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Differences in adjustment to retirement in the elderly regarding the level and type of social activity intensity

Abstract

How much the growth of elderly population will be a part of the demographic change in the society will certainly depend on the readiness of the society to accept changes in the demographic structure. One of the changes occurring simultaneously with the increase of the number of elderly people is the increase of the number of pensioners. To enable the current and future pensioners to achieve a successful adjustment to retirement, as well as a higher quality of life, it is necessary to conduct research aiming at a better understanding of this complex process. The purpose of this research was to establish differences in adjustment to retirement in the elderly regarding self-assessment of their social activity intensity. The survey was conducted in May and June 2021. 134 respondents aged over 65 living in their own households took part in the survey. Differences in adjustment to retirement in the elderly based on a self-assessment of one's social activity intensity were analysed according to Atchley's Ad-

justment to Retirement Model (2004). The obtained results indicate a necessity for elderly people to engage in social interaction in the community by taking part in social activities. The results also suggest that there is a positive impact of social interaction on the adjustment to retirement.

Keywords: Atchley's Model; adjustment; retirement; self-assessment; social activity.

INTRODUCTION

In Europe and in Croatia people over the age of 65 currently make up about 20% of the total population and this percentage is rapidly increasing (DZS 2020, Eurostat 2020). Furthermore, EU member states have entered a permanently increasing demographic stage and the number of people over the age of 65 are expected to reach 30.3% of the total population by 2070 (Akrap et al. 2013, Europska komisija 2019). How much the growth of the elderly population will become a part of the demographic change in the society will certainly depend on the readiness of the society to accept changes in the demographic structure. To better understand the scope and characteristics of social problems caused by aging of the population a lot of theoretical, developmental, and applied scientific research has been conducted in the last fifty years, the results of which outline the basic elements of strategies of social preparation and adjustment to the aging process both of the whole population and the individual.

Retirement

Retirement is usually perceived as an event or process that requires planning and adjustment and can also be interpreted as a transitional life phase that can take several years (Ovesnik et al. 2012, Bertić 2018). The meaning of retirement becomes more complex if subjective as well as objective retirement measures are considered, since these measures will determine whether an individual will take early or regular retirement and whether he or she will go into forced or voluntary retirement (Shultz & Wang 2011, Penezić et al. 2014). Retirement is a complex process due to a multitude of factors and the way they are interconnected (Wang & Shi 2014, Fadila & Alam 2016). An important factor of retirement can be whether or not a person accepts the role of a retiree, with various factors of individual significance, variables related to work before retirement, family functioning, transition to retirement, and variables that affect the individual after retirement (Petkoska & Earl 2009, Wang et al. 2011). People perceive retirement differently due to changes it can cause in the life of an individual, their family and environment, which can be positive (e.g.

more free time for family, friends, hobbies, no more difficult work obligations) and negative (e.g. loss of professional identity, loss of business social network, decrease in income) (Van Solinge 2012). Retirement can be characterized as a stressful period, especially in people who have adapted poorly to the loss of their work role and cause possible deterioration of health, loneliness, depression, and a decrease in life satisfaction (Van Solinge 2012, *Fadila & Alam 2016*).

Social theories of ageing and retirement

Although there is no single comprehensive theory defining the whole, complex process of adjusting to retirement, experts in various fields have tried to explain retirement by empirical research taking it as the subject of their studies. Many basic theories were developed between the 1960 s and 1970 s and should be viewed in the context of the historical period they originated from, but they still capture the attention of many researchers (Touhy & Jett 2014).

The Activity Theory assumes that older people will be more satisfied, useful to themselves and the society if they remain socially active for a long period of time (Joung & Miller 2009). Furthermore, the *Activity Theory* emphasizes that if an elderly person is not constrained by poor health or disability, he or she has the same psychological and social need as middle-aged people (Havighurst 1961, Rosow 1967, Atchley & Barusch 2004).

