Transcendent and transcendental future and time perspective among seniors

Przyszłość transcendentna i transcendentalna, perspektywa czasowa, a wartości osób starszych

Celina Timoszyk-Tomczak

Instytut Psychologii Uniwersytet Szczeciński, Szczecin

Abstract

Introduction. In their thoughts, people easily travel forward, beyond the timeframes of the presence. Confrontation with the end of their own existence seems particularly challenging and meaningful, especially in the last stage of development when self-acceptance and integration of previous stages of life is essential. Therefore, the results of the study may be important not only in terms of increasing knowledge but also for planning effective interventions to improve the quality of life. Aim. The goal of the paper is to present an analysis of correlations between the future that spans beyond this life (transcendent and transcendental) and time perspective adopted in senior population. Material and methods. The research was conducted in a group of 199 individuals (84 women, 115 men) aged 58-84; the average age was 65. In order to measure the variables in question, the following tools were used: Transcendent and Transcendental Time Perspective Inventory TTTPI, short version of Zimbardo Time Perspective Inventory ZTPI. Results. Transcendent future was negatively correlated with balanced time perspective, and its predictor was Past-Positive. Transcendental future was not linked to balanced time perspective, and its predictor was positive past and negative perception of the present (positively fatalistic and negatively hedonistic). Statistical analyses revealed correlations with age, education and gender. Conclusions. The results of the study indicate that seniors in their late adulthood have a more complex profile of time perspectives. (Gerontol Pol 2023; 31; 205-211) doi: 10.53139/GP.20233136

Keywords: transcendent future, transcendental future, time perspective, balanced time perspective, late adulthood

Streszczenie

Wstęp. Ludzie w swoim umyśle z łatwością wędrują w czasie, wychodząc poza granice teraźniejszości. Konfrontacja z końcem własnej egzystencji wydaje się szczególnie trudna i znacząca zwłąszcza na ostatnim etapie rozwoju, kiedy ważna jest akceptacja siebie i integracja poprzednich etapów życia. Dlatego efekty badań mogą być ważne nie tylko w obszarze wiedzy, ale także planowania skutecznych interwencji podnoszących jakość życia człowieka. Cel. Celem artykułu jest analiza związków przyszłości, która wybiega poza doczesne życie, transcendentnej i transcendentalnej z perspektywą czasową w grupie osób starszych. Materiał i metoda. W badaniu wzięło udział 199 (84 kobiet, 115 mężczyzn), w wieku 58-84; średnia 65 lat. W celu pomiaru badanych zmiennych wykorzystano: Kwestionariusz Przyszłości Transcendentnej i Transcendentalnej PTTI, Inwentarz Perspektyw Czasowych Zimbardo ZTPI w wersji skróconej. Rezultaty. W niniejszym badaniu przyszłość transcendentna była negatywnie związana ze zrównoważoną perspektywą czasową, a jej predyktorem okazała się przeszłość pozytywna. Przyszłość transcendentalna nie wiązała się ze zrównoważoną perspektywą czasową, a jej predyktorami okazała się przeszłość pozytywna i negatywnie spostrzegana teraźniejszość (dodatnio fatalistyczna i ujemnie hedonistyczna). Analizy statystyczne ujawniły związki z wiekiem, wykształceniem i płcią. Wnioski. Wyniki badań wskazują, że osoby starsze w okresie późnej dorosłości mają bardziej złożony profil perspektyw czasowych. (Gerontol Pol 2023; 31; 205-211) doi: 10.53139/GP.20233136

Słowa kluczowe: przyszłość transcendentna, przyszłość transcendentalna, perspektywa czasowa, zrównoważona perspektywa czasowa, późna dorosłość

