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**Original Scientific Paper** 

# ROLE OF RELIGIOSITY IN PREDICTING THE FEAR OF DEATH

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Abstract. The aim of this study was to determine if religiosity, involving dimensions such as ideology, intellect, experience, private and public practice, is related to fear of death and to test if it has a role in predicting its dimensions, which are fear of death and dying of self, and fear of death and dying of others. The predictive values of the control variables (gender, age) were also tested. The data was collected using the Collett-Lester Fear of Death Scale - Revised (CLFODS-R; Lester & Abdel-Khalek, 2003) and The Centrality of Religiosity Scale (CRS-15; Huber & Huber, 2012) on a sample of 735 participants, both male (N=214) and female (N=521), aged 18-70 (M=35.62, SD=11.23). When it comes to predicting fear of death using the hierarchical regression analysis, gender and age were included in the first step in every model, while religiosity dimensions were included in the second step of all the analyses. All the models were statistically significant. The results of the hierarchical regression analysis showed that significant predictors of fear of death of self in the first step ( $R^2$ =.065, F(2,732)=25.611, p=.000) were age ( $\beta$ =-.155, p=.000) and gender ( $\beta$ =.226, p=.000), and in the second ( $R^2$ =.087, F(7,727)=9.914, p=.000) gender ( $\beta$ =.213, p=.000), age  $(\beta=-.134, p=.000)$ , and religious experience  $(\beta=.171, p=.011)$ . Gender was the only significant predictor of fear of dving of self in the first ( $\beta$ =.234, p=.000; R<sup>2</sup>=.056, F(2,732)=21.774, p=.000), and in the second step (( $\beta=.237$ , p=.000;  $R^2=.061$ , F(7,727)=6.786, p=.000). Significant predictors of fear of death of others in the first step ( $R^2$ =.087, F(2,732)=34.956, p=.000) were gender ( $\beta$ =.293, p=.000) and age ( $\beta$ =-.097, p=.006), and in the second ( $R^2=.112$ , F(7,727)=13.118, p=.000) gender ( $\beta=.266$ , p=.000), age ( $\beta=-.094$ , p=.011), intellect ( $\beta=-.144$ , p=.001), and experience ( $\beta=.147$ , p=.027). A significant predictor of fear of dying of others in the first step ( $R^2=.081$ , F(2,732)=32.077, p=.000) was gender ( $\beta=.283$ , p=.000). In the second step ( $R^2=.100$ , F(7,727)=11.574, p=.000) significant predictors were gender ( $\beta$ =.256, p=.000), intellect ( $\beta$ =-.147, p=.001), and experience ( $\beta$ =.152, p=.023). There are differences regarding the level of fear of death when groups of non-religious, moderately, and highly religious respondents are compared, where moderately religious respondents expressed higher fear of death of self than non-religious ones (F(2,732)=16.149), p=.000), while highly religious respondents expressed the lowest fear of dying of self,

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when compared to moderately and non-religious respondents (F(2,732)=8.044, p=.000). Based on the results obtained it could be said that religiosity, more precisely its components intellect and experience, gender and age are significant predictors of fear of death. Further research is advised.

Key words: religiosity, fear of death, fear of dying.

### 1. INTRODUCTION

It is often assumed that religiosity is an indicator of a need for protection against the fear of death. Still, considering existing theoretical approaches (e.g., *buffering theory*, Rose & O'Sullivan 2002; *death apprehension theory*, Ellis et al. 2013) it is not clear whether strongly religious individuals would have an intense fear of death, which would lead to even stronger religiosity, or a low fear of death, because of their faith. Considering this conceptual ambiguity, it is not surprising that some authors pointed out that there is no consistent relation between religiosity and fear of death (Kastenbaum & Costa 1977).

For example, one meta-analytic study compared 84 studies on the relationship between religiosity and fear of death and suggested that an inverse correlation between them may exist (at least for moderately to extremely religious), but when nonreligious respondents are included, the relationship often shifts to being either positive or curvilinear, depending on the measured types of religiosity (Ellis & Wahab 2013).

The main idea of this study is to bring the attention to the relationship between religiosity and fear of death and how that relationship is expressed in a Serbian sample. Some practical implications of the results obtained would be applied through educational and therapeutic work.

#### 1.1. Religiosity

Throughout the increase of interest in studying religiosity academically, there have been various approaches from different disciplines, with little or no cooperation among them. For example, psychologists demonstrate the tendency to approach religiosity through the dimensions of devotion, holiness, and piety, while sociologists are more focused on church membership and attendance, belief, and the doctrine acceptance, as well as life within fate (Cardwell 1980, as cited in Holdcroft 2006).