According to the *Continuity Theory*, adults develop and try to maintain patterns of thinking and behaviour which help them adapt to life changes occurring as they age, despite significant life changes in their own environment (Atchley 1976, Atchley & Barusch 2004). This theory emphasizes that maintaining a continuity of life patterns developed before retirement is crucial for retirees to maintain their psychological well-being (Wang 2007). The *Continuity Theory* considers retirement a process of adjustment that can last for several years and involve certain stages (Wang & Shultz 2010, Bonsdoff & Ilmarinen 2012, *Fadila & Alam 2016*). Atchley (2004) developed a model based on the *Continuity Theory* which presents retirement as a six-stage adjustment process: *the Pre-Retirement Phase* occurs when a person begins to think about retirement and the activities they will engage in; during *the Honeymoon Phase* the retiree is positively oriented and satisfied with the activities he or she is engaged in, especially those he or she did not have time to enjoy earlier; *the Disenchantment Phase* takes place when the retiree ceases to be content with his or her activities in retirement and lacks a sense of productivity he or she used to have when working; *the Reorientation Phase* may occur immediately after retirement or after the Disenchantment Phase when, based on their life experience, retirees begin to reorganize their life according to their abilities and resources they possess; *the Retirement Routine*

Phase can occur immediately after retirement, when a person creates a set of criteria that guide him or her through everyday life; *the Termination of Retirement Phase* occurs when the elderly perceive themselves as old and frail and become too weak to participate in daily activities (Atchley & Barusch 2004).

Atchley's Adjustment to Retirement Model (2004) was used as a framework for the survey questionnaire created to determine success of adjustment to retirement (Atchley & Barusch 2004, Penezić et al. 2007). This model was also used as a conceptual model in the research part of the work.

Factors of adjustment to retirement regarding social inclusion in the community

Retirement also requires a reorganization of activities and leisure time. According to the Continuity Theory, participation in post-retirement activities can be considered a type of a resource of various activities (Atchley & Barusch 2004). It helps to ensure time structure and continuity in the daily schedule and can contribute to pensioners' satisfaction and successful adjustment to retirement (Butrica & Schaner 2005, Wanka 2019).

Volunteering differs from other leisure activities, such as sports activities, travel, or family visits, as it can provide more opportunities to maintain self-esteem and social status (Stebbins 2013). Furthermore, social participation through membership or volunteering in various associations contributes to social capital (Van Solinge 2012; Chu & Koo 2023). With the help of these social networks, individuals have access to a support system that can be used to make a positive contribution (Solinge & Henkens 2008; Qorbani et. Al. 2024).

Bridge *employment* is a special form of productive activity people predominantly start at the end of their careers (e.g., part-time jobs, service contracts, etc.), and can help pensioners maintain continuity during the retirement process (Smaliukiene & Tvaronavičienė 2014, Beehr & Bennett 2015). Empirical research supports the hypothesis that involvement in post-retirement activities, such as volunteer work or leisure activities is associated with higher life satisfaction (Solinge & Henkens 2008, Nimrod 2008, Pushkar et al. 2009, Bonsdoff et al. 2009, Zhan et al. 2009, Hershey & Henkens 2014; Chu & Koo 2023). In a study on a sample of 1,000 participants with an average age of 70 years, it was found that volunteers were less powerless and less prone to physical deterioration, and a correlation between volunteering and mental and physical health of the elderly was confirmed (Burr 2011). Furthermore, in a study conducted on a sample of 387 older people aged 65, it was concluded that older people participate in various volunteer activities because these activities become their new obligations giving the elderly a feeling of being important to someone again (Warburton & Peel 2008).

An individual's structure of social networks with family members, friends and former associates can be changed in retirement (Szinovacz 2003, Xin et al. 2022). Creating new social networks, new interactions with different people can contribute to social support that can improve life satisfaction in old age (Lancee & Radl 2012, Dingemans & Henkens 2013, Coif 2017). Important predictors for healthy adaptation to retirement are certain activities, especially family activities, volunteering, and interaction with friends. Older people are more likely to experience loss of friends, spouses, peers, and fewer and fewer common topics when communicating with young people. Getting involved in various activities in accordance with their capabilities will help the elderly overcome such problems (Lepan & Leutar 2012).

Research conducted among employed and unemployed people showed that keeping people employed and active in the society as long as possible is beneficial both for the individual and the society (Drentea 2005). Moreover, the data in this research indicates that many elderly people continue with a significant number of earlier activities, that the degree of activity is influenced by their earlier lifestyle, and that there is a correlation between the level of activity and successful adaptation to retirement (Drentea 2005).

SUBJECTS AND METHODS

Aim and hypotheses

The aim of this research was to determine the difference in adjustment to retirement in the elderly regarding the level and type of intensity of social activities. Therefore, it is an applied research with a specific goal of social intervention based on scientifically collected and processed data aiming at a better position, status and satisfaction of the elderly.