Introduction

In the old age, future becomes a controversial issue and, as there is less and less time left. The question is how do we study this part of time perspective? Qualitative research show that older persons experience their future at different levels: personal, intergenerational and metaphysical [1]. When thinking about the future they cross the timeframes of this life and reflect on the transcendent and transcendental future [2,3]. They look forward, beyond the temporal time perspective much more often than younger people and they "set goals and make plans" for after-death as often as goals for more distant future [3]. Future beyond temporality is connected with a far-reaching perspective, which leads to thinking more about values rather than specific projects. We also know that strong time perspective strengthens connections between distant goals and that what is happening in the close perspective [4]. Time horizon which goes beyond this life can influence the present functioning of individuals. This is important in the late adulthood when individuals try to integrate the previous stages, understand the meaning of their life and accept themselves as they undergo ego integrity vs despair crisis [5]. Studying the relationships between the transcendent and transcendental future, and time perspectives in the old age may contribute to planning effective, developmental interventions and improving functioning not only in this period of life.

The term 'time perspective' (TP) dates back to the first half of the 20th century and quickly gained the researchers' attention. A PC concept used frequently today is the concept by Zimbardo and Boyd [2], according to which time perspective is treated as partly unaware process of assigning personal and social experiences to certain timeframes in order to make them coherent and ordered. At present, time perspective can be describes as a state or a trait. State-TP is a momentary focus on one of the time horizons, whereas trait-TP refers to relatively stable characteristics of differences, combined with an attitude component [6]. The term future time perspective emerged later in psychology and resulted from noticing the importance of TP in the course of individual behaviors. Future time perspective (FTP) refers to viewing time as individual psychological phenomenon understood as acquired and rather stable sets of beliefs about the future [2, 4]. Balanced time perspective (BTP) understood as mental ability to shift flexibly between time orientations depending on task characteristics, demands, situational considerations and personal resources. Thus, it is the ability to adapt one's own perception of time to the present environmental and situational demands.

Such approach to time is considered the most adaptive because it is deprived of sole focus on a single time perspective [2]. Attempts to operationalize the most adaptive time perspective profile have shown that one of the most reliable methods of measuring it is deviation from the balanced time perspective DBTP indicator [7]. The balanced time perspective is associated with many psychological variables. A wide overview of the research suggests that DBTP is connected with well-being, mental health, personality, cognitive functioning, self-control, interpersonal relationships, biological traits as well as demographic variables such as gender and age [8].

The future perspective can be seen as more open, that is, extending beyond the individual the time frames of individual life. People are aware that they will die, which seems to be one of the most challenging life experiences. It triggers different ways of dealing with the fear of death. On the one hand, people escape from it, on the other hand, they can treat death as an escape [9]. The main concepts regarding transcendental thinking about the future were presented by van Beek & Kairys [10]. The future-oriented transcendental perspective has been described as the perspective which includes individual goals, expectations and beliefs related to time from death to eternity [2]. Researchers point to possible transcendental future goals like: reunion with the deceased loved, eternal life, reincarnation, the avoidance of eternal damnation, the elimination of current poverty, pain, suffering and shame [2]. Timoszyk-Tomczak and Bugajska have tried to determine the difference between the transcendental and the transcendent future. Transcendental future refers to planning what may happen after death and is usually linked with faith. Transcendent future may go beyond the personal existence, refer to the future of other and the world, holistic view on life and death, thus, it is treated as wider than transcendental future [3]. Transcendental thinking about the future is connected with religion and spirituality [9]. The importance and motivational potential of this time perspective, though not always empirically verified, have been noticed and emphasized by many researchers [2,10,11].

Aim

The study was aimed at identifying relationships between the transcendental and transcendent future and time perspective and the balanced time perspective in senior population.

It was assumed that transcendent future will be positively associated to positive past, hedonistic present and future. The transcendental future will be positively related to the positive past and negatively related to the hedonistic present (H1). The basis for the hypothesis are studies where transcendent future was positively correlated with the Past-Negative and Past-Positive, Present-Hedonistic and Future time orientation There are no correlations with the Future-Fatalistic perspective. There were no significant differences [3] between the transcendental perspective and time perspectives identified by Zimbardo & Boyd. However, other researchers suggest a relationship between the transcendental perspective and time perspectives [2].

It was assumed that transcendent future will be associated with the balanced time perspective, contrary to the transcendental future (H2). Meta-analyses by Stolarski et al. [8] suggest associations of DBTP with many significant variables.

