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Fundamentalism as Dogmatic Belief, Moral Rigorism, and Strong Groupness across Cultures:

Dimensionality, Underlying Components, and Related Interreligious Prejudice

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Abstract

Is fundamentalism universal across religious cultures? We investigated this issue by focusing on three questions: (1) the dimensionality of fundamentalism, as measured by the Religious Fundamentalism Scale (Altemeyer & Hunsberger, 2004); (2) the very nature of fundamentalism as denoting dogmatic belief, moral rigorism, or strong groupness; and (3) interreligious prejudice as predicted uniquely, additively, or interactively by religiousness and socio-cognitive rigidity. We collected data from 14 countries of Catholic, Protestant, Christian Orthodox, Buddhist, Jewish, and Muslim tradition, regrouped in seven cultural-religious zones (N = 3,218 young adults). We measured fundamentalism, the four dimensions of religiousness (believing, bonding, behaving, and belonging), authoritarianism, existential quest, and interreligious prejudice—negative and discriminatory attitudes toward various religious outgroups and atheists. Across religious cultures, we found that: (1) the scale is unidimensional; (2) fundamentalism is best conceptualized as a combination of dogmatic belief (believing and low existential quest) and moral rigorism (behaving and authoritarianism), and occasionally as strong groupness (belonging and authoritarianism); (3) religious dimensions, additively to and interactively with, authoritarianism and low existential quest predict interreligious prejudice (in monotheistic cultures); and (4) anti-Muslim attitudes were the highest, but fundamentalism and religiousness related most strongly to anti-atheist sentiments.

Fundamentalism as Dogmatic Belief, Moral Rigorism, and Strong Groupness across Cultures:

Dimensionality, Underlying Components, and Related Interreligious Prejudice

What is the very nature of religious fundamentalism, from an individual differences perspective? In psychology, fundamentalism has been primarily conceptualized either as (1) dogmatic and rigid belief and conviction (Kirkpatrick et al., 1991) or as (2) authoritarian religion (Altemeyer, 1996). The latter can be declined into (2a) religious moral traditionalism and rigorism (Antonenko Young et al., 2013; Johnson et all., 2016) and/or (2b) strong and exclusivist identification with the religious group (Herriot, 2007; Hogg et al., 2010). This means that fundamentalism may involve three dimensions of the four Bs model of religious multidimensionality (Saroglou, 2011), believing (cognitive), behaving (moral), and belonging (groupness aspect), as well as rigid socio-cognitive orientations of traditionalism and submission to norms and authority and/or dogmatism, absolutism, and inflexibility in beliefs and conviction. However, it is unclear whether the different aspects of fundamentalism (entirely) overlap or whether they are unique contributors to religious fundamentalism.

To the best of our knowledge, this integrated conceptualization of fundamentalism as a multicomponent construct has not yet been theorized and empirically investigated. More importantly, there has not been systematic investigation of the very nature of fundamentalism across different religious cultures, including secular and religious countries of Christian tradition (Catholic, Protestant, Christian Orthodox), countries of other monotheistic traditions (Jewish and Muslim), and countries of East Asian religious traditions (Buddhism and Taoism). Furthermore, no such cross-cultural investigation has been carried out using the integrative framework of the religious dimensions and the socio-cognitive orientations we described above. This investigation is the central aim of the present research.

We investigated these questions in 14 countries, with adult samples from Europe, the Americas, the Middle East, and Asia, organized into seven cultural-religious zones, partly

following Inglehart and Welzel's (2013) world map of civilizational zones. These zones were: secular Western European countries (Catholic or mixed Catholic/Protestant heritage), religious Catholic countries, the US (predominantly Protestant tradition), Greece (Christian Orthodox), Israel (Jewish), Turkey (Muslim), and Taiwan (Buddhist/Taoist tradition).

In addition to the central question regarding the nature of religious fundamentalism across various religious cultures, we investigated two other related questions. The first regards the dimensionality of fundamentalism as measured by Altemeyer & Hunsberger's (2004) classic scale: is the construct unidimensional or multi-dimensional across cultures? The second regards interreligious prejudice, a typical outcome of fundamentalism (Rowatt et al., 2013). Assuming that fundamentalism is a combination of religious dimensions with rigid socio-cognitive orientations, we investigated whether these components relate to and predict, across religious cultures, interreligious prejudice, uniquely, additively, and/or interactively. We provide the rationale and the specific hypotheses for each of the three questions below.

Unidimensionality and Cross-Cultural Equivalence of Fundamentalism

Is fundamentalism a unidimensional construct? In the classic Fundamentalism Project (Marty & Appleby, 1995), specific aspects of fundamentalism, from a sociological and interdisciplinary perspective, were enumerated. These included absolutism and infallibility of religious texts or authorities, authoritarian structure of the group, feeling of being "selected", anti-modernism and anti-secularism, moral dualism, and apocalyptic tendencies. From a psychological perspective, one may consider different expressions of fundamentalism translating cognitive inflexibility, emotional negativity, moral rigorism, and/or an authoritarian social structure (Saroglou, 2016). Moreover, in the widely used Religious Fundamentalism Scale (Altemeyer & Hunsberger, 2004), purportedly unidimensional, one can identify potentially distinct elements: (1) the superiority and exclusiveness of one's religious teachings as containing the fundamental truth about humans and god and which must

be strictly followed, (2) moral dualism and the need to fight evil, and (3) opposition to science and historical relativism in interpreting sacred texts and religious ideas.

Beyond or across these nuanced aspects, it is reasonable to expect religious fundamentalism to also reflect a unified global attitude of absolutism of one's religion. This absolutism might encompass religious beliefs, rituals, norms, and community, and across related domains such as rationality, science, history, morality, and society's ideals. We expected fundamentalism, as in Altemeyer and Hunsberger's scale, to be unidimensional because first religiosity is already known to be integrative of cognitive, emotional, moral, and social aspects into a coherent whole (Hinde, 2009; Saroglou, 2011). Second, fundamentalism intensifies this integrative tendency since, as theorized by Rokeach (1960), dogmatism implies the subordination of all other "peripheral" beliefs to the "central" (i.e. religious) belief system. In a previous investigation of the dimensionality of the Religious Fundamentalism Scale in Germany, Romania, and the US (Krauss et al., 2006), no theoretically distinct factors were found; the two factor solution was comprised of only the pro- versus the con-items (see also for similar results in Italy with an older scale: Carlucci et al., 2013).

We investigated the dimensionality of fundamentalism collecting data from a number of countries representing all major world religions except Hinduism. For the reasons presented above, we expected fundamentalism, as measured with the Religious Fundamentalism Scale, to be unidimensional across cultural contexts (*Hypothesis 1*).

Fundamentalism as Dogmatic Belief, Moral Rigorism, and/or Strong Groupness

Identifying the psychological components of fundamentalism is an issue partly different from fundamentalism's uni-dimensionality. Does fundamentalism primarily denote religious dogmatic belief, moral rigorism, or strong groupness? Are these three aspects overlapping, complementary, and/or all necessary to constitute fundamentalism? Previous research suggests that fundamentalism is a combination of religiousness and closed-

mindedness in socio-cognitive orientations, mainly authoritarianism (Altemeyer, 1996; Rowatt et al., 2013). However, the more specific integrative model we propose has not yet been investigated, and certainly not across different religious cultures. We hypothesized fundamentalism to denote all three components, i.e. dogmatic belief, moral rigorism, and strong groupness (*Hypotheses 2a-2c*), and we investigated whether these three partly overlap and/or are partly unique in predicting fundamentalism across religious cultures. It may also be that, in certain cultures, fundamentalism becomes more dogmatic, more moralistic, or more identitarian (Saroglou, 2016). Below are the three rationales and the respective hypotheses.

Dogmatic Belief

Fundamentalism may primarily involve dogmatic belief. This means strong conviction in beliefs and worldviews ignoring non-supportive evidence (Kirkpatrick et al., 1991), subordination of ideas and peripheral beliefs to a central belief system (Rokeach, 1960), exclusion of doubt and non-openness to the possibility of change (Batson et al., 1993), and literalism/orthodoxy, i.e. an interpretation of religious ideas that is unilateral (Fontaine et al., 2003) and intra-textual, excluding external sources (Hood et al., 2005). Of importance, religious dogmatic belief is not necessarily coupled with traditionalism, since it can be observed not only in traditional religious systems, but also in liberal religious ideologies.