From previously presented empirical knowledge and theoretical concepts, the following hypotheses arise: Adjustment of older people to retirement differs from their self-assessment of the current level or/and type of intensity of social activities. The basic hypothesis subsumes two subhypotheses: in relation to the current level of intensity of social activities (H1) and in relation to the type of intensity of social activities (H2).

Sample and data collection

The survey was conducted in May and June 2021. The research included 134 participants over the age of 65 who live in their own households in the Bjelovar area (a town in Croatia). With the help of the Bjelovar Pensioners' Association and huma-

nitarian organizations in the Bjelovar area (the Cancer League, the Laryngectomee Club), we contacted the elderly who live in their own households, collected their personal data, and created an overall database in Excel. The interval of choice was each person in alphabetical sequence starting with the smallest number. The study did not include old people who suffered from severe cognitive and psychophysical disorders (such as dementia, mental illnesses, complete immobility) not related to the normal aging process. Furthermore, in order to participate in the research, people had to be retired and receive income from the pension fund. Before conducting the survey, the associations informed their members about the survey.

Due to epidemiological measures introduced to prevent the spread of the COVID-19 disease, the questionnaires used in this study were sent by mail, with a detailed explanation of the purpose and goal of the study (SCZRH 2021). The participants received a franked envelope and were asked to send it back to the author's address after signing an informed consent and filling in the enclosed questionnaires. A survey questionnaire was sent by e-mail to individual participants (a total of 43 participants) upon their request, and some participants took the questionnaires in the above-mentioned associations (a total of 54 participants). A total of 150 survey questionnaires were sent, of which 63 (42.11%) were sent by post, 43 (28.61%) by e-mail, and 44 (29.28%) sent to the associations. We received a total of 134 completed survey questionnaires (89.74%), of which 122 questionnaires (81.71%) were correctly filled in, and 12 questionnaires (8.02%) that were not adequately completed. Due to the lack of data, the results of 12 inadequately completed questionnaires were excluded from the analysis. The questionnaire contained contact information (phone number and e-mail address) of the author of the survey so that he could clear up any misunderstandings or ambiguities which might have arisen during filling in the questionnaire. Nine participants asked for help when filling in the questionnaire via email and 21 by phone.

Description of the instruments

The first part of the questionnaire consisted of five questions related to sociodemographic and socioeconomic characteristics of the participants. Three questions refer to sociodemographic characteristics about the participant: gender, age, marital status (married/common-law marriage, unmarried, divorced, widowed). Two questions refer to the socioeconomic characteristics of the participants we wanted to find out: level of education (incomplete primary education, 8-year primary school, secondary education, bachelor's degree equivalent, master's degree equivalent, or doctorate) and type of retirement (regular, early, disability, family, wartime veterans' pension).

In the second part of the questionnaire, our own Index of Social Inclusion (ISI) in the Community was created for research purposes, based on the Stebbins model (2013). The questionnaire consisted of five questions, each question representing a possible social activity the elderly can engage in in their local community in the town of Bjelovar (humanitarian or volunteer work, part-time work, hobbies, family activities, cultural and educational activities). Participants answered each question in the ISI in the same way: using „yes” or „no” to the questions about their participation in an activity, and if the answer was „yes” they evaluated the intensity of their engagement in the activity using a Likert scale from 1 to 5 (1 – never, 2 – occasionally, 3 – often, 4 – very often, 5 – regularly). The results in the ISI ranged from 5 to 25, and a higher score in self-assessment indicated a better social inclusion in the local community. For the purpose of this research, the results were divided into two levels by the central value (median), the lower level below the central value and the higher level above it. Results for each item can be presented separately, which gives a separate insight into the type of intensity of a particular social activity in the local community.

A standardised *Retirement Adjustment Factors Questionnaire (RAFQ)* was used in the third part of the questionnaire to verify Atchley’s (2004) Adjustment to Retirement Model (Penezić et al. 2014). The questionnaire contained a total of 67 items, of which 44 were arranged in subscales (Pre-Retirement, Honeymoon, Disenchantment, Routine, Termination, and Reactivation) and 23 items were self-contained with the purpose of better understanding the process of adapting to retirement (Penezić et al. 2014). The answers to all items were based on a five-point scale (from 1 = does not relate to me at all, to 5 = relates to me completely). Internal consistency of the subscales was acceptable (Table 1).

