

**Marcin Muszyński**

University of Lodz, Department of Andragogy and Social Gerontology, Lodz,  
Poland  
<https://orcid.org/0000-0001-7393-8866>

**Artur Fabiś**

WSB University, Dąbrowa Górnicza, Poland  
<https://orcid.org/0000-0002-5624-6232>

**Arkadiusz Wąsiński**

University of Lodz, Department of Andragogy and Social Gerontology, Lodz,  
Poland  
<https://orcid.org/0000-0003-1867-8541>

## Buffers mitigating death anxiety among educationally active older adults

### Abstract

*Introduction:* Existential concerns in late adulthood have received increasing attention over the past few decades. However, some areas of functioning in old age have yet to be fully explored. This applies to educationally active older adults because the excessive activity is perceived as an inhibiting reflection on one's finiteness.

*Research Objectives:* The article presents research results on the buffers mitigating death anxiety that educationally active older adults use. The study aimed to analyse the differences in older adults' use of buffers to reduce the level of existential anxiety.

*Material and Method:* The study included 162 older adults (143 women and 19 men) attending classes at Universities of the Third Age (U3A). Participants' age ranged from 60 to 95 years ( $M = 70.35$ ,  $SD = 6.23$ ). The authors used the Strategies for Confronting the Inevitability of Death Questionnaire developed for the present study and made it possible to explore the phenomenon associated with the use of buffers mitigating death anxiety. The analysis consisted of processing the quantitative material composed of descriptive statistics. Because the assumption of normal distribution was not met, nonparametric statistics have been used.

*Results:* Statistical analyses revealed significant differences in the use of buffers between older adults with different sociodemographic characteristics; they also revealed differenc-

*es in the buffers chosen depending on the level of anxiety. Gender differences were also examined in the analyses. The results of the study indicate that gender does not differentiate the choice of strategies for coping with death anxiety.*

*Keywords: existential anxiety, existential terror, buffers, death anxiety level, attitude towards death, older adults' educational activity, University of the Third Age (U3A).*

## Introduction

Existential concerns are an inseparable part of human life. This issue has been addressed by philosophers (Kierkegaard, 1974; Sartre, 1957; Tillich, 1952, 1961, 1991); it has also served as the basis for theoretical reflection (Pyszczyński i in., 1999; Zych, 2013) and numerous empirical studies (Chopik, 2017; Cicirelli, 2002; Hupkens i in., 2016; Nozari i in., 2019; Perng and Renz, 2018; Reker and Woo, 2011; Stelcer, 2015; Wink and Scott, 2005)

Existential concerns in late adulthood have received increasing attention over the past few decades. However, some areas of functioning in old age have not been fully explored yet. The literature provides few examples of research addressing the existential concerns of older adults engaged in different types of activities within the paradigms of active (WHO, 2002, pp. 12–19), successful (Rowe and Kahn, 1987, pp. 143–149), or productive ageing (Taylor and Bengtson, 2001, pp. 120–144), where the value of individuals is measured by criteria such as usefulness. This is mainly because excessive activity is seen as an inhibitor of reflection on one's finiteness (Tornstam, 2005, p. 88). This, however, does not mean that people who are active in some areas never think about ultimate matters or are free from existential concerns. Current knowledge about older adults' existential concerns is insufficient for scholars to develop other theoretical concepts and hardly adequate to translate into practice. For this reason, studies into the existential concerns of older adults who actively participate in educational activities are warranted. The study presented in this article focused on buffers mitigating death anxiety.

Confronting one's mortality is a developmental task (Erikson, 1963, pp. 219–234) that brings a person closer – particularly in old age – to the expected wisdom (Kunzmann and Baltes, 2005, pp. 110–135). Death, however, is an event whose many aspects are impossible to verify empirically, which poses a hindrance to the exploration and understanding of this phenomenon, at the same time generating thanatic anxiety. Death is also a constitutive element of every

life, and every person must confront the idea of their own death. According to the terror management theory, the awareness of the inevitability of death is a source of paralyzing terror (Solomon et al., 1991, pp. 21–40; Łukaszewski, 2010, p. 2). However, activating certain defense mechanisms makes it possible to come to terms with this devastating thought and prepare to live with the constructive awareness of one's mortality, which at the same time supports successful ageing (Rowe and Kahn, 1987, pp. 143–149).

## Research Objectives

The main aim of the research was to analyse the differences in the use of strategies for coping with the inevitability of one's own death among educationally active older adults. The existing studies concern mainly such buffers allowing a person to cope with the inevitability of death as self-worth or faith in immortality, understood literally or symbolically and attainable through participation in culture (Cicirelli, 2002, pp. 358–366). These buffers are directly derived from the terror management theory (Solomon et al., 1991, pp. 21–40). The literature also reports factors mitigating death anxiety, such as religiosity (Ardelt, 2003, pp. 55–77; Wink and Scott, 2005, pp. 207–214), social support, and a number of sociodemographic variables (Cicirelli, 1999, pp. 569–579). On the other hand, it is difficult to find studies on the inevitability of death in which the sample consists exclusively of educationally active older adults and in which the buffers mitigating existential anxiety are derived directly from their experience and life rather than only from the existing well-developed theories. These two elements determined the direction of our research.

Our project focused on educationally active older adults – namely, on those who consciously, intentionally, and systematically participated in an organized form of learning (Muszyński, 2014, pp. 77–88). Classes at the Universities of the Third Age (U3A) offer them this kind of opportunity. This group is of interest to us in several respects. It is a subpopulation with relatively high social capital, relatively better health, and mostly higher education (Zielińska-Więczkowska and Kędziora-Kornatowska, 2014, pp. 324–329). Moreover, from the perspective of the gerotranscendence theory (Tornstam, 2005, pp. 31–47), the activity they engage in helps older adults come to terms with the finiteness of their existence and develop a personal attitude towards existential issues. For these reasons, what seemed particularly interesting to us was the questions of how such people confronted death anxiety and what mechanisms of coping with the inevitability of death they could be found to use.

