



Determining the Impact of Adaptive Games on the Individuals' Psycho-Emotional State among Different Age Groups in Poland and Ukraine

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Abstract

Objectives. The study aimed to determine the effectiveness of implementing projects for the introduction of adaptive sports games on the psycho-emotional state of different population groups in Poland and Ukraine.

Materials and methods. A total of 341 individuals were involved in the study: 117 children (8-12 years old), 118 middle-aged people (35-60 years old), and 116 elderly people (60 years and older). The participants of the study were divided into two groups: those who took part in the Polish project "Academic Center of Sports and Health Games for Activation of People with Special Needs" (56 children, 65 adults, 73 elderly people), and those who took part in the Polish-Ukrainian project, which was conducted directly in Ukraine, "Ukrainian Center of Occupational Therapy through Adaptive Games" (61 children, 53 adults, 44 elderly people). All study participants were engaged in adaptive games (Cornhole, Jacollo, Elastik, Kulbutto, Boccia, Paka laka) for the first time. At the beginning and end of the event on adaptive games, a survey of participants was conducted. To determine the psycho-emotional state of children, the WAM method (well-being, activity, mood) was used, and the features of adults' psychological state were assessed using the standard test AWAMW (anxiety, working capacity, activity, mood, well-being).

Results. The analysis of the obtained study results revealed positive changes in the psycho-emotional state of different population groups in Poland and Ukraine under the influence of adaptive sports games. Furthermore, the adult population, including the elderly of Poland and Ukraine, demonstrated decreased anxiety levels and a significant enhancement in activity, mood and well-being due to engaging in adaptive sports games.

Conclusions. This study emphasizes the potential of adaptive sports games to improve the mental health of different population groups. The findings also indicate the effectiveness of implementing projects for the introduction of adaptive games on the psycho-emotional state of different population groups both in Poland and Ukraine.

Keywords: psycho-emotional state, adaptive games, children, adults, elderly people, project.

Introduction

Prolonged isolation during the COVID-19 pandemic has had significant mental and physical health consequences for people around the world (Shivak et al., 2023; Veronese et al., 2023). People experienced fear of illness, uncertainty about the future, and social isolation, which contributed to worsening mental health. This was especially true for older

people, teenagers and those who already had mental health problems (Alzueta et al., 2023; Hawes et al., 2022; Włostowska et al., 2024). The lack of opportunity to meet with friends and family, limited access to usual social activities, such as going to work or participating in social events, has increased the feeling of loneliness in many people. In turn, the decrease in physical activity due to the restriction of movement and the closure of gyms has led to an increase in cardiovascular problems, weight gain, sleep disorders and nutritional problems. All these consequences led to a deterioration in overall physical fitness and mental state (O'Connor et al., 2024; Dijksterhuis et al., 2022; Bogart et al., 2024).

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The problems caused by the COVID-19 pandemic have been significantly exacerbated by the outbreak of war in Ukraine. This dual crisis has led to a significant deterioration in living conditions and, as a result, a decline in the health of many Ukrainians, especially children and young people (Chaaya et al., 2022; Lass-Hennemann et al., 2024; Riad et al., 2022). Most suffer from conditions such as post-traumatic stress disorder, anxiety and depression.

Anxiety, depression and stress increase the risk of developing post-traumatic stress disorder and complex post-traumatic stress disorder. These conditions are especially exacerbated by prolonged stress, such as war or other traumatic events. The study by Kurapov et al. (2023) showed that Ukrainians of different genders, ages and living conditions who were directly affected by military action, physical violence or experienced severe human suffering had higher levels of anxiety, depression, stress and trauma-related symptoms. At the same time, those who remained in Ukraine had significantly lower symptoms of anxiety, depression and stress compared to those who moved abroad, but this raises doubt.

Therefore, it is necessary to find new and effective means of combating the consequences of the COVID-19 pandemic and war to preserve people's mental health. Scientific research pays much attention to the impact of physical activity and sports on the mental health of people of all ages (Khan et al., 2022; Malm et al., 2019; Hoffmann et al., 2022).

In general, providing support to war victims requires a comprehensive approach, including medical, psychological, social and economic assistance. This process requires the involvement of both national and international resources, as well as active public participation.

Jain et al. (2022) took a detailed look at the aftermath of the Russian invasion of Ukraine, focusing on humanitarian actions, challenges, and opportunities for the international community in response to the crisis. The authors analyzed the situation and measures taken by European countries and international organizations, and offered recommendations for effectively overcoming the challenges associated with the war and its aftermath.

