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FEAR OF DYING IN RELATION TO RELIGIOSITY IN ADULTS

ABSTRACT

The primary goal of this pilot study is to examine the relationship between the fear of dying and religiosity. The religiosity is seen as a complex concept of religious orientation. In addition to testing the relationship between the fear of dying and the religiosity itself, religious orientation (intrinsic vs. extrinsic), age, sex of subjects, and subjects' experience with death of somebody close to them were tested.

Subjects were Slovak male ($N = 24$, 38.1%) and female participants ($N = 39$, 61.9%) aged 19 to 69 ($M = 39.62$; $SD = 14.76$) from various social and educational backgrounds.

Subjects with dominant intrinsic religious orientation ($N = 31$; 51.67%) reported significantly lower fear of one's own dying ($U = 232$; $p < .001$). Intrinsic religiosity is negatively correlated ($r = -.33$, $p < .01$) with the fear of one's own dying. We didn't find statistically significant differences in fear of dying between believers and nonbelievers, men and women, younger and older subjects, subjects with and without experiences with death of somebody close to them.

The important finding is, that the difference between the fear of one's own death and death of somebody else was statistically significant in all studied groups. Therefore, the attention should be paid not only to the variables influencing the level of fear of dying but also to that whose dying evokes fear.

Key words: dying, fear of dying, religiosity, intrinsic and extrinsic religiosity, age, experience with death

INTRODUCTION

Coping with the fact of own mortality belongs to a lifelong and stressful task of each individual. An important feature of the understanding of death (reached in the childhood already – Speece & Brent, 1984) is its inevitability which is connected with the knowledge of certainty of everyone's death. Psychology offers several explanations why there is the fear so commonly connected with the death.

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Some of them claim that the fear is a result of uncertainty connected with the death (McGregor, Zanna, Holmes & Spencer, 2001). The others see the fear as an evolutionary response to the threat for an existence of the organism (Landau, Solomon, Pyszczynski & Greenberg, 2007), or the result of mechanisms based on the Separation Theory (see e.g. Firestone, 1984) which points to an anxiety which rises when important interpersonal bounds are disrupted (Bath, 2010). Based on the different backgrounds, the theories concerning the coping with this fearful and stressful thoughts arise.

Based on the ideas of the Terror Management Theory (proposed in 1986 by Greenberg, Pyszczynski & Solomon), knowledge of universal mortality of all living beings combined with the evolutionary based tendency to survive results in terror. The typical reaction for this stressful stimulus is managing the terror of death by providing life with meaning or other culturally based phenomena. The typical example of such phenomena is a religion.

There are many worldwide theories and practical researches conducted on the topic of relationship between the fear of death and dying and religiosity. Some of them support and enrich the idea of TMT, arguing that belief in afterlife and promise of immortality lowers the fear of death and dying (for review see Ellis & Wahab, 2013). The others e.g. stress the need to distinguish between the level (low, moderate, high - Wink & Scott, 2005) or type (intrinsic, extrinsic – Ka-Ying Hui & Fung, 2009) of religiousness.

There is still a question whether some other variables (e.g. sex, age, experience with death of somebody close) do not have stronger associations with the level of fear of death and dying than does the religiosity. Harrawood, White & Ben-shoff (2008-2009) found a significant negative correlation with age in both men and women in fear of the dying process as well as in fear for significant others. However, no intersexual differences in several fears of death and dying have been found in this research. On the other hand, differences between men and women in fear of death have been reported in Florian & Har-Even's (1983-1984) research.

AIMS OF STUDY

People are not only afraid of death and their further non/existence, but feel anxious also about their dying. Even though the fears of death and dying are highly connected, within the fear of dying many specific concerns can be identified (e.g. physical and intellectual degeneration, limited abilities, pain). In this pilot study, we pay an attention to the fear of dying.

