

# Research in the Social Scientific Study of Religion

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# God Representations: An Exploratory Study on a Croatian Adolescent Sample

*Filip Užarević, Damir Ljubotina and Zvonimir Knezović\**

## Abstract

The varieties of ways in which people think and feel about God, i.e. God representations (GRs), are a relevant topic in psychology, yet under-researched in countries other than Western Europe and the United States. The aim of the current study was to investigate the dimensions of GRs and their associations with religiosity in a sample of Eastern European (Croatian) adolescents. For the assessment of GRs we created the God Representations Questionnaire (GRQ-21), and for measuring religiosity we used a multidimensional Religiosity questionnaire that distinguished between religious beliefs, ritual religiosity, and religious social behaviour. The sample consisted of 413 high school students attending Roman Catholic religion courses in Zagreb. Factor analysis of the GRQ-21 yielded four factors of GRs: the traditional-positive, the abstract/distant, the playful, and the anthropomorphic. Regarding the relationship between dimensions of GRs and religiosity, the traditional-positive dimension correlated positively with all religiosity dimensions, while the playful, abstract/distant, and anthropomorphic dimensions of GRs correlated positively only with religious beliefs, but not ritual religiosity or social religious behaviour. The results are in accordance with previous findings from Western Europe and the United States, but also expand them.

## Keywords

factor analysis – God representations – religiosity

The ways in which people conceptualize God, or God representations (GRs), are a relevant topic for psychologists, who have been investigating them since

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the early twentieth century (e.g. Chave & Thurstone, 1931). This is probably because the discipline of psychology of religion emerged in the context of Judeo-Christian religious traditions, to which God is central. It is impossible to understand the psychology of Judeo-Christian believers without understanding the way they comprehend and feel about God (Spilka, Armatas, & Nussbaum, 1964). Furthermore, GRS are an interesting topic for psychologists because their variations relate to relevant outcomes such as self-esteem (Benson & Spilka, 1973; Zahl & Gibson, 2012), life satisfaction (Zahl & Gibson, 2012), cheating behaviour (Shariff & Norenzayan, 2011), and psychopathological symptoms (e.g. Schaap-Jonker, Eurelings-Bontekoe, & Verhagen, 2002).

Most studies of the nature of GRS have been conducted in Western Europe and the United States. It is likely that GRS vary across cultures (Vergote & Tamayo, 1981; as cited in Spilka, Hood, Hunsberger, & Gorsuch, 2003), so the generalizability of these findings is questionable. For example, it may be unjustified to assume that people in Eastern Europe think of God in the same way as do those in Western Europe or the United States, because in these countries the historical and legislative role of religion has been markedly different (especially in the case of previously communist countries). In many Eastern European countries religion has a strong presence and significance (e.g., 91% of Croatians define themselves as Christians; Croatian Bureau of Statistics, 2011). Taking that into consideration, studying God representations on these samples is a relevant goal. Nevertheless, to our knowledge, there are virtually no empirical studies of God representations in Eastern European countries (at least not available in the English language). The present study is aimed at filling this gap. The main aim of the current study is to investigate the structure of God representations among a Croatian sample, taking Croatia as an example of an Eastern European<sup>1</sup> country. Defining the main dimensions of God representations is the first step in determining the psychological impact of this construct. As Spilka, Armatas and Nussbaum (1964) noticed, it is important to first identify the main features of God representations before exploring their origins and correlates. A second aim of the current study is to investigate the associations between the dimensions of GRS and the dimensions of religiosity.

Although Croatia is in Eastern Europe, Eastern European countries present a culturally heterogeneous group (especially with regard to religion). For example, the Czech Republic, unlike Croatia, is a largely secular country (WIN-Gallup International, 2012). These differences may, in turn, influence the structure of GRS in those countries. From that perspective, the present study aims to

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1 In classifying Croatia as an Eastern European nation, we follow European Union's Eurovoc list (<http://eurovoc.europa.eu/drupal/?q=request&uri=http://eurovoc.europa.eu/100277>).

offer only an initial (but still useful) insight into the dimensions of GRS among Eastern Europeans, by focusing on a particular sub-population of Croatians.

## Overview of Previous Research

### *Dimensions of GRS*

There has been a lack of consensus in terminology within the study of GRS (Davis, Moriarty, & Mauch, 2013), which limits the ability to make comparison across studies. Nevertheless, when it comes to the structure of GRS, there are some relatively consistent findings. Namely, GRS seem to be a multidimensional, rather than unidimensional construct (Grimes, 2008). In other words, people seem to think about God in terms of several relatively independent aspects. Specifically, there are three GRS dimensions that seem to be stable across studies.