The analysis of the collected material revealed two categories: buffers releasing and blocking older adults' self-creation (Wąsiński, 2018, pp. 35–49). The releasing buffers positively change older adults' attitude towards death. By doing so, they bring a new quality into thinking about life as an autotelic value, which death does not abolish or invalidate but which it highlights in a special, barely communicable way. They reduce the level of existential stress, which, when strong, weakens or even deprives the person of the ability to think and function normally. Five buffers have been classified into this category: (a) worldview, as a mechanism of accepting one's fate; (b) performing roles, as an opportunity for self-fulfillment and positive self-esteem; (c) religious attitude, as a metaphysical approach to life; (d) relationships with others, as the consolidation of meaning in life; (e) altruism, as an attitude that gives meaning to life and death. Buffers belonging to the other category, blocking ones, consist of older adults' unwillingness to engage in self-reflection concerning crucial existential dilemmas. They amount to an attitude redirecting older adults' attention to any activity that will prevent them from thinking about what is inevitable in the human condition. This kind of attitude induces constant tension, whose characteristic feature is keeping existential issues out of one's consciousness. This state does not lead to developing a personal attitude towards the transitoriness and fragility of life but, in a way, 'freezes' the potential of terror that arises in every situation requiring unexpected confrontation with the inevitability of death. In other words, these buffers block the process of personal self-creation in older adults who are aware of the inevitability of existential challenges. Two buffers have been classified into the second category: (a) escaping into action, viewed as a transition mechanism protecting the person from experiencing the anticipated fact of death, and (b) repressing thoughts about death, understood as a psychological defense mechanism.

The presentation of this structure of buffers and an in-depth analysis of their characteristics are the subject matter of a different research article, which is currently in preparation. The second stage of the research is the main topic of the present article. The results of analyses from the first stage were used to develop a survey questionnaire. The aim of this study was to identify the buffers applied by older adults in the context of their perceived level of existential anxiety and their selected sociodemographic characteristics. The exploration of the research area of interest to us was focused on the following questions:

- Which of the protective buffers do older adults attribute significant value to?
- What is the participants' anxiety level?

- Are there statistically significant correlations (positive or negative) between the buffers and between the buffers and death anxiety?
- Are there gender differences in older adults' evaluation of the buffers?
- Are the variables of age, marital status, education, living alone vs. living with others, and self-reported attitude to faith significantly related to the buffers used by older adults?

## Material and Method

The study included students attending Universities of the Third Age. Data were collected using an auditorium questionnaire. The sample consisted of 224 participants. Due to the incompleteness of the returned questionnaires, statistical analyses were performed on data collected from 162 respondents (143 women and 19 men). Participants' age ranged from 60 to 95 years ( $M = 70.35$ ,  $SD = 6.23$ ). The largest group of respondents, 45.1 percent, reported that they were married, 28.4 percent were widowed, 10.5 percent reported that they were divorced, and 13 percent were single. Only a tiny percentage of the participants lived in a civil partnership (1.2 percent) or were separated (1.9 percent). Most participants (82.9 percent) were religious believers, including 32.7 percent who were regularly practicing believers, 27.6 percent who were irregularly practicing believers, and 22.6 percent who were non-practicing believers. The remaining 17.1 percent were practicing non-believers (2.5 percent) and non-practicing non-believers (14.6 percent). The sample included 56.2 percent of participants who lived alone and 38.9 percent who lived with their husbands or wives. Nearly all respondents (97.6 percent) had higher or secondary education. The research was conducted in October 2019 in two big cities in central and southern Poland: Łódź and Katowice.

To collect empirical material, we used the Strategies for Confronting the Inevitability of Death Questionnaire, developed for the present study and making it possible to explore the phenomenon associated with the use of buffers mitigating death anxiety. The questionnaire consists of 14 items that respondents rate on a 7-point Likert scale (from 1=strongly disagree to 7=strongly agree), corresponding to the seven main buffers that we identified in the first stage of qualitative research. The internal consistency (Cronbach's  $\alpha$ ) is  $\alpha = .79$  for the Releasing Buffers (RB) scale,  $\alpha = .59$  for the Blocking Buffers (BB) scale and ranges from  $\alpha = .63$  to  $\alpha = .92$  for specific buffers. Additionally, the questionnaire includes an item about the respondent's subjective evaluation of their death anxiety, rated on a 7-point Likert scale. To elicit participants' demographic characteristics we used a personal information form prepared especially for the present study. It consisted of six questions about the fol-

lowing demographic variables: age, gender, education, marital status, living alone vs. living with others, and attitude to faith.

The analysis consisted of processing the quantitative material composed of descriptive statistics. Because the assumption of normal distribution was not met, we used nonparametric statistics. To determine the level of differences, we used the Kruskal–Wallis test and the Mann–Whitney U test (significance levels:  $p < .01, .05$ ), and to determine the relationships between the variables we applied Spearman's rho test (significance levels:  $p < .01, .05$ ). Analyses were performed using PASW Statistics 18 package.

## Results

The presentation of results begins with descriptive statistics for releasing and blocking buffers and with the correlations between them (Table 1). The distribution of mean scores, together with standard deviations, indicates moderate variation in older adults' use of all buffers except religious attitude, in the case of which it is possible to speak of a high variation of responses. The same goes for participants' declarations concerning death anxiety.