We expected religious fundamentalism to involve, across religious cultures, religious dogmatic belief (*Hypothesis 2a*). To investigate this, we examined the associations of fundamentalism with (1) the believing religious dimension *and* (2) low existential quest. The former implies attachment to religious belief that provides meaning and purpose in life (Saroglou, 2011). The latter denotes not valuing doubt and not being open to the possibility of changing one's own ideas and beliefs about the existential issues (Van Pachterbeke et al., 2012). Research in the US and Western Europe has showed that religious fundamentalism and literalism include a component of cognitive rigidity: they are related to dogmatism

(Altemeyer, 1996), need for closure (Brandt & Renya, 2010; Duriez, 2003), and need for consistency (Hill et al., 2010).

Moral Rigorism

Fundamentalism has also be conceptualized as religious authoritarianism, with the emphasis being on moral and social conservatism, colored by submission to the authorities (Altemeyer, 1996) and a need for righteousness, purity, and preservation of moral order (Saroglou, 2019). Thus, it denotes anti-modernism and opposition to secularism and liberal values. It is positively related to authoritarianism (Rowatt et al., 2013), political conservatism (Ludeke et al., 2013), traditional gender roles (Schnabel, 2016), and collectivistic moral foundations of authority and purity (Johnson et al., 2016). Again, religious moral rigorism and traditionalism are not entirely equivalent to dogmatism: some religious people may be submissive moral conservatives without dogmatically endorsing a belief system.

We hypothesized that religious fundamentalism reflects, across cultures, religious moral rigorism (*Hypothesis 2b*). To investigate this, we examined fundamentalism's associations with (1) the behaving—morally/righteously—religious dimension, i.e. attachment to religion for the moral guidance it offers (Saroglou, 2011) *and* (2) right-wing authoritarianism, which denotes moral and societal conservatism. We expected the associations to be consistent and robust across cultures, given the high similarities, across religious cultures, in traditional morality, in particular the "hygienic" morality focusing on sexuality and family-related values (Saroglou, 2019).

Strong Groupness

A third way to conceptualize fundamentalism is in terms of strong religious group identification (Herriot, 2007). Again, fundamentalists might be moderate or even weak believers and practitioners and yet strong identifiers with the religious group or heritage.

Strong groupness implies heightened ingroup barriers, pervasive strong "us" versus "them"

distinction, and actions to get or maintain control of symbolic and real resources, especially in a competitive context (Hogg et al., 2010; Ysseldyk et al., 2010). Such strong religious groupness implies submission to (religious) authority, be it for moral, prosocial, or immoral, antisocial, objectives (Blogowska & Saroglou, 2013; Rothschild et al., 2009).

We thus hypothesized fundamentalism to be associated, across cultures, with a strong identification with one'snreligious tradition (*Hypothesis 2c*). To investigated this, we examined fundamentalism's association with (1) the religious dimension of belonging to a community and being attached to a religious tradition and heritage (Saroglou, 2011), *and* (2) authoritarianism, which denotes attachment to group authorities and norms.

Religious and Socio-Cognitive Components as Underlying Interreligious Prejudice

If fundamentalism can be conceptualized and found, as expected here, as a combination of religious dimensions (i.e., believing, behaving, and belonging) along with with closed-minded socio-cognitive personal orientations, then fundamentalism's well-known effect on prejudice (Rowatt et al., 2013) can also be conceptualized as reflecting the combined role of religiousness with authoritarianism and rigid thinking in predicting prejudice.

We thus investigated whether religiousness, across its four dimensions (Saroglou, 2011)—including bonding (emotional aspects of religion)—is associated with and predicts interreligious prejudice, operationalized here as social distance and discriminatory attitudes toward religious outgroups. We investigated whether religiousness does so uniquely—independently from and additively to—and/or interactively with, authoritarianism and (low) existential quest. We hypothesized both kinds of effects, with religiousness predicting interreligious prejudice both additively to authoritarianism and (low) existential quest (*Hypothesis 3a*), and in interaction with these two constructs (*Hypothesis 3b*). Finally, we hypothesized the combined role of religiousness with authoritarianism and low existential quest in predicting interreligious prejudice to be found across various religious cultures

(*Hypothesis 3c*). This was expected at least within cultures of monotheistic tradition where there is a clear connection between religiousness on the one hand and search for order, self-control, and intolerance of contradiction on the other hand (Clobert et al., 2017; Stark, 2001).

Secondarily, this investigation allows us to clarify whether it is only sociomoral conservatism (authoritarianism) or also, additively and uniquely, low cognitive/convictional flexibility (low existential quest) that predicts prejudice. Both authoritarianism (Rowatt et al., 2013) and low cognitive flexibility (need for closure, need for consistency: Brandt & Renya, 2010; Hill et al., 2010) have been found to explain religious prejudice.

Regarding religiousness, we expected the three dimensions (believing, behaving, and belonging) hypothesized to underline fundamentalism to also predict interreligious prejudice—additively to authoritarianism and (low) existential quest (*Hypothesis 4*).

Religionists of other religions may be perceived as ideological outgroups threatening one's own beliefs and worldviews, as moral outgroups threatening one's own values and norms, and as social outgroups, competing with one's religious group for real and symbolic resources (Hunsberger & Jackson, 2005; Ysseldyk et al., 2010).

To investigate our hypotheses, we included a series of groups as targets of prejudicial attitudes. These groups included atheists (outgroup in all countries), Buddhists (outgroup in all cultures of monotheistic traditions), Muslims (outgroup in all countries except Turkey in this study), Jews (outgroup in all countries except Israel), and Catholics (outgroup in countries of predominantly non-Christian religious tradition). We expected the association between fundamentalism and prejudice to be stronger regarding atheists compared with the other religious outgroups (*Hypothesis 5a*). Atheists may be seen as combining all three evaluative dimensions: an opposite ideology, conflicting values, and social competition.

Finally, research suggests that specific religious prejudices are moderated by whether these prejudices are socially/religiously proscribed or not (Batson et al., 1993; Hall et al.,

2010). Accordingly, we anticipated the association between fundamentalism and interreligious prejudice to be weaker or non-existent in cultural contexts where such prejudice is formally proscribed or at least not encouraged (*Hypothesis 5b*).

Method

Participants

Participants were students in the humanities and social sciences from 14 countries who took part voluntarily in the study (total N = 3,218; $M_{\rm age} = 21.82$, SD = 4.95, 70.8% female). The countries included were Belgium (BE), Costa Rica (CR), France (FR), Germany (DE), Greece (GR), Israel (IL), Italy (IT), Poland (PL), Slovakia (SK), Spain (ES), Switzerland (CH), USA (Arizona and Indiana), Turkey (TK), and Taiwan (TW). Following the general recommendations regarding the sample size requirements for CFAs (Wolf et al., 2013), and the sample size requirements for SEM (Kline, 2015), we estimated that a sample size of 150-200 participants per country was necessary to obtain statistical power at the recommended .80 level (Cohen, 1988). Data were collected during 2010-2012 (in Italy, in 2016) and were part of a larger study (AUTHOR), which additionally included measures of personality (big five), need for closure, life satisfaction, the PANAS, and a projective measure of myside bias. No other measures were included, and participants were not assigned to experimental conditions.

In line with previous work (Inglehart & Welzel, 2011; AUTHOR), we distinguished seven religious-cultural zones for the analyses: secular Western European countries (BE, FR, DE, ES, CH; all of Catholic or mixed Protestant-Catholic tradition; N = 1,204), religious Catholic countries (CR, IT, PL, SK; N = 757), USA (predominantly Protestant tradition; N = 412), Greece (Christian Orthodox tradition; N = 163), Israel (Jewish tradition; N = 147), Turkey (Muslim tradition; N = 250), and Taiwan (Eastern Asian religious traditions: N = 236). Given the focus on interreligious prejudice, we excluded the very few religious participants in each country who were not affiliated with that country's major religious tradition.

Measures

Religious Fundamentalism and Religiousness

The 12-item Revised Religious Fundamentalism Scale (Altemeyer & Hunsberger, 2004) was used to assess religious fundamentalism (e.g., "God has given humanity a complete, unfailing guide to happiness and salvation, which must be totally followed"; 7-point Likert scales). The measure has been widely used, across religions and cultures (α 's in our data ranged from .75 to .95 across countries and cultural zones).

Participants also completed the Four Basic Dimensions of Religiousness scale (Saroglou et al., 2020). Following previous theorization (Saroglou, 2011), this 12-item 7-point Likert scale measures the cognitive, emotional, moral, and social dimensions of religiousness. Specifically, it measures positive attitudes toward and importance of: (1) religious meaning and belief, i.e. the *Believing* dimension (α's ranging from .77 to .91 across countries); (2) religious ritual and emotions, i.e. the *Bonding* dimension (α's ranging from .73 to .94); (3) religious morality, i.e. the *Behaving* dimension (α's ranging from .79 to .95); and (4) religious community and tradition, i.e. the *Belonging* dimension (α's ranging from .71 to .92). Sample items are: "Religious beliefs have important implications for our understanding of human existence" (believing); "Religious rituals, activities or practices make me feel positive emotion" (bonding); "I am attached to the religion for the values and ethics it endorses" (behaving); and "In religion, I enjoy belonging to a group/community" (belonging).