First, the majority of the studies (e.g. Broughton, 1975; Gorsuch, 1968; Krejci, 1998; Nelsen, Cheek, & Au, 1985; Schaap-Jonker, Eurelings-Bontekoe, Zock, & Jonker, 2008; Spilka et al., 1964; Zahl & Gibson, 2012) has yielded a factor which might be interpreted as the 'traditional-positive' dimension. In the above mentioned studies, this dimension was reflected in items describing God in terms such as comforting, helping, mighty, patient, warm, and friendly. Notably, several studies distinguished between different components of positive GRS (separating supernatural characteristics, emotional support, and other human characteristics such as 'wise'; Gorsuch, 1968; Saroglou, 2006; Spilka et al., 1964). However, these sub-dimensions were generally less stable across studies.

The second frequently observed dimension of GRS (e.g. Broughton, 1975; Gorsuch, 1968; Krejci, 1998; Spilka et al., 1964) may be described as the 'abstract/distant' dimension, reflecting features such as unknowable, distant from the world, unavailable, etc.

The third relatively stable dimension across studies can be described as the 'negative' dimension which has emerged from factor-analytical studies that included unfavourable features (e.g. vengeful, punishing, stern, critical, etc.) as items in their questionnaires (Gorsuch, 1968; Schaap-Jonker et al., 2008; Spilka et al., 1964; Zahl & Gibson, 2012).

The time span between the above studies (i.e. almost 50 years from the oldest to the newest) suggests that the three described dimensions of GRS (the traditional-positive, the abstract/distant, and the negative) are temporally stable, at least in the Western society. Additionally, several authors (e.g. Davis et al., 2013; Rizutto, 1979; Schaap-Jonker et al., 2008; Zahl & Gibson, 2012) have recommend distinguishing between the 'learned/doctrinal' aspect of

GRS, reflecting doctrinal prescriptions of religious culture that define what adherents are supposed to believe and feel about God, and the 'personal/experiential' aspect, reflecting personal thoughts and affects related to God. For psychologists, personal/experiential GRS are a more interesting construct than learned/doctrinal ones, partly because the latter are rather uniform within a given religious culture and therefore unlikely to vary much between individuals, and partly because personal/experiential GRS seem to relate to relevant psychological variables to a greater extent than learned/doctrinal GRS. For example, Zahl and Gibson's (2012) showed that an experiential (but not doctrinal) positive view of God positively related to life satisfaction. We thus aimed to explore experiential rather than doctrinal God representations in the present study.

### *Associations between GRS and Religiosity Dimensions*

Research to date has found that perceiving God's actions as supportive, and having positive feelings toward God, are positively related to indicators of religion (Schaap-Jonker et al., 2008). This suggests a positive relation between the traditional-positive GRS dimension and religiosity, which is probably due to the religious institutions promoting precisely this view of God. However, little is known about how the less traditional dimensions of GRS relate to religiosity. For example, in the case of abstract/distant dimension, there are two diverging options. On the one hand it can be argued that, compared to the less religious, people who are more religious will view God as more abstract/distant because they think about God more often, and may thus find out how complex it is to understand what God is. On the other hand it can be argued that because religious people are more attached to God, and rely on his presence in daily life, they may tend to view him as present and available, rather than abstract/distant. These diverging possibilities highlight the necessity of investigating empirically the relationships between different aspects of GRS and religiosity.

The complexity of the associations between GRS dimensions and religiosity is further highlighted if a multidimensional approach to religion is taken. Indeed, many authors suggest that religiosity is comprised of several aspects (Stark & Glock, 1968, Saroglou, 2011). For example, Saroglou (2014, p. 4) defines religion as "the co-presence of beliefs, ritualized experiences, norms, and groups that refer to what people perceive to be a transcendent to humans entity". Accepting these views, we operationally approached religion by recognizing three dimensions (Ljubotina, 2004). The first dimension is 'religious beliefs', which describes those internalized beliefs and affects that are independent of religious behaviour or belonging to a religious community. The second

dimension is 'ritual religiosity', which describes the degree of participation in religious rituals and ceremonies. The third dimension is 'social behaviour', which describes the consequences of religiosity on, among other things, intolerance or exclusivity towards people of different denominations.