The two most influential approaches to studying religiosity are Allport's intrinsic/extrinsic concept (Allport & Ross 1967) and Glock's multidimensional approach (Glock 1962). The multidimensional approach points out five dimensions: the experiential (personal religious experience and feelings), ritualistic (practice of religious rituals), ideological (religious belief, doctrines), intellectual (knowledge of basic principles of a specific faith), and consequential (religious effects). This model was often used in the sociology of religion, and it represents the idea that every human culture generates and expresses forms of religiosity that are anthropologically universal. Therefore, it applies an inductive approach when examining various sociological forms of human experience and behavior within the realm of spirituality and religion. It is based on social expectations which are inseparable in human interaction and communication, where the dynamic of these social expectations creates different ways of expressing an individual's religiosity (Ackert 2021).

Allport's approach focused on two basic orientations in religiosity: extrinsic (religion serves as comfort in salvation and is used for personal gains, such as social status,

sociability, and self-justification) and intrinsic (religion is internalized and the main motivation for life is found inside of it) (Allport & Ross 1967). This model was popular in the psychology of religion because it postulated that the motivational system consisted of various autonomous motivational subsystems that are independent, but in interaction with each other, where they evolve and build new subsystems that later become autonomous themselves (Ackert 2021).

Both approaches have their advantages – the multidimensional approach includes relatively autonomous domains in which religious activities occur, while the extrinsicintrinsic approach includes the motivational structure of a believer. Also, both approaches have their shortcomings – the first model lacks a central unifying concept, and the second model lacks a neutral, universal assessment of motivation. All of this led to the synthesis of these two approaches, which also included Kelly's theory of personal constructs that allows everyone to develop their worldviews and to postulate their principles. Huber proposed the operationalization of the central psychological component and hypothesized that when the shared center is added to the existing dimensions that Glock postulated, the construct becomes an assessment measure of the prominence of certain religious motives. This shared, interactive center covers the crucial point and flaw of the multidimensional approach, which is the relationship between the relatively autonomous dimensions (Huber 2003, as cited in Huber & Huber 2012). This model is economical, undisturbed by theological content from different religious traditions, and form-specific, which means that each dimension has its form of expression that has to be captured accurately (Ackert 2021).

Huber (Huber 2003, as cited in Huber & Huber 2012) proposed five dimensions for this new multidimensional approach for measuring religiosity: *ideology* (belief in the existence of an immaterial and transcendental sphere or reality, where a person does not need firm and complete knowledge in order to believe, and the more assurance the person has, the more important the interactions with the transcendental are; concepts could be both theistic or pantheistic), *intellect* (interests, knowledge and hermeneutic expertise, the more someone thinks about religious topics, the more often is religious subjects present in their reflections and the more often the person elaborates, explains, and presents their religious points of view to others; highlight on cognitive processes), *experience* ("contact with ultimate reality" which leaves traces in forms of feelings and perceptions; refers to the feeling of participation and existence of something divine), *private practice* (devotion to some sort of individualized religious activity and private rituals, such as prayer or meditation) and *public practice* (certain types of relationships with the religious community within places for common rituals and activities; it is measured by the frequency and regularity of participation in religious activities).

#### 1.2. Fear of death

Every culture has its socio-physical network that has the function of predictions and warnings, attempts to prevent or inflict death, nurturing an orientation towards a dying person, rituals related to the disposal of the body, and putting effort into explaining or rationalizing mortality (Kastenbaum & Costa 1977). This socio-physical network includes new biomedical technologies that can prolong life functions, concerns about determining whether or not a person is considered dead under particular circumstances, perception of death as a beginning or an end (or both, as a pass-through gate), prescribed moral codes, the dominant paradigm and ideology, and so on. (Kastenbaum 2000). People often contemplate death, mostly because

it is an inevitable event in everyone's life, and no one can predict how, when, and where their life will end. This uncertainty suggests that some level of anxiety related to death is expected and represents a normal response (Mooney & O'Gorman 2001).

Unlike other living beings, humans can comprehend that the future includes their inevitable death and that it could occur at any moment for any reason. Between the will to live and the awareness of one's own mortality, there is a basic psychological conflict that people experience which results in an intense feeling of fear. People can try and symbolically overcome or reduce this fear in a different manner – some as a part of religious beliefs, through teachings of eternal life or the certain afterlife (heaven, reincarnation, unification with the universe, etc.), some through life achievements (science, sports, art, etc.), others through giving birth ("prolonging own life") or through belonging to a certain valued group, which gives us the feeling that we are a part of something bigger and promises us own transcendence (Branković 2016).

Fear of death can be variously operationalized, both as a one-dimensional and multidimensional and more complex concept. One of the multidimensional concepts refers to the fear of death as an emotional reaction that includes subjective feelings of discomfort and worry related to thinking and anticipation of different aspects connected to death, such as the nature of the process of dying, what will happen to our body after we die, what if we prematurely die, etc. (Hoelter 1979). Another multidimensional approach focuses on different aspects of fear of death, such as fear of our own death and our own dying, but also on fear of death and dying of a loved one (Lester 1990). The advantage of the second multidimensional approach is that the scale is more systematic, and shorter, demonstrates better metric characteristics and a more stable structure, and clearly distinguishes between the concept of death and the concept of dying and the perception of our own death and the death of our loved ones (Petrović et al. 2020).

