even "unforgivable" (for Jews) offenses (Cohen, Malka, Rozin, & Cherfas, 2006). And Muslims seem to differ from Christians living in the same country (Lebanon), being particularly sensitive to the offender's apologies and demonstration of repentance, thus endorsing unconditional forgiveness to a lesser degree (Mullet & Azar, 2009). To give another example, wars are justified in some religions, whereas in others violence of all kinds is prohibited. We know, in fact, almost nothing about how such cross-religious differences in morality can be explained by cultural factors. Does this variation have to do with group differences in personality traits among the respective ethnic groups and nations? Is it due to different forms of moral reasoning, which are partly influenced by sociocultural, socioeconomic, and educational factors? Emerging research on cultural influences on morality (see Miller, 2007) may prove to be particularly fruitful for understanding religious variations in morality.

Finally, there is impressive variability in the forms of religious groups and religious identification, although little is known about the cultural determinisms associated with this variability. Religious communities may be small or large in size, old or new in history, exclusive or inclusive in membership, strict or weak in affiliation/identification, horizontal or vertical in structure, and real or virtual (e.g., internet based) and symbolic in constitution. Much more research in this area

comes from sociology of religion (Beckford & Demerath, 2007). Psychological studies investigating the social dimension of religious identity have been sparse (but see Ysseldyk, Matheson, & Anisman, 2010).

Variation on salience and interrelations of the four dimensions. A complementary way to examine the distinctiveness of the four religious dimensions and their usefulness for cross-cultural psychological research is to compare the salience of the different dimensions within religions, denominations, or groups and to compare different religious communities on the mean importance of each dimension. Cross-sectionally, there may be important differences. For instance, taking the risk to be too global, we can suspect the social dimension to be highly present in Orthodox religiosity in Balkan countries as well as among Israeli Jews, the emotional dimension to be particularly invested among Western Buddhists (see the meditation practice), the believing dimension to be salient in traditional liberal Protestantism, and the moral dimension to be salient in the context of conservative U.S. Protestants. There should also be cultural variation within religions and religious groups as a function of the historical context. For instance, religiosity of Western Catholics has changed in the past 50 years, having shifted its focus from religious morality and beliefs to placing a larger emphasis on emotional religious experiences (Champion & Hervieu-Léger, 1990; Riis & Woodhead, 2010).

Religions and cultures may also differ in the way the four dimensions are inter-related. An intriguing hypothesis is that the more religions have evolved toward organized monotheistic systems, the more religious beliefs, emotions, morality, and identity are interconnected (or ideally expected to do so). There is initial empirical evidence in favor of such an assumption. Analyzing data from dozens of countries, and comparing Eastern countries (Japan, India, or China) with Western ones, Stark (2001) found that religion has the effect of sustaining moral order only as far as religion is based on belief in powerful, active, conscious, morally concerned gods—something that is less typical in Eastern cultures. The weaker motivation for consistency characterizing Eastern compared to Western cultures (Kanagawa, Cross, & Markus, 2001; Suh, 2002) may turn out to be responsible for weaker interconnections between the four religious dimensions when one compares Eastern to Western religiosity.

This is a totally unexplored research area for cross-cultural psychology and the comparative psychology of religion. Not only may there be interesting Eastern-Western differences in the strength of the interrelations between the four dimensions, but cultural factors could also at least partially explain how, within the same religion, people (here Christians) may believe without belonging (Davie, 1994) or behaving (see the religious moral hypocrisy issue, Batson et al., 1993) or may belong without believing or behaving (Marchisio & Pisati, 1999) or finally may behave without believing or belonging (see a recent interview study on nonbeliever priests, Dennett & LaScola, 2010).

Forms of Religiosity: Universals and Variations

Up to now, we advocated for the universality of four basic religious dimensions and their functional equivalence, across cultures and religions, regarding (a) meaning and truth, (b) emotional self-transcendence, (c) self-control in morality, and (d) belonging to transhistorical groups. We also presented evidence for cultural and religious variability regarding the content of beliefs, rituals/emotions, norms, and groups; the intensity of each religious dimension; and the strength of the interconnection between them. As it will be detailed in the next to last section, the model of the Big Four religious dimensions may also be a powerful tool for understanding and integrating the large individual and collective variability of forms of religion. As it will be presented in the following three subsections, the forms religiosity takes may (a) be functional or dysfunctional, depending on the excessiveness or not of the investment on one of the four dimensions

at the detriment of the other three. It also may (b) simply vary on tonality depending on the preference given on the combination of two out of the four dimensions (a six-religious form typology will thus be described). In addition, (c) key dynamics internal to each of the four dimensions constitute additional sources of variability of religious forms. Finally, it will be argued that, across cultural groups, the structural variability of these religious forms may be universal, but there exists cultural variability on the salience of each form.