A multidimensional approach to religion reveals the many options regarding associations of GRS and religiosity. For example, viewing God as abstract/distant may relate positively with the belief dimension of religion (as strong belief may imply serious thinking about the complexity of God); however, it may correlate to a lesser extent with the ritual aspect because rituals highlight God's presence and may make God seem more tangible. The relationships between GRS and religiosity may differ depending on the dimensions taken into account, so we argue that a multidimensional approach is needed when investigating this issue.

### **Aims and Hypotheses**

The present study had two specific aims. The first aim was to use an exploratory analysis to identify the dimensions of God representations in a Croatian sample. Based on previous studies, we expected that GRS will appear as a multidimensional construct. More specifically, we expected three dimensions to emerge: the traditional-positive, the abstract/distant, and the negative dimension. The second aim was to explore the associations between dimensions of GRS and religiosity. We expected an association between all dimensions of religiosity and the traditional-positive dimension of GRS, but we also explored other possibilities.

### **Method**

#### *Participants*

We collected the data on a sample of 428 secondary-school students in Zagreb, the capital of Croatia. Fifteen participants were eliminated because of incomplete answers, so the analyses were conducted on 413 students (181 males and 232 females). Students from secondary schools were chosen as participants instead of university students because they may be more similar to the general Croatian population. Only a minority of Croatians attend colleges and universities: according to the 2011 census, only 16% of Croatians hold a university degree, while 52% hold a high school diploma, (Croatian Bureau of Statistics, 2011). Taking this into account, we assumed that using a high school sample as



participants will be more representative of the general population, than using college students.

Using adolescents may limit the application of results to adults if GRS change greatly during maturation. In Croatia, secondary school includes four grades (typically including students between the ages of 15 and 18). In order to increase the generalizability of the results, we conducted the study only on senior students (3rd – 4th grade), who were 16–19 years old ( $M = 18.2$ ,  $SD = 0.69$ ). Additionally, we tried to increase generalizability by conducting the study on samples coming from different types of schools, covering the three main educational orientations of the Croatian high-schooling system: three general-education high schools ( $N = 232$ ), one art school ( $N = 67$ ), and one secondary technical school ( $N = 114$ ). Overall, the sample was highly religious ( $M = 3.78$ ,  $SD = 0.91$ ; measured with a single item ranging from 1 = ‘not religious at all’ to 5 = ‘very religious’).

Considering the fact that a part of the sample was underage, special ethical considerations were due. The procedure and the instruments were reviewed and affirmed by the Ethical Committee of the Department of Psychology at the University of Zagreb. All of the participants were allowed to withdraw if they chose not to participate, and were free to leave the study at any point without providing any explanation.

### *Instruments*

*God Representations Questionnaire.* We created the God Representations Questionnaire (GRQ) in order to give a methodologically sound answer to the research problems. We generated the items of GRQ in two steps. First, we contacted 27 people, spread roughly equally by age-group (<18, 18–25, 26–40, 41+), gender, level of education (less than secondary school, secondary school, post-secondary education) and religiosity (believers, atheists). In an open-ended questionnaire, we asked them to write 10 short phrases describing the way they personally understood and felt about God. By using this method 151 phrases were collected. With the help of a linguistic expert, we employed content analysis on the collected phrases in order to eliminate synonyms and incomprehensible and rarely used words. Following this method, the number of phrases was reduced to 59.

In the second step, we reviewed previous studies that have explored the structure of GRS (Broughton, 1975; Gorsuch, 1968; Hutsebaut & Verhoeven, 1995; Kunkel, Cook, Meshel, Daughtry, & Hauenstein, 1999; Nelsen et al., 1985; Schaap-Jonker et al., 2008; Spilka et al., 1964; Zahl & Gibson, 2012), and compared their results to the phrases collected in the first step, again with the help of a linguistic expert. This confirmed that the descriptors in our sample

included all of the relevant groups of God-related features used in previous studies. The 59 phrases collected were therefore incorporated (in random order) as items in the initial version of the God Representations Questionnaire (GRQ-59). In GRQ-59, 428 participants assessed to which degree each characteristic corresponded to their personal view of God, on a scale from 1 ('it does not correspond at all') to 4 ('it completely corresponds'). To make sure that the participants' answers reflected their personal experience, rather than doctrinal knowledge about God, the instructions stated that we were interested in the participants' genuine feelings and thoughts about God, regardless of what they think they 'should believe'. A similar procedure was used by Zahl and Gibson (2012) when distinguishing between experiential and doctrinal GRs.