Right-Wing Authoritarianism and Existential Quest

We administered 12 items from the Right-Wing Authoritarianism scale (Funke's, 2005). Following Altemeyer (1996), this version comprises items assessing three dimensions of authoritarianism: conventionalism, submission, and aggression (α's ranged from .52 to .73 across countries). We also administered the 9-item Existential Quest scale (Van Pachterbeke et al., 2012) measuring flexibility in existential beliefs and worldviews—specifically, valuing

doubt and being open to questioning and changing one's own existential beliefs and worldviews (7-point Likert scales). Sample items are, "In my opinion, doubt is important in existential questions" and "My way of seeing the world is certainly going to change again" (α's ranged from .64 to .82 across countries.)

Interreligious Prejudice

We measured prejudice as social distance and negative and discriminatory attitudes toward atheists, Buddhists, Catholics, Jews, Muslims, and members of "Yxto" (a fictitious religious group). For each of these targets, we used four questions: "Would you like to have [target] as (1) a neighbor, (2) a political representative, and (3) a husband/wife?" (answers varying from 1 = totally dislike to 7 = totally like) and (4) "How different are you from [target]?" (answers varying from 1 = very the same to 7 = very different). These measures are used in large international surveys to measure prejudice more subtly. They are less explicit than other measures (e.g., the liking thermometer), clearly denote discriminatory tendencies (e.g., refusing to rent an apartment to people because of their religion is a crime in several countries), and allow for the collection of information regarding numerous outgroups using easy-to-administer paper and pencil measures. The scores were reversed and aggregated by target (as across countries for atheists, .74-.87; Buddhists, .63-.85; Catholics, .68-.86; Jews, .68-.81; Muslims, .70-.86; and Yxtos, .68-.84). An overall score of interreligious prejudice was also computed by religious-cultural zone, by first excluding responses regarding the relevant ingroups (Buddhists in Taiwan, Jews in Israel, Muslims in Turkey, and Catholics in the remaining cultures) and then by aggregating the scores for all the prejudice measures.

Results

(Uni)Factorial Structure and Cross-Cultural Equivalence of the Fundamentalism Scale

A confirmatory factor analysis (CFA) specifying a single-factor model with all the items of the scale contributing to a single underlying factor (religious fundamentalism) was

conducted using AMOS, version 20. Parameters were estimated using maximum likelihood. To account for the nested structure of the data, we ran a multi-group CFA (unconstrained model). The one-factor model, $\chi^2(810, N=3218)=2674.548$, presented a modest (CFI=.868, IFI=.871, NFI=.825) or good (RMSEA=.027) fit to the data, according to the usual indices. To ensure that the single-factor model was equivalent across the 14 countries and individuals' religious affiliations, multi-group CFAs were conducted. We compared a model with no measurement equivalence constraints across countries versus three constraint models. In the first model (configural and metric invariance), factor loadings were constrained to be equal across countries. The second model (scalar invariance) required the factor loadings and intercepts to be equal across countries. In the third model (strict invariance), items' factor loadings, intercepts, and variances were constrained to be equal across countries. Change in goodness of fit was used as an indicator of measurement equivalence.

Following Cheung and Rensvold (2002), we used $\Delta RMSEA$ (less than or equal to .01) as an indicator of measurement equivalence, and as our principal indicator since all other Goodness of Fit Indices were found to be at least partially dependent on model complexity (e.g., number of manifest variables). The RMSEA of the unconstrained model was .027, whereas the first and second constraint models presented RMSEA of .028 and .037, respectively ($\Delta RMSEAs \leq .01$). Using this criterion, we, therefore, established configural, metric, and scalar invariance, indicating that the fundamentalism scale is a unidimensional measure across countries. Thus, mean comparisons, correlations, and regression analyses can be confidently conducted across countries (Steenkamp & Baumgartner, 1998). Nevertheless, strict invariance was not established since the last constraint model presented an RMSEA of .040 ($\Delta RMSEA = .013$), which is slightly above the threshold of .01.

In exploratory factor analyses for each religious-cultural zone, specifying two factors and varimax rotation, we found that the two factors typically included the six positive versus

the six reverse-scored items. When specifying three factors, the positive versus reverse-scored items remained predominant, and the third factor consisted of only one or two items. When specifying four factors, the factors were neither theoretically meaningful nor consistent across cultures. The only exception regarding the meaningfulness of the four-factor model was Israel. In Israel, the four factors were *religious absolutism*, i.e., strict adoption of the only one true religion's teachings (items 1, 5, 8, and 11), *religious literalism*, where sacred texts are entirely true and not subject to historicocritical relativization (items 2, 7, 10, and 12), *religious moralism*, i.e., religion is the only true morality (items 4 and 6), and *religious* "conspiracy" (Satan is fighting against us and God: items 3 and 9). These factors approximate the distinction between identitarian, literalistic, moralistic, and negative emotionality-fueled forms of fundamentalism (Saroglou, 2016).

Fundamentalism Predicted by Religious Dimensions and Socio-Cognitive Orientations *Correlations**

Correlations of religious fundamentalism with the four religious dimensions and the two socio-cognitive orientations (authoritarianism and existential quest), by religious-cultural zone, are detailed in Table 2. All four religious dimensions were positively related to fundamentalism in all cultures, with only one exception, the bonding dimension in Taiwan. Repeating the same analyses for religionists only—thus, not retaining atheists, agnostics, and "other"—provided similar results. Finally, fundamentalism was related to authoritarianism and low existential quest, and this was the case across all seven religious-cultural zones. Again, repeating the same analyses only among religionists provided similar results.

Multiple Regression Analyses

In the next step, we conducted a multiple regression analysis of fundamentalism, with the four religious dimensions, authoritarianism, and existential quest as predictors, distinctly by religious-cultural zone (see Table 3). In all cultures, fundamentalism was predicted uniquely by both high authoritarianism and low existential quest. However, above and beyond these psychological constructs, fundamentalism was predicted in all cultures uniquely and additively by two or three of the religious dimensions. These included (1) believing, in all but one cultural zone (only in Greece the positive effect was non-significant), (2) behaving, in all but two cultural zones (religious Catholic countries and Taiwan), and (3) belonging, in secular European countries, the US (marginally significant), Greece, and Taiwan. Bonding predicted fundamentalism only in the religious Catholic countries.

The models explained an important amount of variance, i.e. from 42% to 74% across monotheistic cultural zones—but explained only 18% in Taiwan. Adding age and gender as predictors in the regression analyses did not change the significant findings for any culture. Repeating the same analyses only among religionists (see also Table 3) provided the same significant results across cultures, for the religious dimensions of believing and behaving, authoritarianism, and existential quest. However, the bonding dimension was no longer a significant predictor of fundamentalism in the religious Catholic countries, and the belonging dimension was no longer a significant predictor in any cultural zone except in Taiwan.

Subsequently, we investigated in a last multiple regression analysis the interaction effects. We regressed fundamentalism on the above four religious dimensions, authoritarianism, and existential quest, and added as predictors the interactions of religiousness (the aggregate score of the four dimensions) with authoritarianism and with existential quest. We also included as predictor the three-way interaction between religiousness, authoritarianism, and existential quest. Given the number of predictors (ten), we carried out this multiple regression analysis in the total sample, and then repeated the analysis only among religionists (see Table 4).

We found that fundamentalism was predicted, uniquely and additively, by both the behaving and the believing dimensions, as well as by high authoritarianism and low existential quest. The results were the same in the subsample of religionists only. In addition to the religious and the socio-cognitive dimensions, the interaction of religiousness with (low) existential quest, as well as the 3-way interaction, were significant in predicting fundamentalism. All the predictors taken together explained about 60% of the variance of religious fundamentalism. The results remained similar after adding gender and age, which were not significant predictors. To account for the nested structure of the data, we also conducted a mixed-model analysis, including the random effect of country (random intercept and slopes). All the predictors of fundamentalism shown in Table 4 remained significant.

To further understand the effect of the 3-way interaction, we divided the total sample into high (above the median) and low (below the median) authoritarians and investigated the effect of the interaction between religiousness and existential quest on fundamentalism. We found the interaction to be significant among the high authoritarians, B = -.34, t(1,1640) = -14.52, p < .001, but inexistent among the low authoritarians, B = .00, t(1,1514) = 0.08. Figure 1 depicts the combined role of religiousness and (low) existential quest in predicting fundamentalism among the low and the high authoritarians.