Table 1. Descriptive Statistics and Spearman's rho Correlations Between the Variables ( $n = 162$ )

	<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7	8
World-view (RB)	5.64	1.38								
Performing roles (RB)	5.18	1.47	.414**							
Religious attitude (RB)	3.86	2.12	.036	.164*						
Relationships with others (RB)	4.33	1.69	.172**	.445**	.336**					
Altruism (RB)	4.75	1.65	.405**	.448**	.221**	.352**				
Escaping into action (BB)	4.59	1.48	-.052	.092	.099	.203**	.048			
Repressing thoughts (BB)	4.19	1.70	-.168*	.136	-.017	.171*	-.145	.398**		

Death anxiety	3.27	2.08	-.427**	-.143	.075	.092	-.336**	.112	.499**	
Age	70.35	5.64	-.001	-.025	-.002	.063	.056	.014	.072	-.101

Note. M = mean; SD = standard deviation; (RB) = buffers releasing personal self-creation; (BB) = buffers blocking personal self-creation; \*  $p < .05$ ; \*\*  $p < .01$ .

Source: authors' research

The results of correlation analysis revealed statistically significant correlations between the study variables. A moderate positive correlation was found between worldview and performing roles ( $r = .414$ ,  $p < .01$ ). This result indicates the positive co-occurrence of these two coping mechanisms with the finiteness of one's existence. These mechanisms are complementary. The situation is similar for the following pairs of buffers: relationships with others and performing roles ( $r = .445$ ,  $p < .01$ ), altruism and worldview ( $r = .405$ ,  $p < .01$ ), altruism and performing roles ( $r = .448$ ,  $p < .01$ ), repressing thoughts and escaping into action ( $r = .398$ ,  $p < .01$ ), altruism and relationships with others ( $r = .352$ ,  $p < .01$ ), and relationships with others and religious attitude ( $r = .336$ ,  $p < .01$ ). The correlations between the remaining pairs of buffers are low and range from  $-.168$  to  $.221$ . The negative correlations of death anxiety with worldview ( $r = -.427$ ,  $p < .01$ ) and altruism ( $r = -.336$ ,  $p < .01$ ) attest to moderately strong relations between these variables. By contrast, a positive relationship was found between death anxiety and repressing thoughts ( $r = .499$ ,  $p < .01$ ). The presented analyses indicate no statistically significant relationships between age and the buffers included in the study.

Further calculations concern the level of existential anxiety among the respondents (Table 2); 79 percent of the older adults taking part in the study reported low or moderate existential anxiety, and 21 percent felt intense death anxiety.

Table 2. Anxiety Level in the Examined Population ( $n = 162$ )

Level of anxiety	Frequency	Percentage
Low	74	45.7
Medium	54	33.3
High	34	21.0
Total	162	100.0

Source: authors' research

We performed further statistical analyses to delve into the differences in the use of buffers and the perception of existential anxiety depending on older adults' gender (Table 3). Data analysis revealed no significant gender differences. Women and men attributed significance to the identified buffers in similar ways. The same goes for death anxiety.

Table 3. Buffers Reducing the Level of Death Anxiety Among Women and Men ( $n = 162$ )

	Mean rank	Sum of ranks	Mean rank	Sum of ranks	$U$	$Z$	$p$
	Women		Men				
Worldview	82.27	11764.50	75.71	1438.50	1248.50	-.581	.561
Performing roles	80.84	11560.50	86.45	1642.50	1264.50	-.494	.622
Religious attitude	81.87	11708.00	78.68	1495.00	1305.00	-.280	.779
Relationships with others	80.30	11483.00	90.53	1720.00	1187.00	-.897	.370
Altruism	81.09	11596.50	84.55	1606.50	1300.50	-.304	.761
Escaping into action	79.33	11344.50	97.82	1858.50	1048.50	-1.624	.104
Repressing thoughts	81.06	11591.50	84.82	1611.50	1295.50	-.330	.742
Death anxiety	82.30	11769.00	75.47	1434.00	1244.00	-.608	.543

Note.  $U/Z$  = Mann-Whitney  $U$  test statistics

Source: authors' research

The research was complemented by an analysis of how sociodemographic characteristics influenced the choice and use of buffers mitigating death anxiety. We used the nonparametric Kruskal-Wallis test for this purpose. In those cases where the  $p$ -value was higher than .05, there were no grounds for rejecting the null hypothesis, which postulates that ranks do not differ. The test results showed that the factors differentiating the choice of buffers were marital status, education, and attitude to faith. In these cases, asymptotic significance was lower than .05, which allowed for rejecting the null hypothesis postulating the equality of ranks. The results of the tests are presented in Table 4.

Because the test results proved statistically significant, we performed an additional test to determine the  $p$ -value from pairwise comparisons (Mann-Whitney  $U$  test). The final test results showed that married, widowed, and divorced respondents attributed more significance to the buffer associated with performing roles than single respondents. Married people more often chose the buffer concerning relationships with others than widows or widowers, who in turn rated this buffer higher than single participants (Table 5).



Table 4. Buffers Reducing the Level of Death Anxiety According to Selected Sociodemographic Characteristics (n = 162)