Functional and dysfunctional religion. The co-presence of the four components is not only needed, when trying to define religion, to delimitate it from proximal constructs but, according to several theorists (e.g., Atran & Norenzayan, 2004; Hervieu-Léger, 1999; Hinde, 1999), helps religion to be successful and dynamic and to encompass large segments of society. In fact, it may often occur that one specific component is excessively invested to the detriment of others. This could lead to religious forms and expressions that may be dysfunctional, if not for the individual, at least for society (see Table 2, column 6). Overemphasis on the cognitive, emotional, moral, or social dimension alone can thus lead, respectively, to religious forms and expressions that are marked by excessive (I) intellectualization, (II) mysticism, (III) moralization, or a strictly (IV) identitarian form of religion. At the individual level, there are dysfunctional ways of dealing with religious beliefs, emotions, moral rules, and groups of belonging. These are (see Table 2, column 7), respectively by dimension, (I) dogmatism—that is, unjustified certainty regarding some beliefs even in the face of disconfirming evidence (Altemeyer, 1996)—(II) neurotic religion, based, for instance, on guilt and fear of divine punishment (Loewenthal, 2008); (III) moral rigorism such as the casuistic forms of Christianity in the 16th-17th centuries (Jonsen & Toulmin, 1988); and (IV) prejudice toward outgroups and groups that threaten religious values (Hunsberger & Jackson, 2005).

On the positive side, one can also find here four important mechanisms that are known to, at least partially, explain the link between religion and mental and physical health (see Table 2, column 8). These are, respectively for each of the four dimensions:

- (I) the meaning-making process and the belief in meaningfulness of the world and life (Park, 2005);
- (II) positive emotions and experiences such as joy, optimism, and emotional well-being (Fredrickson, 2002), attachment security or securing in the context of previous attachment insecurity (Buxant et al., 2007; Miner, 2009), and regulation of negative emotions (Watts, 2007);
- (III) self-control and healthy lifestyles (McCullough & Willoughby, 2009) as well as benefits from prosocial dispositions and behavior (Steffen & Masters, 2005); and
- (IV) a sense of belonging, collective self-esteem, and social support (Greenfield & Marks, 2007; Krause & Wulff, 2005).

A six-form religious typology. An interesting typology of religious expressions may be obtained through the various possible combinations of two of the four poles (see Hervieu-Léger, 1999, for a previous proposal). We argue that religious individuals and religious/cultural groups often differ in emphasizing two of the four dimensions. Therefore, a typology of six religious forms and expressions is suggested (see Table 3). These forms are to be seen not as strictly distinct categories (all four dimensions are present in any religious form) but as six prototypes, each emphasizing in a stronger way two of the four dimensions.

A preferential emphasis on believing in *and* bonding with transcendence is at the heart of *spirituality*, be it within or outside religious traditions and institutions (see Dy-Liacco et al., 2009). Indeed, the link between (some forms of) spirituality and morality has been questioned

Table 3. Religious Forms/Expressions Resulting From the Combination of Two Dimensions

| Combinations of Dimensions | Forms/Expressions |
|--------------------------------|-------------------------|
| I & II: Believing + Bonding | Spirituality |
| I & III: Believing + Behaving | Intrinsic religion |
| I & IV: Believing + Belonging | Orthodox groups |
| II & III: Bonding + Behaving | Asceticism |
| II & IV: Bonding + Belonging | Charismatic communities |
| III & IV: Behaving + Belonging | Moral communities |

(e.g., Bellah, Madsen, Sullivan, Swidler, & Tipton, 1985) and its link with institutions and groups may be weak (Zinnbauer & Pargament, 2005). Emphasizing beliefs *and* morality is typical of *intrinsic religiosity*, in other words, of religiosity that seems, for instance, normative of Protestant cultural contexts, but not necessarily of Jewish ones, where belonging and practicing is equally valued and normative (see Cohen et al., 2005). *Orthodoxy* cannot be thought outside established and structured groups; the emphasis is on beliefs as defined by the group's authority and texts (Hood et al., 2005). Experiencing strong emotions of connection with the transcendence *and*, at the same time exerting strong self-control in order to access purity and virtue, characterizes the *ascetic* form of religiosity. Indeed, monasticism has given priority to rituals and morality over theology and social insertion. Investing in the emotional *and* the community dimensions of religion seems typical of *charismatic* religion (Champion & Hervieu-Léger, 1990). Finally, emphasis on morality (be it oriented toward humanitarian causes or toward self-control) that is animated by the religious tradition is a key feature of religious moral communities—that is, religious groups oriented to either liberal (social activists) or conservative moral objectives (rigorists).

Internal dynamics within each dimension. Within each of the big four religious dimensions, there is considerable variability regarding not only the specific content of beliefs, emotions, rules, and community type, the degree of salience these dimensions have within and across groups, and the degree of the interrelations between these dimensions, but also the specific way individuals, groups, and cultures process these contents (see column 9 in Table 2).

The *believing* dimension can mainly be characterized by holding religious ideas, beliefs, norms, and symbols in a (a) literal, dogmatic, and/or orthodox way versus (b) an interpretative/symbolic, flexible/questing, and/or autonomous way. Beyond the well-established interindividual variability on these styles (Hood, Hill, & Spilka, 2009), interesting cultural variability exists across or within religions. Buddhism and Eastern religions are perceived to differ from monotheistic, mostly Western-world-based, religions by being less systematic in the belief system, less dogmatic in endorsing beliefs, and more tolerant of alternative views. Empirical research should investigate this assumption, including at the individual level of religiosity. A specific religion or religious denomination may also evolve, under the influence of cultural factors, from more fundamentalist to more symbolic forms, or the opposite. For instance, in the last 50 years, creationism has been progressively abandoned within European Catholicism, but it has increased in the context of U.S. Protestantism.