The main goal of the study is to examine the relationship between religiosity and the fear of dying and to compare this relationship with other selected variables (age, experience with death) that might influence the level of fear of dying. According to Terror Management Theory (Greenberg, Pyszczynski & Solomon 1986; Landau, Solomon, Pyszczynski & Greenberg, 2007), we expect that being a believer, especially the intrinsic religious orientation will lower the fear of own dying. Based on the religious orientation (Christianity) of the believers we expect they are more sensible and tolerant to others, willing to help and sacrifice etc. Therefore we assume that believers will show bigger fear of dying of others than of themselves and than nonbelievers. According to previous researches (e.g. Harrawood, White

& Benschhoff, 2008–2009) we expect that impact of sex to fear of death is not significant. On the other hand, we expect the differences in fear of dying according to age, former experience with the death of someone close (see. e.g. Démuthová, 2010).

SUBJECTS

Subjects were Slovak male ($N = 24$, 38.1%) and female ($N = 39$, 61.9%) participants aged from 19 to 69 (mean = 39.62 years; st.deviation = 14.76) from various social and educational backgrounds. 52 participants (82.5%) claimed they're consider themselves as religious, with majority (47 subjects) of Christian denomination.

METHODS

For measurement of the fear of dying The Original Collett-Lester Scale (Lester, 1990) has been used. It consists of 36 general statements requiring the indication of subject's agreement on the six-item scale (from *strong agreement* – score 1 to *strong disagreement* – score 6). It measures four basic subscales – the fear of own death, fear of the death of others, fear of own dying and fear of the dying of the others. For our purposes last two were used. Each scale consists of different number of questions (6 for the fear of own dying and 11 for the fear of the dying of the others) and therefore the scales enable to reach different maximum of the raw score. To be able to compare the means of each scale we liberated the weight of each question into the weighted score. The structure of the questionnaire and the type of statements determines that the higher the level of score subject reaches in the specific category, the lower the fear corresponding to this category is.

The fact whether the subject is a believer or not has been studied by simple question whether the subject considers him/herself to be a believer. If the participant replied positively, an additional question about the denomination has been given. For the measurement of the intrinsic and extrinsic religious orientation The Religious Orientation Scale revised by Gorsuch & McPherson (1989) was used. This scale was constructed and frequently used in Protestant circumstances. As the majority of Slovak population belongs to the Catholic denominations (Statistical Office of the Slovak Republic 2013) we assumed it's able to measure selected variables reliably. The Religious Orientation Scale originates in Allport & Ross (Gorsuch & McPherson, 1989) who defined the extrinsic religiousness as instrumental in nature, immature and utilitarian. Extrinsic religiousness is used to achieve extra-religious (psychological and social) goals. In intrinsic religiousness, the motive for religiousness is more autonomous and 'over-reaching' (Flere & Lavrič, 2008). It is considered to be a mature type of religiosity (Halama in Halama, Adamová, Hatoková & Stríženec, 2006). The Religious Orientation Scale – Revised is 14-item scale where eight items (three reversed scored) tap the intrinsic orientation and six extrinsic. The rough score (gained by scoring on the 5-point scale from *strongly disagree* – score 1 to *strongly agree* – score 5) has been converted into the weighted one in order to enable the comparison again. The higher level of score subject reaches in the specific category, the lower is his/her religious orientation.

The questionnaires were enriched also by the questions about the experience with the death of somebody close. Age and sex were monitored, too.

RESULTS

Table 1 presents the basic data of the sample. From the descriptive analysis it is obvious that the highest level of fear (30.90) regardless of age, belief, religious orientation, experience with the death of somebody close, and sex report subjects when it comes to their own dying. The lowest level of fear in all sample is reasonably in the fear of dying of others (45.22) as this situation is less threatening for subjects' own existence.

When it comes to specific groups of subjects divided into various groups according to their age, belief, religious orientation, experience with the death of somebody close, and sex, the highest level of fear show nonbelievers when it comes to their own dying (26.67). This means they are worried about the process of dying and accompanying complications – physical and intellectual degeneration, limited abilities, pain etc. Being a nonbeliever brings approximately the same level of fear than being extrinsically orientated in person's religiousness. The second biggest value of fear (26.87) is reported within the fear from own death and belongs to the group of subject with dominant extrinsic religious orientation. On the other hand, the lowest level of fear (46.35) belongs to the group of subjects with extrinsically orientated religiousness in the category "fear of the dying of others".