Cai et al. (2022) in their study proved the effectiveness of international cooperation and support for refugees during the Russian-Ukrainian war, namely overcoming the mental health crisis among children and adolescent refugees.

Project activities can be a very effective means of psychological support for the population, especially in times of crisis, such as a pandemic or war. Project activities can be an adaptive tool to address the specific needs of the population in crisis situations (Tijani et al., 2024). When developing and implementing projects, they collaborate with various specialists, organizations and communities, which also have a positive impact on the socialization of project participants.

Thus, this study is aimed at identifying the effectiveness of the implementation of projects for the introduction of adaptive games on the psycho-emotional state of different groups of the population of Poland and Ukraine. In Poland, the project "Academic Center for Sports and Health Games for the Activation of People with Special Needs" was implemented under the ministerial program "Social Responsibility/Perfect Science". Thanks to the transfer of experience from Polish partners, the project "Ukrainian Center for Occupational Therapy through Adaptive Games"

is being implemented in Ukraine within the framework of the RITA - Region in Transition Education for Democracy Foundation competition.

Material and Methods

Participants

A total of 341 people took part in the study: 117 children (8-12 years old), 118 middle-aged people (35-60 years old) and 116 elderly people (60 years and older). The study participants were conditionally divided into two groups: those who took part in the Polish project "Academic Center for Sports and Fitness Games for the Activation of People with Special Needs" (56 children, 65 adults, 73 elderly people), and those who took part in the Polish-Ukrainian project, directly in Ukraine, "Ukrainian Center for Occupational Therapy through Adaptive Games" (61 children, 53 adults, 44 elderly people). The groups were homogeneous in terms of general characteristics, social status and health status of the study participants. All study participants were participating in adaptive games sports events for the first time (Cornhole, Jacollo, Elastik, Kulbutto, Boccia, Paka laka).

Procedure

During the work of the Polish and Ukrainian centers, a sociological survey of each participant was conducted. Also, to determine the psycho-emotional state of children, the WAM method (well-being, activity, mood) was used, and the characteristics of the psychological state of adults were assessed using the standard AWAMW test (anxiety, working capacity, activity, mood, well-being). The study participants were asked to fill in a standard self-assessment card at the beginning and end of the adaptive sports game's session. The personality self-assessment tool is presented as a registration form consisting of several lines (WAM – 30 lines; AWAMW – 40 lines), each of which contains two adjectives of opposite meanings and numbers indicating the degree of expression of each feature: 3 (strongly expressed), 2 (moderately expressed), 1 (weakly expressed).

Statistical Analysis

The research materials were processed using statistical analysis from IBM SPSS 20. The mean values were compared using the t-test for paired values. A 95 % confidence interval was chosen during data processing. The level of significance was accepted if $p \leq 0,05$.

Results

At the first stage of the study, the effectiveness of the implementation of the Polish project "Academic Center for Sports and Fitness Games for Activation of People with Special Needs" was analyzed.

The indicators of the psychological state of children after classes in adaptive sports games showed positive shifts. Thus, during the study, significant shifts were found in the children's activity indicators ($t = 31.723$; $p < 0.001$) and mood ($t = 44.161$; $p < 0.001$) (Table 1). Classes in adaptive games also had a positive effect on well-being indicators.

Table 1. Assessment of well-being, activity and mood (according to the WAM method) of Polish children aged 8-12 years at the beginning and end of adaptive sports games, points (n = 56)

№	Scales	At the beginning of the class	At the end of the class	\Delta x	Assessment of reliability	
		X ± s	X ± s	DM ± SD	t	Sig. (2-tailed)
1	Well-being	34.5 ± 7.20	50.2 ± 6.32	15.7 ± 3.98	29.429	< 0.001
2	Activity	47.3 ± 6.10	62.3 ± 4.26	15.0 ± 3.54	31.723	< 0.001
3	Mood	43.8 ± 5.4	63.4 ± 4.55	19.6 ± 3.31	44.161	< 0.001

Table 2. Assessment of anxiety, working capacity, activity, mood and well-being (using the AWAMW method) of the Polish adult population (35-60 years old) at the beginning and end of adaptive sports games, points