#### 1.3. The relation between religiosity and fear of death

There are four main theories when it comes to explaining the relationship between religiosity and fear of death: 1) *the buffering theory* – believing in the chances of an afterlife alleviates the fear of death, assuring people that death is not the end (Rose & O'Sullivan 2002); 2) *the terror-management theory* – similar to the buffering theory, it predicts an inverse relationship, but also emphasizes the importance of culture – if a culture is dominated by a single religion, fear of death should be relatively low (Cohen et al. 2005); 3) *the curvilinearity theory* – people with firm ideological commitments on both ends of the religiosity spectrum (non-religious and extremely religious) may be less scared of death than those with more ambivalent beliefs and attitudes (Neimeyer et al. 2004); 4) *the death apprehension theory* – expects a positive relationship between fear of death and most aspects of religiosity, such as belief in a demanding and vengeful God or certainty about the reality of an afterlife (Ellis et al. 2013).

William James (1902, as cited in Soenke et al. 2013) and Sigmund Freud (1919, as cited in Soenke et al. 2013), probably some of the most influential authors in modern psychology, recognized the importance of religion as a defense mechanism that keeps anxiety at a distance. James considered religion a powerful tool that could increase well-being, happiness, and growth, and could promote positive psychological involvement that could help deal with anxiety. On the other hand, Freud rejected religion as an infantile neurosis and illusion that humanity should overcome and reject, but still, he acknowledged its

protective function (Soenke et al. 2013). Other psychodynamic theories usually see religion as something that has a function in decreasing anxiety in adulthood, the same as parents, who had that function in childhood, and that way they both provide protection, comfort, answers, and hope (Brown & Cullen 2006). Bowlby emphasizes that infants instinctively react to threatening stimuli by searching for the proximity of the object that they are attached to, which offers constant protection (Greenspan & Bowlby 1974, as cited in Kirkpatrick 2008). It is suggested that the same system that drives infants to search for security through the physical proximity of their parents, also drives adults to search for security through the symbolic proximity of almighty God (Kirkpatrick 2008). This allows people to soften their threatening cognitive content about inevitable death (Soenke et al. 2013).

Some studies demonstrated that religious people express lower levels of anxiety related to death (Feifel 1959, as cited in Soenke et al. 2013; Kahoe & Dunn 1975). Variables that were the most important for protection against death-related anxiety are the belief in life after death (Harding et al. 2005), active devotion and practice (Feifel & Nagy 1981), and the strength of conviction in religious beliefs (Triplett et al. 1995). It was shown that events which enhance the consciousness of death often precede the increase of religious activities – for example, after the 9/11 terrorist attacks in the USA, there had been increased church attendance and visits to different religious webpages (Lampman 2001, as cited in Soenke et al. 2013), as well as Bible sales (Rice 2001, as cited in Soenke et al. 2013).

Previous studies have reported that females are more religious than males (De Vaus & McAllister 1987, as cited in Ellis & Wahab 2013; Miller & Hoffmann 1995) and reported greater fear of death than males (Dattel & Neimeyer 1990; Rasmussen & Johnson 1994). It is also noted that age may modify the relation between religiosity and fear of death, as people's concerns about death partly depend on whether the inevitability of death is a constant reality (Edmondson et al. 2008).

This research would try to contribute to a better understanding of the relationship between fear of death and religiosity, but also a better and more thorough understanding of these individual concepts. The results could be applied in educational and therapeutic work, through learning about fears and their associations with certain world views and individual characteristics.

#### 2. The Method

#### 2.1. The goal and hypothesis of the study

The goal of this study is to determine whether religiosity correlates with the fear of death and to test the predictive power of different aspects of religiosity (ideology, intellect, experience, private and public practice) regarding the fear of death. Also, the goal is to test the predictive value of gender and age, and to test the difference between respondents with different levels of religiosity (none, medium, and highly religious) regarding the fear of death.

It can be assumed that religiosity would be a significant predictor of all aspects of fear of death: death of self, dying of self, death of others, and dying of others. It can also be assumed that people with higher religiosity would manifest lower fear of death and that female respondents would express greater fear of death than male ones. Lastly, it can be assumed that older and younger respondents would express different levels of fear of

death, but it is not certain whether older respondents would fear death more or less than younger respondents.

#### 2.2. The sample

The sample consists of 735 respondents from different parts of Serbia, both rural (N=192) and urban (N=543). In the sample, there were 70.9% female (N=521) and 29.1% male (N=214) respondents, aged from 18 to 70 years (M=35.62, SD=11.23). Considering Erikson's proposed psychosocial developmental stages, the respondents were divided in three groups: 1) young adulthood – aged from 18 to 35 years (N=394), 2) adulthood – aged from 36 to 60 years (N=325), and 3) old age – age over 60 years (N=16) (Erikson, 1950). Since there are significantly fewer respondents in the third group than in the first two, all the comparisons regarding the developmental stages are conducted between young adults and adults.

