

Agnieszka Kozerska, PhD, <https://orcid.org/0000-0001-6375-6495>
Faculty of Social Sciences
Jan Długosz University
in Częstochowa

Predictors of the existential dimension of gerotranscendence in women. Intergenerational differences

Predyktory egzystencjalnego wymiaru gerotranscendencji u kobiet. Różnice międzypokoleniowe¹

<https://doi.org/10.34766/fetr.v48i4.931>

Abstract: The purpose of study carried out in the context of the analysis of learning in late adulthood is: 1. to verify if older women (60+) differ from younger women in terms of the level of the existential dimension of gerotranscendence. 2. To determine in which circumstances existential dimension of gerotranscendence develops in each of the research groups. Method: The research was carried out in Poland. The study included 253 women aged between 20 to 89. Hierarchical regression analysis was used in the research taking into account two models. The research sample was divided to two groups: (1.) Younger group - aged between 20 to 49, and (2.) Older group - aged between 60 to 89. In the first stage, for each compared group separately, the model presenting the connection between existential dimension of gerotranscendence and the set of variables considered in the literature to be gerotranscendence correlates were analysed: Health condition and engagement in life, The feeling of sense in life, Wisdom, Recent experiencing a difficult life situation, The feeling of loneliness. Next, it was verified to what extent religious activity undertaken by women subject to the research related with creating a relationship with God improves parameters of model created in the first stage.

Results: The level of existential dimension of transcendence is higher in older women. In the group of both younger and older women the level of dependent variable increases in persons who actively look for the sense in life and are characterised by a high level of emphatic wisdom. A significant predictor in both compared groups is activity related to the search for God together with other people. In the group of younger women, an additional predictor is also experiencing difficult life situations within the past 6 months.

Conclusion: The obtained models show that in the process of development towards the existential dimension of gerotranscendence relations with other people are essential for women who actively search for the sense in life. It refers in particular to relations with others in the context of religious engagement.

Keywords: existential dimension of gerotranscendence; cosmic gerotranscendence; search for meaning in life; spirituality, wisdom

Abstrakt: Celem badania, prowadzonego w kontekście rozważań nad uczeniem się w późnej dorosłości, jest 1. Sprawdzenie, czy starsze kobiety (60+) różnią się poziomem egzystencjalnego wymiaru gerotranscendencji od kobiet młodszych. 2. Ustalenie, w jakich okolicznościach następuje wzrost egzystencjalnego wymiaru gerotranscendencji w każdej z badanych grup. Metoda: Badania prowadzono na terenie Polski. Uczestnicy: 253 kobiety w wieku od 20 do 89 lat. W analizach

¹ Artykuł w języku polskim dostępny jest na stronie:
<https://www.stowarzyszeniefidesetratio.pl/Presentations0/2021-4Koze2.pdf>

posłużono się metodą hierarchicznej analizy regresji wielowymiarowej, biorąc pod uwagę dwa modele. Próbę badawczą podzielono na dwie grupy: (1.) Grupa młodsza – w wieku od 20 do 49 lat, oraz (2.) Grupa starsza: od 60 do 89 lat. W pierwszym etapie analizowano, dla każdej z porównywanych grup oddzielnie, model przedstawiający związek pomiędzy egzystencjalnym wymiarem gerotranscendencji a zestawem zmiennych uznanych w literaturze za korelaty gerotranscendencji: Stan zdrowia i zaangażowanie w życie, Poczucie sensu w życiu, Mądrość, Doświadczenie trudnej sytuacji życiowej w ostatnim czasie, Poczucie samotności. Następnie sprawdzano, w jakim stopniu podejmowana przez kobiety aktywność religijna, aktywność związana z budowaniem relacji z Bogiem poprawia parametry zbudowanego w pierwszym etapie modelu. Wyniki: Poziom egzystencjalnego wymiaru transcendencji jest wyższy w przypadku starszych kobiet. Z badań wynika, że zarówno w grupie młodszych jak i starszych kobiet, poziom zmiennej zależnej wzrasta u osób aktywnie poszukujących sensu w życiu, charakteryzujących się wysokim poziomem mądrości empatycznej. Mądrość empatyczna jest tutaj rozumiana jako zdolność do refleksyjnego analizowania sytuacji innych osób z różnych perspektyw, i co za tym idzie - zdolność do rozumienia owych sytuacji. Istotnym predyktorem w obu porównywanych grupach jest aktywność związana z poszukiwaniem Boga wspólnie z innymi ludźmi. W grupie młodszych kobiet dodatkowym predyktorem jest jeszcze doświadczenie trudnych sytuacji życiowych w ciągu ostatnich 6 miesięcy. Wnioski: Uzyskane modele pokazują, że w procesie rozwoju w kierunku egzystencjalnego wymiaru gerotranscendencji, u kobiet aktywnie poszukujących sensu w życiu, istotne znaczenie mają relacje z innymi ludźmi. W szczególności, chodzi tu o relacje z innymi w kontekście zaangażowania religijnego.

Słowa kluczowe: duchowość; egzystencjalny wymiar gerotranscendencji; kosmiczna gerotranscendencja; mądrość; poszukiwanie sensu w życiu

Introduction

The theory of gerotranscendence is one of the many attempts in gerontological literature to explain the process of human adaptation to old age. Lars Tornstam (2011), who is the author of the theory, argues that the aim is to have a different perspective on development in late adulthood. Gerotranscendence is associated with an individual gaining a new perspective of perceiving their own lives and the surrounding world (Tornstam, 2011; Brudek, 2016, 2017; Muszyński, 2016, Timoszyk-Tomczak, 2017, Wortman & Lewis, 2021). According to Tornstam, development towards gerotranscendence is associated with a growing sense of unity with the entire universe, weakened fear of death, and a decline in interest in material things. Changes revealed as part of this development concern three dimensions: 1. Existential dimension (called by the author *the cosmic dimension*) - changes at the existential level, 2. Self dimension - changes in the way we perceive our Self, and 3. Social and personal relationships dimension - changes in interpersonal ties.