Material and methods

The sample consisted of 199 persons: 84 women and 115 men, aged 58-84 (the average age was 65.27, standard deviation 5.447) The higher number of seniors had university degree (44%), then secondary education (24%), vocational education (14%), higher-technical degree (13%) and primary education (5%). Of the group, 35% lived in a city with population 200k or more, 34% in smaller towns between 20k and 200k residents and 31% lived in a village. The respondents were invited to participate in the study through snowball sampling. They received a link to the study and instructions. They filled in a demographic form by stating their age, gender, place of residence and education, and then they completed in the following order: short version of Zimbardo Time Perspective Inventory, Transcendent and Transcendental Time Perspective Inventory. The study presented is compliant with the Declaration of Helsinki and was approved by the Ethics Committee of the Institute of Psychology in the University of Szczecin (KB 19/2022).

In order to measure transcendent and transcendental future, the Transcendent and Transcendental Time Perspective Inventory TTTPI [3] was used. It is a tool to investigate future that extends beyond the individual's death and personal future. The questionnaire has two subscales: transcendental future and transcendent future. Transcendental future refers to images of time after death, mental traveling to infinity and includes "planning" things such as a meeting with relatives or salvation. It is connected with believing in existence after death. Transcendent future is a holistic vision of life and death, devoid of the strong commitment of the "I." Along with the personal, it includes the generational and metaphysical aspect. The reliability factors for both scales were satis-

factory: transcendental future $\alpha = .88$, transcendent future $\alpha = .81$.

Time perspectives were measured using short version of the Zimbardo Time Perspective Inventory [12]. The original version consists of 56 items. For the purpose of this study, a 15-item version was used. The respondents evaluated statements in a 5-point Likert scale from 1 "very much not true" to 5 "very true". The tool allows to measure five time perspectives: two past ones (positive and negative), two present ones (hedonistic and fatalistic) and a future one. The reliability factors for each subscale are satisfactory: Past-Negative $\alpha = .74$, Past-Positive $\alpha = .51$, Present-Hedonistic $\alpha = .63$, Present-Fatalistic $\alpha = .56$, Future $\alpha = .71$. Additionally, the balanced time perspective evaluation method was used, that is, a constant indicator that describes the match between individual perception of time and optimal temporal. The indicator is calculated as the root of sum of squared deviations of individual's scores from the optimal score on each scale. Compared to other indicators, it has a higher predictive value [7]. The lower DBTP, the higher level of the balanced time perspective.

Results

Table I presents the descriptive results regarding the variables in question. The mean indicators, standard deviations and kurtoses were verified assuming normality of the variables. The means obtained for the time perspectives indicate a close-to-balanced profile; the results in the scales: Past-Positive, Preset-Hedonistic and Future are higher than the means obtained for Present-Fatalistic and Future. The mean DBTI indicator confirms that the respondents' profile is close to optimal. The mean transcendent future is higher than transcendental. Skewness and kurtosis are lower than ±2, so it can be assumed that they are within the acceptable limits of normal distribution [13].

Table II presents correlation analyses which partially replicate the results of previous research [3]. This may be explained with different proportions of female and male respondents in the groups compared. In contrast to the previous studies, but according to the hypothesis, transcendental future correlates weakly or moderately positive with Past-Positive and Fatalistic-Present. There is a trend towards statistical significance for transcendental future and Past-Negative, as well as weak negative correlation with Present-Hedonistic. Transcendental future is not linked with balanced time perspective. The transcendent future correlation profile is also different; weak positive correlations with Past-Positive and Present-Fatalistic are observable. Also, a trend towards po-

Table I. Descriptive statistics of investigated variables

variable	min	max	M	sd	skewness	kurtoza
TFRLA	1	5	3.116	1.212	210	-1.261
TFRA	1	5	3.578	.763	301	349
PP	1	5	3.598	.718	496	.434
PN	1	5	3.167	.971	141	755
HP	1	5	3.687	.780	298	602
FP	1	5	2.822	1.078	.300	965
Р	1	5	3.928	.841	.475	195
DBTP	0.75	5.29	2.73	.873	.097	612