*Religiosity questionnaire.* As an indicator of religiosity we used the Religiosity questionnaire (Ljubotina, 2004). It consists of 26 items grouped in three subscales. The questionnaire is linguistically and culturally adapted to the Croatian population. Religiosity is conceptualized as a multidimensional characteristic, including dimensions of religious beliefs (assessed by items indicating cognitions and emotions regarding the existence of a divine being such as 'Sometimes I feel the presence of God or a divine creature'), ritual aspect (assessed by items indicating the participation in religious customs such as 'I regularly visit the church, or temple of God'), and social aspect (assessed by items indicating the strength of adherence to the participant's religious group such as 'I am against the marriage of people who belong to different religious traditions'). The questionnaire has been used in previous research, showing excellent psychometric characteristics (Ljubotina, 2015). For example, for religious beliefs dimension (RB), Cronbach's  $\alpha = .92$ , for ritual religiosity (RR)  $\alpha = .87$ , and for consequences of religiosity on social behaviour (CRSB)  $\alpha = .70$ . Intercorrelations between the subscales were  $r_{RB, RR} = .73$  ( $p < .001$ ),  $r_{RB, CRSB} = .56$  ( $p < .001$ ), and  $r_{RR, CRSB} = .65$  ( $p < .001$ ). Factor analyses indicate that all three dimensions are highly saturated with one general factor.

### *Procedure*

In agreement with the principals and professors in the high schools, we distributed the questionnaires during the class hours. It took about 20 minutes for the students to fill in the questionnaire.

### **Results**

In order to investigate the structure of God representations, we conducted a factor analysis on GRQ. We firstly excluded 15 items from further analyses because they either did not show appropriate psychometric characteristics for

factor analysis (due to low common variance or high complexity), or were frequently left unanswered (probably due to participants' non-understanding of terms such as 'paradoxical'). The rest of the analyses were conducted on a 44 item version of GRQ (GRQ-44).

Kaiser-Meyer-Olkin Measure ( $KMO = 0.953$ ) and Bartlett's test of sphericity ( $\chi^2 = 11745.2, p < .001, N = 413$ ) indicated that the correlation matrix was suitable for factor analysis. Based on the Kaiser-Guttman criterion and scree-plot analysis, we decided to keep five factors explaining 57.7% of the total variance. The eigenvalues of the principal components were  $\lambda_1 = 16.72, \lambda_2 = 3.72, \lambda_3 = 1.79, \lambda_4 = 1.60, \lambda_5 = 1.57$ . We firstly used Direct Oblimin (an oblique rotation method), expecting factor analysis to yield interrelated factors. However, Direct Oblimin and the orthogonal Varimax method yielded almost identical results. Varimax results are presented because of their greater simplicity. Item factor loadings are shown in Table 1.

Based on the results of factor analysis we formed scales for each of the dimensions. These dimensions were interpreted as:

1. *the traditional-positive dimension (TPD)*. The scale consists of 25 items (e.g. hope, happiness, wise, love, merciful, father, safety, etc.);
2. *the negative dimension (ND)*. The scale consists of nine items (e.g. arrogant, cruel, vengeful, stern);
3. *the abstract/distant dimension (ADD)*. The scale consists of four items (beyond space and time, mysterious, a being without a body, incomprehensible);
4. *the playful dimension (PD)*. The scale consists of three items (has a sense of humour, has a sense of play, childlike);
5. *the anthropomorphic dimension (AD)*. The scale consists of three items (bearded, old, wearing white clothes).

The majority of the GRQ-44 items were highly saturated with the first factor (TPD); the saturations ranged from .75 to .85. Due to the TPD scale's high homogeneity, from the psychometric viewpoint it is justifiable to reduce the number of items while maintaining the sensitivity and the reliability of the scale. For this reason, as well as for pragmatic purposes, we decided to keep a smaller number of the best indicators for each of the dimensions, while eliminating the others that shared a high amount of common variance. When choosing which items to keep for TPD, despite the psychometric homogeneity of the TPD scale (average item intercorrelation is  $r = .56$ ), based on content analysis and bearing in mind previous research (e.g. Gorsuch, 1968; Saroglou, 2006; Spilka et al., 1964), we distinguished between three facets of TPD, including almighty or supernatural characteristics (e.g. items 'the creator', 'omnipresent'),