The *bonding* dimension is mainly qualified by the specific emotional quality that individuals, groups, and cultures experience through the connection with the transcendence, be it a personal deity, other kinds of divinities, impersonal forms of transcendence, or the cosmos as a whole. Religious experience can be marked by, result from, and/or lead to negative emotions (e.g., guilt, sadness, fear, anxiety, anger) or positive emotions (e.g., awe, reverence, gratitude, joy) (Emmons, 2005; Watts, 2007). Religious people may hold positive versus negative God representations

such as “God is loving and supportive” versus “God is judging and punishing” (see Grimes, 2008; Saroglou, 2006, for reviews). Similarly, cultural/religious groups seem to differ in the way religiosity reflects emotionality and emotional stability. Guilt and neuroticism seem more present in the context of European Catholicism rather than in the context of U.S. Protestantism (Saroglou, 2010). There is also cultural variation within religions: The connection between the personal religiosity of Western Christians and guilt and introversion has weakened in the past decades, if not been replaced by positive emotionality (Saroglou, 2002, 2010).

The *behaving* of a religious person in a correct manner may vary depending on the emphasis, extent, and priority given to interpersonal versus impersonal morality. The former is animated by feelings of empathy and principles of care and justice; the latter, more typical of conservative persons and collectivistic societies, is animated by principles such as loyalty, authority, purity, and integrity (see Graham & Haidt, 2010; Saroglou, in press; Weeden, Cohen, & Kenrick, 2008). For instance, anti-gay and -lesbian prejudice as a function of individual religiosity is common in the major religions (Hunsberger, 1996; Whitley, 2009). However, a recent comparison between Catholics, Protestants, and Muslims living in the same country (Belgium) showed important differences in homonegativity scores: Muslims being high, Catholics in the middle, and Protestants low, no higher than atheists (Hooghe, Claes, Harell, Quintelier, & Dejaeghere, 2010). Both religious differences (e.g., internal theological developments) and cultural factors (e.g., conservative morality in collectivistic societies) related to the culture of origin of the respective groups may be responsible for these findings. Research on religion and racism among U.S. Christians has also shown that, when racism became socially proscribed, it was no longer an outcome of individual religiosity (Batson et al., 1993; Hall, Matz, & Wood, 2010).

Finally, an important variability characterizes the *belonging* dimension of religion. Religious people report affiliation and/or identify with communities, groups, and traditions whose frontiers vary from natural kinships of small size (based, e.g., on ethnicity, language, and geography) to large, culturally extended communities that transcend ethnic, linguistic, and geographical barriers. Judaism and Eastern Orthodox religion are strongly interconnected with ethnicity (Kivisto, 2007). In contemporary Islam, Catholicism, and Protestantism, religious identity often transcends national and ethnic barriers (Saroglou & Cohen, in press). Some religions and spiritual expressions (e.g., Western Buddhism) even transcend religious barriers by facilitating universalistic values (Saroglou & Dupuis, 2006). To use another terminology, religious groups vary greatly on a continuum going from exclusive identity (e.g., sects, ethnic religions) to inclusive identity (modern spirituality). It may be that the primary factors explaining this kind of variability in the belonging dimension are not religious but cultural. For instance, in typical Western European countries of Christian tradition, individual religiosity of young people is overall unrelated to the value of Universalism, whereas it is consistently negatively related to this value among Mediterranean young people, be it Turkish Muslims, Israeli Jews, Greek Orthodox, or Italian and Spanish Catholics (Saroglou et al., 2004).

In sum, within each of the four basic dimensions, one can find key different forms of religiosity—that is, symbolic versus orthodox in beliefs, positive versus negative in emotions, other-oriented versus holistic in morality, and extended versus kinship-focused in identity. There is certainly interesting cross-cultural variability on the salience and prevalence of these forms across individuals, cultural groups, religions, denominations, and historical periods. However, these key dynamics, internal to the four basic dimensions that are presumably universal, are very likely themselves universal across various religious and cultural groups. For instance, fundamentalist versus relativistic expressions of faith have been attested across all major religions (Altemeyer & Hunsberger, 2005). Positive versus negative emotionality in religious experiences seems also a constant distinction across the major religions (Pargament, 1997).³

Conclusion

The coexistence of cognitive, emotional, moral, and social dimensions within religion is very likely universal. These dimensions reflect interconnected, but partly distinct, underlying psychological processes, religious products, goals, functions, and mechanisms explaining religion's outcomes on individuals' lives and society. In addition, there seems to be important variation within individuals, groups, and cultures, and across time, (a) in the mean importance of each dimension and its relative importance in comparison to the other dimensions, (b) in the degree and manner in which the four dimensions are interconnected or isolated from each other, and (c) in the specific content and processes through which the four dimensions are expressed. Moreover, there are possible universals in the internal dynamics that are preponderant within each dimension: Across religious and cultural groups, one can distinguish in religion between dogmatic versus symbolic thinking, positive versus negative emotionality, self- versus other-oriented morality, and exclusive versus inclusive identity. Nevertheless, the salience of these forms may vary as a function of cultural factors.