Table 1

Differences in means of the fear of dying in different groups of subjects

fear of dying – generally (mean 76.12)					
variable/N	Means	Difference	variable/N	Means	difference
under 40/32	75.67	-.93	believer/52	77.09	5.51
above 40/31	76.60		nonbeliever/11	71.57	
male/24	76.31	.30	intrinsic/31	78.10	4.90
female/39	76.01		extrinsic/29	73.21	
experience/52	76.15	.17			
no experience/11	75.98				
fear of own dying (mean 30.90)					
variable/N	Means	Difference	variable/N	Means	difference
under 40/32	30.14	-1.55	believer/52	31.80	5.13
above 40/31	31.69		nonbeliever/11	26.67	
male/24	31.85	1.53	intrinsic/31	34.30	7.43
female/39	30.32		extrinsic/29	26.87	
experience/52	31.06	.89			
no experience/11	30.17				
fear of dying of others (mean 45.22)					
variable/N	Means	Difference	variable/N	Means	difference
under 40/32	45.53	.63	believer/52	45.29	.38
above 40/31	44.91		nonbeliever/11	44.91	
male/24	44.46	-1.23	intrinsic/31	43.81	-2.54
female/39	45.69		extrinsic/29	46.34	
experience/52	45.10	-.72			
no experience/11	45.82				

To outline more general statements the non-parametric Mann-Whitney U -test has been used. Shapiro-Wilk test of normality showed that the distribution of one variable (fear of the dying of others) cannot be counted as sufficiently normal therefore the non-parametric Mann-Whitney U -test for comparing the groups has been used.

FEAR OF DYING IN BELIEVERS VS. NONBELIEVERS

First analysis concerns the variable that divides the subject into the group of believers and non-believers. From the total number of 63 participants 52 (82,54%) assigned themselves as believers. Table 2 shows that believers are less afraid of the dying than nonbelievers (the higher level of score subject reaches in the specific category, the lower the fear corresponding to this category is). The same result brings the category of fear of own dying – believers fear less of own dying than nonbelievers. Explanation may be that being religious brings strong belief, that God will help the man in his/her hard times and won't put on him/her more than is able to bear even in the moments of dying. This may be the reason why the fear of own dying as well as the fear of dying somebody close is lower in this group than in the group of nonbelievers. However, the differences between believers and nonbelievers are not statistically significant.

Table 2

Differences in groups of believers and nonbelievers in the fear of dying

	mean rank	U
fear of dying – generally		
Believers	33.85	190.000†
Nonbelievers	23.27	
fear of own dying		
Believers	33.85	190.000†
Nonbelievers	23.27	
fear of dying of others		
Believers	32.16	277.500
Nonbelievers	31.23	

Note. † $p < .10$ (tendency).

Table 1 also shows, that the score in the fear of dying of others is much lower than in the fear of own dying. We've tested whether this difference in believers and in nonbelievers is significant. The results from the Wilcoxon nonparametric test (table 3) show, that 48 (92,3%) of 53 believers fear more when it comes to their own dying as when they evaluate the fear of dying of somebody else. This difference is statistically significant. The same tendency is obvious in the group of nonbelievers – all eleven of them scored lower (and thus reported higher levels of fear) in fear of own dying then in fear of dying of others.

Table 3

Differences in fear of own dying and fear of dying of others in believers and nonbelievers

fear of own dying vs. fear of dying of others						
Believers				Nonbelievers		
	<i>N</i>	mean rank	<i>Z</i>	<i>N</i>	mean rank	<i>Z</i>
negative ranks	48 ^a	27.25		11 ^a	6.00	
positive ranks	4 ^b	17.50	-5.64***	0 ^b	0.00	-2.93**
Ties	0 ^c			0 ^c		
Total	52			11		

Note. a. fear of own dying < fear of dying of others; b. fear of own dying > fear of dying of others; c. fear of own dying = fear of dying of others; ** $p < .01$; *** $p < .001$.