According to Tornstam's concept (2011), changes resulting from the process of gerotranscendence are accompanied by a development towards wisdom, which can be described as follows: "Looking back, the individual notices how the focus on one's own needs has gradually been transcended and replaced with a focus on the needs of others – in particular the needs of children and grandchildren. Egoism has been overshadowed by altruism." (Ibid, p. 172) and "The individual experiences a new awareness of the fact that he

or she is not the center of the universe" (Ibid, p. 171). The above understanding of wisdom is close to the definition developed by Ardel, who understands wisdom as a combination of cognitive, reflective, and affective personality characteristics (Ardelt, 2003, 2019).

The focus in the article is on one of the dimensions of gerotranscendence only - existential dimension.

1. Existential dimension of gerotranscendence

Existential (cosmic) dimension relates to such signs of development towards gerotranscendence as: redefining the way of perceiving time, space and objects, redefining the way of perceiving life and death, weakening the fear of death, feeling of cosmic unity with the entire universe (Tornstam, 2011). As changes take place, the distance between the presence and the past becomes blurred. A man returns to past periods of their own life and reinterprets (from the perspective of the person they are now) events and situations. Past events are viewed through the prism of all life experiences, which is why the behaviour of other people from the past is now often understood in a completely different way than before. This, in turn, can lead to reconciliation, forgiveness. The essence of gerotranscendence process is opening up to the reality that is beyond material and rational one. This, in turn, as noted by Straś-Romanowska (2019), helps to recognise the meaning of life events in a new semantic context.

Studying the subject of spirituality and transcendence in the period of late adulthood, Kunz (2020) concludes that gerotranscendence is a way of life that can be compared to some extent to Christian piety. On the other hand, Braam et al. (2006) point out the relationship between spirituality and existential (cosmic) dimension of gerotranscendence. They argue that the meaning of the concept of existential (gero)transcendence may to some extent coincide with the concept of spirituality. They show the similarity of this concept with one of the three aspects of Ralph Piedmont's Scale of Spiritual Transcendence, referred to as *universality*. In Polish studies, the term *spiritual gerotranscendence* is used to describe changes related to gerotranscendence in existential (cosmic) dimension (Brudek 2018). The term was adopted by the Polish research team after consultation with the author of the theory as more appropriate in the context of Polish culture derived from the Judeo-Christian tradition (ibid., p. 97). However, it is certain that "spirituality" and "spiritual gerotranscendence" are different concepts. Their concepts do not fully coincide. Here, the results of the study carried out by Stevens (2017) can be recalled. Based on qualitative interviews with elderly people, the author states that Tornstam's model did not fully capture the experiences of respondents who deepened their relationship with God. Therefore, the model turned out to be insufficient. However, according to Stevens, it could be an important step towards developing a more adequate model of spirituality in late adulthood in the future.

2. Development towards gerotranscendence - educational aspects

From the perspective of studies on learning in late adulthood, it is crucial to emphasise a personal change in the theory of gerotranscendence. It is also very important to underline the emergence of new development opportunities in elderly people - understood not only as a continuation of the state of middle adulthood. Adopting a spiritual perspective in later adulthood may fulfil an adaptive function at the end of life, may create meaning, and may contribute to the strengthening of human subjectivity and integration of personality. From the perspective of studies on education of elderly people, attention should be paid to potential connected with the use of the assumptions of the gerotranscendence theory to develop methods of supporting elderly people in various types of institutions providing care for seniors, or to promote mental and spiritual health among elderly people. An illustration of study that presents the possibilities in this area is experiment carried out by the team: Wang, Lin and Hsieh (2011). The results of this study suggest that supporting seniors with methods that use the theory of gerotranscendence has an impact on the indicators of their mental health. Life satisfaction experienced by the participants of the experiment improved significantly, the symptoms of depression decreased, and the level of gerotranscendence increased. Assuming that life satisfaction increases with the increase in gerotranscendence, some authors develop multidimensional programmes that support seniors in this direction (Chen, Moyle & Jones, 2019). The literature on the subject emphasises the special importance of the theory of gerotranscendence in the process of supporting the oldest seniors (Gondo et al., 2013). It is pointed out that support programmes based on Tornstam's theory can be successfully used even for people experiencing a significant cognitive decline. Problems faced by the oldest (e.g. the necessity to use the help of others daily, the prospect of a nearby death) are easier to overcome by adopting the optics of spirituality than by using methods based on logical or strategic thinking (Gondo et al., 2013). Experimental studies carried out by the team of Lin, Wang and Wang (2016) revealed the need for continuous training of caregivers working in long-term care facilities in the field of gerotranscendence.