This model thus posits a "big four" of basic religious dimensions: believing (in "truth"), bonding (with "transcending realities"), behaving ("virtuously"), and belonging (to "transhistorical" groups). Defining religion in this way allows social scientists to conceive religion as (a) being based on universal human motives (following Fiske's, 2010, core motives: understanding, trusting, controlling, self-enhancing, and belonging), but (b) constituting one of various cultural ways of expressing these motives, thus being distinct from close social domains (e.g., paranormal beliefs, philosophy, art). This model incorporates previous efforts to define the major religious dimensions and adopts a psychologically informed perspective more than a religiously based approach (too close to the content of the theological traditions) or sociologically based taxonomy (too focused on external manifestations of religiosity: adherence to beliefs, frequency of practice, and affiliation).

As far as measurement is concerned, at the moment, there exists no published integrated measure of the big four religious dimensions, let alone one having received cross-cultural validation. The creation and cross-cultural validation of such a measure, either for survey (measures of different dimensions of individual religiosity) or experiment purposes (for instance, activation/priming of religious cognitions, emotions, norms, or community), would be a welcomed research goal.⁴

Throughout this article, we often used phrasing suggesting that culture shapes religion. However, there is also evidence in favor of the inverse pathway: Religious specifics may contribute to cultural differences. In a series of recent experiments, Colzato et al. (2010) compared, distinctly by country, Dutch Calvinists, Italian Catholics, and Israeli Jews with nonreligions peers on the global-local task that measures one's focus on the "big picture" (holistic perception of a big rectangle) or on details (perception of several small rectangles within the big rectangle). The Calvinists turned out to be "detail"-oriented, whereas the Catholics and Jews were "big picture"-oriented. The authors interpreted these findings as being due to the fact that Calvinism emphasizes individual responsibility, whereas Catholicism and Judaism place more emphasis on social responsibility.

In cultural and cross-cultural psychology, there is an increasing understanding of factors shaping cognition, emotions, self-concept, morality, and social behavior among different cultural groups, especially non-Westerners (Henrich, Heine, & Norenzayan, 2010). Most, but fortunately not all, of our psychological knowledge of religion comes from Christian, especially Protestant, cultural contexts. It is reasonable to expect that cultural psychological research may also prove fruitful for future researchers willing to examine how cultural factors are intertwined with variation in the cognitive, emotional, moral, and social dimensions of religion.

Acknowledgments

The revision of the present manuscript benefited from helpful comments provided by two reviewers, Raymond Paloutzian and Johnny Fontaine; the *JCCP* founding and special issues editor, Walt Lonner; and the guest co-editor of this special issue, Adam B. Cohen.

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. Throughout the article, we often use the phrasing “religious and cultural” factors, variation, differences, and so forth. This does not imply that we pretend to resolve here the interdisciplinary question of the relationships between religion and culture: Is religion part of culture? Is religion one form of culture? Does religion include cultural elements in addition to its own? We do this because, with respect to the variability of religious forms across groups, one may distinguish factors that are strictly religious (differences in theology, texts, religious traditions, and history) from other cultural factors such as ethnicity, language, socioeconomic factors, and differences in cognitions, emotions, personality, morality, and social behavior.
2. Psychological studies specifically dedicated to atheism or irreligion are scarce. However, the existing empirical literature suggests that, with respect to many psychological domains (e.g., personality, values, and social behavior), atheists and nonbelievers are often opposite to believers (see Zuckerman, 2009, for a review). On the basis of our framework presented in this article, being atheist, irreligious, or non-spiritual can be conceived as located at the low end in *all* four religious dimensions. There are, of course, differences in the ways to be irreligious. For instance, when atheism is not just irreligion but reflects (a) high investment on specific beliefs against what religious believers perceive as transcendence and (b) belonging to an atheist group, then atheism becomes an organized ideology. Still it does not constitute religion (or a counterreligion), because the dimension of bonding as described here is not involved.
3. Nevertheless, just as the qualification of an individual score on a given personality trait as high or low is dependent on the mean importance of this trait within the group of reference, the qualification of an individual’s religiosity, for instance as fundamentalist or open-minded, should also be made in reference to the mean level this religious form has within the religious/cultural group of reference. In other words, what is fundamentalist in the eyes of a secularized Western should not necessarily be qualified as such if applied to the context of Islam in Iran or Pakistan.
4. At the moment, in collaboration with colleagues from 12 countries and data from different religious denominations, we have collected data from more than 2,300 participants using a short 12-item scale we created. Initial analyses are in favor of the distinctiveness and inter-relation, across countries and religious denominations, of four dimensions—that is, religiosity for (a) meaning-making, (b) ritual and emotional experiences, (c) moral guidance, and (d) group identity.

References

- Aarnio, K., & Lindeman, M. (2007). Religious people and paranormal believers: Alike or different? *Journal of Individual Differences*, *28*, 1-9.
- Allport, G. W., & Ross, J. M. (1967). Personal religious orientation and prejudice. *Journal of Personality and Social Psychology*, *5*, 432-443.
- Altemeyer, B. (1996). *The authoritarian specter*. Cambridge, MA: Harvard University Press.