FEAR OF DYING IN INTRINSIC VS. EXTRINSIC RELIGIOUS ORIENTATION

Intrinsic religiousness characterizes the interiorized values together with behaviour and thinking according to the faith (Stríženec 1999). Therefore we assume that subjects with dominant intrinsic religious orientation will show the similar, but exaggerated tendencies as the religious group from the previous comparison. According to the dominant score in two dimensions of religiousness (intrinsic vs. extrinsic) we were able to differentiate 95,2% of subjects (3 scored equally in both dimensions). From the number of 60 subjects 31 (51,67%) were dominantly intrinsically orientated. Except the fear of dying of others our presumption was confirmed – subjects with dominant intrinsic religious orientation scored lower than subjects with extrinsic orientation in overall fear of dying and in fear of own dying specifically, too (see table 4). The difference in fear of own dying between intrinsically and extrinsically orientated subjects is statistically significant. Intrinsically orientated subject compared to extrinsically orientated ones (unlike the believers compared to nonbelievers) scored higher in fear of dying of others. Many theologians and philosophers (e.g. Lewinas, Rosenzweig) assume that the essence of believing in God lies in love and responsibility for others (Tkáčik, 2009). Similarly, according to the work of Paul Tillich the authentic religiosity is rooted in what he calls “experience of depth” (Slavkovský, 2001) which causes the closer relationships. This may be a reason why intrinsically orientated subject care much more for the suffering of others and therefore show the higher level of fear of dying of others than extrinsically orientated ones.

Table 4

Differences in intrinsic and extrinsic orientated subjects in the fear of death and dying

	mean rank	<i>U</i>
fear of dying – generally		
Intrinsic	34.34	330.500†
Extrinsic	26.40	
fear of own dying		
Intrinsic	37.52	232.000*
Extrinsic	23.00	
fear of dying of others		
Intrinsic	26.56	327.500†
Extrinsic	34.71	

Note. * $p < .01$; † $p < .10$ (tendency).

The question is, whether the level of fear of dying of others in intrinsically orientated subjects is significantly higher than the level of fear of own dying. The results from the Wilcoxon nonparametric test (table 5) show, that 27 (92,3%) of 31 intrinsically orientated subjects fear significantly more when it comes to the dying of others as when it comes to the fear of their own dying. Therefore we can summarize that when reporting the fear of death of others 1) intrinsically orientated subjects fear much more than extrinsically orientated, and 2) they also fear more than when it comes to their own dying.

Table 5

Differences in fear of own dying and fear of dying of others in intrinsically and extrinsically orientated subjects

fear of own dying vs. fear of dying of others			
intrinsic religious orientation			
	<i>N</i>	mean rank	<i>Z</i>
negative ranks	27 ^a	16.46	
positive ranks	4 ^b	12.88	
Ties	0 ^c		-3.85***
Total	31		

Note. a. fear of own dying < fear of dying of others; b. fear of own dying > fear of dying of others; c. fear of own dying = fear of dying of others; *** $p < 0,001$.

FEAR OF DEATH AND DYING IN YOUNGER VS. OLDER SUBJECTS,
MEN VS. WOMEN AND IN SUBJECT WITH AND WITHOUT THE EXPERIENCE
WITH THE DEATH OF SOMEBODY CLOSE

Some authors stress the influence of age on preoccupation with the death topics. E. H. Erikson considers the dealing with this task as a part of critical developmental period (Erikson 1968). 32 subjects (50.79% from overall number of 63) from our sample fell into the age category below 40 (mean age 26.94, st. deviation 6.61) and 31 subjects (mean age 52.71, st. deviation 7,52) into the category above the age of 40. Results from Mann-Whitney U-test show that the differences between age groups are not significant. Further examination showed that there are also no significant group differences in fear of dying – neither between men and women nor between the subjects with and without ($N = 11$, 17,5%) the experience with the death of somebody close in this sample.

