Abstract: The aim of the research is to check, in which areas older people actively shape their learning environment in everyday life. Method: 192 people participated in the study. Age of the respondents: from 60 to 92 years old. In order to group older people in terms of their activities, the k-medium cluster analysis method was used. Results: three dominant profiles of activity were identified: 1. Religious profile; 2. Profile characterized by striving to meet own needs; 3. Profile with low level of activity. The profiles were compared in terms of selected independent variables.

Keywords: learning in late adulthood, active aging, late adulthood

Słowa kluczowe: uczenie się w późnej dorosłości, aktywne starzenie się, późna dorosłość

THEORETICAL BACKGROUND

At the level of social policy, active aging is considered mainly in the context of the challenges faced by an aging society. It is defined as “the process of optimizing opportunities for health, participation and security in order to enhance quality of life as people age” (WHO, 2002, p. 12). Encouraging the elderly to be more active is treated by politicians and decision makers as a remedy implemented in case of an aging population (Jurek, 2015, Zaidi et al., 2017). At the same time, both in political and public discourses, an approach is presented that emphasizes the productivity of undertaken activity, along with its usefulness for the social environment of an elderly person, as well as its importance in terms of physical and mental health of the person. Such an interpretation of activity is dictated to a large extent by economic reasons – encouraging the elderly to take up thus understood activity brings economic benefits to the society. The aforementioned approach can be exemplified by the proposal to measure the degree of active aging (Active Aging Index) proposed in 2012 during the European Year for Active Ageing and Solidarity between Generations. The index is a tool for evaluating the senior policy of individual countries and it measures the extent to which the potential of the elderly is used in relation to the economy and society (Jurek, 2015). What can be noticed when analyzing the structure of the index is the fact that its authors contribute considerable importance to productive activity. One of the four indicators used is participation in the labor market, with its relatively high weight of 35%. Participation in the life of society is another indicator, weighing 35 %, whereas two of the four sub-indicators also constitute productive activity - delivering care to relatives (grandchildren or the elderly).

The concept of active aging changes the way people perceive old age as a period of life characterized by passivity and dependence. However, many authors argue with this approach, noting that too much involvement in implementing this idea may have negative effects for the elderly (Holstein, Minkler, 2007). Excessive emphasis on the significance of being active, especially in its productive sense, and highlighting the importance of this activity for the so-called successful ageing, may lead to social exclusion of a large group of the oldest persons who, for various reasons, are
unable to undertake such activity (Katz, 2005; Rubinstein, Medeiros, 2015; Scheidt, Humpreys et al., 1999; Harris, 2008). Moreover, it should be noted that the very concept of activity is elusive and therefore not unambiguous. What can turn out to be problematic in terms of assessing the degree of activity is, for instance, the interpretation of watching TV. Some authors interpret this way of spending time as passivity; however, some TV programs offer mentally stimulating content (Boudiny, 2013). From the point of view of a researcher dealing with the education of the elderly, the concept of active aging should be understood more broadly than it is in public debates. As far as educational considerations on old age are concerned, activity is related to human learning in the course of everyday life. Therefore, it may concern many areas of life. It is related to shaping the human learning environment. The article focuses on such activity of the elderly, which helps them shape their objective learning environment (both material and social) and their subjective learning environment (existing in human consciousness), which is conducive to achieving harmony with themselves and the surrounding world. Activity in this sense will be, for example, Delight at the beauty of nature included in the research tool used by the author, as it shapes the subjective human environment and may lead to harmony with the surrounding world. The aim of the research is to check in which areas the elderly people living in Poland actively shape their learning environment in the course of their everyday life. In other words, the objective is to learn about the varieties of active aging in Polish reality.