- Altemeyer, B., & Hunsberger, B. (2005). Fundamentalism and authoritarianism. In R. F. Paloutzian & C. L. Park (Eds.), *Handbook of the psychology of religion and spirituality* (pp. 378-393). New York, NY: Guilford Press.
- Assmann, J. (2009). *The price of monotheism* (R. Savage, Trans.). Stanford, CA: Stanford University Press. (Originally published 2006)
- Atran, S., & Norenzayan, A. (2004). Religion's evolutionary landscape: Counterintuition, commitment, compassion, communion. *Behavioral and Brain Sciences*, 27, 713-770.
- Barrett, D. A. (2001). *World Christian encyclopedia* (2nd ed.). New York: Oxford University Press.
- Batson, C. D., Schoenrade, P., & Ventis, W. L. (1993). *Religion and the individual: A social-psychological perspective*. New York: Oxford University Press.
- Beckford, J. A., & Demerath, N. J., III. (Eds.). (2007). *The SAGE handbook of the sociology of religion*. London: Sage.
- Bekkers, R., & Wiepking, P. (2007). *Generosity and philanthropy: A literature review*. Report commissioned by the John Templeton Foundation. Retrieved from Social Sciences Research Network: <http://ssrn.com/abstract=1015507>
- Bellah, R., Madsen, R., Sullivan, W., Swidler, A., & Tipton, A. (1985). *Habits of the heart: Individualism and commitment in American life*. Berkeley: University of California Press.
- Billiet, J. (n.d.). *Proposal for questions on religious identity*. *European Social Survey Core Questionnaire Development*. Retrieved from http://www.europeansocialsurvey.org/index.php?option=com_content&view=article&id=62&Itemid=355
- Boyer, P. (2001). *Religion explained: The human instincts that fashion gods, spirits and ancestors*. London: Heinemann.
- Brown, D. E. (1991). *Human universals*. Philadelphia: Temple University Press.
- Buxant, C., Saroglou, V., Casalfiore, S., & Christians, L.-L. (2007). Cognitive and emotional characteristics of New Religious Movement members: New questions and data on the mental health issue. *Mental Health, Religion, and Culture*, 10, 219-238.
- Champion, F., & Hervieu-Léger, D. (1990). *De l'émotion en religion: Nouveaux et traditions* [Emotion in religion: Renewal and tradition]. Paris: Centurion.
- Cohen, A. B., Hall, D. E., Koenig, H. G., & Meador, K. G. (2005). Social versus individual motivation: Implications for normative definitions of religious orientation. *Personality and Social Psychology Review*, 9, 48-61.
- Cohen, A. B., Malka, A., Rozin, P., & Chermas, L. (2006). Religion and unforgivable offenses. *Journal of Personality*, 74, 85-118.
- Colzato, L. S., van Beest, I., van den Wildenberg, W. P. M., Scroli, C., Dorchin, S., Meiran, N., et al. (2010). God: Do I have your attention? *Cognition*, 117, 87-94.
- Cutting, M., & Walsh, M. (2008). Religiosity scales: What are we measuring in whom? *Archive for the Psychology of Religion*, 30, 137-153.
- Dalbert, C., Lipkus, I. M., Sallay, H., & Goch, I. (2001). A just and an unjust world: Structure and validity of different world beliefs. *Personality and Individual Differences*, 30, 561-577.
- Davie, G. (1994). *Religion in Britain since 1945: Believing without belonging*. Oxford, UK: Blackwell.
- Dennett, D. C., & LaScola, L. (2010). Preachers who are not believers. *Evolutionary Psychology*, 8, 122-150.
- Dy-Liacco, G. S., Piedmont, R. L., Murray-Swank, N. A., Rodgeron, T. E., & Sherman, M. F. (2009). Spirituality and religiosity as cross-cultural aspects of human experience. *Psychology of Religion and Spirituality*, 1, 35-52.
- Emmons, R. A. (2005). Emotion and religion. In R. F. Paloutzian & C. L. Park (Eds.), *Handbook of the psychology of religion and spirituality* (pp. 235-252). New York: Guilford Press.
- Fiske, S. T. (2010). *Social beings: Core motives in social psychology* (2nd ed.). New York: Wiley.