Indicators		At the beginning of the class	At the end of the class	\Delta x	Assessment of reliability	
		X ± s	X ± s	DM ± SD	t	Sig. (2-tailed)
Anxiety	women (n = 34)	57.8 ± 6.51	49.3 ± 4.19	8.5 ± 3.34	14.832	< 0.001
	men (n = 31)	60.4 ± 5.52	52.8 ± 4.61	7.6 ± 2.98	14.133	< 0.001
Working capacity	women (n = 34)	27.3 ± 6.68	40.2 ± 7.56	12.9 ± 3.96	19.012	< 0.001
	men (n = 31)	31.2 ± 6.58	43.5 ± 4.44	12.3 ± 4.04	16.925	< 0.001
Activity	women (n = 34)	26.4 ± 9.15	54.6 ± 6.66	28.2 ± 3.40	48.241	< 0.001
	men (n = 31)	23.8 ± 8.84	49.7 ± 6.96	25.9 ± 5.49	26.279	< 0.001
Mood	women (n = 34)	33.2 ± 5.92	50.6 ± 3.70	17.4 ± 3.47	29.107	< 0.001
	men (n = 31)	31.6 ± 6.02	48.3 ± 3.74	16.7 ± 3.21	28.924	< 0.001
Well-being	women (n = 34)	24.9 ± 6.03	42.6 ± 4.22	17.7 ± 2.55	40.339	< 0.001
	men (n = 31)	22.3 ± 6.14	37.8 ± 5.26	15.5 ± 2.03	42.637	< 0.001

Table 3. Assessment of anxiety, working capacity, activity, mood and well-being (using the AWAMW method) of Polish elderly people (60 years and older) at the beginning and end of adaptive sports games, points

Indicators		At the beginning of the class	At the end of the class	\Delta x	Assessment of reliability	
		X ± s	X ± s	DM ± SD	t	Sig. (2-tailed)
Anxiety	women (n = 43)	61.7 ± 5.53	50.1 ± 3.40	11.6 ± 2.92	25.883	< 0.001
	men (n = 30)	62.5 ± 5.66	52.8 ± 4.66	9.7 ± 3.24	16.348	< 0.001
Working capacity	women (n = 43)	16.4 ± 7.44	28.4 ± 5.49	12.0 ± 5.32	14.726	< 0.001
	men (n = 30)	18.8 ± 6.34	30.7 ± 4.19	11.9 ± 4.46	14.591	< 0.001
Activity	women (n = 43)	24.5 ± 10.45	51.4 ± 7.60	26.9 ± 6.35	27.798	< 0.001
	men (n = 30)	22.3 ± 8.34	48.2 ± 7.06	25.9 ± 5.31	26.667	< 0.001
Mood	women (n = 43)	35.7 ± 7.16	54.9 ± 5.33	19.2 ± 5.19	24.185	< 0.001
	men (n = 30)	33.1 ± 6.37	49.8 ± 3.74	16.7 ± 4.97	18.379	< 0.001
Well-being	women (n = 43)	22.7 ± 7.05	41.4 ± 6.05	18.7 ± 5.67	21.588	< 0.001
	men (n = 30)	23.8 ± 6.14	40.2 ± 5.75	16.4 ± 4.31	20.911	< 0.001

Table 2 shows changes in the psychological state of the adult population in Poland (35-60 years old) under the influence of adaptive sports games. It was found that classes using adaptive sports games had a positive effect on all participants in the study, but on women to a greater extent.

Thus, women showed a greater increase in activity indicators under the influence of adaptive sports games – by 28.2 points (t = 48.241; p < 0.001), mood – by 17.4 points (t = 29.107; p < 0.001), well-being – by 17.7 points (t = 40.339;

p < 0.001), and men also showed a significant improvement in the studied indicators (p < 0.001).

Elderly people (60 years and older) showed a high interest in adaptive sports games events in Poland. Table 3 shows changes in indicators of the psychological state of older people under the influence of playing adaptive sports games.

Thus, in elderly women, under the influence of adaptive sports games, significant changes occurred in the indicators

Table 4. Assessment of well-being, activity and mood (according to the WAM method) of Ukrainian children 8-12 years old at the beginning and end of adaptive sports games, points (n = 61)

№	Scales	At the beginning of the class	At the end of the class	Δx	Assessment of reliability	
		X ± s	X ± s		t	Sig. (2-tailed)
1	Well-being	31.6 ± 7.27	49.8 ± 5.10	18.2 ± 3.49	40.644	< 0.001
2	Activity	43.9 ± 7.37	64.5 ± 5.44	20.6 ± 3.26	49.405	< 0.001
3	Mood	39.4 ± 5.49	62.7 ± 3.48	23.3 ± 2.79	64.928	< 0.001

of activity ($t = 27.798$; $p < 0.001$), mood ($t = 2.55$; $p < 0.001$), well-being ($t = 21.588$; $p < 0.001$) and anxiety ($t = 25.883$; $p < 0.001$). In elderly men, reliable shifts were obtained in the indicators of activity ($t = 26.667$; $p < 0.001$), mood ($t = 18.379$; $p < 0.001$) and well-being ($t = 20.911$; $p < 0.001$).