	Marital status	Education	Residence	Attitude to faith	Age
Worldview	$\chi^2 = 3.597$ 5 df, $p = .609$	$\chi^2 = 9.401^*$ 3 df, $p = .024$	$\chi^2 = 1.772$ 2 df, $p = .412$	$\chi^2 = 6.516$ 4 df, $p = .164$	$\chi^2 = 0.379$ 2 df, $p = .827$
Performing roles	$\chi^2 = 11.587^*$ 3 df, $p = .041$	$\chi^2 = 2.540$ 3 df, $p = .468$	$\chi^2 = 2.276$ 2 df, $p = .320$	$\chi^2 = 3.286$ 4 df, $p = .511$	$\chi^2 = 1.485$ 2 df, $p = .476$
Religious attitude	$\chi^2 = 8.027$ 5 df, $p = .155$	$\chi^2 = 4.482$ 3 df, $p = .214$	$\chi^2 = 0.200$ 2 df, $p = .905$	$\chi^2 = 79.156^*$ 4 df, $p = .000$	$\chi^2 = 0.360$ 2 df, $p = .835$
Relationships with others	$\chi^2 = 11.450^*$ 5 df, $p = .043$	$\chi^2 = 5.440$ 3 df, $p = .142$	$\chi^2 = 0.107$ 2 df, $p = .948$	$\chi^2 = 10.597^*$ 4 df, $p = .031$	$\chi^2 = 1.642$ 2 df, $p = .440$
Altruism	$\chi^2 = 6.190$ 5 df, $p = .288$	$\chi^2 = 3.190$ 3 df, $p = .363$	$\chi^2 = 0.398$ 2 df, $p = .820$	$\chi^2 = 6.246$ 4 df, $p = .182$	$\chi^2 = 0.533$ 2 df, $p = .766$
Escaping into action	$\chi^2 = 4.102$ 5 df, $p = .535$	$\chi^2 = 2.417$ 3 df, $p = .491$	$\chi^2 = 0.930$ 2 df, $p = .628$	$\chi^2 = 5.577$ 4 df, $p = .233$	$\chi^2 = 0.446$ 2 df, $p = .800$
Repressing thoughts	$\chi^2 = 2.344$ 5 df, $p = .800$	$\chi^2 = 3.693$ 3 df, $p = .297$	$\chi^2 = 1.619$ 2 df, $p = .445$	$\chi^2 = 5.622$ 4 df, $p = .229$	$\chi^2 = 1.062$ 2 df, $p = .588$

\* relationship between the variables at  $p < .05$

Source: authors' research

Table 5. Results of the Mann-Whitney U Test for the Characteristics Differentiating the Choice of Buffers Among Older Adults (n = 162)

	U	p	U	p	U	p
	Married		Widowed		Divorced	
Performing roles	540.00	.038*	271.000	.004**	105.00	.030*
Relationships with others	1183.00	.007**	290.000	.009**	169.00	.779

Note. U – Mann-Whitney U-test statistics; \*  $p < .05$ ; \*\*  $p < .01$ .

Source: authors' research

The next determinant differentiating preferences regarding the choice of buffer reducing death anxiety was participants' attitude to faith. It turned out that religious believers, regardless of whether they practiced their faith regularly or irregularly or did not practice it at all, attached great importance to the religious attitude buffer and rated it higher than non-believers. The situation was identical in the case of relationships with others as a buffer (Table 6).

Table 6. Results of the Mann–Whitney U Test for the Characteristics Differentiating the Choice of Buffers Among Older Adults (n = 162)

	<i>U</i>	<i>p</i>	<i>U</i>	<i>p</i>	<i>U</i>	<i>p</i>
	Regularly practicing believers		Irregularly practicing believers		Non-practicing believers	
Religious attitude	484.500	.000**	65.000	.000**	161.500	.000**
Relationships with others	304.000	.001**	311.500	.018*	260.000	.040*

Note. U= Mann–Whitney U-test statistics; \*  $p < .05$ ; \*\*  $p < .01$ .

Source: authors' research

The last factor differentiating the preferences regarding the choice of buffer, reducing participants' anxiety, was their education level. As shown by the present study results, people with higher education rated the worldview buffer much higher than individuals with secondary education ( $p = .013$ ).

## Discussion

The discussion of results is undeniably linked with older adults' style of functioning, of which systematic educational activity at a University of the Third Age is an important indicator. It specifies the context that is significant for explaining the strongly marked importance of buffers releasing personal self-creation in the study sample and the relatively low level of existential anxiety.

The results of correlation analysis (Table 1) indicate that engagement in the development of one's worldview, in which active participation in education is helpful, can lead to the acceptance of one's fate and, consequently, to the effective reduction of existential anxiety ( $r = -.427$ ,  $p < .01$ ). The same goes for the buffer that consists in older adults exhibiting greater willingness to engage in altruistic behaviors, which allows them to more effectively make their life and death meaningful ( $r = -.336$ ,  $p < .01$ ). The results of our study are consistent with the findings reported in the specialist literature. For example, the use of the buffer associated with altruism as an attitude that makes life and death meaningful corresponds with the findings reported by sociobiologists, according to which certain types of altruistic behaviour have an adaptive character. These researchers claim that prioritizing children's well-being over one's own is a manifestation of responsibility for the fate of future generations (Wilson, 1988, pp. 189–208; DeLamater, Myers and Collett, 2015, pp. 343–368). When altruistic

behaviours are considered from the geragogical perspective, their significance manifests itself in older adults' volunteer activity to benefit people requiring various forms of support. Particularly accompanying people who are dying allows older adults to experience making a personal contribution to their life and to compensate – at least partly – for loneliness, but above all, it promotes constructively coming to terms with death (Fabiś, Wawrzyniak and Chabior, 2015, p. 2008; Wąsiński, 2020, pp. 203–205).