- Flere, S., & Lavrič, M. (2008). Is intrinsic religious orientation a culturally specific American Protestant concept? The fusion of intrinsic and extrinsic religious orientations among non-Protestants. *European Journal of Social Psychology, 38*, 521-530.
- Fontaine, J. R. J., Duriez, B., Luyten, P., & Hutsebaut, D. (2003). The internal structure of the Post-Critical Belief scale. *Personality and Individual Differences, 35*, 501-518.
- Fredrickson, B. L. (2002). How does religion benefit health and well-being? Are positive emotions active ingredients? *Psychological Inquiry, 13*, 209-213.
- Ghorpade, J., Lackritz, J. R., & Moore, R. (2010). Intrinsic religious orientation: The conservative Christian connection. *International Journal for the Psychology of Religion, 20*, 201-218.
- Glock, C. Y. (1962). On the study of religious commitment. *Religious Education, 57*(Research Suppl.), S98-S110.
- Graham, J., & Haidt, J. (2010). Beyond beliefs: Religions bind individual into moral communities. *Personality and Social Psychology Review, 14*, 140-150.
- Granqvist, P., & Hagekull, B. (1999). Religiosity and perceived childhood attachment: Profiling socialized correspondence and emotional compensation. *Journal for the Scientific Study of Religion, 38*, 254-273.
- Greenfield, E. A., & Marks, N. F. (2007). Religious social identity as an explanatory factory for associations between more frequent formal religious participation and psychological well-being. *International Journal for the Psychology of Religion, 17*, 245-259.
- Grimes, C. (2008). God image research: A literature review. In G. L. Moriarty & L. Hoffman (Eds.), *God image handbook for spiritual counseling and psychotherapy* (pp. 11-32). New York: Routledge.
- Guerra, V. M., & Giner-Sorolla, R. (2010). Community, Autonomy, and Divinity Scale (CADS): Development of a theory-based moral codes scale. *Journal of Cross-Cultural Psychology, 41*, 35-50.
- Hall, D., Matz, D. C., & Wood, W. (2010). Why don't we practice what we preach? Social-cognitive motives behind religious racism. *Personality and Social Psychology Review, 14*, 126-139.
- Hall, D. E., Meador, K. G., & Koenig, H. G. (2008). Measuring religiousness in health research: Review and critique. *Journal of Religion and Health, 47*, 134-163.
- Halman, L. (2001). *The European values study, a third wave: Source book of the 1999/2000 European values study surveys*. Tilburg, the Netherlands: Tilburg University.
- Henrich, J., Heine, S. J., & Norenzayan, A. (2010). The weirdest people in the world? *Behavioral and Brain Sciences, 33*, 61-83.
- Hervieu-Léger, D. (1999). *Le pèlerin et le converti: La religion en mouvement* [The pilgrim and the convert: Religion in movement]. Paris: Flammarion.
- Hill, P. C. (2005). Measurement in the psychology of religion and spirituality: Current status and evaluation. In R. F. Paloutzian & C. L. Park (Eds.), *Handbook of the psychology of religion and spirituality* (pp. 43-61). New York: Guilford Press.
- Hill, P. C., & Hood, R. W. (Eds.). (1999). *Measures of religiosity*. Birmingham, AL: Religious Education Press.
- Hinde, R. A. (1999). *Why gods persist: A scientific approach to religion*. London: Routledge.
- Hood, R. W., Jr., Hill, P. C., & Spilka, B. (2009). *The psychology of religion: An empirical approach* (4th ed.). New York: Guilford Press.
- Hood, R. W., Jr., Hill, P. C., & Williamson, W. P. (2005). *The psychology of religious fundamentalism*. New York: Guilford Press.
- Hooghe, M., Claes, E., Harell, A., Quintelier, E., & Dejaeghere, Y. (2010). Anti-gay sentiment among adolescents in Belgium and Canada: A comparative investigation into the role of gender and religion. *Journal of Homosexuality, 57*, 384-400.
- Hunsberger, B. (1996). Religious fundamentalism, right-wing authoritarianism, and hostility toward homosexuals in non-Christian religious groups. *International Journal for the Psychology of Religion, 6*, 39-49.

- Hunsberger, B., & Jackson, L. M. (2005). Religion, meaning, and prejudice. *Journal of Social Issues, 61*, 807-826.
- Jonsen, A., & Toulmin, S. (1988). *The abuse of casuistry: A history of moral reasoning*. Berkeley: University of California Press.
- Kanagawa, C., Cross, S. E., & Markus, H. R. (2001). "Who am I?" The cultural psychology of the conceptual self. *Personality and Social Psychology Bulletin, 27*, 90-103.
- Keltner, D., & Haidt, J. (2003). Approaching awe, a moral, spiritual, and aesthetic emotion. *Cognition and Emotion, 17*, 297-314.
- Kim-Prieto, C., & Diener, E. (2009). Religion as a source of variation in the experience of positive and negative emotions. *Journal of Positive Psychology, 4*, 447-460.
- Kivisto, P. (2007). Rethinking the relationship between ethnicity and religion. In J. A. Beckford & N. J. Demerath III (Eds.), *The SAGE handbook of the sociology of religion* (pp. 490-510). London: Sage.
- Krause, N., & Wulff, K. M. (2005). Church-based social ties, a sense of belonging in a congregation, and physical health status. *International Journal for the Psychology of Religion, 15*, 73-93.
- Lambert, W. W., Triandis, L. M., & Wolf, M. (1959). Some correlates of beliefs in the malevolence and benevolence of supernatural beings: A cross-societal study. *Journal of Abnormal and Social Psychology, 58*, 162-169.
- Loewenthal, K. (2008). *Religion, culture and mental health*. Cambridge, UK: Cambridge University Press.
- Lofland, J., & Skonovd, L. N. (1981). Conversion motifs. *Journal for the Scientific Study of Religion, 20*, 373-385.
- Lonner, W. J. (1980). The search for psychological universals. In H. C. Triandis & W. W. Lambert (Eds.), *Handbook of cross-cultural psychology, Vol. 1, perspectives* (pp. 143-204). Boston: Allyn and Bacon.
- Marchisio, R., & Pisati, M. (1999). Belonging without believing: Catholics in contemporary Italy. *Journal of Modern Italian Studies, 4*, 236-255.
- Markstrom, C. A., Huey, E., Stiles, B. M., & Krause, A. L. (2010). Frameworks of caring and helping in adolescence: Are empathy, religiosity, and spirituality related constructs? *Youth and Society, 42*, 59-80.
- McCullough, M. E., & Willoughby, B. L. B. (2009). Religion, self-regulation, and self-control: Associations, explanations, and implications. *Psychological Bulletin, 135*, 69-93.
- Miller, J. G. (2007). Cultural psychology of moral development. In S. Kitayama & D. Cohen (Eds.), *Handbook of cultural psychology* (pp. 477-499). New York: Guilford Press.
- Miner, M. (2009). The impact of child-parent attachment, attachment to God and religious orientation on psychological adjustment. *Journal of Psychology and Theology, 37*, 114-124.
- Mullet, E., & Azar, F. (2009). Apologies, repentance, and forgiveness: A Muslim-Christian comparison. *International Journal for the Psychology of Religion, 19*, 275-285.
- Neyrinck, B., Lens, W., Vansteenkiste, M., & Soenens, B. (2010). Updating Allport's and Batson's framework of religious orientations: A reevaluation from the perspective of self-determination theory and Wulff's social cognitive model. *Journal for the Scientific Study of Religion, 49*, 425-455.
- Norenzayan, A., & Heine, S. J. (2005). Psychological universals: What are they and how can we know? *Psychological Bulletin, 135*, 763-784.
- Norenzayan, A., & Lee, A. (2010). It was meant to happen: Explaining cultural variations in fate attributions. *Journal of Personality and Social Psychology, 98*, 702-720.
- Otto, R. (1923). *The idea of the holy: An inquiry into the non-rational factor in the idea of the divine and its relation to the rational*. London: Oxford University Press. (Originally published 1917)
- Pargament, K. I. (1997). *The psychology of religion and coping: Theory, research, practice*. New York: Guilford Press.
- Park, C. L. (2005). Religion and meaning. In R. F. Paloutzian & C. L. Park (Eds.), *Handbook of the psychology of religion and spirituality* (pp. 295-314). New York: Guilford Press.
- Peltzer, K. (2003). Magical thinking and paranormal beliefs among secondary and university students in South Africa. *Personality and Individual Differences, 35*, 1419-1426.