3. Determinants of gerotranscendence

Determinants of gerotranscendence have been the subject of interest for representatives of social sciences for many years. Variables positively correlated with gerotranscendence turned out to be, for example, age, gender, social support, life satisfaction, negative life events, or a sense of the meaning of life. A review of studies on this subject carried out till 2015 can be found, for example, in the publications of Brudek (2018), Timoszyk-Tomczak (2017). The example of a report from recent studies on the relationship

between gerotranscendence and the quality of life may be an article that shows the effect of gerotranscendence on the mental health of elderly people living in Japan who experience reduced physical fitness (Masui et al. 2016). Other data collected from elderly people living in Japan show that the level of gerotranscendence is statistically significantly correlated with the level of life quality measured with the Geriatric Oral Health Assessment Index (Mihara et al., 2018). Qualitative interviews on elderly people in Iran show that gerotranscendence is portrayed by them as a process of coping with age-related changes. This process is described as occurring simultaneously with active ageing (Dehkordi et al., 2020). On the other hand, studies carried out in China have confirmed the impact of Tai Chi exercises on the development of gerotranscendence (Duan et al., 2016). Studies carried out in Russia (Strizhitskaya, 2020) revealed a relationship between psychological well-being, self-acceptance, and self-actualisation. Higher scores on the gerotranscendence scale were obtained by people who were interested in active participation in the life of the community they live in. Studies carried out in Singapore on the members of the Methodist Church (Chia, 2019) show that being religious and gerotranscendence play a parallel role in supporting elderly people in the process of ageing. It has been noticed, *inter alia*, that some forms of being religious, such as "superficial" religiosity, may hinder development towards gerotranscendence. Studies carried out in Poland on the relationship between gerotranscendence and styles of sense of humour show that gerotranscendence is a factor that protects individuals against the use of aggressive humour, while predisposing them to use of humour that expresses self-acceptance and strengthens interpersonal relations (Brudek et al., 2021).

4. Correlates of existential dimension of gerotranscendence

Based on empirical studies (2011), Tornstam showed that the level of existential (cosmic) dimension of gerotranscendence increases with the age of adults. However, in men over 75 the level of this variable begins to decline, whilst in women over 75, the correlation is positive with age. Elderly people, compared to the young ones, perceive the manifestations of existential (cosmic) dimension of gerotranscendence as less unusual (Buchanan et al., 2016). The factor accelerating the development towards existential (cosmic) dimension of gerotranscendence is experiencing difficult situations and life crises. Studies in this area by Read et al (2014) showed that a greater number of negative life events other than the death of loved ones were associated with a higher level of existential (cosmic) dimension of gerotranscendence, whilst the absence of such experiences coexisted with a low level of this dimension.

Studies carried out in Europe (the Netherlands) also provide evidence of a relationship between existential dimension of gerotranscendence and the sense of meaning

in life (Braam et al., 2006). This relationship is more evident in widows aged over 75, less engaged in religious activity. According to Braam et al. (2006), spiritual gerotranscendence seems to be an important sphere in the life of older widowed women.

Being religious is another variable that can be associated with existential dimension of gerotranscendence. It can be assumed that greater concentration on spiritual and existential aspects of life favours greater involvement in religious matters. In Dutch studies (1998), Roman Catholics had higher scores for spiritual (cosmic) gerotranscendence than non-church members. In studies carried out in the Netherlands (Braam et al., 2016), a higher level of existential dimension of gerotranscendence was connected with age, the importance of prayer, and membership in the Roman Catholic Church. Moreover, people with a higher level of spiritual gerotranscendence had a higher level of cognitive abilities. According to the authors, lower cognitive abilities may hinder development towards spiritual gerotranscendence.

5. Purpose of the study

In researches presented in this article, the attention was drawn to a selected correlates of existential dimension of gerotranscendence in women (spiritual gerotranscendence). In particular, the connection between religious engagement and existential dimension of gerotranscendence was analysed together with selected conditionings of such relationship. Two categories were taken into account: 1. The individual activity aimed at learning how to build own relationships with God, 2. Activity has taken together with other people (close people from the family, members of a religious community, etc.) directed towards building the relationship with God.

The following research questions were posed:

1. Do women in their old adulthood differ from younger women in terms of the level of spiritual transcendence?
2. What are the circumstances that are in favour of the high level of spiritual gerotranscendence in young and older women? Are there intergenerational differences in this regard?
3. Is religious activity directed to building relations with God related to the level of spiritual gerotranscendence in women? If so, in which circumstances can this relation be seen? Are there intergenerational differences in this regard?

6. Method

The research sample were 253 women aged between 20 to 89. The research was situated in a Christian cultural context, in which Roman-Catholic Church is a dominant one.

All research subjects live in Poland (north part of the Silesian Province). The research was carried out in 2020. The research sample was divided to two groups: (1.) Younger group - aged between 20 to 49, N=127 and (2.) Older group - aged between 60 to 89, N=126. Age of research subjects: M=47 age, s=23.4. On the other hand, in the younger group, the values of descriptive statistics for the age are: M=24.4, s= 6.7; in the older group: M=69.2 , s=6.9. From among the respondents, 125 lives in the city, 126 lives in the village, 2 persons did not provide information about their place of residency.

In the first stage, for each compared group separately, the model presenting the connection between spiritual gerotranscendence and the set of variables considered in the literature to be gerotranscendence correlates were analysed. *Health condition and engagement in life, The feeling of sense in life, Wisdom, Recent experiencing a difficult life situation, The feeling of loneliness.* Next, it was verified to what extent religious activity undertaken by women subject to the research related with creating a relationship with God improves parameters of model created in the first stage.

7. Measures

a. Spiritual gerotranscendence

To evaluate spiritual gerotranscendence, the Gerotranscendence Scale Type 2 (GST-2) was used created by Tornstam (2005) in Polish adaptation by P. Brudek (2015). 5 items which describe existential, spiritual dimension (called by Tornstam *the cosmic dimension*) were considered in the analyses. The examples of items: *I feel a strong connection with earlier generations; I feel that I am a part of everything alive, Sometimes I feel like I live in the past and present simultaneously.* On the basis of the obtained data, the reliability of the scale evaluated with the use of Cronbach's alpha coefficient is 0,76.

b. Successful Ageing (SA) status

The tool developed by the author of this article is intended for the evaluation of the level of meeting the criteria of successful ageing created by Rowe and Kahn (1998). It is composed of 9 statements. Individuals evaluated on a scale from 1 to 7 assess the level a given statement refers to their situation. The analysis concerned the fulfilment of the criteria by persons subjected to the research. 1. Low risk of disease and disability (exemplary item: *Compared to other people my age, my health condition is better*), 2. Active engagement in life (exemplary item: *I maintain social contacts with many persons*), 3. Maintaining good physical and mental condition (*I am in good physical and mental condition.*) The reliability of the scale evaluated with the use of Cronbach's alpha coefficient is 0.75.

c. Recent experiencing a difficult life situation

The tool developed by the author of this article.