Interreligious Prejudice as Predicted by the Components of Fundamentalism Correlations

Table 5 details the correlations, distinctly by religious-cultural zone, between religious fundamentalism, religiousness (aggregate score of the four dimensions), authoritarianism, and existential quest, and prejudice toward atheists and Yxtos (out-groups in all zones), Buddhists (outgroup in all zones except Taiwan), Jews (outgroup in all zones except Israel), Muslims (outgroup in all zones except Turkey), and Catholics (ingroup in countries of Christian tradition and outgroup in Israel, Taiwan, Turkey).

Authoritarianism was positively and most strongly related, and existential quest was negatively related, consistently across outgroups and cultures, to interreligious prejudice.

Only three out of the 58 correlations were not significant, the negative association between existential quest and interreligious prejudice toward Catholics and Muslims in Israel, and toward Jews in the religious Catholic cultures.

Moreover, in all cultural zones (except Taiwan, see below), fundamentalism and religiousness were consistently associated with negative attitudes toward atheists, Buddhists, and the fictitious "Yxtos" (for the latter, except in secular Western Europe). Similarly, in the East Mediterranean countries, fundamentalism and religiousness were related to negative attitudes toward the monotheistic outgroups: Jews and Muslims for Greece (one of the four associations was not significant), Catholics and Muslims for Israel, and Catholics and Jews for Turkey. The religious attitudes of Greek Orthodox toward Catholics were neither positive nor negative (Catholics may not be perceived as a religious ingroup in this country).

Among cultures with Western Christian heritage (Catholicism and Protestantism), the attitudes toward monotheistic outgroups were less homogeneous. In secular Western European countries, fundamentalism and religiousness were unrelated to anti-Jew and anti-Muslim sentiments; in religious Catholic countries, fundamentalism and religiousness were unrelated to anti-Jew sentiments but related to anti-Muslim ones; and in the US, only fundamentalism was related to anti-Jew and anti-Muslim attitudes, but religiousness was either unrelated (anti-Muslim) or related to positive sentiments toward Jews.

Taiwan was an exceptional case. Authoritarianism and existential quest were unrelated to prejudice; and religiousness was related to negative attitudes only toward atheists and positive attitudes toward other religionists, i.e. Catholics, Jews, Muslims, and even "Yxtos".

Prejudices Varying in Importance

In all cultures, the association of fundamentalism with prejudice was the highest toward atheists compared to the other targets (Table 5). Negative attitudes toward atheists were higher compared to the ones regarding Buddhists, in secular Western Europe, the US,

Greece, Israel, and Turkey, respective z's = 4.49, 5.21, 3.58, 3.03, and 3.93, all ps < .001. Moreover, prejudice toward Buddhists as a function of fundamentalism was higher than prejudice toward: Jews and Muslims, in secular Western Europe, religious Catholic countries, and the US, respective z's = 6.16, 5.42, 6.62, all p's < .001; Muslims and Catholics in Greece, 1.57, p = .058; Jews and Catholics in Turkey, 1.49, p = .068; and Muslims in Israel, 1.82, p = .034. The only two exceptions were the anti-Jew attitudes in Greece and the anti-Catholic attitudes in Israel whose associations with fundamentalism were equal to or slightly higher than the association of fundamentalism with the anti-Buddhist attitudes.

Note that this implicit hierarchy of interreligious prejudice as a function of fundamentalism, with atheists being the most disliked, was different from the evident hierarchy between targets when simply comparing means in the general population (see Table 1), where anti-Muslim sentiments were the highest in all relevant cultures. When comparing the means of the various prejudices within each cultural zone (see Table 1), thus independently from fundamentalism, we found that anti-Muslim attitudes—often followed by the negative attitudes toward the fictitious group—were the highest in all relevant cultural zones. Negative sentiments toward Muslims were stronger compared to Buddhists and Jews in secular Western Europe, religious Catholic countries, the US, and Greece, Fs = 508.81, 353.26, 157.51, and 20.87, respectively (dfs: 1123, 748, 399, 156; 1); Buddhists and Catholics, F(140, 1) = 126.43, in Israel; and Jews and Catholics, F(218, 1) = 54.41, in Taiwan (all ps < .001). Attitudes against atheists were the lowest in most cultures, compared to: Buddhists and Jews, in secular Western Europe, religious Catholic countries, and Greece, respective Fs = 296.48, 11.65, and 11.41 (*dfs*: 1,123, 748, 156; 1); Buddhists and Catholics in Israel, F(140, 1) = 29.30; and Jews and Catholics in Taiwan, F(218, 1) = 60.76 (all ps < .001); but were higher compared to Buddhists and Jews in the US, F(399, 1) = 57.30, p < .001, and Jews and Catholics in Turkey, F(249, 1) = 6.22, p = .013.

Intercorrelations Between Prejudices

The various prejudices were inter-correlated in all cultural zones, with ranges varying as follows: r's = .22 to .68, in secular Western European countries (Catholics not included, but with associations going in the same direction—an indicator of treating all religions similarly); r's = .32 to .71, in religious Catholic countries (Catholics not included, and with associations going to the opposite direction); r's = .38 to .75 (USA, Catholics not included, but with associations going to the same direction—an indicator of treating all religions similarly); r's = .35 to .74, in Greece (Catholics not included, but with associations going to the same direction—an indicator that Catholics were a sort of outgroup); r's = .26 to .61, in Israel (Jews not included, but with associations going to the opposite direction); and r's = .43 to .82 in Taiwan (Buddhists not included, but with associations going in the same direction—an indicator of treating all religions similarly) with attitudes toward atheists going in the opposite direction.

Given the above intercorrelations between attitudes toward the various outgroups, we created for each cultural zone a global measure of religious prejudice, by aggregating the attitudes toward the relevant zone's outgroups: atheists, Yxtos, and all the religious groups except the zone's ingroup (i.e., Catholics for countries of Christian tradition, Buddhists for Taiwan, Jews for Israel, and Muslims for Turkey).

Multiple Regression Analyses

To identify the unique and additional effect of fundamentalism's components on interreligious prejudice (as an aggregate score), we first conducted two series of multiple regressions, distinctly by cultural zone (see Table 6). Taiwan was not included since overall religiousness did not predict interreligious prejudice. In the first series, we regressed interreligious prejudice on the four religious dimensions (Model 1). In the second series, we

regressed interreligious prejudice on general religiousness (the aggregate score of the four dimensions), authoritarianism, and existential quest (Model 2).

In three cultural zones, the US, Israel, and Turkey, interreligious prejudice was predicted by the religious behaving (moral) dimension. In addition, interreligious prejudice was predicted by the believing dimension in the religious Catholic countries, the bonding dimension in Greece, and the belonging dimension in the secular West. The variance explained was low in Western countries with a Christian tradition, and moderate in the other cultures (Model 1). When both the socio-cognitive orientations and religiousness were entered as predictors (Model 2), interreligious prejudice was predicted, in all zones by authoritarianism, but also (low) existential quest. In addition, in all but two cultural zones, religiousness had a unique effect on interreligious prejudice, above and beyond socio-cognitive orientations. However, this was not the case in the two cultural zones characterized by secularism or Protestantism (Europe and the US). The total variance explained was higher in the second model compared to the model with religious dimensions alone.

Finally, we carried out a multiple regression analysis using the total sample. We regressed interreligious prejudice on religiousness (aggregate), authoritarianism, existential quest, the interactions of religiousness with authoritarianism and with existential quest, and the 3-way interaction between the three constructs (Table 7). The three constructs and the two-way interactions had unique and additive effects in predicting prejudice (Figure 2). Repeating the same analysis among religionists confirmed the unique role of religiousness, authoritarianism, and (low) existential quest; however, the interactions were no longer significant. Adding gender and age as predictors slightly increased the explained variance, from 17% to 18% for the total sample, and from .14% to .16% for the religionist subsample, but did not change the significant results (women and younger participants scored slightly higher in interreligious prejudice). Nevertheless, in a subsequent multi-level, mixed model,

including the random effect of country (random intercept and slopes), authoritarianism was the only significant predictor of interreligious prejudice.

Discussion

With data from 14 countries, mostly from Europe, but also the Americas, Middle East, and East Asia, organized into seven religious-cultural zones and reflecting most major world religious traditions (Protestantism, Catholicism, secular Christianity, Orthodox Christianity, Islam, Judaism, and Buddhism/Taoism), we provided evidence advancing our understanding of the very nature of religious fundamentalism and related interreligious prejudice.