¹ Abbreviations: TFRLA transcendental future, TFRA transcendent future, PP past positive, PN past negative, HP hedonistic present, FP fatalistic present, F future, DBTP balanced time

Table II. Correlations between transcendent future, transcendental future, time perspective, age and education (N=199)

variable	1	2	3	4	5	6	7	8	9	10	11	12	13
TFRLA													
TFRA	.615***												
PP	.346***	.317***											
PN	.123	.048	.134										
HP	395***	069	.065	078									
FP	.448***	.143*	.234**	.233**	377***								
F	.051	.132	.196**	123	.028	079							
DBTP	010	.206**	142*	.595***	381***	.695***	244**						
Α	.091	.022	.099	.283***	212**	.228**	026	.271***	.213**	055	190**	119	
E¹	370***	138	209**	084	.384**	551***	.077	394***	277***	. 530**	.499***	.192**2	133

¹ Abbreviations: TFRLA transcendental future, TFRA transcendent future, PP past positive, PN past negative, HP hedonistic present, FP fatalistic present, F future, DBTP balanced time perspective, C conservatism, ST self-transcendence, LO lower for openness, SE self-enhancement, A age, E education ² *p <0.05; **p <0.01; ***p <0.001

sitive correlation with the Future orientation can be observed. There is a weak positive link with balanced time perspective, which means that the higher transcendent perspective, the less balanced time perspective profile, which is inconsistent with the hypothesis.

As time perspectives turned out to be significant for transcendental future, to fit the model, a regression analysis was conducted using backward elimination. This method assumes including all variables in the model, and then eliminating them gradually to optimize the model.

In the first regression analysis, transcendental future was the dependent variable and time perspectives were predictors. The best matching model was significant F (3.195) =34.43, p <0.000 and had three predictors: Future-Positive β = 0.31, p <0.000, Present-Hedonistic β = -0,32, p <0.000 and Present-Fatalistic β = 0.26, p <0.000. The model explained the total of 34% of the dependent variable variance. Using the same method, the regression analysis was also conducted for transcendent future as a dependent variable. The model obtained was significant F (1.197) = 21.96, p <0.000 and had one predictor – Past-Positive β = 0.32, p <0.000 which explained 10% of variance of the dependent variable.

The results have led to several conclusions. The transcendental perspective is not connected with balanced time perspective, and its predictors are Past-Positive and Present-Fatalistic and, negatively, Present-Hedonistic. In the case of transcendent future, there are statistically significant relationships with balanced time perspective, however, the most important predictor is Past-Positive. It means that both transcendental and transcendent future are linked to Positive-Past but transcendental future is linked to negative attitude towards the Present. Transcendental future is not linked with the balanced time perspective, whereas transcendent future is.

The differences in the levels of indicators by gender were also investigated and for this purpose, independent samples t-test was performed (Table III).

The results obtained show significant differences between women and men in Present-Hedonistic and Present-Fatalistic scales. It means that women have higher mean in Present-Hedonistic and lower mean in Present-Fatalistic than men. There are some trends to significance in case of transcendental future and balanced time perspective. Female respondents obtain higher results than male respondents in terms of means for transcendental future and balanced time perspective, what could it mean more balanced profile of time perspectives.

Table III. T-test for female and male samples (84F and 115M; N199, df 197)

variable	Sex	M	sd	Т	р
TFRLA	F	2.930	1.058	-1.864	.064
	M	3.252	1.300		
TFRA	F	3.513	.855	-1.024	.307
	M	3.625	.687		
PP	F	3.559	.758	645	.520
	M	3.626	.688		
PN	F	3.202	.980	.432	.666
	M	3.142	.968		
HP	F	3.921	.718	3.729***	.000
	M	3.516	.783		
FP	F	2.607	.926	-2.437*	.016
	M	2.979	1.156		
F	F	4.032	.837	1.493	.137
	M	3.852	.839		
DBTP1	F	2.601	.829	-1.763	.079
	M	2.812	.897		

¹ Abbreviations: TFRLA transcendental future, TFRA transcendent future, PP past positive, PN past negative, HP hedonistic present, FP fatalistic present, F future, DBTP balanced time perspective

Discussion

Correlations between transcendental, transcendent future and time perspective, balanced time perspective were subject to empirical analysis. The hypotheses formulated have been only partially verified. As for links between transcendent future and time perspectives, Past-Positive turned out to be a predictor, while for transcendental future, it was not only Past-Positive but also negatively perceived present (negatively the Hedonistic-Present and positively the Fatalistic-Present).