It was assumed that the respondent has recently experienced a difficult life situation in the event they agreed with at least of the questions concerning event from the past few month on such subjects as: 1. Someone from closest family had serious health problems, 2. The respondent had serious health problems, 3. A close person for the respondent died, 4. The responded faced serious problems in their life.

d. Three-Dimensional Wisdom Scale

In the research Polish adaptation of the Three-Dimensional Wisdom Scale by Monika Ardelt was used (Studen et al., 2016). The scale is composed of 39 items, For the research, a 4-factor version of the authors of Polish adaptation was assumed.

Based on the work by Clayton and Birren (1980), Ardelt (2003) defines wisdom as a complex set of features that create the component *Cognitive, Affective, Reflective*. All three dimensions are essential for the presence of wisdom. *The cognitive* dimension refers to the understanding of phenomena and events. It covers, amongst other, knowledge on positive and negative aspects of a human nature. The cognitive dimension is directly dependant on the Reflective dimension. A deep understanding is possible thanks to reflective thinking, analysis of phenomena from various perspectives. On the other hand, *Affective* dimensions assume the presence of positive emotions and behaviours towards other people. Empathy and sympathy are essential here. All three dimensions are a condition precedent for the presence of wisdom. Researches carried out in Poland with the use of a Polish adaptation of a 3-dimentional wisdom scale (Studen et al., 2016) suggest additionally a division of the *Reflective* dimension into two independent factors - *Self-conscious* and *Empathic*. The example of an item of a self-conscious dimension: *I either get very angry or depressed if things go wrong*. The examples of items of an empathic dimension: *I try to look at everybody's side of a disagreement before I make a decision, Before criticizing somebody, I try to imagine how I would feel if I were in their place, I always try to look at all sides of a problem*. Therefore, empathic dimension, as making the Reflective dimension more detail, refers to the ability of deep understanding of other people thanks to analysing their situation from various perspectives.

e. SWLS - Satisfaction with Life Scale

Test authors: E. Diener, R. A. Emmons, R. J. Larson, and S. Griffin (1985). Polish adaptation author: Zygryd Juczyński (2011).

The scale is used to evaluate our satisfaction with life-based on a comparison of our situation with standards we determined. The scale is composed on 5 statements. The subject assesses what is the level of reference of each statement to their life. The result of the measurement is the coefficient of satisfaction with life. On the basis of the obtained data, the reliability of the scale evaluated with the use of Cronbach's alpha coefficient is 0,86.

f. Meaning in Life (Steger et al. 2006)

In research, the Polish version of the Meaning in Questionnaire MLQ (Kossakowska et al., 2013) was used. MLQ is composed of 10 questions to which the responses can be given in a 7-point Likert scale. The questionnaire is composed of two sub-scales: the presence of sense in life (Presence, MLQ-P) and search for the sense (Search, MLQ-S). In the perspective of the present time, the MLQ-P sub-scale measures a declared, obtained sense in life. In the perspective of the future, the MLQ-P sub-scale measures the need for search and constant assigning of sense and purpose in life by each person. The reliability of the MLQ scale evaluated with the use of Cronbach's alpha coefficient is 0.87.

g. Individual activity aimed at learning how to build own relationships with God

The tool developed by the author of this article.

The scale is composed of 3 statements. The respondent is asked to evaluate on the scale from 1 to 7 the level a given statement refers to their situation from past 6 months: 1. *I tried to find the presence of God in my every day life*, 2. *I often prayed or spent my time meditating*, 3. *I turned to God in difficult moments in my life*. The reliability of the scale evaluated with the use of Cronbach's alpha coefficient is 0.93.

h. Learning how to build good relationships with God together with other people

The tool developed by the author of this article.

The scale is composed of 3 statements. The respondent is asked to evaluate on the scale from 1 to 7 the level a given statement refers to their situation from past 6 months: 1 *Together with other people I undertook actions to do goods*, 2. *I engaged in actions for religious communities*, 3. *I talked to other people about matters connected with faith in God* . The reliability of the scale evaluated with the use of Cronbach's alpha coefficient is 0.74.

i. The scale for the evaluation of the feeling of loneliness - De Jong Gierveld (2006)

Polish adaptation: P. Grygiel, G. Humenny, S. Rębisz, P. Świtaj, and J. Sikorska (2013), De Jong Gierveld et al. (2006).

The tool is composed of 11 statements, in which there are 6 negative sentences referring to the lack of satisfaction with social contact, and 5 statements to evaluate satisfaction with interpersonal relationships (positive statements). The higher total score of the respondent, the higher the feeling of loneliness is. The tool reliability according to the Cronbach's alpha coefficient is 0.90.

8. Hypothesis

When proceeding with the research, the following hypotheses were developed:

- 1) Older women present higher level of gerotranscendence in existential dimension compared to younger women.
- 2) The regression model composed of such predictors as: *the SA level, meaning in life, empathic wisdom, recent experiencing a difficult life situation, the feeling of loneliness* statistically significantly explains the variability of dependent variable which is *spiritual gerotranscendence*, both in the group of younger and older women.
- 3) Enriching the above model with independent variables 1. *Individual learning how to build own relationships with God*; and 2. *Learning how to build a good relationship with God together with other people* will essentially statistically improve the level of the variability of the dependent variable (spiritual gerotranscendence) explained by the model both in the group of older and younger women.