Table 1. Cronbach’s alpha coefficients for six subscales of the RAFQ

Subscales	Number of items	Cronbach’s α
Pre-Retirement Phase	7	0.68
Honeymoon Phase	6	0.71
Disenchantment Phase	3	0.84
Routine Phase	14	0.72
Termination Phase	8	0.74
Reactivation Phase	6	0.69

Statistical methods

Research results were processed using the IBM SPSS Statistics V24.0 statistical software. The sample was divided according to the hypotheses and the differences were tested. Normal distribution was established by the Kolmogorov-Smirnov Test (for more than 50 distributions) and the Shapiro-Wilk Test (for fewer than 50 distributions). The measured distribution of results was non-normal ($p < 0.05$). To avoid reaching wrong conclusions when testing differences between the groups, the Mann-Whitney Test (M-W Test) for testing the significances between two categories was used. A difference equal to or lower than 5% risk ($p \leq 0.05$) was chosen as the significance level.

These tests determine whether there is a statistically significant difference in answers given by participants from different groups, but the tests cannot identify the cause of the difference. The obtained results will be interpreted according to the modified Atchley's Adjustment to Retirement Model (2004), which defines the direction of results in each phase, and which was used for creating the RAFQ.

RESULTS

The study included 122 elderly people, of which 59.7% were women and 40.3% were men. The youngest participant was 65 years old and the oldest was 80 years old. The average age of the participants was 72 years ($SD=4.18$), which was at the same time the most common age in the sample. Most of the participants in the survey were married or lived in a common-law marriage (46.4%), followed by participants who were widowed (39.3%), divorced (9.1%), and who are unmarried (5.2%). When we divided the sample by gender, there were more married men (55.56%) than women (39.71%), and there were more widowed women (44.12%) than men (33.33%). Most participants graduated from secondary school (43.44%), followed by those with bachelor's (26.23%) and master's degrees (16.39%) and those who completed 8-year primary school (11.48%). The smallest number of participants did not attend or finish school (1.64%) or had a master's degree or a doctorate (0.82%). According to the type of retirement most participants were in a regular retirement (48.08%), followed by those in early retirement (21.31%), disability retirement (15.57%), war-time veterans' retirement (11.48%), and family retirement (6.56%).

Difference in adjustment to retirement regarding the current level of intensity of social activities

Table 2 shows that there is a statistically significant difference ($p \leq 0.05$) among different categories of participants regarding the current level of intensity of social activities in the subscales of the RAFQ. Participants who self-assessed a higher level of their social inclusion in the local community on the *Retirement, Honeymoon, Routine and Reactivation Subscales* had higher results than the participants who self-assessed a lower level of their social inclusion. The results on the *Disenchantment and Termination Subscales* shows a different trend of differences. Participants who self-assessed their social inclusion in the local community as being at a lower level achieved higher results when compared to the participants who self-assessed a higher level of their social inclusion.

Table 2. Results of the M-W Test for significant differences in the subscales of the RAFQ in relation to the current level of intensity of social activities

Subscales	Current Level of Intensity of Social Activities	N	Mean Rank	p
Pre-Retirement	Lower	69	15.3	0.03
	Higher	53	52.24	
Honeymoon	Lower	69	22.4	0.05
	Higher	53	64.11	
Disenchantment	Lower	69	81.34	0.02
	Higher	53	51.23	
Routine	Lower	69	8.6	0.00
	Higher	53	102.25	
Termination	Lower	69	114.24	0.00
	Higher	53	52.3	
Reactivation	Lower	69	42.36	0.04
	Higher	53	83.97	

Differences in adjustment to retirement in relation to the type of intensity of social activities

Table 3 shows that the M-W Test indicates statistically significant differences on the subscales of the RAFQ among results of the participants who are engaged in humanitarian or voluntary work and those who are not. Participants who are involved in humanitarian work or volunteer achieved statistically more significant results ($p \leq 0.05$) on the *Pre-Retirement, Honeymoon and Routine Subscales* than the

participants who are not involved in such work. Participants results on the *Termination Subscale* show a different trend of differences. Participants who do not do humanitarian or volunteer work had statistically more significant results ($p=0.00$) than the participants who do. No statistically significant differences were found in the remaining subscales (*Disenchantment* and *Reactivation*) of the RAFQ ($p \geq 0.05$) among the participants who are engaged in humanitarian or voluntary work and those who are not.