Regarding religiosity, there are 3 groups of respondents: 1) non-religious (N=286), 2) religious (N=354) – this category represents moderately religious respondents, and 3) highly religious (N=95). All the respondents agreed to participate in the study by filling in an online questionnaire.

### 2.3. Instruments

Collet-Lester Fear of Death Scale – Revised (CLFODS-R; Lester & Abdel-Khalek, 2003) – this scale consists of 28 items, separated into 4 different subscales, where each subscale consists of 7 items. The respondents answer the following question: "How disturbed or anxious you feel by the following aspects of death and dying?" for each item, demonstrating agreement with every item on a Likert-type five-level scale (1=it doesn't disturb or worry me at all, 5=it disturbs and worries me very much). Subscales are *Fear of Death of Self* ( $\alpha$ =0.91) which refers to situations such as "Missing out on so much after you die"; *Fear of Dying of Self* ( $\alpha$ =0.92) which refers to situations such as "Losing someone close to you", and *Fear of Dying of Others* ( $\alpha$ =0.92) which refers to situations such as "Watching the person suffer from pain". The scale was translated and adapted into the Serbian language by Petrović and colleagues (2020). The displayed Cronbach's alpha coefficients were obtained in this study.

The centrality of Religiosity Scale (CRS-15; Huber & Huber, 2012) – this scale consists of 15 items distributed into 5 subscales, where each subscale consists of 3 items. The items refer to the prominence or frequency of certain religious attitudes, experiences, and behavior, where the respondents respond on Likert-type five-level (1=never/not at all, 5=very often/very much) and seven-level scales (1=never, 7=several times a day/more than once a week), depending on the question. Later, while analyzing the data, all the scales are transformed into five-level scales, which is a suggestion of the authors of this scale (Huber & Huber, 2012). Subscales are Intellect ( $\alpha=0.86$ ) – which consists of items such as "How often do you think about religious issues?"; Ideology ( $\alpha=0.92$ ) – which consists of items such as "To what extent do you believe that God or something divine exists?"; Experience ( $\alpha=0.93$ ) – which consists of items such as "How often do you?"; Public practice ( $\alpha=0.90$ ) – which consists of items such as "How often do you take part in religious services?", and Private practice

 $(\alpha=0.93)$  which consists of items such as "How often do you pray?". Based on these subscales, the central, core dimension of religiosity could be calculated, which then indirectly measures the importance and prominence of the religious constructive system within all other individual constructs. This scale was translated by the author of this study, for research purposes. The displayed Cronbach's alpha coefficients were also obtained in this study, and for the central dimension of religiosity, Cronbach's alpha coefficient is 9.5.

#### 2.4. The procedure

The study was conducted online, in the summer of 2022, using Google forms. The respondents were informed about the procedure, and they read the instructions at the beginning of each questionnaire, related to what the scales measure and how they should respond, regarding the meaning of the displayed numbers. The scale that measured fear of death was given at the end so that any potential anxiety increase that could affect the other answers could be avoided. The respondents were informed that the obtained data would be used for research purposes only and that their participation includes anonymity. No time limit was set regarding filling out the questionnaire and at the end of the examination process, the respondents were given the space to comment on the questionnaire, share their feelings if they felt the need to do so, or leave their contact information if they wished to see the results of the study.

#### 3. RESULTS

First, descriptive statistical measures of the main variables in this study and their correlations are presented.

Research variables	Min	Max	Μ	SD	Skewness	Kurtosis	α
Ideology	1.00	5.00	3.04	1.39	-0.07	-1.34	0.92
Intellect	1.00	5.00	2.82	1.10	0.19	-0.83	0.86
Experience	1.00	5.00	2.39	1.25	0.46	-0.95	0.94
Private practice	1.00	5.00	2.46	1.41	0.45	-1.24	0.93
Public practice	1.00	5.00	2.15	1.12	0.86	-0.18	0.89
Fear of death of self	1.00	5.00	2.66	1.15	0.33	-0.92	0.89
Fear of dying of self	1.00	5.00	3.32	1.07	-0.27	-0.80	0.87
Fear of death of other	1.00	5.00	3.94	0.81	-0.93	0.67	0.81
Fear of dying of others	1.00	5.00	3.79	0.84	-0.63	0.14	0.83

 Table 1 Descriptive statistics for the main variables

The results indicate that all the presented dimensions have adequate reliability as scales ( $\alpha$ >0.7). The values of skewness (from -0.93 to 0.86) and kurtosis (from -1.34 to 0.67) deviate from recommended values (from +1 to -1) only when it comes to 2 variables in this study (Ideology and Private practice have platykurtic distributions). Since the results do not change drastically when we switch from parametric to nonparametric tests, and since all the other variables have the recommended values of skewness and kurtosis, the results of the parametric tests will be presented in the following tables.