- Riis, O., & Woodhead, L. (2010). *A sociology of religious emotion*. Oxford, UK: Oxford University Press.
- Rohner, R. P. (1975). *They love me, they love me not: A worldwide study of the effects of parental acceptance and rejection*. New Haven, CT: HRAF Press.
- Saroglou, V. (2002). Religion and the five factors of personality: A meta-analytic review. *Personality and Individual Differences*, *32*, 15-25.
- Saroglou, V. (2003). Trans-cultural/religious constants vs. cross-cultural/religious differences in psychological aspects of religion. *Archive for the Psychology of Religion*, *25*, 71-87.
- Saroglou, V. (2006). "A son image" mais "à Sa ressemblance" ou comment l'homme façonne Dieu: Dynamiques psychologiques ["In his image", but in "His resemblance" or how humans shape God: Psychological dynamics]. In O. H. Pesch & J.-M. Van Cangh (Eds.), *L'homme, image de Dieu* (pp. 145-187). Bruxelles, Belgium: Cerf.
- Saroglou, V. (2010). Religiousness as a cultural adaptation of basic traits: A Five Factor Model perspective. *Personality and Social Psychology Review*, *14*, 108-125.
- Saroglou, V. (in press). Religion, spirituality, and altruism. In K. I. Pargament, J. Exline, & J. Jones (Eds.), *The APA handbook of psychology, religion and spirituality* (Vol. 1). Washington, DC: American Psychological Association.
- Saroglou, V., Buxant, C., & Tilquin, J. (2008). Positive emotions as leading to religion and spirituality. *Journal of Positive Psychology*, *3*, 165-173.
- Saroglou, V., & Cohen, A. B. (in press). Cultural and cross-cultural psychology of religion. In R. F. Paloutzian & C. L. Park (Eds.), *Handbook of the psychology of religion and spirituality* (2nd ed.). New York: Guilford Press.
- Saroglou, V., Delpierre, V., & Dernelle, R. (2004). Values and religiosity: A meta-analysis of studies using Schwartz's model. *Personality and Individual Differences*, *37*, 721-734.
- Saroglou, V., & Dupuis, J. (2006). Being Buddhist in Western Europe: Cognitive needs, prosocial character, and values. *International Journal for the Psychology of Religion*, *16*, 163-179.
- Schwartz, S. H., & Huismans, S. (1995). Value priorities and religiosity in four western religions. *Social Psychology Quarterly*, *58*, 88-107.
- Schwartz, S. H., Verkasalo, M., Antonovsky, A., & Sagiv, L. (1997). Value priorities and social desirability: Much substance, some style. *British Journal of Social Psychology*, *36*, 3-18.
- Shek, D. T. L. (2010). The spirituality of the Chinese people: A critical review. In M. H. Bond (Ed.), *The Oxford handbook of Chinese psychology* (pp. 343-366). New York: Oxford University Press.
- Skitka, L. J., Bauman, C. W., & Lytle, B. L. (2009). The limits of legitimacy: Moral and religious convictions as a constraint on deference to authority. *Journal of Personality and Social Psychology*, *97*, 567-578.
- Smith, T. W. (2009). Loving and caring in the United States: Trends and correlates of empathy, altruism, and related constructs. In B. Fehr, S. Sprecher, & L. G. Underwood (Eds.), *The science of compassionate love: Theory, research, and applications* (pp. 81-119). Chichester, UK: Wiley-Blackwell.
- Stark, R. (2001). Gods, rituals, and the moral order. *Journal for the Scientific Study of Religion*, *40*, 619-636.
- Stark, R. (2003). *For the glory of God: How monotheism led to reformations, science, witch-hunts, and the end of slavery*. Princeton, NJ: Princeton University Press.
- Steffen, P. R., & Masters, K. S. (2005). Does compassion mediate the intrinsic religion-health relationship? *Annals of Behavioral Medicine*, *30*, 217-224.
- Suh, E. M. (2002). Culture, identity consistency, and subjective well-being. *Journal of Personality and Social Psychology*, *83*, 1378-1391.
- Tarakeshwar, N., Stanton, J., & Pargament, K. I. (2003). Religion: An overlooked dimension in cross-cultural psychology. *Journal of Cross-Cultural Psychology*, *34*, 377-394.
- Tetlock, P. E., Kristel, O. V., Elson, S. B., Green, M., & Lerner, J. S. (2000). The psychology of the unthinkable: Taboo trade-offs, forbidden base rates, and heretical counterfactuals. *Journal of Personality and Social Psychology*, *78*, 853-870.