9. Results

All analyses carried out for the needs of this article were prepared in Statistica 13.3 software.

Descriptive statistics for spiritual gerotranscendence in the group of younger women adopt the following values: $M=15.3$, $s=5.9$. In the group of older women $M=16.9$, $s=5.1$. The difference is statistically significant ($F=5.04$; $p=0.03$). This way, the hypothesis 1 has been confirmed.

Table 1. presents r Pearson correlation between the level of spiritual gerotranscendence and the selected variables in the group of younger and older women. All statistically significant factors are positive, which means that the higher the level of the analyzed variables, the higher is the level of spiritual gerotranscendence in the respondents. Variables that are strongest connected with spiritual gerotranscendence, both in the group of young and older women, turned to be variables concerning the engagement in religious activity connected with building the relationship with God (individually or together with other people) and meaning in life (both the Presence of sense in life and the Search for sense in life). Wisdom in the empathic dimension is statistically significantly correlated with the dependent variables in the group of younger women. In the group of older women, the variable Wisdom, is not statistically significantly connected with spiritual gerotranscendence in any of its dimensions. Satisfaction with life turned to be an important correlate in both groups. The fulfilment of assumptions of the Successful Ageing model turned to be essential

in the younger group only. In the group of older women this variable is not statistically essentially connected with dependent variable.

Table 1. r Pearson correlation between the level of spiritual gerotranscendence and the selected variables in the group of younger and older women

<i>Variable</i>	<i>Spiritual gerotranscendence</i>		
	Younger women	Older women	Younger and older women
Successful Ageing (SA) status	0.20**	0.16	0.21**
Satisfaction with Life (SWLS)	0.21**	0.22**	0.23**
Feeling of loneliness	-0.12	-0.11	-0.13
Wisdom – Cognitive dimension	-0.02	0.01	-0.05
Wisdom – Affective dimension	0.15	0.10	0.14
Wisdom – Self-conscious dimension	-0.07	0.01	-0.004
Wisdom – Empathic dimension	0.43**	0.19	0.31**
Wisdom	0.15	0.08	0.11
<i>Individual activity aimed at learning how to build own relationships with God</i>	0.39**	0.31**	0.38**
<i>Learning how to build good relationships with God together with other people</i>	0.60**	0.50**	0.56**
<i>Meaning in Life</i>	0.45**	0.33**	0.39**
<i>The presence of sense in life</i>	0.40**	0.27**	0.35**
<i>Search for the sense in life</i>	0.48**	0.38**	0.39**

Note: ** p<0.05, * p<0.1

Source: Author's research.

To verify Hypothesis 2, a hierarchical analysis of regression was carried out. The relations between variables were analysed considering two models. In Model 1. connection between variables which are multiple times analysed in literature is analysed as a potential correlate of spiritual gerotranscendence: Satisfaction with life; The feeling of loneliness; Wisdom, Meaning in life; Experiencing a difficult life situation, Fulfilling the assumptions of the Successful Ageing model. Taking into account the results of carried out analysis of correlation, the variable Wisdom was included into the model only in its empathic dimension. Moreover, meaning in life was analysed in two dimensions: The presence of sense in life; Search for sense in life; Model 2 was enriched by variables connected with learning how to build a relationship with God.

Table 2. Summary of hierarchical regression analysis for variables predicting spiritual gerotranscendence (the group of younger women)

Variable	Model 1				Model 2			
	β	SSE β	BB	SSE B	β	SSE β	BB	SSE B
Successful Ageing (SA) status	0.02	0.11	0.02	0.07	0.02	0.09	-0.01	0.06
Satisfaction with Life (SWLS)	-0.09	0.09	-0.09	0.10	-0.13	0.09	-0.13	0.09
Feeling of loneliness	-0.01	0.09	-0.004	0.06	0.02	0.08	0.01	0.05
Wisdom – Empathic dimension	0.24**	0.09	1.81	0.68	0.27**	0.09	2.04	0.64
The presence of sense in life (MLQ-P)	0.17	0.11	0.22	0.13	0.06	0.09	0.08	0.12
Search for the sense in life (MLQ-S)	0.34**	0.10	0.30	0.09	0.18*	0.09	0.16	0.09
Recent experiencing a difficult life situation	0.18**	0.08	1.96	1.14	0.17**	0.07	2.38	1.05
Individual activity aimed at learning how to build own relationships with God					0.09	0.10	0.08	0.10
Learning how to build good relationships with God together with other people					0.39**	0.11	0.51	0.15
R	0.60				0.72			
Adjusted R ²	0.32				0.47			
F	8.55				11.63			

Note: ** p<0.05, * p<0,1

Source: Author's research

In the group of younger women, Model 1 explains 32% variance of the dependent variable, the multiple correlation coefficient is R=0.60. Statistically significant predictors turned to be: *Wisdom* (in its empathic dimension): $\beta=0.24$, *Looking for sense in life*: $\beta=0.34$, and *Experiencing a difficult life situation in past 6 months*: $\beta=0.18$. In Model 1, the search for the sense in life has the biggest significance for the level of spiritual gerotranscendence. The more the subject is set to the search, the higher is their spiritual (gero)transcendence. Adding variables to the model connected with the search for manners to build a relationship with God increased the percentage of explained variance up to 47%, additionally revealing the significance of *Learning how to build relationship with God together with other people*. Beta coefficient is relatively high and is: $\beta=0.39$.