	Le	- Total		
	1	2	3	Total
Stages of Young adults (18-35 years)	110	212	71	393
psychosocial Adults (36-60 years)	166	137	23	326
development Old age (over 60 years)	10	5	1	16
Total	286	354	95	735

 Table 2 Distribution of the sample on existing levels of religiosity based on CRS-15, regarding different stages of psychosocial development

Numbers in the Table 2: 1=non-religious; 2=moderately religious; 3=extremely religious

Most of the respondents in the sample are in the young adult and adult stage of their psychosocial development, and most of them are in the moderately religious category, but there are also a lot of non-religious respondents. When it comes to extremely religious respondents, most of them belong to the group of young adults, and are 18 to 35 years old.

Table 3 Pearson's correlation coefficient between the studied variables

	1	2	3	4	5	6	7	8	9	0
1	-									
2	272**									
3	247**	.492**								
4	176**	.812**	$.470^{**}$							
5	191**	.793**	.494**	.791**	-					
6	248**	.675**	.547**	.629**	.752**	-				
7	123**	.133**	.003	.163**	.113**	$.085^{*}$	-			
8	017	053	066	026	057	$078^{*}$	.666**	-		
9	057	$.079^{*}$	085*	.125**	$.098^{**}$	.053	.515**	.542**	-	
10	042	018	145**	.046	.011	022	.527**	.612**	.742**	-

Numbers in the Table 3: 1=Age; 2=Ideology; 3=Intellect; 4=Experience; 5=Private practice; 6=Public practice; 7=Fear of death of self; 8=Fear of dying of self; 9=Fear of death of others;

10=Fear of dying of others;

\*=correlation is significant at the 0.05 level; \*\*=correlation is significant at the 0.01 level

The correlation analysis showed that dimensions of religiosity mutually correlate, with medium to high intensity. These results make sense since these dimensions can be treated as one dimension that measures the importance and prominence of the religious system in the group of all individual constructs. Although, caution is advised while conducting a regression analysis with these predictors, since these results can indicate multicollinearity. Because of that, the values of the variance inflation factor (VIF) will be presented in Table 3. All VIF values that are above 5 are considered problematic (James et al. 2021).

Ideology, experience, and private practice significantly and positively correlate with fear of death of self and others, intellect correlates negatively with fear of death and dying of others, and public practice correlates positively with fear of death of self and negatively with fear of dying of self. All significant correlations of religiosity with fear of death are low by intensity. All aspects of fear of death mutually correlate significantly and positively, with medium to high intensity. Age significantly and negatively correlates with all aspects of religiosity and with fear of death of self, with low to medium intensity.

To test the possible prediction of fear of death based on religiosity, a hierarchical regression analysis was conducted. In the first step, the predictive powers of the control variables were examined (gender and age), and in the second step, the predictive powers of religiosity were examined (consisting of ideology, intellect, experience, private practice, and public practice). This way, examining the effect of religiosity on the expression of fear of death after eliminating the effects of gender and age was enabled.

Block	Predictors	β	Sig.	VIF	Model
1	Gender	.226	.000	1.020	R=.25, R <sup>2</sup> =.06, R <sup>2</sup> (adj)=.06,
1	Age	155	.000	1.020	F(2,732)=25.611, p=.000
	Gender	.213	.000	1.117	
	Age	134	.000	1.128	
	Ideology	.020	.771	3.837	R=.29, R <sup>2</sup> =.08, R <sup>2</sup> (adj)=.07,
	Intellect	066	.140	1.581	F(7,727)=9.914, p=.000,
2	Experience	.171	.011	3.612	$R^2_{change} = .02,$
	Private practice	066	.363	4.151	F <sub>change</sub> (5,727)=3.463, p=.004
	Public practice	.049	.396	2.678	

Table 4 Prediction model of fear of death of self

The first tested model is statistically significant and explains 6.5% of the variance of fear of death of self, with both predictors as significant, which are gender and age. The second model explains 8.7% of the variance of fear of death of self, where besides gender and age, experience was also a significant predictor. Values of VIF do not go beyond the limit (VIF<5) and in the following tables they will not be presented again since they are the same in the same prediction models, no matter the criterion.

Block	Predictors	β	Sig.	Model
1	Gender	.239	.000	R=.23, R <sup>2</sup> =.05, R <sup>2</sup> (adj)=.05,
1	Age	050	.169	F(2,732)=21.774, p=.000
	Gender	.237	.000	
	Age	066	.083	$\mathbf{P} = 24 \mathbf{P}^2 + 06 \mathbf{P}^2(-1) + 05$
	Ideology	039	.578	$R=.24, R^2=.06, R^2(adj)=.05,$
	Intellect	.012	.797	F(7,727)=6.786, p=.000, R <sup>2</sup> <sub>change</sub> =.00,
2	Experience	.047	.494	$K_{change}^{00}$ , $F_{change}(5,727)=.803$ , p=.548
	Private practice	066	.371	$\Gamma_{change}(3, 121) = .003, p = .048$
	Public practice	018	.763	

Table 5 Prediction model of fear of dying of self

Both the first and the second model are statistically significant, where the first model explains 5.6% of the variance of fear of dying of self, while the second model explains 6.1% of the variance of the same criterion. The contribution of the second model is not significant, and gender is the only significant predictor, both in the first and the second model.