TABLE 1 *The results of the GRQ-44 factor analysis*

Items	Factors				
	TPD	ND	TD	PD	AD
Hope	.84	-.23	-.03	.10	.05
Happiness	.82	-.27	.02	.10	.02
Wise	.82	-.16	.12	.05	.07
Love	.82	-.24	.10	.03	-.03
Safety	.81	-.23	.03	.05	.04
Good	.80	-.24	.08	.05	.05
Creator	.80	-.11	.00	.06	-.02
Friend	.80	-.21	-.04	.10	.06
Comfort	.80	-.22	.02	.12	-.01
Gentleness	.77	-.22	.06	.21	.06
Faithful	.77	-.20	.05	-.03	.07
Omnipresent	.76	-.18	.09	-.03	.05
Redeemer	.76	-.19	-.05	.04	.04
Father	.75	-.17	-.02	.07	.12
Truth	.75	-.34	.03	.04	-.05
Just	.75	-.26	-.01	.10	.05
Beyond the whole world and creation	.72	-.16	.17	-.02	.03
Holy	.71	-.26	.16	-.06	.05
Merciful	.71	-.26	.16	.03	.07
The master of the world	.65	-.09	-.02	.03	.22
Eternal	.65	-.01	.20	.01	.08
He has a mind	.64	-.09	.21	.05	.14
Brother	.55	-.12	-.19	.18	-.01
Immortal	.55	.01	.36	.01	-.06
Calm	.54	-.10	.15	.06	.09
Arrogant	-.27	.69	-.07	.04	-.05
Cruel	-.28	.69	.17	-.05	.01
Vengeful	-.20	.65	.04	-.04	.05
Irresponsible	-.28	.65	-.01	.15	.03
Stern	-.05	.64	.11	-.00	.12
Selfish	-.28	.64	-.08	.07	-.06
Aggressive	-.10	.60	.02	.01	.03
Cowardly	-.32	.59	.04	.04	.10

Items	Factors				
	TPD	ND	TD	PD	AD
Overrated	-.34	<b>.50</b>	.15	.01	-.07
Beyond space and time	.17	.03	<b>.68</b>	.03	.11
Mysterious	.30	.10	<b>.67</b>	.13	.08
A being without a body	.04	-.02	<b>.61</b>	.07	-.11
Incomprehensible	-.05	.33	<b>.47</b>	-.01	.02
Has a sense of humour	.20	-.04	.16	<b>.81</b>	.10
Has a sense of play	.18	-.02	.17	<b>.79</b>	.23
Childlike	.05	.32	-.07	<b>.67</b>	-.13
Bearded	.10	.05	-.03	.07	<b>.83</b>
Old	.01	.12	.32	.05	<b>.72</b>
Wearing white clothes	.30	.04	-.20	.05	<b>.65</b>

Note.  $N = 413$ . Factor loadings were obtained by principal axis factoring with Varimax rotation. Bold type indicates the factor on which an item loaded most heavily. TPD = traditional-positive dimension; ND = negative dimension; ADD = abstract/distant dimension; PD = playful dimension; AD = anthropomorphic dimension. Items in the left column are translated from Croatian.

emotional fulfilment and support (e.g. 'hope', 'happiness'), and other human positive characteristics (e.g. 'righteous', 'wise'). In the shortened version we included three items for each of the mentioned TPD facets (total of nine items). For the rest of the dimensions we chose the best three markers (i.e. the ones saturated most clearly with their respective factors). In sum, the GRQ-44 was reduced to 21 items (for TPD  $k = 9$ , and for ND, ADD, PD, and AD each,  $ks = 3$ ). Furthermore, although factor analysis on 44 items suggested that TPD and ND are distinct factors, these two factors had directly opposing content and were strongly negatively correlated ( $r = -.55, p < .001$ ). For these reasons, we decided to treat these two factors as two opposites of a single dimension in further analyses, so when creating the subscales we combined TPD results with reversely coded items from ND.

To confirm the above proposed factor structure on a shorter version of GRQ (GRQ-21), we conducted factor analysis on the 21 items. Again, KMO and Bartlett's test of sphericity suggested that the correlation matrix is suitable for factor analysis (KMO = 0.909;  $\chi^2 = 4370.72, p < .001, N = 413$ ). The results of the principal component analysis (and Varimax rotation) indicated results consistent to those for the GRQ-44. The only difference was that that we decided to keep four factors (explaining 61.1% of variance) instead of five, based on

scree plot analysis, Keiser-Guttman criterion, and the above proposed suggestion that TPD and ND in fact represent two ends of a single dimension. The eigenvalues of the first four principal components were  $\lambda_1 = 7.35$ ,  $\lambda_2 = 2.43$ ,  $\lambda_3 = 1.58$ ,  $\lambda_4 = 1.47$ .