Table 3. Results of the M-W Test for significant differences in the RAFQ among participants who do and who not do humanitarian or voluntary work

Subscales	Humanitarian or Voluntary Work	N	Mean Rank	p
Pre-Retirement	Not do	91	101.95	0.05
	Do	31	145.79	
Honeymoon	Not do	91	102.73	0.03
	Do	31	174.55	
Disenchantment	Not do	91	145.04	0.24
	Do	31	133.29	
Routine	Not do	91	108.54	0.00
	Do	31	207.06	
Termination	Not do	91	145.93	0.00
	Do	31	96.30	
Reactivation	Not do	91	149.39	0.16
	Do	31	162.25	

Table 4 shows that the M-W Test indicates statistically significant differences on the subscales of the RAFQ among results of the participants who do and do not do part-time work. Participants who do part-time work achieved higher statistically significant results on the *Pre-Retirement Subscale* ($p=0.05$), as well as on the *Honeymoon* ($p=0.03$), *Routine* ($p=0.00$) and *Reactivation* ($p=0.05$) *Subscales* in comparison to the participants who do not do any part-time work. However, participants' results on the *Disenchantment* ($p=0.04$) and *Termination* ($p=0.00$) *Subscales* suggest a different trend of differences. Participants who do not do part-time work had higher statistically significant results on the above-mentioned subscales than those who do part-time work.

Table 4. Results of the M-W test for significant differences in the RAFQ among participants who do and do not do part-time work

Subscales	Part-Time Work	N	Mean Rank	p
Pre-Retirement	Not do	101	128.75	0.05
	Do	21	189.51	
Honeymoon	Not do	101	127.88	0.03
	Do	21	193.15	
Disenchantment	Not do	101	145.5	0.04
	Do	21	119.62	
Routine	Not do	101	121.67	0.00
	Do	21	219.09	
Termination	Not do	101	157.07	0.00
	Do	21	71.36	
Reactivation	Not do	101	73.36	0.05
	Do	21	128.57	

Table 5 shows that the M-W Test suggests there are statistically significant differences on the subscales of the RAFQ among the results of participants who have hobbies and those who do not. Participants who have hobbies achieved higher statistically significant results ($p \leq 0.05$) on the *Pre-Retirement*, *Honeymoon* and *Routine Subscales* than the participants who do not have hobbies. A different trend in differences can be seen on the *Termination Subscale*. Participants who do not have hobbies had higher statistically significant results ($p=0.00$) than participants who do. No significant differences were found ($p \leq 0,05$) on the *Disenchantment* and *Reactivation Subscales* among the participants who have and those who do not have hobbies.

Table 5. Results of the M-W Test for significant differences in the RAFQ among participants who have and who do not have hobbies

Subscales	Hobbies	N	Mean Rank	p
Pre-Retirement	Do not have	89	78.86	0.00
	Have	33	154.08	
Honeymoon	Do not have	89	83.16	0.00
	Have	33	142.43	
Disenchantment	Do not have	89	125.41	0.15
	Have	33	146.27	

Routine	Do not have	89	67.42	0.00
	Have	33	168.45	
Termination	Do not have	89	208.25	0.00
	Have	33	114.59	
Reactivation	Do not have	89	161.76	0.09
	Have	33	132.37	

Table 6 shows that the M-W Test indicates there are statistically significant differences on the subscales of the RAFQ among the results of participants who are involved in family activities and those who are not. Participants who are involved in family activities achieved statistically more significant results ($p \leq 0.05$) on the *Pre-Retirement*, *Honeymoon* and *Routine Subscales* than the participants who are not involved in such activities. However, a different trend of differences was found on the *Termination Subscale*. Participants who are not involved in family activities had higher statistically significant results ($p=0.00$) than the participants who are involved. No significant differences ($p \leq 0.05$) were found on the *Disenchantment* and *Reactivation Subscales* of the RAFQ among the participants who are involved in family activities and those who are not.

Table 6. Results of the M-W test for significant differences in the RAFQ among participants who are involved and who are not involved in family activities

Subscales	Family Activities	N	Mean Rank	p
Pre-Retirement	Not involved	29	75.33	0.00
	Involved	93	159.24	
Honeymoon	Not involved	29	94.9	0.00
	Involved	93	153.61	
Disenchantment	Not involved	29	124.66	0.08
	Involved	93	145.06	
Routine	Not involved	29	78.67	0.00
	Involved	93	160.87	
Termination	Not involved	29	205.66	0.00
	Involved	93	121.76	
Reactivation	Not involved	29	167.63	0.12
	Involved	93	132.7	

Table 7 shows that the M-W Test indicates there are statistically significant differences on the subscales of the RAFQ among the results of participants who are involved in cultural and educational activities and those who are not. Participants who are involved in cultural and educational activities achieved higher statistically significant results on the *Pre-Retirement Subscale* than the participants who are not involved in such activities ($p=0.00$). Moreover, they also had higher statistically significant results on the *Honeymoon* ($p=0.00$), *Routine* ($p=0.00$), and *Reactivation* ($p=0.04$) *Subscales*, but there was a different trend of differences on the *Termination Subscale* ($p=0.00$). There were no significant differences on the *Disenchantment Subscale* of the RAFQ ($p \geq 0,05$) among the participants who are involved in cultural and educational activities and those who are not.