Table 3. Summary of hierarchical regression analysis for variables predicting spiritual gerotranscendence (the group of older women)

Variable	Model 1				Model 2			
	β	SSE β	BB	SSE B	β	SSE β	BB	SSE B
Successful Ageing (SA) status	-0.06	0.12	-0.03	0.07	-0.04	0.12	-0.03	0.07
Satisfaction with Life (SWLS)	0.09	0.13	0.08	0.11	0.09	0.13	0.08	0.11
Feeling of loneliness	0.05	0.10	0.03	0.06	0.05	0.10	0.03	0.06
Wisdom – Empathic dimension	0.13	0.10	0.80	0.65	0.17*	0.10	1.09	0.62
The presence of sense in life	-0.01	0.14	-0.01	0.15	-0.08	0.14	-0.09	0.15
Search for the sense in life	0.35**	0.12	0.27	0.09	0.25**	0.12	0.19	0.09
Recent experiencing a difficult life situation	0.14	0.09	1,58	1,03	0,13	0,09	1,49	0,98
Individual activity aimed at learning how to build own relationships with God					-0,03	0,11	-0,02	0,10
Learning how to build good relationships with God together with other people					0,38**	0,12	0,41	0,13
R	0.46				0.56			
Adjusted R ²	0.16				0.25			
F	3.8				4.78			

Note: ** p<0.05, * p<0,1

Source: Author's research.

Table 3 presents results concerning older women. In Model 1 the search for sense in life is the only statistically significant predictor which allows for predicting the level of spiritual gerotranscendence; $\beta=0.35$. Model 1 explains 16% variance of dependent variable. Adding variables to the model connected with the search for manners to build a relationship with God increased the percentage of explained variance up to 25%, additionally revealing the significance of *Learning how to build relationship with God together with other people*. Beta coefficient is here, similar as in the group of younger women, relatively high and is: $\beta=0.38$.

10. Discussion

In the researches presented in this study the level of spiritual (gero)transcendence is higher in older women. The potential for the development of spirituality in the group of older people can be experiences characteristic to the period of late adulthood. Spirituality is helpful when confronting existential concerns, which are composed of the feelings that arise from the awareness of our finity (Fabiś, 2018). As result of the researches presented in this

article, the increase of the level of spiritual (gero)transcendence are connected with the level of individual engagement in the search for sense in life. Carrying out the review of our own life in the period of late adulthood to make the balance is necessary to achieve the ego integrity (Erikson & Erikson, 1998). In the event the balance is negative, an individual may feel motivated to undertake actions that may change such state of affairs. In the event these attempts fail, there is despair, a lack of acceptance for our elder age and the perspective of near death.

In the group of young women, the level of spiritual transcendence is higher in the event where in the past few months they experienced a difficult life situation: own health problems or health problems of a family member, death of a close person, or other serious problems connected with personal life. According to the received model, the probability of a high level of spiritual transcendence increases if such individuals are additionally characterised by a high level of empathic wisdom. A high level of empathic wisdom is the ability to reflect on the situation of another person from various perspectives, and thus - the ability to understand such person. In models developed based on data collected from the group of young women, a high significance is placed in one more variable: search for the sense in life. Enriching the model by variables connected with religious engagement significantly improves the model quality. However, only *Learning the religiousness with other people* is significant in this case. On the other hand, individual (without the participation of others) engagement in building the relationship with God has no significance.

In models developed based on data obtained from the group of older women, experiencing a difficult life situation in recent times is not an essential predictor for spiritual transcendence. In the group of older women, spiritual transcendence co-exists with the search for sense in life. In model 1, this variable is the only significant predictor. Difficult experiences from past months turned to be a variable that is statistically unimportant both in models 1 and 2. In the event of older women, the presence of such events may not be necessary to be willing to make the attempts to carry out life balance, a summary of previous stages of life, and search for sense in life. It is probable that in this case it is enough to be aware of the shortening time perspective. In model 2, similarly to young women, the significance of learning religiousness together with other people (in people with high level of empathic wisdom) can be noticed.

The obtained models show that in the process of development towards existential dimension of transcendence relations with other people and the ability to perceive the situation of others in a manner that lacks significant deformations are important. The last feature is the sign of empathic wisdom. Empathic wisdom reveals as the result of reflective recognition by an individual of life problems that are faced by others. Moreover, it was noticed that there is a dependence between active learning of how to build a relationship with God and the level of spiritual transcendence. This connection is strong both in the

group of younger and older women. It is interesting in this case that the significance is placed here to social interactions and relationships with other people. It is essential in the analysed models to learn how to build a relationship with God undertaken together with other people instead of alone: the good made together with others, acting for religious community, or discussion with others on topics connected with faith in God.

Limitations

The limitation for the carried out research is quite small research sample, which was not created randomly. Therefore, conclusions from the generalisation of research results need to be treated with certain carefulness. Despite these limitations, results turned to be interesting enough to consider them the introduction to further, more extent exploration.

Conclusions

The research shows that there is a predisposition to learn towards existential dimension of gerotranscendence in adult women who search for sense in life, who are characterised with a high level of empathic wisdom, and who search for God together with other people.