RELATIONSHIP BETWEEN THE FEAR OF DYING AND OTHER SELECTED VARIABLES

Due to results regarding no presence of statistically significant differences in fear of dying between believers and nonbelievers, men and women, younger and older subjects, with and without an experience with death of somebody close we're able to state, that from all monitored variables only the religious orientation changed the levels of fear of dying significantly. Therefore we assume it has the closest relation to the fear of dying from all mentioned variables. Table 6 shows correlations be-

tween the fear of dying and religious orientations. The intrinsic religious orientation has the strongest connection with the fear of own dying, extrinsic religious orientation with the fear of dying of others.

Table 6

Pearson's correlations between the fear of dying and religious orientation

variable	intrinsic religiosity	extrinsic religiosity
fear of dying – generally	-.34**	-.22†
fear of own dying	-.33**	-.10
fear of dying of others	-.10	-.26*

Note. * $p < .05$; ** $p < .01$; † $p < .10$ (tendency).

DISCUSSION

The connection between the religiosity and the fear of dying is not simple. First of all, it is rather complicated to state what does it mean to be a “believer”. Statement of being a believer or a nonbeliever (positive or negative answer on the question “Are you a believer?”) divides participants into the two groups, which do not differ significantly in the fear of dying in any of monitored variables. Taking into account only the general belonging to the group of believers or nonbelievers does not differentiate individuals properly. We suggest, that more sophisticated methods of dividing subjects into the groups of believers and nonbelievers should be used. However, P. Wink and J. Scott (2005) used longitudinal data of 155 adults and came to the conclusion, that there is no linear relation between the religiousness and fear of dying. They state it is necessary to distinguish between the quality of religiousness, as the relation between the fear and religiousness is rather curvilinear – individuals who are strong or weak believers fear death and dying less than individuals who scored on religiousness moderately (Wink & Scott, 2005). This fact stresses the importance of distinguishing between the strong and weak believers.

One possibility of doing so is the measuring the level of intrinsic and extrinsic religion orientation. In our case, the intrinsically orientated believers showed significantly lower fear in fear of own dying than extrinsically orientated subjects. There is also a strong negative correlation between the intrinsic religiousness and fear of own dying. The more is the subject intrinsically orientated the less fear of own dying reports. These results correspondent with theoretical idea that the mature belief in afterlife helps to cope with the death anxiety and they were also proved by practical research. E. g. Ka-Ying Hui & Fung (2009) tested the mediation model with findings that intrinsic religiosity, but not extrinsic religiosity, lowered anxiety toward the dying and death of self. On the other hand, it is questionable, whether the concepts of intrinsic and extrinsic religious orientation are universally valid as two distinguishable factors. The Pearson's correlation coefficient .70 ($p < .001$) shows that there is a strong positive relationship between these two dimensions in our sample. S. Flere & M. Lavrič (2008) discusses the possibility that these two orientations form two separate dimensions only within the American Protestants. In other European religious environments (including Roman Catholic which is the dominant

religion in Slovakia - Statistical Office of the Slovak Republic 2013), extrinsic and intrinsic items form a single dimension (Flere & Lavrič, 2008). From these findings there is evident the need for better grasping the concept of religiosity.

Also, when the fear of dying is studied it is important to distinguish between the dying of self and of the others. Some authors state, that regardless of the degree to which individuals fear their own death, most individuals fear the death and dying of others (Bath, 2010). Some authors even state that individuals are more anxious toward the dying of someone close then towards their own (Ka-Ying Hui & Fung, 2009). The differences between the fear of own death and fear of death of others were statistically significant in groups of believers and nonbelievers (table 3), intrinsically (table 5) and extrinsically orientated subjects. This difference was significant also in monitored age groups, sexes and groups with and without the experience with death of somebody close. The message is that when studying the fear of dying it is more important to ask about who's dying we're talking about as e.g. to ask about the age, or sex.

Finally, the future research should be continued in order to gain more information and to concentrate on questionable topics. According to a rather small number of this sample, the application of stated results is limited to this research only and should be considered as introductory. The main ideas that should be followed (except the number of participants) is to find more accurate method for the measurement of religiosity as The Religious Orientation Scale (Gorsuch & McPherson, 1989) describing two separate dimensions did not discriminate our sample properly. Another idea is connected with testing the wider range of possible influences on fear of dying and their overall and relative impact on this variable.

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