These results differ from the initial assumptions are not coherent with the previous results [3]. It may be due to several reasons. The correlations analyses revealed some interesting though weak correlations with age, strong correlations with education, and differences between genders. The results of the study indicate that seniors in their late adulthood have less balanced time perspective profile or, more precisely, higher Past-Negative, lower Present-Hedonistic and higher Future-Fatalistic indicators. Such outcomes are confirmed by a few studies that point out to the relationship between balanced time perspective and age [8].

As they mature and move forward with their existence, people become more aware of time and realize that it is running out [14]. It means confrontation with one's own death, that may cause anxiety and increase the stress level. When time is perceived as open-ended, knowledge-related are more important, whereas when it is perceived as running out, emotional goals become the priority [15]. This may be explained by the lack of re-

lationships between transcendental and transcendent past (trend only), and future. The data regarding correlations of time perspectives (measured using the expanded ZTPI scale) and stress suggest that the main stress predictor is negative past while positive past can reduce it [16]. Constructive processing of one's own past, that is, remembering the positive and redefining the negative experiences, supports positive ageing [17,18]. This may mean the need for a research based on DBTP-E (Expanded, balanced time perspective considering positive and negative future) but also verifying to what extent transcendental and transcendent future have their areas of "hopes" and "threats", and what are the correlations between these perspectives, fear of death and depression.

Attitude towards present time perspectives is an interesting result of the study. Previous data suggest that with age, people focus on the present rather than on the past or the future, and this leads to an emphasis on the intuitive and subjective [19]. The results obtained for the whole sample show that individuals with higher results in the transcendental future scale at the same time scored higher in Present-Fatalistic and lower in Present--Hedonistic scale. As for differences between genders, it is more relevant for men. Comparisons of the indicators and gender suggest that women obtain higher results in Present-Hedonistic and lower in Present-Fatalistic orientation. At the same time, there are some trends towards significance for transcendental future (lower index for women) and balanced time perspective (more balanced for women) indicators. This could suggest that men who are inclined to fatalism have more developed the trans-

² *p <0,05; **p <0,01; ***p <0,001

cendental future perspective. Perhaps, they cope less well with time running out, focusing on the fatalistic present. This would be connected with the explanation based on the socioemotional selectivity theory [20]. The theory assumes that as we have less and less time left, we optimize our goals, giving priority to emotional goals, for example those focusing on relationships with the loved ones. According to gender roles, it can be more natural for women and explain the results.

There were also highly significant correlations with education. Persons with a university degree show low transcendental future indicators and more balanced time perspective profile but with some negative correlations with positive past, positive correlations with hedonistic present and low positive correlations with fatalistic present. These dependencies may suggest that both transcendental, transcendent future and balanced time perspective are linked with age, education and gender. These variables can be important moderators of the relationships studied.

Perception of one's own post-death perspective, or transcendent and transcendental future, is an important aspect of coping with existential problems like fear of death or the sense of meaning in life. Therefore, studies aimed at understanding the connections between the transcendent perspective and other perception-related variables are important for the development of thinking about individual functioning. This study should be further expanded and more detailed analysis of differences in perception of transcendent and transcendental future should be performed. Also, functional conditions of the variables should be determined to improve the quality of human life.

The results obtained are meaningful for expanding knowledge about the links between time perspectives, however they have some limitations. First, the majority of the sample are men, therefore it is worth to remain critical when interpreting the results regarding gender-based differences. Second, the study was conducted using self-descriptive methods, what may lead to errors caused by the need of social acceptance and inability to describe one's own mental processes adequately. Despite these limitations, the research shows new aspects of correlations between the transcendent and transcendental orientations, and time perspective in late adulthood.