The development towards spiritual gerotranscendence is connected with the change in the manner an individual perceives themselves and the surrounding world. It can be assumed that such a development is the result of the existential learning of an individual. Peter Jarvis (2012, 2018), the author of many articles on the topic of existential learning, states that learning is the constant transformation of a human. The course of such changes is always within the social context. According to this author, there are certain conditions, which are the basis to initiate the process of so understood learning in the course of every day life. These are: social interaction and disjuncture. Social interaction leads to the joint discovery of differences between participants of interactions. By observing others, the participants of interaction simultaneously discover (learn) themselves. In life situations, including social, an individual often experiences various contradictions between what they expected and what they experience. Jarvis calls these contradictions a disjuncture. The attempts to deal with experienced disjuncture always lead to a transformation of an individual. As presented research we are interested in transformation towards spiritual transcendence. In a result of analysis of data concerning young adult women, there was clearly one area in which the subjects could experience disjuncture. This is experiencing difficult, crisis life situation. On the other hand, in the case of older women, disjuncture is probably the effect of existential worries connected with the process of ageing. It results from the analysis of data that the process of coping with disjuncture together with other people in the field of religious engagement, both in the group of older and younger women, increases the probability of development towards existential dimension of gerotranscendence. It may

be expected that individuals with a high level of empathic wisdom, as more reflective ones, experience higher disjuncture in social contacts and situations of every day life. On the other hand, disjuncture triggers the process of conscious learning, which goal is to create the state of harmony of a learning individual with oneself and the surrounding world. The condition for this goal to be achieved is to give the sense to our own experiences. One of the possibilities is to look at our own experiences through the prism of existential dimension of spirituality.

Bibliography:

- Ardelt, M. (2003). Empirical assessment of a three-dimensional wisdom scale, *Research on Aging*, 25 (3), 275-324, <https://doi.org/10.1177/0164027503025003004>.
- Ardelt, M. (2019). Wisdom and well-being, (in:) R.J. Sternberg & J. Glück (Eeds.), *The Cambridge handbook of wisdom*, 602-625. Cambridge University, <https://doi.org/10.1017/9781108568272.028>.
- Braam, A.W., Bramsen, I., van Tilburg, T.G., van Der Ploeg, H.M., & Deeg, D.J. (2006). Cosmic transcendence and framework of meaning in life: Patterns among older adults in the Netherlands, *The Journals of Gerontology, Series B: Psychological Sciences and Social Sciences*, 61 (3), 121-128.
- Braam, A.W., Galenkamp, H., Derkx, P., Aartsen, M.J., & Deeg, D.J. (2016). Ten-year course of cosmic transcendence in older adults in the Netherlands, *The International Journal of Aging and Human Development*, 84 (1), 44-65.
- Brudek, P. (2015). Skala gerotranscendencji Typu 2 (GST-2). https://www.researchgate.net/publication/330016418_Skala_Gerotranscendencji_Typu_2_GST-2 <https://doi.org/10.13140/RG.2.2.21896.06400>.
- Brudek, P. (2016). Larsa Tornstama teoria gerotranscendencji jako teoria pozytywnego starzenia się, [Lars Tornstam's Gerotranscendence Theory as a Positive Aging Theory], *Psychologia Rozwojowa*, 22 (4), 9-25.
- Brudek, P. (2017). Protestancka Szwecja jako kolebka teorii gerotranscendencji Larsa Tornstama. Pochodzenie, ogólny zarys i krytyczna analiza koncepcji [Protestant Sweden as a Cradle of Lars Tornstam's Gerotranscendence Theory. Origin, General Brief and Critical Analysis of the Conception], *Studia Oecumenica*, 17, 419-438.
- Brudek, P. (2018). Skala gerotranscendencji typu 1 (GST-1) Larsa Tornstama. Polska adaptacja metody, [Polish Adaptation of Lars Tornstam's Gerotranscendence Scale Type 1 (GST-1)], *Psychologia Rozwojowa*, 23 (2), 85-98.
- Brudek, P.J., Płudowska, M., Steuden, S., & Sękowski, A. (2021). Gerotranscendence and humor styles: the mediating role of generativity and wisdom, *HUMOR*, <https://doi.org/10.1515/humor-2020-0117>.

- Buchanan, J.A., Ebel, D., Garcia, S., VandeNest, F.J., & Omlie, C.C. (2016). Age differences in perceptions of gerotranscendence: An examination of cosmic dimension behaviors, *Journal of Religion, Spirituality & Aging*, 28 (3), 239-254.
- Chen, S.C., Moyle, W., & Jones, C. (2019). Feasibility and Effect of a Multidimensional Support Program to Improve Gerotranscendence Perception and Depression for Older Adults: A Pragmatic Cluster-Randomized Control Study, *Research in Gerontological Nursing*, 12 (3), 148-158.
- Chia, C.N. (2019). The role of religiosity in gerotranscendence: a Singaporean case study (Master's thesis, University of Malta), <https://www.um.edu.mt/library/oar/handle/123456789/50835>.
- Dehkordi, R.F., Eslami, A.A., Zamani Alavijeh, F., & Matlabi, H. (2020). Gerotranscendence and active aging: the lived experience, *Journal of Religion, Spirituality & Aging*, 1-27, <https://doi.org/10.1080/15528030.2020.1770662>.
- Diener, E.D., et al. (1985). The satisfaction with life scale, *Journal of personality assessment*, 49, 71-75.
- Duan, G.X., Wang, K., Su, Y.H., Tang, S.Y., Jia, H.L., Chen, X.M., & Xie, H.H. (2016). Effects of Tai Chi on telomerase activity and gerotranscendence in middle aged and elderly adults in Chinese society, *International Journal of Nursing Sciences*, 3 (3), 235-241.
- Erikson E.H., & Erikson J.M. (1998). *The life cycle completed*, WW Norton & Company.
- Fabiś, A. (2018). *Troski egzystencjalne w starości. Ujęcie geragogiczne*. Kraków: Wydawnictwo Naukowe UP.
- Gondo, Y., Nakagawa, T., & Masui, Y. (2013). A new concept of successful aging in the oldest old, *Annual Review of Gerontology and Geriatrics*, 33 (1), 109-132, <https://doi.org/10.1891/0198-8794.33.109>.
- De Jong Gierveld, J., T. van Tilburg, & Dykstra P.A. (2006). Loneliness and Social Isolation. (in:) A.L. Vangelisti, D. Perlman (red.), *The Cambridge handbook of personal relationships*, 485-500, Cambridge: Cambridge University Press.
- Grygiel, P., Humenny, G., Rebisz, S., Świtaj, P., & Sikorska, J. (2013). Validating the Polish adaptation of the 11-item de Jong Gierveld Loneliness Scale, *European Journal of Psychological Assessment*, 29(2), 129-139, <https://doi.org/10.1027/1015-5759/a000130>.
- Jarvis, P. (2012). Transformacyjny potencjał uczenia się w sytuacjach kryzysowych [The transformative potential of learning in situations of crisis], *Teraźniejszość-Człowiek-Edukacja*, 3 (59), 128-135.
- Jarvis, P. (2018). Learning to be a person in society: Learning to be me, (in:) K. Illeris (ed.), *Contemporary theories of learning*, 15-28, Routledge.
- Juczyński, Z. (2001). Skala Satysfakcji z Życia [Satisfaction with Life Scale SWLS], (w:) Z. Juczyński (red.), *Narzędzia pomiaru w promocji i psychologii zdrowia*,