Block	Predictors	β	Sig.	Model
1	Gender	.293	.000	R=.29, R <sup>2</sup> =.08, R <sup>2</sup> (adj)=.08,
1	Age	097	.006	F(2,732)=34.956, p=.000
	Gender	.266	.000	
	Age	094	.011	$\mathbf{P} = 22 \mathbf{P}_{1}^{2} + 11 \mathbf{P}_{2}^{2} + 11 \mathbf{P}_{3}^{2}$
	Ideology	048	.488	$R=.33, R^2=.11, R^2(adj)=.10,$
	Intellect	144	.001	F(7,727)=13.118, p=.000,
2	Experience	.147	.027	$R^{2}_{change} = .02,$
	Private practice	.020	.779	$F_{change}(5,727)=4.088, p=.001$
	Public practice	.074	.199	

Table 6	Prediction	model	of fear	of dear	th of others
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The first tested model is statistically significant and explains 8.7% of the variance of fear of death of others, with gender and age as significant predictors. The second model explains 11.2% of the variance of fear of death of others and besides gender and age, intellect and experience are also significant predictors.

Block	Predictors	β	Sig.	Model
1	Gender	.283	.000	R=.28, R <sup>2</sup> =.08, R <sup>2</sup> (adj)=.07,
1	Age	.003	.930	F(2,732)=32.077, p=.000
	Gender	.256	.000	
	Age	013	.723	D 21 D2 10 D2( 1) 00
	Ideology	100	.148	$R=.31, R^2=.10, R^2(adj)=.09,$
	Intellect	147	.001	F(7,727)=11.574, p=.000,
2	Experience	.152	.023	R <sup>2</sup> <sub>change</sub> =.02, F <sub>change</sub> (5,727)=3.181, p=.008
	Private practice	017	.816	$\Gamma_{change}(3,727)=3.181, p=.008$
	Public practice	.079	.169	

Table 7 Prediction model of fear of dying of others

The first model is statistically significant and explains 8.1% of the variance of fear of dying of others, with gender as a significant predictor. The second model explains 10% of the variance of fear of dying of others and besides gender, both intellect and experience are significant predictors in this model too.

 Table 8 Results of the ANOVA test for fear of death of self and fear of dying of self, regarding different levels of religiosity

	Fear of death of	self	Fear of dying of self		
	М	SD	М	SD	
Non-religious	2.387	1.104	3.323	1.038	
Moderately religious	2.896	1.125	3.429	1.063	
Highly religious	2.625	1.203	2.936	1.137	
	F(2,732)=16.1	F(2,732)=16.149, p=.000,		4, p=.000,	
	$\eta^2 = .042$		$\eta^2 = .022$		

Tests of homogeneity of variances are not significant for both fear of death of self (F=1.927, p=.146) and fear of dying of self (F=0.841, p=.432), which makes them eligible for an analysis of variance. There were no significant differences between different levels of religiosity when it comes to fear of death of others (F(2,732)=2,562, p=.078) and fear of dying of others (F(2,732)=0.721, p=.487). There were significant differences regarding the dimensions fear of death of self and fear of dying of self (Table 8), and the Tukey post hoc test was applied to test the specific differences between levels of religiosity regarding fear of death and dying of self (Table 9). The mean values of every group are shown in Table 8.

Table 9 Tukey post hoc test for fear of death of self and fear of dying of self

Fear of Deat	h of Self	Mean difference	Sig.
Non-religious	Moderately religious	508	.000
Fear of Dying of Self		Mean difference	Sig.
Highly galigious	Non-religious	386	.006
Highly religious	Moderately religious	492	.000

There is a significant difference between non-religious and moderately religious respondents when it comes to expression of fear of death of self. Non-religious respondents demonstrate significantly less fear of death of self, compared to moderately religious respondents. When it comes to fear of dying of self, there is a significant difference between highly religious and moderately religious, as well as between highly religious and non-religious respondents. The results suggest that highly religious respondents express the lowest fear of dying of self, compared to moderately and non-religious respondents.

There are no significant differences between the age groups of young adults and adults when it comes to expressing all the dimensions of fear of death: fear of death of self (t(717)=1.837, p=.067), fear of dying of self (t(717)=-0.838, p=.402), fear of death of others (t(717)=0.360, p=.719), and fear of dying of others (t(717)=-1.693, p=.091).