The final factors were interpreted as the traditional-positive dimension (items: happiness, hope, love, good, wise, just, redeemer, omnipresent, creator; three reversely coded are also added to the TPD scale: cruel, arrogant and vengeful), the abstract/distant dimension (items: beyond space and time, mysterious, a being without a body), the playful dimension (items: has a sense of humour, has a sense of play, childlike), and the anthropomorphic dimension (items: bearded, old, wearing white clothes). Table 2 shows descriptive data for GRQ-21 subscales. The reliability and homogeneity of the first factor are high, even after reducing the number of items. The reliabilities of the other factors are acceptable considering the number of items.

The differences between the means in Table 2 were tested for statistical significance with paired-samples *t*-tests. The results indicated that means for all the scales were statistically highly significantly different from each other. The participants scored highest on the traditional-positive dimension. This dimension is followed by the abstract/distant, and then by the anthropomorphic dimension, while the participants seemed least likely to view God as playful. Intercorrelations between the factors were low and varied from .16 to .22 (Table 3). In sum, the analyses showed that the traditional-positive dimension of GRS is dominant within the GRQ. However, this factor does not fully describe the variation in God representations as conceptualized in the questionnaire. In order to best describe the latent structure of GRQ, we found that three other

TABLE 2 *Arithmetic means, standard deviations, minimal and maximal achieved values, number of items and internal reliability coefficients for the subscales of GRQ-21*

Subscale	M	SD	$r_{ij}$	k	$\alpha$
TPD	3.59	0.57	.52	12	.93
ADD	3.09	0.75	.33	3	.60
PD	2.01	0.79	.45	3	.71
AD	2.43	0.90	.38	3	.65

*Note.*  $N = 413$ . TPD = traditional-positive dimension; ADD = abstract/distant dimension; PD = playful dimension; AD = anthropomorphic dimension;  $r_{ij}$  = average item intercorrelation;  $k$  = number of items;  $\alpha$  = Cronbach's alpha coefficient. All of the means were statistically significantly different from each other ( $t > 7, p < .001$ ).

TABLE 3 *Correlation matrix for GRQ-21 subscales*

	ADD	PD	AD
TPD	.20**	.20**	.16**
ADD		.22**	.13**
PD			.21**

*Note.*  $N = 413$ . TPD = traditional-positive dimension; ADD = abstract/distant dimension; PD = playful dimension; AD = anthropomorphic dimension. \* $p < .05$ , \*\* $p < .01$ .

TABLE 4 *Correlations of GRQ-21 and Religiosity questionnaire*

	Religious beliefs	Ritual religiosity	Religious social behaviour
TPD	.81**	.63**	.48**
ADD	.11*	.02	-.01
PD	.17**	.07	.08
AD	.10*	.09	.05

*Note.*  $N = 413$ . TPD = traditional-positive dimension; ADD = abstract/distant dimension; PD = playful dimension; AD = anthropomorphic dimension. \* $p < .05$ , \*\* $p < .01$ .

dimensions appear (namely, God as abstract/distant, God as playful, and God as showing distinct human physical features).

To address the second research problem, we analysed the correlations between GRQ-21 subscales and religiosity dimensions. All four GRQ-21 dimensions correlated positively with the dimension of religious beliefs (Table 4). However, only TPD correlated positively with the ritual and social dimensions of religiosity, while there was no correlation between them and ADD, PD, and AD.

## Discussion

This exploratory study aimed to investigate the structure of God representations and the relationship between dimensions of GRS and religiosity, on a sample of Croatian adolescents. We expected that GRS would appear as multidimensional rather than unidimensional. Our analyses confirmed this expectation, suggesting that four distinct dimensions best explained the structure of GRQ, namely the traditional-positive, the abstract/distant, the playful,

and the anthropomorphic. We also expected that the traditional-positive dimension would correlate positively with all religiosity dimensions, which was also confirmed. Other GRS dimensions, however, positively correlated only with religious beliefs, but not other dimensions of religiosity (i.e. ritual and social). We will reflect on each of the dimensions, and their overlap with religiosity dimensions.