- Tiliouine, H., & Belgoumidi, A. (2009). An exploratory study of religiosity, meaning in life and subjective wellbeing in Muslim students from Algeria. *Applied Research in Quality of Life*, 4, 109-127.
- Tsai, J. L., Miao, F., & Seppala, E. (2007). Good feelings in Christianity and Buddhism: Religious differences in ideal affect. *Personality and Social Psychology Bulletin*, 33, 409-421.
- Tsang, J., & McCullough, M. E. (2003). Measuring religious constructs: A hierarchical approach to construct organization and scale selection. In C. R. Snyder (Ed.), *Handbook of positive psychological assessment* (pp. 345-360). Washington, DC: American Psychological Association.
- Turiel, E. (2006). The development of morality. In W. Damon & R. M. Lerner (Series Eds.), & N. Eisenberg (Vol. Ed.), *Handbook of child psychology: Vol.3. Social, emotional, and personality development* (6th ed., pp. 789-857). Hoboken, NJ: Wiley.
- Van Cappellen, P., Iweins, C., & Saroglou, V. (2010, June). *Induction of positive emotions lead to spirituality through changes in basic beliefs: An experimental study*. Paper presented at the 5th European Conference on Positive Psychology, Copenhagen, Denmark.
- Van Cappellen, P., & Saroglou, V. (2009, August). *Positive emotions as influencing spirituality-related feelings and behavioral intentions: The specific role of awe*. Paper presented at the International Association for Psychology of Religion Conference, Vienna, Austria.
- Verbit, M. F. (1970). The components and dimensions of religious behavior: Toward a reconceptualization of religiosity. In P. E. Hammond & B. Johnson (Eds.), *American mosaic* (pp. 24-39). New York: Random House.
- Vilchinsky, N., & Kravetz, S. (2005). How are religious beliefs and behavior good for you? An investigation of mediators relating religion to mental health in a sample of Israeli Jewish students. *Journal for the Scientific Study of Religion*, 44, 459-471.
- Vitell, S. J., Bing, M. N., Davison, H. K., Ammeter, A. P., Garner, B. L., & Novicivec, M. M. (2009). Religiosity and moral identity: The mediating role of self-control. *Journal of Business Ethics*, 88, 601-613.
- Voas, D. (2007). Surveys of behavior, beliefs and affiliation: Micro-quantitative. In J. A. Beckford & N. J. Demerath III (Eds.), *The SAGE handbook of the sociology of religion* (pp. 144-166). London: Sage.
- Watts, F. (2007). Emotion regulation and religion. In J. J. Gross (Ed.), *Handbook of emotion regulation* (pp. 504-520). New York: Guilford Press.
- Weeden, J., Cohen, A. B., & Kenrick, D. T. (2008). Religious attendance as reproductive support. *Evolution and Human Behavior*, 29, 327-334.
- Whitley, B. E., Jr. (2009). Religiosity and attitudes toward lesbians and gay men: A meta-analysis. *International Journal for the Psychology of Religion*, 19, 21-38.
- Woolley, J. D. (2000). The development of beliefs about direct mental-physical causality in imagination, magic, and religion. In K. S. Rosengren, C. N. Johnson, & P. L. Harris (Eds.), *Imagining the impossible: Magical, scientific, and religious thinking in children* (pp. 99-129). Cambridge, UK: Cambridge University Press.
- Ysseldyk, R., Matheson, K., & Anisman, H. (2010). Religiosity as identity: Toward an understanding of religion from a social identity perspective. *Personality and Social Psychology Review*, 14, 60-71.
- Zinnbauer, B. J., & Pargament, K. I. (2005). Religiousness and spirituality. In R. F. Paloutzian & C. L. Park (Eds.), *Handbook of the psychology of religion and spirituality* (pp. 21-42). New York: Guilford Press.
- Zuckerman, P. (2009). Atheism, secularity, and well-being: How the findings of social science counter negative stereotypes and assumptions. *Sociology Compass*, 3, 949-971.