Table 7. Results of the M-W test for significant differences in the RAFQ among participants who are involved and who are not involved in cultural and educational activities

Subscales	Cultural and Educational Activities	N	Mean Rank	p
Pre-Retirement	Not involved	47	76.45	0.00
	Involved	75	162.95	
Honeymoon	Not involved	47	72.06	0.00
	Involved	75	167.66	
Disenchantment	Not involved	47	142.95	0.21
	Involved	75	138.93	
Routine	Not involved	47	72.26	0.00
	Involved	75	187.33	
Termination	Not involved	47	200.16	0.00
	Involved	75	94.05	
Reactivation	Not involved	47	161.91	0.04
	Involved	75	106.81	

DISCUSSION

The study included 122 elderly people, of which 59.7% were women and 40.3% were men. This difference in the data on men and women is completely justified because, when compared to men, women live longer and have more non-fatal chronic conditions (Nakamura & Miyao 2008, Kim 2011, UN 2022). Women also outnumber men in older age groups, and this imbalance increases with age (Jagger 2015, McGrath 2019, UN 2022).

The focus of this research was aimed at getting a clearer insight into differences in adjustment to retirement and a timely identification of potential factors which co-

uld be used to reduce poor adjustment to retirement. Since the conducted analyses confirmed that there are differences in adjustment to retirement regarding the participants self-assessment of the current level and type of intensity of social activity, we are going to highlight the main insights.

Difference in adjustment to retirement regarding the current level of intensity of social activities

The results obtained in Table 2 shows that there is a statistically significant difference ($p \leq 0.05$) among different categories of participants regarding the current level of intensity of social activities in the subscales of the RAFQ. Participants who self-assessed their social inclusion in the local community on the *Pre-Retirement Subscale* to be at a higher level achieved statistically more significant results in comparison to the participants who self-assessed their social inclusion to be at a lower level. The obtained results indicate that participants who self-assessed their social inclusion in the local community higher engaged in various activities both before and during retirement which helped them to adjust better to retirement. Participants who self-assessed a higher level of their social inclusion in the local community on the *Honeymoon Subscale* had higher results than the participants who self-assessed a lower level of their social inclusion. The obtained results demonstrate that participants with a higher self-assessment of their social inclusion in the local community have a more positive attitude towards retired life than the participants with a lower level of social inclusion. The *Disenchantment Subscale* shows a different trend of differences. Participants who self-assessed their social inclusion in the local community on the *Disenchantment Subscale* as being at a lower level achieved higher results when compared to the participants who self-assessed a higher level of their social inclusion. These results suggest that participants with a lower level of social inclusion are less satisfied with their activities and feel less productive than in the period when they were working. Participants who self-assessed their social inclusion in the local community as being at a higher level on the *Routine Subscale* had higher results than the participants who self-assessed theirs as a lower level. The obtained results indicate that participants with a higher self-assessment of their social inclusion organised their activity plan and criteria set of daily routine better, which helped them to adjust more successfully to retirement. Participants' results on the *Termination Subscale* demonstrate another trend of differences. Participants who self-assessed their social inclusion in the local community as being at a lower level achieved better results on the *Termination Subscale* in comparison to the participants who self-assessed theirs at a higher level. These results indicate that participants with a lower level of self-assessed social inclusion on the *Termination Subscale* are less focused on their role as retirees because they are preoccupied with other things, such as their own or their spouse's illnesses or frailty, and loneliness. Results of the *Reactivation Subscale* show that participants who self-assessed their social inclusion in the local community as

being at a higher level had better results than the participants who self-assessed theirs at a lower level. These results suggest that participants with a self-assessed higher level of social inclusion are more involved in various activities when compared to the participants with a self-assessed lower level of social inclusion.