The similarities between our results and those in the specialist literature also concern the use of the repression buffer ( $r = .499$ ,  $p < .01$ ). Its application is not conducive to confronting anxiety-inducing existential issues and does not lead older adults to adopt their individual attitude towards the value and meaning of life considered from the perspective of the inevitability of death. Repressing thoughts of death neither resolves nor invalidates the key issues. While giving temporary relief, it cumulates the potential of terror. Consciously pushing thoughts of death out of one's consciousness does not contribute to reducing the level of death anxiety and may even intensify it. The literature underscores that the mechanism of repressing thoughts is supposed to promote adaptive processes (McWilliams, 2008, p. 134). However, multiple and regular repression uses up a considerable amount of energy resources, which are expended on avoiding the negative emotions evoked in situations foregrounding death (Szentagotai and Onea, 2007, pp. 127–138; Wegner, Zanakos, 1994, pp. 615–640). This may gradually decrease the effectiveness of repression and, paradoxically, intensify the repressed undesirable thoughts (Wegner et al., 1987; Wenzlaff et al., 1991). (Wegner et al., 1987, pp. 5–13; Wenzlaff, Wegner and Klein, 1991, pp. 500–508)

The results of correlation analysis also show the co-occurrence of selected buffers used to cope with death anxiety. They can be divided into homogeneous releasing buffers, mixed buffers, and homogeneous blocking buffers. The first group includes performing roles combined with worldview ( $r = .414$ ,  $p < .01$ ), relationships with others combined with performing roles ( $r = .445$ ,  $p < .01$ ), altruism combined with worldview ( $r = .405$ ,  $p < .01$ ), and altruism combined with performing roles ( $r = .448$ ,  $p < .01$ ). This strategy consists in recognizing the value and meaning of one's life as a personal response to inevitable death. The mixed strategy consists of the co-occurrence of releasing and blocking buffers in a configuration that combines escaping into action with engaging in activities for the benefit of others ( $r = .203$ ,  $p < .01$ ). The escape strategy might seem to be a releasing one. However, in this context, it draws the individual away from thinking in existential terms and does not lead to developing unique solutions in this domain. It, therefore, cumulates internal tension in every situation, evoking the inevitability of death and increasing continual anxiety. The last strategy is the

homogeneous blocking one, which consists in the co-occurrence of escaping into action with repressing thoughts ( $r = .398$ ,  $p < .01$ ). This helps attain momentary calm and peace but diverts older adults from developing their attitude toward death, which is ineffective in achieving a successful and lasting reduction of the level of existential anxiety.

The results of the present study indicate that age is not significantly related to buffers mitigating death anxiety. Death anxiety does not increase with age. This supports the theory of the ageless self, known among gerontologists (Kaufman, 1986, pp. 6–13). According to this theory, age group is not a predicate of older adults' social functioning. What is more important than age is older adults' needs (Achenbaum, 2009, pp. 25–38), the social context, and the meanings attributed to old age by society (Higgs and Jones, 2009, pp. 17–33).

The results of analyses show that older adults' age does not differentiate perceived death anxiety level or the strategies behind the choice of buffers mitigating death anxiety. Due to their universal nature, existential issues may be considered on a deeper, gender-independent level of understanding insight into human existence's value and meaning/meanings. Therefore, life's transitoriness must be confronted – to use Viktor Frankl's nomenclature – in the noological dimension, which the lower (i.e., biological and psychological) dimensions of human existence are projected on (Frankl, 2006, p. 105). It should also be added that a characteristic feature of the Universities of the Third Age is feminization (Zych, 2012, pp. 158–164; Zielińska-Więczkowska, 2016, pp. 85–103). The overrepresentation of women limits the possibility of making gender comparisons. This is a considerable challenge for everyone who conducts this kind of research in U3A institutions. Women account for approximately 85 percent of all participants there (Gołdys et al., 2012, p. 45). Therefore, this aspect of the results should be approached with a certain degree of caution. It is known from other research reports that the differences between women and men in terms of death anxiety are not very large. Some studies indicated such differences (McDonald, 1976, pp. 35–44; Neimeyer and Moore, 1994, pp. 103–119), while others did not reveal a clear relationship (Feifel and Branscomb, 1973, pp. 282–288). Where differences were detected, women were found to have a higher level of anxiety than men (Lester, 1972, p. 440). It, therefore, seems reasonable in future studies on a representative sample of older adults to check if there are significant gender differences in death anxiety levels and in the strategy for choosing the buffers to mitigate this anxiety.

The factors that differentiate preferences regarding the choice of buffers include marital status, education, and attitude to faith. The quality of older adults' social functioning is significant evidence of using specific types of buffers in

practice. It comprises social roles and relationships with others. Married people may have a more dense network of social relations than single ones, so they attach greater importance to the buffer associated with performing roles. Over many years of married life, a person develops resources such as skills for establishing and maintaining long-term, meaningful relationships with others. In the literature it is reported that, to older adults, the most important roles are the traditional ones associated with family life: wife, husband, grandmother, and grandfather. It is only later that these people mention roles linked with belonging to informal groups and broader communities (relations with friends and neighbors) or formal groups (professional, social, civic, and religious roles) (Wieczorkowska, 2017, pp. 77–97). Relationships with others acquire greater significance in those older adults who have experienced the death of their spouse. They are aware of the importance of stable relations with others as a mechanism mitigating death anxiety. In the literature, there is information suggesting that older adults experiencing widowhood withdraw from contact with their friends who are married or have partners. This situation usually leads to passiveness, loneliness, and frustration (Gutowska, 2011, pp. 157–172).

The next factor differentiating the choice of buffers mitigating death anxiety among older adults was their education. It must be stressed that in our study, we considered only individuals with secondary or higher education. They accounted for 97.6 percent of all respondents. The results revealed that older adults with higher education used the worldview buffer more often than those with secondary education, which allowed them to organize the chaos of thoughts and feelings associated with the inevitability of death and to come to terms with what was inevitable. It can be assumed that acquiring higher education and maintaining or resuming activities characteristic of the earlier stages of life, which self-fulfillment at the Universities of the Third Age amounts to, promotes further development of intellectual skills, including the self-reflective development of an attitude towards existential issues. This may mean a process of constantly (re)constructing the worldview determining one's attitude to life and death. Worldview means understanding the mechanisms governing the course of human life combined with accepting one's fate. This makes it a buffer, reducing the level of anxiety in situations in which death is prominent. Other research has shown that having a formed worldview and the resulting sense of self-worth act as a buffer protecting the individual against potential existential anxiety (Hunt and Shehryar, 2002, pp. 51–59, 2011, pp. 372–382). Moreover, sustained educational activity in old age can be perceived as a factor reducing existential anxiety level. What becomes crucial is older adults' commitment to lifelong development in the intellectual, emotional, social, cultural, or artistic domains (Czerniawska,

2009, pp. 97–113; Moroń, 2010, p. 348; Regulska, 2012, pp. 109–127; Szarota and Fabiś, 2015, pp. 47–62). In this context, educational activity is understood as a catalyst for the phenomenon of gerotranscendence (Tornstam, 2005, pp. 31–47; Muszyński, 2016, pp. 23–36), which is rooted in a self-reflective attitude towards the transitoriness of life and the mystery of death (Fabiś, 2018, p. 229).