**METHODOLOGY**

In order to achieve the aim of the research, a structured interview was conducted. A description of the interview questionnaire can be found further in the paper. Interviewers (pedagogy students) participated in the process of data collection. The interviewers conducted the research among the elderly people they know (in many cases they were the interviewers’ grandparents) and who agreed to participate in the research. It was carried out, depending on the possibilities or preferences of the respondents, either in the form of an interview, with the interviewer reading the questions to the respondents writing down their answers, or in the form of a written survey, with the respondents completing the questionnaire on their own. 192 people participated in the study. The survey was conducted among people living in the city of Częstochowa or small towns located in the vicinity of the city. Age of the respondents: 60 to 92; average age $M = 70.1$, $s = 7.7$. Gender 140 women, 48 men, 4 people did not answer the question concerning gender. Among the respondents, 94 of them live in the city, 92 live in the countryside, and 6 did not answer the question concerning their place of residence.

The aim of the collected data analysis is to:

1. Group the elderly, taking into account the forms of undertaken activity
as the grouping criterion, which contribute to creating their own learning environment in the course of everyday life. As a result, varieties of active aging in everyday life of the elderly will be distinguished.

2. Describe each group in terms of selected independent variables (age, life satisfaction, feeling of loneliness, gender).

**Questionnaire for measuring the activity of the elderly.** The questionnaire was developed according to the results of a qualitative analysis of literature on the topic of successful aging and learning in old age (Kozerska, 2015). Moreover, the results of a pilot study conducted with the use of a questionnaire consisting of 52 items were used. The answers were given according to a seven-point scale. This study took place in 2016 and 2017 and 224 people participated in it. The aim of the first, pilot stage, was to check how the individual items of the questionnaire were understood by the respondents, what the structure of the activity of elderly people looked like and whether the typology created on the basis of literature analysis would be reflected in the empirical research. As a result of the empirical data analysis with the use of hierarchical cluster analysis, three types of activity of the elderly were distinguished: 1. activity aiming at the development of human spirituality; 2. activity aiming at achieving a person's well-being (self-harmony). There also appeared a type of activity aimed at an elderly person’s environment. The purpose of the third type of activity is to achieve harmony with the outside world. At the first stage of the study, it was noticed that the selected sub-groups coincide with the typology created on the basis of the literature, but the composition of individual groups did not always agree with the assumptions made before the beginning of the study (which could be related to the respondents’ different interpretation of the meaning of items than the one assumed by the author). 192 people aged 60+ participated in the second stage of the research reported in the paper. The study was conducted in 2019. A new version of the presented questionnaire was employed. Conclusions from the pilot study were used. In the new version, the number of items was reduced to 31. Those items that ambiguously fitted the theoretical meaning of the clusters obtained in the pilot study were rejected. Those that highly correlated with other items of the questionnaire and “described the same” as other items were rejected, too.

Cronbach’s alpha reliability coefficient for all 31 items of the new version of the questionnaire is 0.87. For the separate subscales: 1. activity in creating conditions for learning in the area of religious spirituality: 0.89; 2. activity in creating conditions for learning to live in harmony with the outside world: 0.79; 3. activity in creating conditions for learning to live in harmony with oneself: 0.81, respectively. Taking into account the obtained results, it can be concluded that the scale obtained is characterized by an acceptable level of reliability, required for group studies.

Goodness-of-fit assessment using the confirmatory factor analysis method turned out to be impossible due to the shape of the distributions of individual variables deviating from the normal shape and too small sample size so as to apply methods
Insensitive to breaking normality assumption. While the calculated skewness for individual variables can be considered insignificant, the kurtosis values indicated a significant deviation from the normal distribution. Taking into account the above-mentioned circumstances, the cluster analysis method was used as goodness-of-fit assessment (as in the pilot studies). The executed hierarchical cluster analysis with the use of the Ward’s method, and Pearson’s 1-r as a distance measure, came almost entirely in line with the classification assumed before the study began (Figure 1).