Significance of the results obtained by the M-W Test *confirmed* that there are differences in the success of retirement adjustments among participants who self-assessed their social inclusion in the local community as being at a higher or lower level on the subscales of the RAFQ. Participants who self-assessed their social inclusion in the local community to be at a higher level showed better adjustment to retirement on the RAFQ than the participants who self-assessed their social inclusion to be at a lower level. The results we obtained confirm research which established that inclusion and active participation in various activities according to individual capabilities will help the elderly to ensure a successful time structure and continuity of their daily schedule (Grünwald et al. 2021, Chen & Zhang 2022, Kanamori & Ide-Okochi 2023, Jonasson et al. 2023). In addition, it will help them to remain socially included in the community which can contribute to the overall satisfaction with retirement as well as adjustment to it (Szinovacz M et al. 2003, Butrica B & Schaner 2005, Dingemans & Henkens 2013, McGrath et al. 2019, Grünwald et al. 2021, Xin et al. 2022).

Differences in adjustment to retirement in relation to the type of intensity of social activities

The results obtained in Table 3 shows that participants who are involved in humanitarian work or volunteer achieved statistically more significant results ($p=0.05$) on the *Pre-Retirement Subscale* than the participants who are not involved in such work which means that participants engaged in humanitarian and voluntary work undertook various activities both before and during retirement with the aim of a more successful adjustment to retirement. Participants involved in humanitarian and voluntary work had higher statistically significant results ($p=0.03$) on the *Honeymoon Subscale* than the participants who are not involved in such work, suggests that participants engaged in humanitarian work have a more positive attitude towards retired life. Participants who are engaged in humanitarian work or volunteer achieved statistically more significant results ($p=0.00$) on the *Routine Subscale* in comparison with the participants who do not engage in such work which indicates that the participants who are involved in humanitarian work or volunteer, owing to their already created set of criteria and satisfactory daily routine, adopted the role of retirees better than those who are not involved in humanitarian or volunteer work. Participants' results on the *Termination Subscale* show a different trend of differences. Participants who do not do humanitarian or volunteer work had statistically more significant results ($p=0.00$) than the participants who do, which means that the participants who are not involved in humanitarian work or volunteering are less focused on their role

as retirees because they are preoccupied with other things, such as their own or their spouse's illnesses or frailty, and loneliness.

The results in Table 4 shows that the M-W Test indicates statistically significant differences on the subscales of the RAFQ among results of the participants who do and do not do part-time work. The obtained results show that participants who do part-time work are more successfully adjusted to retirement than participants who do not do any part-time work. Participants engaged in part-time work have a positive attitude, they undertook activities according to their capabilities and they are satisfied with them because they helped them to create a set of criteria guiding them through everyday life and to adjust better to retirement than the participants who are not engaged in any part-time work.

The results obtained in Table 5 shows that participants who have hobbies achieved higher statistically significant results ($p=0.00$) on the *Pre-Retirement Subscale* than the participants who do not have hobbies, which indicates that participants with hobbies undertook more activities before and during retirement to adjust more successfully to it. Participants who have hobbies had higher statistically significant results ($p=0.00$) on the *Honeymoon Subscale* than the participants without hobbies which indicates that those with various hobbies have a more positive attitude towards retirement life. Participants who are engaged in hobbies achieved higher statistically significant results ($p=0.00$) on the *Routine Subscale* when compared to the participants without hobbies, which means that those with hobbies embraced their role as retirees, due to previously created set of criteria and satisfactory daily routine, better than those without. A different trend in differences can be seen on the *Termination Subscale*. Participants who do not have hobbies had higher statistically significant results ($p=0.00$) than participants who do, which suggests that participants without hobbies are less focused on their role as retirees since they are preoccupied with other things, most often their own or their spouse's illnesses or frailty, and loneliness.

The results obtained in Table 6 shows that participants who are involved in family activities achieved statistically more significant results ($p=0.00$) on the *Pre-Retirement Subscale* than the participants who are not involved in such activities, which suggests that participants involved in family activities undertook more activities both before and during retirement to enable them to adjust better to retirement. Participants who are engaged in family activities had higher statistically significant results ($p=0.00$) on the *Honeymoon Subscale* than the participants who are not, which signifies that participants who engage in family activities have a positive attitude towards life in retirement. Participants who are involved in family activities had higher statistically significant results ($p=0.00$) on the *Subscale* in comparison with the participants who are not involved, which means that participants involved in family activities, owing to previously created set of criteria and satisfactory daily routine, embraced the role of retirees more successfully than the participants who are not involved in family activities. However, a different trend of differences was found

on the *Termination Subscale*. Participants who are not involved in family activities had higher statistically significant results ($p=0.00$) than the participants who are involved, which indicates that participants who are not involved in family activities are less focused on their role as retirees being preoccupied with other things, most often their own or their spouse's illnesses or frailty, and loneliness.