Looking for the determinants accounting for the use of protective buffers, our attention was also focused on respondents' self-reported attitude to faith. It turns out that religious believers, regardless of whether they practice their faith regularly or irregularly or do not practice it at all, attach great importance to the religious attitude buffer and rate it higher than non-believers. The situation is identical regarding the relationships with other buffers (Table 6). Older adults' self-reported attitude to faith harmonizes with their attitude towards life and death, usually associated with the Catholic religion. In this context, relationships with others are situated in the domain of religious communities, whose significance manifests itself in the sphere of values and mutual support in spiritual growth. Terror management theory suggests that individuals who focus on literal or symbolic immortality—as one does, for instance, in the case of religion, offering life after death—cope with the awareness of death better than others. Religious beliefs are perceived as a protective buffer (Solomon et al., 1991, pp. 21–40).

## Conclusion

The key aspect of the present study was the examination of protective buffers in the context of individuals' self-creation. Linking these two seemingly distant and incompatible domains of internal experiences and sensations revealed the many-sided nature of buffers, basically situated within two opposing orders: releasing vs. blocking older adults' self-creative self-development efforts. This distinction makes it possible to change the perspective on buffers and view them no longer as involuntarily activated mechanisms decreasing the level of existential anxiety but as intentionally activated mechanisms developed and shaped in the course of older adults' lifelong self-creative self-development work. One of the study's main findings is that older adults' use of buffers releasing personal self-creation is linked with the constructive aspects of coping with existential anxiety. They increase these people's engagement in intellectually and spiritually coming to terms with the mystery of life and death, inducing them to take up valuable forms of activity that make their everyday preoccupations meaningful. Viewed more broadly, they reveal the value of the personal path of life

that older adults create for themselves. In this context, the buffers that become more important are those in which the dominant features are various aspects of being with others and acting for the benefit of others. By contrast, buffers blocking personal self-creation reorient older adults towards activities that are not conducive to constructively confronting the finiteness of life. These buffers are associated with activities that do not lead older adults to face the inevitability of death and do not prepare them for it. On the contrary, they entangle them in a net of activities that seemingly and temporarily reduce existential anxiety but do not contribute to coping with what causes that anxiety. The perspective on buffers adopted in our study leads to the conclusion that releasing buffers supports rather than blocks older adults' self-creative self-development efforts, thus promoting their personal growth aimed at achieving wisdom.

In conclusion, it is worth adding that the research results about practical actions suggest that education in old age, social interactions, and actions for the benefit of others should be recommended as crucial elements of gerontological prevention, which significantly contribute to reducing existential stress and, as a result, improve the quality of life.

**Declarations:**

**Funding:** This research received no specific grant from any funding agency in the public, commercial, or not-for-profit sectors.

**Conflicts of interest:** The authors declare that there is no conflict of interest.

**Authors' contributions:** All authors contributed to the study conception, material preparation analysis and interpretation of data. All authors read and approved the final manuscript.

**Ethics approval:** This study was approved by the Commission for Research Bioethics at the University of Lodz.

Data wpłynięcia: 2023-09-29;

Data uzyskania pozytywnych recenzji: 2024-09-09;

Data przesłania do druku: 2024-12-18.

**References:**

- Achenbaum, W. A. (2009) 'A metahistorical perspectives on theory of aging', in V. L. Bengtson et al. (eds) *Handbook of theories of aging*. Nowy Jork NY: Springer Publishing Company, pp. 25–38.