### *The Traditional-Positive Dimension*

The most robust of the GRS dimensions was the traditional-positive. A dimension like this was often noted in previous studies employing factor analysis (e.g. Broughton, 1975; Gorsuch, 1968; Nelsen et al., 1985; Schaap-Jonker et al., 2008; Spilka et al., 1964; Zahl & Gibson, 2012). It describes a mighty, but at the same time gentle God who cares for people. Most of the sample conceptualized God as high on traditional-positive dimension. Seeing God as a positive figure has been shown to correlate positively with self-esteem (Benson & Spilka, 1973), and satisfaction with life (Zahl & Gibson, 2012).

The negative dimension of GRS, consistent with expectations, also appeared in the factor analysis. However, subsequent analyses suggested that it is more suitable to view the traditional-positive and negative dimension as two opposites of one continuum. It is possible that on other samples the negative dimension would indeed form a factor robust enough to be kept as a distinct dimension, but in the case of the present study it seemed more correct and pragmatic to view the two factors as the opposite ends of a continuum. This corresponds to previous work in which the continua 'nurturing-judging' (Krejci, 1998) and 'nurturant-punitive' (Kunkel et al., 1999) were found to be robust dimensions of God representations.

The relationships between the traditional-positive dimension and dimensions of the Religiosity questionnaire indicated that all three religiosity dimensions (religious beliefs, ritual behaviour and social aspect of religion) correlate positively with TPD. The high overlap between religiosity dimensions and TPD was expected, and most likely due to the fact that TPD is promoted by religious authorities, and is thus salient in religious people's minds.

### *The Abstract/Distant Dimension*

As predicted in the hypotheses, the analysis yielded a factor we interpreted as the abstract/distant dimension of GRS. A similar dimension was found in the studies by Broughton (1975), Gorsuch (1968), Krejci (1998), and Spilka et al. (1964), and it describes an unknowable God outside the material world. Most of the participants in the present study were more inclined to perceive God



as more abstract/distant than as immanent. The abstract/distant dimension showed a modest positive association with the dimension of religious beliefs, but not the ritual and social aspect of religiosity. The weak relationship between dimensions of religiosity and the abstract/distant GRS dimension may be due to the fact that religious education does not explicitly endorse this kind of God conceptualization. Although the association is weak, it still seems that people with internalized religious beliefs tend to view God as unknowable and abstract. Interestingly, ADD showed no association with the ritual and social dimension of religiosity. This suggests that ADD reflects a more personalized (rather than socially-based) approach to God and religion. We argue that future research should focus on the relationship between ADD and open religiosity (e.g. quest, spirituality). It is possible that people endorsing this kind of open and less traditional approach to religion/spirituality may also endorse less rigid and more amorphous God representations, such as the abstract/distant view of God.

### *The Playful Dimension*

To the best of our knowledge, this is the first study to demonstrate the playful dimension, describing God as humorous and childlike. Although it is possible that this kind of GRS dimension reveals a distinct localized (Eastern European) approach to Christianity, it seems more likely that other studies have not found this dimension simply because they did not include in the questionnaires the items reflecting this dimension. Religious beliefs, but not social and ritual dimension of religiosity, correlated positively with the playful GRS dimension. This suggests that people who internalize religious beliefs and values (but not the ones with the more social approach to religion) tend to view God as more bright and playful.

The playful dimension is an interesting finding, because even though religion is often associated with a serious and humourless approach to life (see Saroglou, 2002), the existence of the playful dimension shows that some people might take their religion light-heartedly. It would be interesting to explore further correlates of this dimension. For example, since sense of humour is positively correlated with better coping mechanisms and general well-being (Martin, 1998; Martin, Kuiper, Olinger, & Dance, 1993), it would be interesting to see whether people who see God as playful would exhibit similar features. Finally, it would be interesting to see whether this factor would reappear if we applied the GRQ on a different (especially older and thus arguably more seriously-minded) sample, and in other countries of Eastern Europe and the West.

### *The Anthropomorphic Dimension*

Finally, a factor we interpreted as the anthropomorphic dimension appeared. A similar dimension emerged in Broughton's (1975) study, and it describes God with distinctive human characteristics. The number of participants accepting this dimension and rejecting it was approximately equal. This dimension resembles God as presented in some Christian art: bearded, old, and wearing white clothes. This perhaps explains its slight positive correlation with the dimension of religious beliefs. In Broughton's study this dimension was negatively associated with education and socioeconomic status. He argues that this link is due to the less educated and less affluent individuals having difficulties with complex symbolization. Thus, to help themselves understand a highly abstract concept such as God, they "establish a correspondence with the familiar and concrete". (Broughton, 1975, p. 341). However, Broughton did not support this hypothesis with any data, so this remains a conjecture for now.