Fundamentalism's Unidimensionality

Across the various religious-cultural zones, fundamentalism, as measured by the Altemeyer and Hunsberger's (2004) scale, was shown to be unidimensional, in line with previous research (Krauss et al., 2006). The scale's unidimensionality is not incompatible with the possibility that a researcher might find distinct aspects of fundamentalism within the same scale or by using a different measure, or in specific cultural contexts. In our Israeli sample, for example, an exploratory factor analysis indicated four factors denoting religious absolutism, literalism, moralism, and conspiracy—fear of the evil's action.

Nevertheless, the data confirmed the unidimensional nature of the construct denoting the unifying character of the fundamentalist attitude. Based on the items included in Altemeyer and Hunsberger's (2004) scale, we can define this unifying fundamentalist attitude as strict adherence to religion as the exclusive source of truth about god and humans and of guidance for behavior, even if in conflict with science, history, and morality.

Fundamentalism as Dogmatic Belief, Moral Rigorism, and, Possibly, Strong Groupness

It has been assumed that fundamentalism is all about a personal authoritarian structure (Altemeyer, 1996), with religiousness having little or nothing to add; or that fundamentalism is dogmatism (Kirkpatrick et al., 1991) applied to a particular ideology (religion). It has also

been argued that closed-mindedness is orthogonal to religiosity (Fontaine et al., 2005) or even to fundamentalism (Hood et al., 2005). A complementary consideration is that fundamentalism represents the subcategory of those religious people who are authoritarian and/or dogmatic (Hunsberger & Jackson, 2005). Finally, it is unclear whether fundamentalism is similar or different across religions and/or cultures (Saroglou, 2016).

The present research provides answers to the above issues, with evidence being that fundamentalism is consistent across cultures. In all seven religious cultures, fundamentalism was predicted not only by authoritarianism but also, uniquely and additively, by (low) existential quest and by religiousness. When focusing on the four religious dimensions, it was the believing (belief in transcendence and meaning in life) and the behaving (morally) dimensions that typically predicted fundamentalism across cultures.

Taken together, these findings imply that fundamentalism involves cognitive and moral rigidity, a combination of dogmatic, inflexible, belief (believing and low existential quest) with moral rigorism and conservatism through conformity to religious norms (behaving and authoritarianism). In other words, fundamentalism integrates religious authoritarianism and religious dogmatism, or orthodoxy and orthopraxy.

Religious authoritarianism and religious dogmatism are partly distinct. Some religious zealots may be conservative, rigorist, and submissive without dogmatically endorsing a belief system and worldviews; others may be dogmatic in their convictions without being authoritarian and even with being liberal. However, the two, religious dogmatism and authoritarianism, are also related, if we observe the correlations between believing and behaving (varying across cultures from .72 to .83, among the religionists) and between authoritarianism and existential quest (from -.19 to -.39). We argue that religious absolutism may be appealing and strong because what is true to believe is also good to do (and vice versa) because this is what the tradition and the group's authority have endorsed as good to

follow and true to believe for centuries. Moreover, as suggested by a reviewer, the believing and behaving dimensions may be highly demanding of strictness: they imply, respectively, strong adherence to many counterintuitive ideas and exercising extensive self-control in reference to many norms (Hansen & Ryder, 2016).

The belonging religious dimension (attachment to the religious group and tradition), combined with authoritarianism, can be characterized as reflecting strong religious groupness. The latter uniquely explained fundamentalism in Greece, where Orthodox Christianity and ethnicity are known to be highly interconnected (Ramet, 2019), in secular Europe, where the transition from uni-religious to multi-convictional societies created some cultural valorization of religious heritage (Astor et al., 2017; Kasselstrand, 2015), and in Taiwan, possibly because in cultures of long historical co-existence between various religious traditions, strongly identifying with one of them may denote religious superiority and rigidity. However, we note that the belonging dimension explained additional variance of fundamentalism in samples including believers and non-believers, but not in subsamples composed by only religionists. Strong religious groupness may characterize zealots who seek to defend ethnoreligious cultural purity compared to the "globalizing" atheists, without necessarily being high believers or practitioners.

Religious fundamentalism appears as a strong and possibly unique kind of absolutism involving dogmatic belief, moral rigorism, and, sometimes, strong groupness. Thus, fundamentalism combines ideological, moral, and social rigorousness, whereas other absolutisms may emphasize mainly one of the above, ideological (e.g., communism), moral (e.g., moral vegetarianism), or social (e.g., nationalism) purity. Of interest, monotheistic religions worship a God who is perceived to be the source of truth, goodness, and oneness.

The bonding dimension seemed almost irrelevant in explaining fundamentalism, possibly because the items measuring item do not specifically focus on negative emotionality.

The only exception was the religious Catholic countries, possibly because of the emphasis in these cultures on ritualistic orthopraxy.

The multiple regression analysis, in the total sample, of fundamentalism on the relevant variables together with their interactions provided additional information. The significant interactions found between religiousness and (low) existential quest, and between religiousness, (low) existential quest, and authoritarianism, confirmed what is broadly accepted in the literature (Altemeyer & Hunsberger, 2005; Hunsberger & Jackson, 2005; Rowatt et al., 2013), that is, highly dogmatic believers, and those highly religious who are authoritarian and dogmatic, tend to adopt a fundamentalist orientation.

However, beyond these interactions, religiousness, authoritarianism, and existential quest, each alone, continued to have an independent effect in predicting fundamentalism.

Thus, not all is about the interaction of rigid socio-cognitive orientations with religiousness.

On the one hand, being authoritarian or inflexible in existential convictions may compel people, in specific contexts, toward fundamentalist ideas, practices, and identity even if they are not intense believers or high religious moralists, simply because they are social conformists or unwilling to question their worldviews. On the other hand, the intensity of religiousness, for some people, even if they are not necessarily authoritarians and low questers, may facilitate their endorsement of fundamentalist beliefs and practices. Believing in the superiority of one's religion and religious ideas and values with regard to other faiths and human morality may constitute a common feature of religious intensity and fundamentalism.

Interreligious Prejudice as a Function of Religiousness and Socio-Cognitive Orientations

A typical outcome of religious fundamentalism is religious prejudice (Altemeyer, 1996; Hunsberger & Jackson, 2005; Rowatt et al., 2013). In the present research, we focused on interreligious prejudice. Is such prejudice present basically among religious authoritarians or among dogmatic religious people? Does it result exclusively from rigid socio-cognitive

orientations, with religiousness not having any proper role? Or does religious intensity uniquely account for interreligious prejudice?

Across the seven cultures, we consistently found that authoritarianism and low existential quest were associated with, and uniquely and additively predicted, interreligious prejudice. This clarifies previous research by showing that authoritarianism and cognitive need for order and non-change are not overlapping but constitute distinct pathways for interreligious prejudice. Furthermore, religiousness, though variable religious dimensions, added unique variance in explaining prejudice in most religious-cultural zones. (In the US and secular Europe, religion's effect was explained by only the socio-cognitive orientations). Finally, our multiple regression analysis in the total sample confirmed the unique and additional role of the above distinct variables, but also the role of the interactions between them, in predicting interreligious prejudice: religious authoritarians and dogmatic religious people are more prone to show interreligious prejudice, very likely because they perceive members of other religions as ideological and moral outgroups.

Which religious outgroup is seen most negatively? Contrary to the idea that antiatheist prejudice is strongest across the world (Gervais et al., 2017), in most cultural zones (with the exception of Turkey and the US, which were the two less secular cultures), mean attitudes toward atheists were the least negative compared to the negative attitudes toward religious outgroups. This may partly be due to the young age and educational status of participants, especially in secular cultures. On the contrary, in all relevant religious-cultural zones, the most negative attitudes were toward Muslims, in line with evidence on increased Islamophobic feelings across the world (Helbling, 2012).

However, when focusing on the associations of fundamentalism with the various prejudices, the highest associations across cultures were those with anti-atheist attitudes, suggesting religious absolutists are primarily opposed to their full ideological, moral, and

social opponents, the atheists. In terms of negative attitudes toward religious outgroups, the associations between fundamentalism and anti-Buddhist attitudes, followed by those toward the fictitious religion, were, in most cultural zones, higher than the ones regarding other groups, in particular Jews and Muslims. Fundamentalism was even unrelated to anti-Jew sentiments in European countries of Western Christian tradition and unrelated to anti-Muslim attitudes in secular Europe. Our interpretation, in line with research on proscribed versus prescribed religious prejudice (Batson et al., 1993; Hall et al., 2010), is that anti-Semitism and Islamophobia are generally condemned by (Christian) religious authorities today, especially in the West. No such proscription of prejudice toward Buddhists has been elaborated.

The lack of explicit proscription of prejudice may also explain the considerable strength of the anti-Christian attitudes as a function of fundamentalism we found in the two non-Christian monotheistic contexts (Islam in Turkey and Judaism in Israel), as well as anti-Muslim fundamentalist attitudes in Israel and anti-Jewish attitudes in Turkey. The opposition between monotheisms seems to be stronger in non-Christian cultural contexts.