The results in Table 7 shows that the M-W Test indicates statistically significant differences on the subscales of the RAFQ among results of the participants who are involved in cultural and educational activities and those who are not. Participants who are involved in cultural and educational activities are positive, they undertook activities according to their capabilities and they are satisfied with them because they helped them to create a set of criteria guiding them through everyday life, and they also helped them to adjust successfully to retirement, unlike the participants who are not engaged in cultural and educational activities.

M-W Tests „*indicate*” that there are statistically significant differences on the subscales of the RAFQ among the results of participants who are engaged in various activities in the local community (humanitarian work, volunteering, part-time work, hobbies, family activities, cultural and educational activities) and those who are not. Our results also support empirical research which report that inclusion in activities such as humanitarian work, volunteering, pastime activities, and bridge employment at the beginning of retirement, are all associated with greater life satisfaction and ease transition from work environment to retirement as well as adjustment to retirement in old age (Wang 2007, Solinge & Henkens 2008, Hershey & Henkens 2014, Penezić et al 2014, Cousineau & Misener 2019, Bjälkebring et al. 2021, Chu & Koo 2023).

CONCLUSION

Retiring, further course of adjustment to retirement, and ageing are affected by a number of mostly connected factors. Majority of elderly people have many years left to live after retirement. Good planning and adjustment to life changes caused by retiring are necessary in order to be able to lead a fulfilling life during this period. During this time, an individual can go through several phases of adjustment to retirement.

The main aim of this research was to examine how successful adjustment to retirement is and establish whether it differs in the elderly regarding the self-assessment of the level and type of intensity of social activities. It was applied research with a concrete aim of social intervention based on scientifically gathered and processed data while the practical objective was improved status and satisfaction of elderly people. The obtained results indicate the importance of social interaction of elderly people in the community through social activities and its positive impact on adjustment to retirement. We can conclude that inclusion and active participation of

older people in various activities, according to individual capabilities, will help them create a time structure and continuity in their daily routine, which can contribute to the feeling of satisfaction in retired life and adjustment to retirement.

This research provided a clearer insight into factors associated with successful adjustment to retirement and timely identification of factors which could be used to reduce poor adjustment to retirement. Maybe the results of this research will contribute to a deeper understanding of the process of adjustment to retirement and ageing. Prolonging the retiring age and a growing number of older population has created a need to understand circumstances of retiring, to identify the right time and reason to retire, and activities in retired life.

Some limitations of this research were related to the small sample which ultimately limited the range of possible analyses and relevance of the applied tests. The presented research provided an insight into only some of the factors influencing success of adjustment to retirement. Therefore, the findings presented in this paper should be viewed in the context of encouraging further research.

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Razlika u prilagodbi na umirovljenje kod starijih osoba u odnosu na razinu i vrstu intenziteta socijalnih aktivnosti

Sažetak

Koliko će demografska promjena povećanja broja starijeg stanovništva biti izražena u pojedinom društvu, svakako će ovisiti o pripremi društva na promjene u demografskoj strukturi. Jedna od promjena koje se događaju s povećanjem broja starijih osoba jest i povećanje broja umirovljenika. Kako bi sadašnji i budući umirovljenici postigli kvalitetniju prilagodbu na umirovljenje te bolju kvalitetu života, nužno je provoditi istraživanja usmjerena na bolje razumijevanje toga složenog procesa. Svrha izrade ovoga rada bila je utvrditi razliku u prilagodbi na umirovljenje kod starijih osoba s obzirom na samoprocjenu intenziteta socijalnih aktivnosti. Anketiranje je provedeno u svibnju i lipnju 2021. godine. U istraživanju su sudjelovala 134 ispitanika starosti veće od 65 godina koji žive u vlastitom domaćinstvu. Razlike u prilagodbi na umirovljenje kod starijih osoba s obzirom na samoprocjenu intenziteta socijalnih aktivnosti analizirane su po Atchleyevu (2004) modelu prilagodbe na umirovljenje. Dobiveni rezultati upućuju na nužnost socijalne interakcije starijih osoba u zajednici putem socijalnih aktivnosti i na njezin pozitivan utjecaj na prilagodbu na umirovljenje.

Ključne riječi: Atchleyev model; prilagodba; socijalna aktivnost; samoprocjena; umirovljenje.

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