Overall, most of the described GRS dimensions (with the exception of the playful dimension) were found in previous studies in Western Europe and the United States. This suggests their stability within the Judeo-Christian culture (both Western and Eastern-European), and confirms multidimensionality of God representations.

### *Limitations*

There are several limitations of the present study. The first limitation is that the study's methodology implies that people hold easily definable and stable God representations, thus possibly oversimplifying this subject. Conversely, Gibson (2007) has argued that God representations are complex and dynamic, emphasizing that people view God through multiple schemas. Different aspects of God representations emerge depending on the context: "A charismatic worship service, a Bible study, and sitting in a foxhole while under fire are each likely to activate different God schemas" (Gibson, 2007, p. 232). Although we recognize that the approach assuming that GRS are a stable construct (and not context-dependent) is a serious limitation to the present study, we nevertheless believe that the present study offers a useful (if only initial) insight into GRS in the Eastern European context.

Secondly, the generalizability of the findings is limited. Primarily, although the findings of the present study give an outlook on GRS in an Eastern European country, the results obtained on a Croatian sample are not necessarily generalizable to other Eastern European countries, especially since these countries are heterogeneous with regard to religion. Furthermore, even generalization on the Croatian population is limited, as the sample consisted of adolescents, i.e. secondary school students. This restricts generalizability of the findings to older people in two ways. First, from a developmental perspective,

adolescents' religiosity, compared to that of adults', seems to be more unstable (e.g., before the age of 25, [de]conversions are more frequent than later in life; Granqvist, 2014; Streib & Klein, 2013). Second, religiosity in adulthood generally tends to become less personalized and experiential, and more habit-based (Granqvist, 2014). These differences are likely to reflect on the structure of GRS. For example, if adult religiosity is indeed more habit/tradition-based compared to adolescent, the GRS dimensions reflecting a more personal view of God (e.g., PD and ADD) should appear less frequently in the adult population. On the other hand, we might expect that TPD dominates in these samples.

Besides the developmental, there are possible cohort effects. This is especially relevant for the present sample, having in mind the Croatian post-communist context. Religion in Croatia had a strong upsurge in the late 1980s when communism lost its influence (Marinovic Jerolimov, 2005). It is possible that adults who lived through this religious renaissance will have different attitudes and approach to religion, and subsequently different GRS, compared to adolescents who were born years later. Consequentially, the presented results should not be considered as representative for the Croatian population, but only for the young urban Croatians.

Finally, having in mind the aim of the present study to explore the similarities between GRS dimensions in Croatia and the West, it is important to note that additional information is needed to provide answers to this problem. Although three out of four GRS dimensions of the present study were previously noted in Western studies (suggesting their stability across the two cultures), only a direct comparison, using the same instrument on a comparative Western sample, would test the overlap between GRS dimensions in the two cultures.

## Conclusion

The present study had two main aims. The first was to investigate the structure of God representations among Croatian adolescents. Although we approached this issue with an exploratory factor analysis, it was expected that GRS would be a multidimensional construct that would include traditional-positive, abstract/distant, and negative dimensions of GRS. The hypotheses were confirmed, with the exception of the negative dimension of GRS being interpreted as the opposite end of the traditional-positive dimension. Furthermore, factor analysis yielded two unexpected factors of GRS, namely the anthropomorphic dimension and the playful dimension.

The second aim was to investigate the associations between the dimensions of GRS and religiosity. This question was also approached in an exploratory manner,

the only expectation being that the traditional-positive dimension of GRS would correlate positively with all religiosity dimensions. This hypothesis was confirmed. Interestingly, other GRS dimensions (playful, abstract/distant, and anthropomorphic) correlated positively with religious beliefs, but not ritual religiosity or social religious behaviour, suggesting their intrinsic (rather than social) nature.

The present study offers an initial insight into the structure of GRS in an Eastern European context, and evidence for the intercultural stability of GRS dimensions. However, if the results are to be generalized to other Eastern European countries, the study should be replicated among other nationalities and among adults. Moreover, in order to confirm the intercultural stability of the structure of GRS, future studies should focus on direct comparison between Eastern European and Western samples.

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