## 4. DISCUSSION AND CONCLUSION

The main problem of this study was to examine the correlation between religiosity and fear of death, and the basic assumption was that the dimensions of religiosity would be significant predictors of different aspects of fear of death. The assumption was partially confirmed since every prediction model was significant, but with different significant predictors. Gender remained a significant predictor in each model and it was shown that women, compared to men, are statistically more afraid of their own death and dying, but also more afraid of the death and dying of others, which is in accordance with some previous results (Cicirelli 1999; Petrović et al. 2020).

It was shown that fear of death of self and fear of death of others decrease with age. Some authors stated that during adulthood and old age, people are confronted with new developmental challenges, such as accepting their own mortality and time limitations (Colarusso 2000). Even though there are certain findings that show that age is not correlated with fear of death, other previous research shows that, when compared to younger people, older people express the tendency to more often contemplate about death, but are less afraid of it (DePaola et al. 2003). This makes sense, since in this developmental stage, death is

expected and people are preparing themselves for the inevitability of it. It is harder to accept mortality for younger adults who are in the middle of their unfinished or half-done life plans (Gesser et al. 1988). It is also important to examine previous life experiences, especially those related to separation, intellectual and religious beliefs, as they could affect the relationship between age and fear of death (Madow 1997, as cited in Anđelković 2015).

Similar results regarding the relationship between age and fear of death were obtained in some other studies, including ones conducted on a Serbian sample (Bengtson et al. 1977; Patton & Freitag 1977; Petrović et al. 2020). Nevertheless, when the sample is divided into certain age categories that match different stages of psychosocial development, there are no significant differences between them regarding the expression of the fear of death. When these age categories are crossed with the categories of religiosity proposed by the instrument CRS-15, it was shown that most of the respondents in this study were moderately religious. The smallest part of the sample were highly religious respondents who were at the same time the youngest part of the sample.

When it comes to predictive models of fear of death, the dimension of experience is a significant positive predictor of three aspects of fear of death (fear of death of self, fear of death of others, and fear of dying of others), while the dimension of intellect is a significant negative predictor of two aspects of fear of death (fear of death of others and fear of dying of others). It is often presumed that if a person has stronger religious beliefs, especially about life after death, they will fear death less, and some research demonstrates this tendency (Thorson & Powell 1990). However, the results vary depending on religious belief. Therefore, if the punishment after death is more pronounced in those beliefs, religiosity correlates positively with the fear of death (Florian & Kravetz 1983), but if God's love and care, and ideal life after death are more pronounced, religiosity correlates negatively with fear of death (Rigdon & Epting 1985).

The religious dimension of experience positively correlates with fear of death, which means that "contact with the ultimate reality" leaves not only traces in the forms of feelings and perception (Huber 2003, as cited in Huber & Huber 2012), but also traces in the form of increased fear of death. The dimension of experience includes different conceptualizations of transcendence and is often illustrated as the feeling of the presence of something holy or being part of something divine. There is a possibility that with the sense of "greater existence" comes greater fear, especially if "the ultimate reality" is demanding and vindictive, with a God that is prone to punish misdeeds. This is in accordance with death apprehension theory, which postulates that with this belief, and with certainty about the reality of an afterlife, fear of death should rise.

The religious dimension of intellect negatively correlates with the fear of death, which means that fear of death of others and fear of dying of others reduces with greater interest and knowledge of religious subjects, more frequent reflection, representation, explanation, and elaboration of religious matters, and the constant expansion of one's own religious knowledge. If we consider that these are all cognitive processes and that a person has the intrinsic need to know more about religious subjects and stimulate and direct their cognitive functions, this dimension of religiosity could be perceived as a form of intrinsic religiosity. Even though the results in this area are opposed, some research showed that intrinsic religiosity negatively correlates with the fear of death (Thorson & Powell 1990). Also, fear of the unknown (which represents ignorance about what happens after death) and fear of dying negatively correlate with religiosity (Cicirelli 1999), which is in accordance with the results obtained in this study.

Further research with non-religious, moderately, and highly religious people is needed before concluding the relationship between fear of death and religiosity. One of the suggestions would be to include more variables besides religiosity in the predictive model (such as general anxiety, culture specific rituals and beliefs regarding death, personal orientations towards the transcendental and transcendent future) while predicting fear of death. Even though the models were significant, they explained a small percentage of the variance of the criteria, which suggests that the models should be complemented with some other constructs as predictors. Religiosity could be also used as a one-dimensional construct, instead of a multidimensional one (eliminating the possibility of multicollinearity) except in cases where the research aims are to examine the complexity of religiosity and the difference between various aspects of religiosity.

It is important to pay attention to whether the used instruments have been adapted to the culture in which the study is being conducted. One of the merits of this study is that the adapted instrument (CRS-15) showed good reliability and the original factor structure is applicable in a Serbian sample. Also, it gives insight into the complex relationship between fear of death and religiosity in a Serbian sample, suggesting that further research is required.