There were three clusters corresponding in the theoretical sense to the activity aimed at creating educational environment in the area of religious spirituality (cluster 1), striving for harmony with oneself (cluster 2) and with the outside world (cluster 3). The difference between the assumed model and the model obtained through the empirical studies only concerned the p24, p21 and p8 variables. The p24 variable (I undertake activities, along with other people, aimed at my moral development) was included before the research involved the area of religious spirituality, whereas the cluster analysis included this variable in the area of striving for harmony with oneself. The analysis of the correlation of the variable with the remaining items of the questionnaire showed that it correlates statistically significantly to a low or moderate extent with the variables from both groups (1 and 2). Moreover, taking into account the theoretical meaning of the variable, it can be argued that it describes well both the activity characterized by cluster 1 and cluster 2, as well. It was decided that it would remain in the group describing the activity related to religious spirituality.

In the case of the p8 variable (I am involved in activities for the benefit of the local community), which, as a result of cluster analysis, was included in cluster 2 (the area of striving for harmony with oneself), whereas before the study began it was assumed that it represented the area of striving for harmony with the external world, the procedure was alike. As in the previous case, the variable correlates significantly with a similar strength (r equal to approximately 0.3), with the variables included both in cluster 1 and cluster 2. The theoretical interpretation, however, would rather suggest the variable should remain in accordance with the order adopted at the beginning, and so it was decided. The same happened as far as the p21 variable is concerned (I constantly learn new things or improve my skills as I don’t want to be dependent on others) for the same reasons as in the above-mentioned cases. Moreover, it was noted that the variables whose distributions are characterized by high skewness should be treated with caution, as it may have an impact on the value of the correlation coefficient used in the cluster analysis calculations. These variables include primarily p17 (I spend time writing poems or short stories, painting, composing music or singing). This variable belongs to cluster 2 (the area of striving for harmony with oneself). Eventually, taking into account the theoretical interpretation of this item in the questionnaire, it was assumed that the location of this variable was correct.

* According to Bedyńska and Książek (2012, p. 179): „the values [skewness and kurtosis] within the range [-1.1] are considered small, and some authors are even more liberal and allow a situation in which the values of skewness and kurtosis are in the range [-1.5; 1.5] and even [-2.2]."
Legend:

**Cluster 1. Activity in the area of religious spirituality**
P12. I talk to others on topics related to faith in God
P23. Faith in God helps me in difficult times I face in my life
P10. I often pray often or take time to meditate
P9. I try to find God’s presence in my everyday life
P4. I am involved in activities to benefit a religious community

**Cluster 2. Activity aimed at living in harmony with oneself**
P26. I talk to others on topics related to my experiencing works of art
P5. I spend time experiencing works of art (painting, literature, music)
P25. I read books
P22. I attend lectures, talks, readings
P17. I spend time writing poems or short stories, painting, composing music or singing
P29. I deepen my knowledge concerning a healthy lifestyle (e.g. I’m interested in TV programs on such topics, I read books or articles on this topic)
P28. I often talk to others about health topics
P30. I have a hobby that requires continuous learning
P31. I take up physical activity (e.g. exercising, cycling, walking, swimming, etc.)
P27. I travel outside the place of residence to rest
P21. I constantly learn new things or improve my skills as I don’t want to be dependent on others
P24. I undertake activities, along with other people, aimed at my moral development
P8. I am involved in activities for the benefit of the local community

**Cluster 3. Activity aimed at living in harmony with the surrounding world**
P19. I try not to attach importance to possessing material things
P18. I enjoy the beauty of nature
P13. I feel responsible for the younger generation
P11. I look for meaning in the situations I come across, as each life experience enriches me
P2. I often share my own experiences with younger people
P6. There is a person I share my thoughts and reflections with
P14. Activities for the benefit of others consume a lot of my time
P15. In the last few months I have been helping someone struggling with a problem
P16. I take up work that brings financial benefits
P3. I look after someone who needs care (e.g. a grandson, a relative, or someone outside my family
P7. I try to be an independent person, not use others’ help
P20. It is crucial for me to decide for myself
P1. I work in a garden or allotment

**Figure 1.** Structure of relationships between the analyzed items of the questionnaire

**Source:** author’s own.
Interpretation of the results: high values on the distinguished scales prove that the respondents perceive themselves as active to a large extent in the areas described.