- Ardelt, M. (2003) 'Effects of religion and purpose in life on elders' subjective well-being and attitudes toward death,' *Journal of Religious Gerontology*, 14(4), pp. 55–77. Available at: [https://doi.org/10.1300/J078v14n04\\_04](https://doi.org/10.1300/J078v14n04_04)
- Chopik, W. J. (2017). 'Death across the lifespan. Age differences in death-related thoughts and anxiety', *Death Studies*, 41(2), 69–77. Available at: <https://doi.org/10.1080/07481187.2016.1206997>.
- Cicirelli, V. G. (1999) 'Personality and demographic factors in older adults' fear of death,' *The Gerontologist*, 39(5), pp. 569–579. Available at: <https://doi.org/10.1093/geront/39.5.569>
- Cicirelli, V. G. (2002) 'Fear of death in older adults. Predictions from terror management theory', *The Journals of Gerontology Series B. Psychological Sciences and Social Sciences*, 57(4), pp. 358–366. Available at: <https://doi.org/10.1093/geronb/57.4.P358>
- Czerniawska, O. (2009) 'Uniwersytet Trzeciego Wieku, 30 lat działania. Przemiany, dylematy i oczekiwania w epoce ponowoczesnej', *Chowanna*, 33(2), pp. 97–113.
- DeLamater, J. D., Myers, D. J. and Collett, J. L. (2015) *Social psychology*. Boulder, CO: Westview Press.
- Erikson, E. H. (1963) *Childhood and society*. 2<sup>nd</sup> ed. New York: W.W.Norton & CO.
- Fabiś, A. (2018) *Troski egzystencjalne w starości. Ujęcie geragogiczne*. Kraków: Wydawnictwo Naukowe Uniwersytetu Pedagogicznego.
- Fabiś, A., Wawrzyniak, J. and Chabior, A. (2015) *Ludzka starość. Wybrane zagadnienia gerontologii społecznej*. Kraków: Oficyna Wydawnicza 'Impuls.'
- Feifel, H. and Branscomb, A. B. (1973) 'Who's afraid of death?', *Journal of Abnormal Psychology*, 81, pp. 282–288. Available at: <https://doi.org/10.1037/h0034519>
- Frankl, V. (2006) *Man's search for meaning*. Boston: Beacon Press.
- Gołdys, A. et al. (2012) *Zoom na UTW*. Available at: <https://nck.pl/badania/raporty/zoom-na-utw>.
- Gutowska, A. (2011) 'Przyjaźń a zdrowie psychiczne w okresie starości', in A. Fabiś, and M. Muszyński (eds) *Społeczne wymiary starzenia się*. Bielsko-Biała: Wyższa Szkoła Administracji w Bielsku – Białej, pp. 157–172. Available at: <https://ojs.wsb.edu.pl/index.php/bgs/issue/view/67/9>.
- Higgs, P. and Jones, I. (2009) *Medical sociology and old age. Towards a sociology of health in later life*. New York: Taylor and Francis.
- Hunt, D. M. and Shehryar, O. (2002) 'The nature of fear arousal and segmentation of target audience in fear appeal advertising. A terror management perspective', *American Marketing Association Conference Proceedings*, 13, pp. 51–59.
- Hunt, D. M. and Shehryar, O. (2011) 'Integrating terror management theory into fear appeal research', *Social and Personality Psychology Compass*, 5(6), pp. 372–382. Available at: <https://doi.org/10.1111/j.1751-9004.2011.00354.x>
- Hupkens, S., Machielse, A., Goumans, M., and Derkx, P. (2016). 'Meaning in life of older persons. An integrative literature review', *Nursing Ethics*, 25(8), 973–991. Available at: <https://doi.org/10.1177/0969733016680122>.



- Kaufman, S. R. (1986) *The ageless self. Sources of meaning in late life*. Madison: University of Wisconsin Press.
- Kierkegaard, S. (1974). *Fear and trembling. The sickness unto death*. Princeton University Press.
- Kobylarek, A. (2010) 'Uniwersytet trzeciego wieku jako kanał transferu wiedzy i informacji', in H. Horyń, and J. Maciejewski (eds) *Nauczyciel andragog we współczesnym społeczeństwie*. Wrocław: Wydawnictwo Uniwersytetu Wrocławskiego, pp. 366–367.
- Kunzmann, U. and Baltes, P. B. (2005) 'The psychology of wisdom: Theoretical and empirical challenges', in R. J. Sternberg, and J. Jordan (eds) *A Handbook of wisdom. Psychological perspectives*. Cambridge, pp. 110–135. Available at: <https://doi.org/10.1017/CBO9780511610486.006>
- Lester, D. (1972) 'Studies in death attitudes. Part II', *Psychological Reports*, 30(2), p. 440. Available at: <https://doi.org/10.2466/pr0.1972.30.2.4>
- Łukaszewski, W. (2010) *Udręka życia. Jak ludzie radzą sobie z lękiem przed śmiercią*. Sopot: Wydawnictwo Smak Słowa.
- McDonald, G.W. (1976) 'Sex, religion, and risk-taking behavior as correlates of death anxiety', *Omega: Journal of Death and Dying*, 7(1), pp. 35–44. Available at: <https://doi.org/10.2190/1RH2-KJR2-DW66-3AFQ>.
- McWilliams, N. (2008) *Diagnoza psychoanalityczna*. Gdańsk: Gdańskie Wydawnictwo Psychologiczne.
- Moroń, D. (2010) 'Działalność osób starszych w trzecim sektorze jako sposób zaspokajania potrzeb edukacyjnych w społeczeństwie wiedzy', in W. Horyń, and J. Maciejewski (eds) *Nauczyciel andragog we współczesnym społeczeństwie*. Wrocław: Wydawnictwo Uniwersytetu Wrocławskiego, p. 348.
- Muszyński, M. (2014) 'Edukacja i uczenie się – wokół pojęć', *Rocznik Andragogiczny*, 21, pp. 77–88. Available at: <https://doi.org/10.12775/RA.2014.004>
- Muszyński, M. (2016) 'Przegląd wybranych stanowisk dotyczących teorii gerotranscendencji', in E. Dubas, and M. Muszyński (eds) *Refleksje nad Starością. Obiektywny i subiektywny wymiar starości*. Łódź: Wydawnictwo Uniwersytetu Łódzkiego, pp. 23–36. Available at: <http://hdl.handle.net/11089/42188>
- Neimeyer, R. A. and Moore, M. K. (1994) 'Validity and reliability of the multidimensional fear of death scale', in R. A. Neimeyer (ed.) *Death anxiety handbook: Research, instrumentation, and application*. Philadelphia: Taylor and Francis, pp. 103–119.
- Nozari, Z., Mo'tamedi, A., Eskandari, H., and Ahmadiwand, Z. (2019) 'Narrative group therapy to improve aging perceptions and reduce thanatophobia (death anxiety) in older adults', *Elderly Health Journal*, 5(2), 117–123.
- Perng, A., and Renz, S. (2018) 'Identifying and Treating Complicated Grief in Older Adults', *The Journal for Nurse Practitioners*, 14(4), 289–295. Available at: <https://doi.org/https://doi.org/10.1016/j.nurpra.2017.12.001>
- Pyszczynski, T., Greenberg, J., and Solomon, S. (1999) 'A dual-process model of defense against conscious and unconscious death-related thoughts. An extension of terror management theory', *Psychological Review*, 1006(4), 835–845.