In Greece, the association of fundamentalism with anti-Jew attitudes was higher compared to the anti-Muslim attitudes may reflect the absence of thorough religious education against anti-Semitism in the Christian Orthodox world (Blümel, 2017). Finally, fundamentalism was unrelated to prejudice in Taiwan, a country marked by East Asian religions, in particular Buddhism. Buddhist religiosity does not seem to follow Western monotheisms in nourishing interreligious prejudice (Clobert et al., 2015), possibly due to West-East cross-cultural/religious differences on compassion and tolerance of incongruity (Clobert et al., 2017).

Limitations and Further Ouestions

The samples were composed of mostly young students in the humanities and the social sciences. Young adults are often lower in religiosity compared to the general population and

may not represent "real" older adult fundamentalists. Further research is needed to consolidate the generalizability of the findings in other ages and more focused groups. Nevertheless, fundamentalism, measured as a continuous variable, provided here meaningful and coherent results in line with previous research. If anything, one could anticipate the effects to be replicable if not stronger in older adult and more highly religious samples. Prudence also is needed not to equalize fundamentalism, a not uncommon form of religiousness across the world, with violent religious militantism.

Another limitation is that dogmatic belief, moral rigorism, and strong groupness were measured here indirectly, as the combination of rigid socio-cognitive orientations with religious dimensions. Though theoretically innovative and heuristically rich, having provided here meaningful and cross-culturally consistent results, our approach was exploratory. Future studies should better operationalize and distinguish between dogmatic, moralistic, and communitarian dimensions of fundamentalism (Saroglou, 2016; Wibisono et al., 2019) and investigate their respective psychological characteristics and outcomes.

A question remains: does religion predict no interreligious tolerance at all? Previous research relying on self-reports has shown that some religious orientations (e.g., religion-asquest and devotional religion), to some extent, and rather in secular contexts, predict low intergroup, including low interreligious, prejudice (Hansen & Ryder, 2016; Van Assche et al., 2020). Yet other research questions the dichotomy between "good" religion predicting tolerance and "bad" religion predicting prejudice (Batson et al., 1993). Our work indicated that, in secular contexts, religiousness may not predict prejudice toward monotheistic religious outgroups; but still predicts prejudice toward other religious outgroups, unknown religious groups, and atheists. Believing intensely and using religion as a guide of morality predicted interreligious prejudice beyond the effects of cognitive and sociomoral rigidity across cultures suggesting that this should be an important agenda for further research.

Conclusion

The present research provided new theorization and results of interest for the fields of personality and social psychology, cross-cultural psychology, and psychology of religion.

Fundamentalism does not seem to be restricted to US Protestant literalism or to Islamic moral rigorism, but, across religious cultures, religious fundamentalism integrates the cognitive and the sociomoral aspects of religious absolutism. Moreover, across religious cultures, fundamentalism seems similar in its basic components by integrating the cognitive, moral, and occasionally social components of religiousness with critical personal dispositions toward authoritarianism and inflexibility in worldview. Finally, across various cultural zones representing most major world religions, this religious absolutism combining religiousness, authoritarianism, and dogmatism, results into negative prejudicial attitudes toward some or all kinds of religious outgroups.

References

- Altemeyer, B. (1996). The authoritarian specter. Harvard University Press.
- Altemeyer, B., & Hunsberger, B. (2004). A revised Religious Fundamentalism Scale: The short and sweet of it. *International Journal for the Psychology of Religion, 14*(1), 47-54. https://doi.org/10.1207/s15327582ijpr1401_4
- 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). Guilford.
- Antonenko Young, O., Willer, R., & Keltner, D. (2013). "Thou shalt not kill": Religious fundamentalism, conservatism, and rule-based moral processing. *Psychology of Religion and Spirituality*, 5(2), 110-115. https://doi.org/10.1037/a0032262
- Astor, A., Burchardt, M., & Griera, M. (2017). The politics of religious heritage: Framing claims to religion as culture in Spain. *Journal for the Scientific Study of Religion*, 56(1), 126-142. https://doi.org/10.1111/jssr.12321
- Batson, C. D., Schoenrade, P., & Ventis, W. L. (1993). *Religion and the individual: A social-psychological perspective*. Oxford University Press.
- Blogowska, J., & Saroglou, V. (2013). For better or worse: Fundamentalists' attitudes towards outgroups as a function of exposure to authoritative religious texts. *International Journal for the Psychology of Religion*, 23(2), 103-125. https://doi.org/10.1080/87567555.2012.687991
- Blümel, T. (2017). Antisemitism as political theology in Greece and its impact on Greek Jewry, 1967–1979. *Southeast European and Black Sea Studies*, *17*(2), 181-202. https://doi.org/10.1080/14683857.2017.1324263
- Brandt, M. J., & Renya, C. (2010). The role of prejudice and the need for closure in religious fundamentalism. *Personality and Social Psychology Bulletin*, *36*, 715-725.

- https://doi.org/10.1177/0146167210366306
- Carlucci, L., Tomasi, M., & Saggino, A. (2013). Factor structure of the Italian version of the Religious Fundamentalism Scale. *Psychological Reports*, *112*(1), 6-13. https://doi.org/10.2466/07.17.PR0.112.1.6-13
- Cheung, G. W., & Rensvold, R. B. (2002). Evaluating goodness-of-fit indexes for testing measurement invariance. *Structural Equation Modeling*, 9(2), 233-255. https://doi.org/10.1207/S15328007SEM0902_5
- Clobert, M., Saroglou, V., & Hwang, K.-K. (2015). Buddhist concepts as implicitly reducing prejudice and increasing prosociality. *Personality and Social Psychology Bulletin*, 41(4), 513-525. https://doi.org/10.1177/0146167215571094
- Clobert, M., Saroglou, V., & Hwang, K.-K. (2017). East Asian religious tolerance vs. Western monotheist prejudice: The role of (in)tolerance of contradiction. *Group Processes and Intergroup Relations*, 20(2), 216-232. https://doi.org/10.1177%2F1368430215603458
- Duriez, B. (2003). Vivisecting the religious mind: Religiosity and motivated social cognition.

 *Mental Health, Religion and Culture, 6(1), 79-86.

 https://doi.org/10.1080/1367467031000085928
- 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*(3), 501-518. https://doi.org/10.1016/S0191-8869(02)00213-1
- Funke, F. (2005). The dimensionality of right-wing authoritarianism: Lessons from the dilemma between theory and measurement. *Political Psychology*, 26(2), 195-218. https://doi.org/10.1111/j.1467-9221.2005.00415.x
- Gervais, W. M. (2013). In godlessness we distrust: Using social psychology to solve the puzzle of anti-atheist prejudice. *Social Psychology and Personality Compass*, 7(6), 366-377. https://doi.org/10.1111/spc3.12035

- 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(1), 126-139. https://doi.org/10.1177/1088868309352179
- Hansen, I. G., & Ryder, A. (2016). In search of "religion proper": Intrinsic religiosity and coalitional rigidity make opposing predictions of intergroup hostility across religious groups. *Journal of Cross-Cultural Psychology*, 47(6), 835–857.
 https://doi.org/10.1177/0022022116644983
- Helbling, M. (Ed.). (2012). *Islamophobia in the West: Measuring and explaining individual attitudes*. Routledge.
- Herriot, P. (2007). Religious fundamentalism and social identity. Routledge.
- Hill, E. D., Cohen, A. B., Terrell, H. K., & Nagoshi, C. T. (2010). The role of social cognition in the religious fundamentalism–prejudice relationship. *Journal for the Scientific Study of Religion*, 49(4), 724-739. https://doi.org/10.1111/j.1468-5906.2010.01542.x
- Hinde, R. A. (2009). Why gods persist: A scientific approach to religion (2nd ed.). Routledge.
- Hogg, M. A., Adelman, J. R., & Blagg, R. D. (2010). Religion in the face of uncertainty: An uncertainty-identity theory account of religiousness. *Personality and Social Psychology Review*, 14(1), 72-83. https://doi.org/10.1177/1088868309349692
- Hunsberger, B., & Jackson, L. M. (2005). Religion, meaning, and prejudice. *Journal of Social Issues*, *61*(4), 807–826. https://doi.org/10.1111/j.1540-4560.2005.00433.x
- Inglehart, R., & Welzel, C. (2013). *The WVS cultural map of the world*. http://piketty.pse.ens.fr/files/InglehartWelzel2011.pdf
- Johnson, K. A., Hook, J. N., Davis, D. E., Van Tongeren, D. R., Sandage, S. J., & Crabtree, S. A. (2016). Moral foundation priorities reflect US Christians' individual differences in religiosity. *Personality and Individual Differences*, 100, 56-61. https://doi.org/10.1016/j.paid.2015.12.037

- Kasselstrand, I. (2015). Nonbelievers in the Church: A study of cultural religion in Sweden. Sociology of Religion, 76(3), 275-294. https://doi.org/10.1093/socrel/srv026
- Kirkpatrick, L. A., Hood, R. W., Jr., & Hartz, G. W. (1991). Fundamentalist religion conceptualized in terms of Rokeach's theory of the open and closed mind: A theoretical model and its implications for mental health. *Research in the Social Scientific Study of Religion*, *3*, 157-170.
- Kline, R. B. (2015). *Principles and practice of structural equation modeling* (4th ed.). Guilford.
- Krauss, S. W., Streib, H., Keller, B., & Silver, C. (2006). The distinction between authoritarianism and fundamentalism in three cultures: Factor analysis and personality correlates. *Archive for the Psychology of Religion*, 28(1), 341-348. https://doi.org/10.1163/008467206777832553
- Ludeke, S., Johnson, W., & Bouchard, T. J., Jr. (2013). "Obedience to traditional authority:"

 A heritable factor underlying authoritarianism, conservatism and religiousness.