**Other research tools. De Jong Gierveld Loneliness Scale.** Polish adaptation: P. Grygiel, G. Humenny, S. Rębisz, P. Świtaj, J. Sikorska. The tool consists of eleven statements. Six items contain negative phrases describing the lack of satisfaction with social contacts, and the remaining five – formulated positively – measure satisfaction with interpersonal relations. The examined person is asked to indicate to what extent the statements express their present situation and feelings. The answers were given on a 7-point scale. Items containing negatively formulated sentences were translated and, as a result, a higher total result calculated for all items meant a lower feeling of loneliness. The higher the final score, the less lonely the examined person is.

**SWLS – Satisfaction with Life Scale.** Authors of the test: E. Diener, R.A. Emmons, R. J. Larson, S. Griffin Author of adaptation: Z. Juczyński. The scale contains five statements. A respondent assesses to what extent each of them relates to his or her current life situation. What constitutes the result of the measurement is an overall level of satisfaction with life.

**RESULTS**

The aim of the conducted research was to check whether the elderly take up activity in all the dimensions included in the research tool to a similar extent. When analyzing the data, it was first determined whether the distinguished forms of activity are concurrent. As shown in Table 1, the three scales of the questionnaire for measuring the activity of elderly people correlate with one another significantly. Positive correlation coefficients mean that people who perceive themselves active in one of the distinguished areas, consider themselves active in the other two, as well. What correlates the most strongly is taking up activity aimed at meeting one’s own needs (harmony with oneself) and activity directed at the outside world. The area of religious spirituality appears the most weakly related to the area of pursuing one’s own needs (harmony with oneself).

<table>
<thead>
<tr>
<th>Activity in the area of religious spirituality</th>
<th>Activity aimed at living in harmony with the surrounding world</th>
<th>Activity aimed at living in harmony with oneself</th>
</tr>
</thead>
<tbody>
<tr>
<td>Activity in the area of religious spirituality</td>
<td>1.00</td>
<td>0.29</td>
</tr>
<tr>
<td>Activity aimed at living in harmony with the surrounding world</td>
<td>0.29</td>
<td>1.00</td>
</tr>
<tr>
<td>Activity aimed at living in harmony with oneself</td>
<td>0.21</td>
<td>0.43</td>
</tr>
</tbody>
</table>

Source: author’s own.
It turned out to be interesting to apply k-means cluster analysis (Figure 2). It revealed three dominant profiles as far as activity of elderly people is concerned.

**Religious profile** (cluster 1) – it is a group of people characterized by high (above average) results on the scale of religious spirituality and a rather high level of activity directed at the outside world. The results for the scale of activity aimed at meeting one’s own needs are clearly lower (at the level of the average value) in this group. 70 people belong to the group. The religious profile is characterized by the highest level of life satisfaction (M = 24.6; s = 6.8), statistically significantly higher than the level of life satisfaction in group 2 (M = 19.9; s = 5.6). What is worth noting is the fact that every second person (54%) in the religious group has recently had serious health problems. For comparison – in group 2 there were 38% of such people. 45% of all women respondents are in the group; 82% of religious profile people are women. This group is dominated by people with low education (60% have primary or vocational education). At the same time, group 1 is characterized by the lowest level of loneliness compared to the other groups, but in the case of this variable, the mean results for the clusters compared do not differ statistically significantly. There are 28% of widows/widowers in the group.

**Profile characterized by a low level of activity** (cluster 2). It is a group with activity levels below the average in each of the analyzed areas. There are 57 people in group 2. They are characterized by the lowest level of life satisfaction (compared to groups 1 and 3, the difference is statistically significant). The results of the research with the use of life satisfaction scale for this group are as follows: M = 19.9; s = 5.6. The group of people with low level of activity constitutes the oldest group. Average age M = 72, s = 8.7. In this respect, it differs significantly at the level of α = 0.05 from group 1 (M = 70.6, s = 7.7) and group 3 (M = 67, s = 7.6). Cluster 2 includes
almost half of all (47.7%) male respondents; 37% of cluster 2 constitute men. This group is dominated by people with low education (77% of people with vocational or primary education). These are people living both in the city (55%) and in the countryside (45%). There are 37% of widows/widowers in the group. The percentage is the highest among the compared groups.