- Regulska, A. (2012) 'Działalność uniwersytetów trzeciego wieku w aspekcie aktywizacji seniorów', *Roczniki Pedagogiczne*, 4(1), pp. 109–127.
- Reker, G. T., and Woo, L. C. (2011) Personal meaning orientations and psychosocial adaptation in older adults. *SAGE Open*.
- Rowe, J. W. and Kahn, R. L. (1987) 'Human aging: Usual and successful,' *Science*, 237, pp. 143–149.
- Sartre, J. P. (1957). *Existentialism and human emotions*. Philosophical Library. New York.
- Solomon, S., Greenberg, J. and Pyszczynski, T. (1991) 'Terror management theory of self-esteem', in C. R. Snyder, and R. D. Forsyth (eds) *Handbook of social and clinical psychology. The health perspective*. New York: Pergamon Press, pp. 21–40.
- Stelcer, B. (2015) 'Żal po stracie–dynamika adaptacji do nieuniknionych zmian', *Sztuka Lekarska*, 3–4, 47–56
- Szarota, Z. and Fabiś, A. (2015) 'Doświadczanie starości: jej zalety i trudy–w opiniach słuchaczy UTW', *Edukacja Dorosłych*, 2, pp. 47–62.
- Szentagotai, A. and Onea, D. (2007) 'Is repressive coping associated with suppression?', *Journal of Evidence-Based Psychotherapies*, 7(2), pp. 127–138.
- Taylor, B. A. and Bengtson, V. L. (2001) 'Sociological perspectives on productive aging', in N. Morrow-Howell, J. Hinterlong, and M. Sherraden (eds) *Productive aging. Concepts and challenges*. Baltimore: The Johns Hopkins University Press, pp. 120–144.
- Tillich, P. (1952). *The courage to be*. Yale University Press.
- Tillich, P. (1961) 'Existentialism and psychotherapy', *Review of Existential Psychology and Psychiatry*, 1, 8–16.
- Tillich, P. (1991). *Osamotnienie i odosobnienie*. Znak, 431(4), 3–8.
- Tornstam, L. (2005) *Gerotranscendence. A developmental theory of positive aging*. New York: Springer Publishing Company.
- Tornstam, L. (2011) 'Maturing into gerotranscendence', *Journal of Transpersonal Psychology*, 43(2), pp. 166–180.
- Wąsiński, A. (2018) *Autokreacja małżonków bezdzietnych do wielowymiarowego rodzicielstwa adopcyjnego. Perspektywa pedagogiczno-antropologiczna*. Łódź: Wydawnictwo Uniwersytetu Łódzkiego.
- Wąsiński, A. (2020) 'Doświadczanie osamotnienia jako źródła cierpienia egzystencjalnego w sytuacji choroby Alzheimera', *Nauki o Wychowaniu. Studia Interdyscyplinarne*, 10(1), pp. 202–219. Available at: DOI: 10.18778/2450-4491.10.14
- Wegner, D. M. et al. (1987) 'Paradoxical effects of thought suppression', *Journal of Personality and Social Psychology*, 53(1), pp. 5–13. Available at: <https://doi.org/10.1037/0022-3514.53.1.5>
- Wegner, D. M. and Zanakos, S. (1994) 'Chronic thought suppression', *Journal of Personality*, 62(4), pp. 615–640. Available at: <https://doi.org/10.1111/j.1467-6494.1994.tb00311.x>
- Wenzlaff, R. M., Wegner, D. M. and Klein, S. B. (1991) 'The role of thought suppression in the bonding of thought and mood', *Journal of Personality and Social Psychology*, 60(4), pp. 500–508. Available at: <https://doi.org/10.1037/0022-3514.60.4.500>

- Wieczorkowska, M. (2017) 'Role społeczne współczesnych polskich seniorów w świetle wyników badań', *Acta Universitatis Lodzensis. Folia Sociologica*, 61, pp. 77–97.
- Wilson, E. O. (1988) *O naturze człowieka*. Warszawa: Państwowy Instytut Wydawniczy.
- Wink, P. and Scott, J. (2005) 'Does religiousness buffer against the fear of death and dying in late adulthood? Findings from a longitudinal study', *The Journals of Gerontology Series B. Psychological Sciences and Social Sciences*, 60(4), pp. 207–214. Available at: <https://doi.org/10.1093/geronb/60.4.P207>
- World Health Organization (2002) *Active ageing*. A policy framework. Geneva.
- Zielińska-Więczkowska, H. Kędziora-Kornatowska, K. (2014) 'Postawy wobec edukacji ustawicznej słuchaczy Uniwersytetu Trzeciego Wieku w świetle wybranych czynników socjo-demograficznych', *Hygeia Public Health*, 49(2), pp. 324–329.
- Zielińska-Więczkowska, H. (2016) 'Historia i rozwój Uniwersytetów Trzeciego Wieku', in M. Cybulski, and E. Krajewska-Kułak (eds) *Edukacja prozdrowotna seniorów jako szansa na pomyślne starzenie się na przykładzie miasta Białegostoku*. Białystok : Duchno, pp. 85–103.
- Zych, A. (2012) 'Globalne starzenie się oraz potrzeby społeczne, kulturalne i edukacyjne ludzi starych–wyzwanie dla uniwersytetów trzeciego wieku', *Teraźniejszość – Człowiek – Edukacja*, 2(58), pp. 158–164.
- Zych, A. A. (2013). *Przekraczając „smugę cienia”*. Szkice z gerontologii i tanatologii. „Śląsk” Wydawnictwo Naukowe.