 Personality and Individual Differences, 55(4), 375-380.

 https://doi.org/10.1016/j.paid.2013.03.018
- Marty, M. E., & Appleby, R. S. (1995). (Eds.). *The fundamentalism project*. Vol. 5: Fundamentalisms comprehended. University of Chicago Press.
- Mavor, K. I., Macleod, C., Boal, M., & Louis, W. (2009). Right-wing authoritarianism, fundamentalism, and prejudice revisited: Removing suppression and statistical artifact.
 Personality and Individual Differences, 46(5-6), 592-597.
 https://doi.org/10.1016/j.paid.2008.12.016
- Ramet, S. P. (Ed.). (2019). Orthodox Churches and politics in Southeastern Europe:

 Nationalism, conservativism, and intolerance. Palgrave Macmillan.
- Rokeach, M. (1960). The open and closed mind. Basic Books.

- Rothschild, Z. K., Abdollahi, A., & Pyszczynski, T. (2009). Does peace have a prayer? The effects of mortality salience, compassionate values, and religious fundamentalism on hostility towards out-groups. *Journal of Experimental Social Psychology*, 45(4), 816-827. https://doi.org/10.1016/j.jesp.2009.05.016
- Rowatt, W. C., Shen, M. J., LaBouff, J. P., & Gonzalez, A. (2013). Religious fundamentalism, right-wing authoritarianism, and prejudice: Insights from meta-analyses, implicit social cognition, and social neuroscience. In R. F. Paloutzian & C. L. Park (Eds.), *Handbook of the psychology of religion and spirituality* (2nd ed., pp. 457-475). Guilford.
- Saroglou, V. (2011). Believing, bonding, behaving, and belonging: The big four religious dimensions and cultural variation. *Journal of Cross-Cultural Psychology*, 42(8), 1320-1340. https://doi.org/10.1177%2F0022022111412267
- Saroglou, V. (2016). Intergroup conflict, religious fundamentalism, and culture. *Journal of Cross-Cultural Psychology*, 47(1), 33-41. https://doi.org/10.1177%2F0022022115621174
- Saroglou, V. (2019). Religion and related morality across cultures. In D. Matsumoto & H. C. Hwang (Eds.), *The handbook of culture and psychology* (2nd ed., pp. 724-785). Oxford University Press. https://doi.org/10.1093/oso/9780190679743.001.0001
- Saroglou, V., Clobert, M., Cohen, A. B., Johnson, K. A., Ladd, K. L., Van Pachterbeke, M., Adamovova, L., Brandt, P.-Y., Çukur, C. S., Hwang, K.-K., Miglietta, A., Motti-Stefanidi, F., Muñoz-García, A., Murken, S., Roussiau, N., & Tapia Valladares, J. (2020). Believing, bonding, behaving, and belonging: The cognitive, emotional, moral, and social dimensions of religiousness across cultures. *Journal of Cross-Cultural Psychology*. Advance online publication.
- Schnabel, L. (2016). Religion and gender equality worldwide: A country-level analysis.

- Social Indicators Research, 129, 893-907. https://doi.org/10.1007/s11205-015-1147-7
- Stark, R. (2001). Gods, rituals, and the moral order. *Journal for the Scientific Study of Religion*, 40(4), 619-636. https://doi.org/10.1111/0021-8294.00081
- Steenkamp, J. B. E., & Baumgartner, H. (1998). Assessing measurement invariance in cross-national consumer research. *Journal of Consumer Research*, 25(1), 78-90. https://doi.org/10.1086/209528
- Van Assche, J., Bahamondes, J., & Sibley, C. (2020). Religion and prejudice across cultures:

 A test of the threat-constraint model. *Social Psychological and Personality Science*.

 Advance online publication. https://doi.org/10.1177/1948550620920966
- Van Pachterbeke, M., Keller, J., & Saroglou, V. (2012). Flexibility in existential beliefs and worldviews: Introducing and measuring existential quest. *Journal of Individual Differences*, 33(1), 2-16. https://psycnet.apa.org/doi/10.1027/1614-0001/a000056
- Wibisono, S., Louis, W. R., & Jetten, J. (2019). A multidimensional analysis of religious extremism. *Frontiers in Psychology*, *10*: 2560. https://doi.org/10.3389/fpsyg.2019.02560
- Wolf, E. J., Harrington, K. M., Clark, S. L., & Miller, M. W. (2013). Sample size requirements for structural equation models an evaluation of power, bias, and solution propriety. *Educational and Psychological Measurement*, *73*(6), 913-934. https://doi.org/10.1177%2F0013164413495237
- 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*(1), 60-71. https://doi.org/10.1177/1088868309349693

Table 1

Descriptive Statistics (M, SD) for All Variables, by Religious Cultural Zone

	Secular W. EU	Religious Catholic	Protestant (USA)	Greek Orthodox	Jewish (Israel)	Muslim (Turkey)	Eastern (Taiwan)
Fundamentalism	2.39(1.02)	3.65(1.09)	3.66(1.69)	2.87(1.15)	3.00(1.30)	4.85(1.54)	2.70(0.78)
Rel. Dimensions	2.75(1.54)	3.94(1.74)	4.04(1.72)	3.14(1.40)	3.60(1.64)	4.68(1.64)	3.73(1.00)
Believing	2.95(1.71)	4.06(1.92)	4.08(1.85)	3.38(1.63)	3.50(1.82)	5.10(1.81)	3.91(1.30)
Bonding	2.89(1.65)	3.97(1.84)	4.21(1.80)	3.13(1.53)	3.90(1.86)	4.51(1.87)	4.02(1.27)
Behaving	2.53(1.74)	3.92(1.97)	4.07(1.97)	3.21(1.76)	3.40(1.95)	5.44(1.86)	3.76(1.29)
Belonging	2.62(1.74)	3.79(1.88)	3.82(1.86)	2.85(1.52)	3.60(1.77)	3.68(1.87)	3.24(1.20)
Authoritarianism	3.17(0.83)	4.11(0.81)	3.74(0.89)	3.67(1.00)	3.69(0.94)	3.96(1.01)	3.81(0.71)
Existential Quest	4.77(0.98)	4.41(1.02)	4.29(1.02)	4.37(1.07)	4.17(1.10)	4.50(1.15)	4.90(0.84)
Neg. Attitudes t.							
Atheists	3.15(1.40)	3.91(1.56)	4.41(1.81)	4.01(1.63)	4.43(1.71)	5.76(1.79)	3.51(1.32)
Buddhists	3.75(1.37)	4.04(1.51)	3.91(1.59)	4.11(1.42)	4.81(1.49)	5.63(1.56)	3.86(1.09)
Catholics	3.45(1.43)	2.85(1.54)	3.26(1.49)	3.69(1.38)	5.23(1.14)	5.34(1.63)	4.27(1.07)
Jews	4.02(1.32)	4.14(1.36)	3.70(1.44)	4.64(1.37)	2.15(1.27)	5.67(1.56)	4.68(1.06)
Muslims	4.60(1.37)	4.89(1.43)	4.49(1.58)	4.82(1.37)	6.08(1.04)	1.81(1.35)	4.89(1.15)
Yxtos	4.40(1.34)	4.85(1.48)	4.57(1.49)	4.89(1.49)	/	5.84(1.52)	4.58(1.12)
Total Prejudice	3.97(1.06)	4.35(1.17)	4.21(1.32)	4.49(1.16)	5.13(1.06)	5.65(1.38)	4.31(0.87)

 Table 2

 Coefficients of Correlations of Religious Fundamentalism with the Four Basic Religious