It is also important to know which religion is dominant in the examined culture, which characteristics of that dominant religion could be important and considered for the study, and which characteristics of the culture could also be related to the fear of death. For example, in the recent past, the culture and the area where this study was being conducted were affected by wars, bombing attacks, and the revitalization of religion, after the communist regime. One other strength of this study is that it demonstrates the tendency of younger respondents to be generally more religious than older ones, which can be an addition to the previous observation about the revitalization of the religion in this culture.

It would be useful to take all these factors (or some of them) into account and direct upcoming research toward these potential factors. Potential mediators should be also considered, which could additionally explain the relationship between religiosity and fear of death.

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# ULOGA RELIGIOZNOSTI U PREDVIĐANJU STRAHA OD SMRTI

Cilj ovog istraživanja bio je utvrditi da li je religioznost, koja uključuje dimenzije ideologije, intelekta, iskustva, privatne i javne prakse, povezana sa strahom od smrti i da li može statistički značajno da previdi njene dimenzije, a to su strah od sopstvene smrti i sopstvenog umiranja, kao i strah od smrti drugih i umiranja drugih. Prediktivna vrednost kontrolnih varijabli (pol, uzrast) je takođe testirana. Za prikupljanje podataka korišćeni su sledeći instrumenti: Collett-Lester skala straha od smrti (CLFODS-R; Lester & Abdel-Khalek, 2003) i skala centralnosti religioznosti (CRS-15; Huber & Huber, 2012). Uzorak čini 735 ispitanika, ženskog (N=521) i muškog pola (N=214), uzrasta od 18 do 70 godina (M=35,62, SD=11,23). Kada je u pitanju predviđanje straha od smrti primenom hijerarhijske regresione analize, pol i uzrast su činili prvi blok varijabli u svim modelima, dok su dimenzije religioznosti dodate u drugom koraku, pa zajedno sa kontrolnim varijablama čine drugi blok svih prediktivnih modela. Svi modeli su statistički značajni. Rezultati hijerarhijske regresione analize su pokazali da su značajni prediktori straha od sopstvene smrti u prvom koraku ( $R^2$ =0,065, F(2,732)=25,611, p=0,000) pol ( $\beta$ =0,226, p=0,000) i uzrast ( $\beta$ =-0,155, p=0,000, a u drugom (R<sup>2</sup>=0,087, F(7,727)=9,914, p=0,000) su to pol ( $\beta$ =0,213, p=0,000), uzrast ( $\beta=-0,134$ , p=0,000) i religijsko iskustvo ( $\beta=0,171$ , p=0,011). Pol je jedini značajan prediktor straha od sopstvenog umiranja u prvom ( $\beta = 0,234$ , p = 0,000;  $R^2 = 0,056$ , F(2,732) = 21,774, p=0,000 i u drugom koraku ( $\beta=0,237$ , p=0,000;  $R^2=0,061$ , F(7,727)=6,786, p=0,000). Značajni prediktori straha od smrti druge osobe u prvom koraku ( $R^2=0,087, F(2,732)=34,956, p=0,000$ ) su pol  $(\beta=0,293, p=0,000)$  i uzrast  $(\beta=-0,097, p=0,015)$ , a u drugom koraku  $(R^2=0,112, F(7,727)=13,118, R^2)$ p=0,000) su to pol ( $\beta=0,266$ , p=0,000), uzrast ( $\beta=-0,094$ , p=0,015), intelekt ( $\beta=-0,144$ , p=0,001) i iskustvo ( $\beta$ =0,147, p=0,027). Značajni prediktor straha od umiranja druge osobe u prvom koraku  $(R^2=0,081, F(2,732)=32,077, p=0,000)$  je pol  $(\beta=0,283, p=0,000)$ . U drugom koraku  $(R^2=0,100, p=0,000)$ F(7,727)=11,574, p=0,000) značajni prediktori su pol ( $\beta=0,256, p=0,000$ ), intelekt ( $\beta=-0,147, p=0,001$ ) i iskustvo ( $\beta$ =0,152, p=0,023). Rezultati su pokazali da postoje i izvesne razlike u izraženosti straha od smrti između grupa nereligioznih, umereno i veoma religioznih ispitanika, pa umereno religiozni ispitanici ispoljavaju veći strah od sopstvene smrti od nereligioznih (F(2,732)=16,149, p=0,000), dok su visoko religiozni ispitanici ispoljavali manji strah od sopstvenog umiranja u odnosu na umereno religiozne i nereligiozne ispitanike (F(2,732)=8,044, p=0,000). Na osnovu dobijenih rezultata može se reći da su religioznost, odnosno njene dimenzije intelekta i iskustva, kao i pol i uzrast statistički značajni prediktori straha od smrti. Preporučuju se dalja istraživanja na ovu temu.

Ključne reči: religioznost, strah od smrti, strah od umiranja