Profile characterized by the pursuit of own needs (harmony with oneself) – cluster 3. It is a group of people characterized by high (above average) activity aimed at fulfilling their own needs and rather high activity directed at the outside world. As for the scale of activity in the area of religious spirituality, the results in this group are significantly lower (at the level of the average value). There are 51 people in group 3. Average age $M = 67.7$, $s = 5.4$. This group differs significantly in terms of life satisfaction when compared to group 2. The results of the research with the use of life satisfaction scale: $M = 22.8$; $s = 6.3$. In terms of life satisfaction, the profile does not differ significantly from the other two groups. Cluster 3 includes every fourth male respondent (25%), as far as women are concerned, the percentage is 28.5%. What is characteristic of group 3 is a high proportion of people with high (secondary or higher) education (65%). Group 3 includes 43.8% of all respondents with high education. There are 19.6% of all surveyed widows/widowers in the group. This percentage is the lowest among the compared groups. Every second person in group 3 lives in the city, and the other half constitutes people living in the countryside.

**DISCUSSION AND CONCLUSION**

The surveyed people do not constitute a homogeneous group a far as activity oriented towards creating a learning environment in the course of everyday life is concerned. Based on the research, three dominant profiles (varieties) of activity of the elderly can be distinguished. The first two are a combination of activity aimed at the outside world with activity of a different kind (related to religion or the pursuit of one's own needs). Activity aimed at the outside world include generative activities, activities for the benefit of other people and the environment, productive activity that brings benefits to the social environment, activity related to experiencing, emotional involvement, looking for meaning in life events. This type of activity does not occur “separately” in the study group; a profile in which such a type of activity dominates has not been distinguished. It accompanies the respondents’ attempts to develop good relations with God or activities aimed at fulfilling their own needs.

Profile 3 is characterized by a high level of activity focused on the pursuit of one's own needs and a rather high level of activity aimed at the outside world. It is a group that implements the assumptions of the concept of *active aging*, which is dominant in public space, and is also promoted by educational institutions targeting seniors, for instance, Universities of the Third Age.
### Table 2. Characteristics of the distinguished groups

<table>
<thead>
<tr>
<th>Variety of active ageing</th>
<th>Gender</th>
<th>Financial problems</th>
<th>Health problems</th>
<th>Marital status</th>
<th>Place of residence</th>
<th>Education</th>
<th>Life satisfaction (M ± s)</th>
<th>Age (M ± s)</th>
<th>Lack of feeling of loneliness (M ± s)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>F</td>
<td>M</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>Married</td>
<td>Widowed</td>
<td>City</td>
</tr>
<tr>
<td>Religious profile</td>
<td>58</td>
<td>12</td>
<td>19</td>
<td>51</td>
<td>38</td>
<td>32</td>
<td>30</td>
<td>20</td>
<td>40</td>
</tr>
<tr>
<td>Profile characterized by a low level of activity</td>
<td>35</td>
<td>21</td>
<td>8</td>
<td>48</td>
<td>21</td>
<td>35</td>
<td>31</td>
<td>21</td>
<td>25</td>
</tr>
<tr>
<td>Profile characterized by the pursuit of own needs</td>
<td>37</td>
<td>11</td>
<td>20</td>
<td>30</td>
<td>20</td>
<td>30</td>
<td>35</td>
<td>10</td>
<td>24</td>
</tr>
<tr>
<td>Total</td>
<td>130</td>
<td>44</td>
<td>47</td>
<td>129</td>
<td>79</td>
<td>97</td>
<td>96</td>
<td>51</td>
<td>89</td>
</tr>
<tr>
<td>The significance of differences</td>
<td>p &lt; 0.05</td>
<td>p &lt; 0.05</td>
<td>n.i.</td>
<td>n.i.</td>
<td>n.i.</td>
<td>p &lt; 0.05</td>
<td>p &lt; 0.05</td>
<td>p &lt; 0.05</td>
<td>p &lt; 0.05</td>
</tr>
</tbody>
</table>