- [Measurement Tools in Health Promotion and Psychology], 134-138, Warszawa: Pracownia Testów Psychologicznych Polskiego Towarzystwa Psychologicznego.
- Kossakowska, M., Kwiatek, P., & Stefaniak, T. (2013). Sens w życiu. Polska wersja kwestionariusza MLQ (Meaning in Life Questionnaire), [Meaning in life. The Polish version of Meaning in Life Questionnaire MLQ (PL)], *Psychologia Jakości Życia*, 12 (2), 111-131.
- Kunz, R. (2020). Closer to the World beyond? Spirituality and Transcendence in Old Age, (in:) M. Schweda, M. Coors, C. Bozzaro (eds.), *Aging and Human Nature*, 269-283, Cham: Springer.
- Lin, Y.C., Wang, C.J., & Wang, J.J. (2016). Effects of a gerotranscendence educational program on gerotranscendence recognition, attitude towards aging and behavioral intention towards the elderly in long-term care facilities: A quasi-experimental study, *Nurse Education Today*, 36, 324-329.
- Masui Y., Gondo Y., Nakagawa T., Ishioka Y.L., Arai Y., Kamide K., Ikebe K., & Ishizaki T. (2016). Buffering effect of gerotranscendence on mental health when experiencing physical function decline, *The Gerontologist*, 56, 88, <https://doi.org/10.1093/geront/gnw162.345>
- Mihara, Y., Matsuda, K.I., Hatta, K., Gondo, Y., Masui, Y., Nakagawa, T. & Ikebe, K. (2018). Relationship between gerotranscendence and oral health-related quality of life. *Journal of Oral Rehabilitation*, 45 (10), 805-809, <https://doi.org/10.1111/joor.12691>.
- Muszyński, M. (2016). Przegląd wybranych stanowisk dotyczących teorii gerotranscendencji. Refleksje nad Starością, [Review of selected positions concerning gerotranscendence theory], (w:) M. Muszyński, E. Dubas (red.), *Obiektywny i subiektywny wymiar starości*, 23-36, Łódź: Wydawnictwo UŁ.
- Read, S., Braam, A.W., Lyyra, T.M., & Deeg, D.J. (2014). Do negative life events promote gerotranscendence in the second half of life? *Aging & Mental Health*, 18 (1), 117-124. <https://doi.org/10.1080/13607863.2013.814101>.
- Rowe, J.W., & Kahn, R.L. (1998). *Successful aging*, Pantheon Books, New York.
- Steger, M.F., Frazier, P., Oishi, S., i Kaler, M. (2006). The Meaning in Life Questionnaire: Assessing the presence of and search for meaning in life, *Journal of Counseling Psychology*, 53, 80-93, <https://doi.org/10.1037/0022-0167.53.1.80>.
- Studen, S., Brudek, P., & Izdebski, P. (2016). Polska adaptacja trzywymiarowej skali mądrości (3D-WS) M. Ardelt, [A Polish adaptation of Monika Ardelt's Three-Dimensional Wisdom Scale (3D-WS)], *Roczniki Psychologiczne*, 19 (4), 745-768.
- Stevens, B.A. (2017). Do we become more spiritual with age?, *Journal of Aging and Geriatric Medicine*, 1 (2), 1-6.

- Straś-Romanowska, M. (2019). Człowiek stary, czyli mądry (?) [I san old man necessarily a wise man?], (w:) M. Kielar-Turska (red.) *Starość. Jak ją widzi psychologia. Siła umysłu w starości*, 215-231, Kraków: Wydawnictwo Naukowe Akademii Ignatianum.
- Strizhitskaya, O. (2020). Gerotranscendence as a Factor of Active Aging: Predictors and Outcomes. *Innovation in Aging*, 4 (Suppl 1), 470.
- Timoszyk-Tomczak, C. (2017). Teoria gerotranscendencji – jej potencjał i ograniczenia, [The theory of gerotranscendence-its potential and limitations], *Gerontologia Polska*, 3,191-196.
- Tornstam, L. (2011). Maturing into gerotranscendence, *Journal of Transpersonal Psychology*, 43 (2), 166-180.
- Wang, J.J., Lin, Y.H., & Hsieh, L.Y. (2011). Effects of gerotranscendence support group on gerotranscendence perspective, depression, and life satisfaction of institutionalized elders, *Aging & Mental Health*, 15 (5), 580-586,<https://doi.org/10.1080/13607863.2010.543663>.
- Wortman, E.S., & Lewis, J.P. (2021). Gerotranscendence and Alaska Native Successful Aging in the Aleutian Pribilof Islands, Alaska, *Journal of Cross-Cultural Gerontology*, 36 (1), 43-67.