 Dimensions and Socio-Cognitive Orientations, Distinctly by Cultural Religious Zone

	Secular	Religious	Protestant	Greek	Jewish	Muslim	Eastern
Correlates	West. EU	Catholic	(USA)	Orthodox	(Israel)	(Turkey)	(Taiwan)
Rel. Dimensions							
Believing	.51 (.46)	.51 (.50)	.75 (.70)	.56 (.48)	.70 (.66)	.79 (.70)	.23 (.18)
Bonding	.39 (.37)	.49 (.43)	.61 (.48)	.43 (.38)	.52 (.41)	.67 (.57)	.02 (.02)
Behaving	.52 (.48)	.48 (.45)	.76 (.67)	.65 (.60)	.80 (.77)	.78 (.67)	.24 (.21)
Belonging	.51 (.44)	.45 (.43)	.70 (.55)	.58 (.48)	.59 (.50)	.56 (.45)	.35 (.37)
SC Orientations							
Authoritarianism	.42 (.41)	.48 (.39)	.62 (.52)	.49 (.46)	.59 (.55)	.53 (.38)	.24 (.27)
Existential Quest	19 (27)	29 (24)	47 (50)	26 (42)	38 (39)	48 (45)	17 (11)

Note. In italics: nonsignificant results. All other associations are significant at least at p < .01.

In parentheses: correlations on religionists only. EU: Europe. SC: socio-cognitive.

Table 3Multiple Regressions of Religious Fundamentalism on the Four Basic Religious Dimensions and Socio-Cognitive Orientations, Distinctly by Cultural Religious Zone

Predictors	Secular West. EU	Religious Catholic	Protestant (USA)	Greek Orthodox	Jewish (Israel)	Muslim (Turkey)	Eastern (Taiwan)
			Total (Ns)				
	1.204	757	412	163	147	250	256
Rel. Dimensions							
Believing	.29***	.29***	.33***	.14	.24**	.33***	.17*
Bonding	06	.18***	05	07	02	.09	11
Behaving	.15**	.03	.26***	.34***	.54***	.30***	.01
Belonging	.14**	05	.09†	.19*	10	.03	.28***
SC Orientations							
Authoritarianism	.26***	.30***	.27***	.30***	.17**	.10*	.15*
Exist. Quest	16***	20***	19***	19*	24***	18***	17**
Adj. R^2	.42	.42	.74	.48	.72	.70	.18
			Religionists				
	579	525	236	117	124	231	97
Rel. Dimensions							
Believing	.26***	.33***	.34***	.15	.20*	.31***	02
Bonding	01	.08	05	07	09	.11	10
Behaving	.18**	.01	.25***	.35*	.62***	.24***	.07
Belonging	.07	.05	.06	.10	11	.03	.41***
SC Orientations							
Authoritarianism	.29***	.24***	.22***	.18*	.18**	.09*	.19*
Exist. Quest	22***	16***	25***	23**	25***	22***	18†
Adj. R^2	.41	.35	.65	.45	.70	.57	.19

^{***} p < .001. ** p < .01. * p < .05. † p < .10.

Table 4

Multiple Regression of Fundamentalism on Religiousness (Four Dimensions), SocioCognitive Orientations, and the Interactions of the Latter with Religiousness

	Total	Sample	Only	Religionists
Predictors	В	t-test	В	t-test
Religiousness: Believing	.26	11.04***	.26	9.29***
Religiousness: Bonding	.01	0.60	.02	0.88
Religiousness: Behaving	.32	12.79***	.34	12.02***
Religiousness: Belonging	02	-1.16	08	-3.34**
RWA-Authoritarianism	.27	20.49***	.24	13.09***
Existential Quest	20	-15.51***	19	-10.27***
$Religiousness \times RWA$.02	1.43	.02	1.00
Religiousness × Existential Quest	08	-6.28***	09	-4.47***
Relig. \times RWA \times Ex. Quest	.05	4.10***	.08	4.10***
Adj. R ² : 59, .55				

Table 5Coefficients of Correlations of Religious Fundamentalism and Socio-Cognitive Orientations with Social Distance from Various Religious Groups, Distinctly by Cultural Religious Zone

Targets		Secular W. Europe	Religious Catholic	Protestants (USA)	Greek Orthodox	Jewish (Israel)	Muslim (Turkey)	Eastern (Taiwan)
Atheists	RF	.31***	.33***	.58***	.46***	.59***	.63***	.07
	Relig.	.32***	.46***	.43***	.56***	.46***	.58***	.14*
	RWA	.21***	.23***	.44***	.45***	.38***	.53***	.07
	EQ	08**	23***	35***	24**	21*	35***	.00
Buddhists	RF	.18***	.29***	.38***	.21**	.40***	.47***	14*
	Relig.	.05†	.23***	.13**	.17*	.24**	.40***	37***
	RWA	.22***	.20***	.33***	.37***	.43***	.36***	02
	EQ	15***	21***	32***	29***	41***	28***	14*
Catholics	RF	24***	31***	05†	.04	.48***	.38***	14*
	Relig.	45***	57***	26***	03	.42***	.32***	25***
	RWA	15***	25***	01	.11	.40***	.39***	02
	EQ	01	.09*	04	18*	13	26***	04
Jews	RF	.04	.04	.12*	.21**	24**	.39***	.01
	Relig.	10†	.00	10*	.26***	29***	.30***	18**
	RWA	.19***	.08**	.13**	.37***	26**	.27***	.04
	EQ	09**	06	18***	25**	.08	24***	05
Muslims	RF	.03	.18***	.18***	.12	.25**	60***	.03
	Relig.	.00	.16***	.00	.17*	.19*	56***	16*
	RWA	.22***	.13***	.19***	.24**	.39***	38***	04
	EQ	07*	16***	13**	17*	13	.28***	.04
"Yxtos"	RF	.05	.21***	.27***	.22**	_	.44***	.02
	Relig.	.06†	.24***	.08†	.36***	_	.38***	21**
	RWA	.15***	.19***	.27***	.42***	_	.35***	.10
	EQ	07*	14***	24***	26***	_	26***	.00

^{***} p < .001. ** p < .01. * p < .05. † p < .10.

Note. In italics: results for attitudes toward religious ingroup. RF: religious fundamentalism.

Relig.: religiousness. RWA: right-wing authoritarianism. EQ: existential quest.

Table 6Multiple Regressions of Interreligious Prejudice on Religiousness and Socio-Cognitive

Orientations, Distinctly by Cultural Religious Zone

Predictors	Secular West. EU	Religious Catholic	Protestant (USA)	Greek Orthodox	Jewish (Israel)	Muslim (Turkey)
			Total			
Believing	06	.15*	.08	06	.08	.10
Bonding	.01	.09	18*	.24*	06	00
Behaving	01	.05	.28*	.13	.33*	.40***
Belonging	.15*	.03	04	.17	.09	.02
Adj. R^2	.01	.08	.04	.15	.17	.24
			Religionists			
Religiousness	.03	.24***	02	.21**	.22**	.27***
Authoritarianism	.23***	.11**	.27***	.31***	.35***	.27***
Exist. Quest	06*	16***	20***	19*	14+	15**
Adj. R^2	.07	.12	.14	.27	.29	.29

Table 7Multiple Regression of Interreligious Prejudice on Religiousness (Four Dimensions), SocioCognitive Orientations, and the Interactions of the Latter with Religiousness

	Total	Sample	Only	Religionists
Predictors	В	t-test	В	t-test
Religiousness: Four Dimensions	.16	8.30***	.11	4.35***
RWA-Authoritarianism	.24	12.16***	.24	8.93***
Existential Quest	14	-7.14***	15	-5.49***
$Religiousness \times RWA$.05	2.94**	.02	0.58
Religiousness × Existential Quest	05	-2.85**	02	-0.87
Relig. \times RWA \times Ex. Quest	.04	1.95*	.00	0.15
Adj. R ² : 17, .14				

Figure 1

Religiousness and (Low) Existential Quest as Predicting Fundamentalism Among Low (Left)

and High (Right) Authoritarians

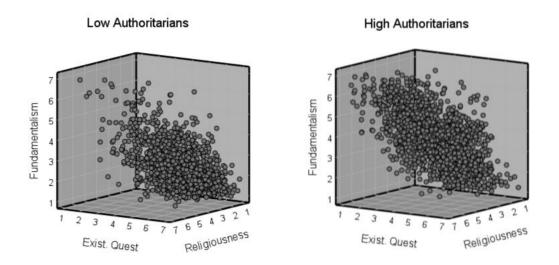


Figure 2

Religiousness and Authoritarianism (Left) or Existential Quest (Right) as Predicting

Interreligious Prejudice