**Note:** The significance of the differences was examined: 1. for qualitative variables – by a chi-square test, 2. for quantitative variables: by one-way analysis of variance test

**Source:** author’s own.
What is included in the lifestyle to a much higher extent than in the case of the other profiles, is: introducing preventive healthcare, broadening the knowledge about the healthy lifestyle, relaxing, taking up physical activity, developing one’s own interests, taking up artistic creativity. At the same time, it is a group open to contacts with the environment. Most of the group is constituted by people with high education (65%). However, when analyzing the distribution of people with high education in the three groups (Table 2), it turns out that in group 3 there are 43% of such people, only slightly more than in the group with the religious profile (38%); they are the least numerous in the less active group (18%). Most people in group 3 are married, younger than those in the other groups.

Profile 1 is characterized by a high level of involvement in religious activities and a rather high level of activity focused on the outside world. The variety of active ageing represented by group 1 is promoted by religious institutions. They “activate” the elderly in the area of independent building good relations with a Higher Being (God) and in the area of building such relationships with other people. They also encourage learning to live in harmony with the surrounding world. Profile 1 is chosen by women. The vast majority of people who prefer this type of active ageing are women.

Profile 2, in turn, defines people with a relatively low level of activity in each of the analyzed areas. It is possible that these people are active in areas that have not been identified in the method used. This type of active (?) aging is characteristic of the oldest people with the lowest level of life satisfaction. This group has the highest percentage of people with low education. It is noteworthy that nearly every second male respondent (45%) belongs to this group. The low level of activity is unlikely to be related to dissatisfaction with the nature of the social network in which an elderly person functions. The group does not differ from the others in terms of the feeling of loneliness, the percentage of widowers is also similar. Neither is the low level of activity related to the financial situation – the percentage of people who have had financial problems in the last year seems to be the lowest here. It seems that age, gender (male) and life satisfaction (low) are of paramount importance here.

When discussing the results, attention should be paid to the limitations of the study conducted. They include a relatively small sample size, non-random sample selection and the fact that the respondents do not represent all regions of Poland, but only the area of the northern Silesian Voivodeship. An uncritical generalization of the results to the population of all Polish seniors would certainly be a mistake. The obtained results should therefore be treated as an example to show the varieties of active ageing in Polish reality. It is advisable to conduct more extensive research on a representative sample of Polish seniors.

What distinguishes the less active group from the active ones may be having a life purpose. The active groups seem to have such goals. It is transcendence, spiritual development, living in accordance with the dictates of religion, or living healthy and being independent from the help of others as long as possible. They are related to goals aimed at the outside world, going beyond one’s own interests: e.g., generative
goals related to the upbringing of younger generations. Human is an intentional being (Kamińska, 2018), having a purpose in life makes it meaningful, valuable and worth living (Emmons, 2003). This, in turn, may be related to life satisfaction, which, as can be seen on the example of the research, correlates positively with human activity. This assumption is confirmed by the results of studies showing the relationship between life satisfaction and sense of meaning (Reker, Wong, 1988; Wong, Fry, 1998), the sense of meaning is also included in the conceptual models of human well-being (Ryff, Keyes, 1995), the significance of meaning of life and the related theories are considered in the context of pedagogical research on human’s continuous development and the sense of fulfillment (Kamińska, 2018). The research conducted in this area (Emmons, 2003) shows, however, that not every type of goal influences human well-being in a positive way. For example, aggressive goals related to the desire to control others and influence their lives, do not show a positive relationship with the subjective well-being. What Emmons (2003) enumerates as goals accompanying people with high level of life satisfaction are: intimacy, spirituality, and generativity.

REFERENCES