Conclusions

The study into relationships between the future that extends the boundaries of death and time perspective, conducted among seniors, show some interesting correlations. Past-Positive is the predictor of transcendent future, whereas for transcendental future it is Past-Positive as well as Present-Fatalistic (positively) and Present-Hedonistic (negatively). The results may indicate that the correlations described above are connected with gender and educational background of the respondents. This provides an interesting base for further studies and further identification of the nature of time perspective, together with transcendent and transcendental future.

Conflict of interest None

References

- 1. Nilsson M, Sarvimäki A, Ekman SL. The meaning of the future for the oldest old. The International Journal of Aging and Human Development. 2003;56(4):345-64.
- 2. Zimbardo P, Boyd J. The time paradox: The new psychology of time that will change your life. 2008; Simon and Schuster.
- 3. Timoszyk-Tomczak C, Bugajska B. Transcendent and transcendental time perspective inventory. Frontiers in Psychology. 2019:2677.
- 4. Husman J, Shell DF. Beliefs and perceptions about the future: A measurement of future time perspective. Learning and individual differences. 2008;18(2):166-75.
- 5. Erikson EH. Sociedad y adolescencia. 2004; Siglo xxi.
- Stolarski M, Fieulaine N, Zimbardo PG. Putting time in a wider perspective: The past, the present and the future
 of time perspective theory. 2008.
- 7. Zhang JW, Howell RT, Stolarski M. Comparing three methods to measure a balanced time perspective: The relationship between a balanced time perspective and subjective well-being. Journal of Happiness Studies. 2013;14(1):169-84.

- Stolarski M, Zajenkowski M, Jankowski KS, Szymaniak K. Deviation from the balanced time perspective: A systematic review of empirical relationships with psychological variables. Personality and Individual Differences. 2020;156:109772.
- Beek WV, Chistopolskaya K. Friend or foe? Escape from death, or death as an escape? In Time Perspective Theory; Review, Research and Application. Springer, Cham. 2015:471-80.
- 10. Beek WV, Kairys A. Time perspective and transcendental future thinking. In Time perspective theory; Review, research and application (pp. 73-86). Springer, Cham. 2015:73-86.
- 11. Barrera-Hernández LF, Corral-Verdugo V, Fraijo-Sing BS. Transcendental future as a determinant of sustainable behavior and the perception of happiness. CES Psicología. 2021;14(1):2-15.
- 12. Cybis N, Rowiński T, Przepiorka A. Development of the Polish version of Zimbardo time perspective inventory. In Ist International Conference on Time Perspective, Coimbra, Portugal. 2012.
- 13. Fidell LS, Tabachnick BG. Preparatory data analysis. Handbook of psychology: Research methods in psychology. 2003;2:115-41.
- 14. Carstensen LL. The influence of a sense of time on human development. Science. 2006;312:1913-5.
- 15. Charles ST, Carstensen LL. Social and emotional aging. Annual Review of Psychology. 2010;61:383-409.
- 16. Rönnlund M, Lström E, Adolfsson R, Carelli MG. Perceived stress in adults aged 65 to 90: Relations to facets of time perspective and COMT Val158Met polymorphism. Frontiers in Psychology. 2018;9:378.
- 17. Westerhof GJ, Bohlmeijer E, Webster JD. Reminiscence and mental health: A review of recent progress in theory, research and interventions. Ageing & Society. 2010;30(4):697-721.
- 18. Westerhof GJ, Bohlmeijer ET. Celebrating fifty years of research and applications in reminiscence and life review: State of the art and new directions. Journal of Aging Studies. 2014;29:107-14.
- 19. Carstensen LL, Isaacowitz DM, Charles ST. Taking time seriously: A theory of socioemotional selectivity. American Psychologist. 1999;54(3):165.
- 20. Lang FR, Carstensen LL. Time counts: future time perspective, goals, and social relationships. Psychology and Aging. 2002;17(1):125.