Thus, it can be concluded that adaptive sports games had a positive impact on the psychological state and well-being of Polish residents. A survey of participants on their well-being at the beginning and end of sports events on adaptive games also revealed positive changes in respondents.

During the observation of the participants of the events, an interesting fact was revealed that those who had illnesses and disabilities stopped experiencing internal barriers: fear, shame, rejection by society. It is also worth noting the positive changes in the control over emotions and stress. Most respondents noticed a decrease in conflict situations, especially on the part of those who caused these conflicts. At the end of the sports event with adaptive games, respondents felt an improvement in their mood and noticed that they had become more open to communication. Most respondents noted that they liked this type of motor activity and were interested in learning new knowledge and skills. Thus, we can state the positive impact of adaptive sports games on well-being, as an element of quality of life, of different population groups.

In connection with the successful implementation of this project and the confirmed effectiveness of the use of adaptive games to improve the quality of life of the population, an application was submitted and won the project within the competition "RITA – Przemiany w regionie" RITA – "Region in Transition" Education for Democracy Foundation called "Ukrainian Center for Occupational Therapy Through Adaptive Games".

The project aims to implement Polish experience in the field of occupational therapy by means of adaptive games in Ukraine by opening 3 Ukrainian occupational therapy centers in partner universities of Lviv, Rivne and Kharkiv. The activities of the centers are aimed primarily at temporarily displaced persons of all ages, gender and physical abilities, including people with disabilities.

In the study of the impact of adaptive sports games, children from Ukraine showed reliable ($p < 0.001$) changes in all indicators of psychological state (Table 4).

Thus, the greatest changes were obtained in mood indicators, which improved by 23.3 points ($t = 64.928$; $p < 0.001$), the level of well-being increased by 18.2 points ($t = 40.644$; $p < 0.001$), and activity – by 20.6 points ($t = 49.405$; $p < 0.001$). The obtained data indicate a positive impact of adaptive games on the psycho-emotional state of children from Ukraine, which is especially important during wartime.

Also in Ukraine, a study was conducted on the level of social adaptation of children aged 8-12 during martial law. Under the influence of adaptive sports games, changes

occurred in the social adaptation of children in both groups. Figure 1 shows the distribution of children by level of social adaptation at the beginning and end of adaptive sports games.

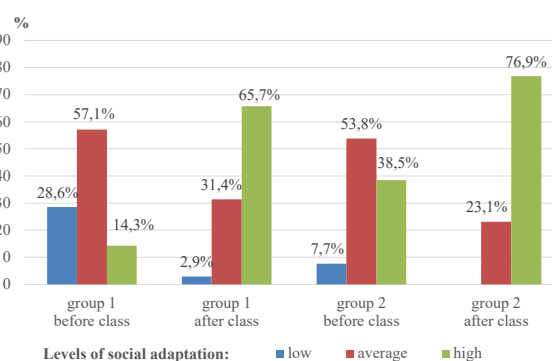


Fig. 1. Distribution of children by level of social adaptation at the beginning and end of adaptive sports games: group 1 – children who were forced to change their permanent place of residence during the war due to danger to life (n = 35); group 2 – children who did not change their permanent location (n = 26)

Thus, the number of children in group 1 with a low level of social adaptation at the beginning of adaptive sports games was 28.6 % (10 children), and at the end – 2.9 % (1 child). At that time, the number of children with a high level of social adaptation increased significantly: 14.3 % (5 children) were found to be engaged in adaptive games, after – 65.7 % (23 children). Similar changes in the level of social adaptation occurred in children from group 2, that is, the number of children with a high level of adaptation increased significantly due to those with an average and low level at the beginning of the activities, and children with a low level of social adaptation were not identified at all after the activities.

The obtained data indicate a positive impact of even short-term adaptive games on the mental state and social adaptation of children, which primarily confirms the effectiveness of the implementation of this project in Ukraine, which is aimed at reducing negative phenomena during resettlement, the emergence of depression, anxiety and building connections and integration.

Adaptive sports games also affected the psycho-emotional state of the adult population of Ukraine. Table 5 presents the results of self-assessment of the level of anxiety, performance, activity, mood and well-being of mature Ukrainians (35-60 years old) at the beginning and end of adaptive sports games.

Thus, under the influence of adaptive classes, women improved their anxiety scores by 17.5 points ($t = 23.018$; $p < 0.001$), activity by 21.3 points ($t = 18.726$; $p < 0.001$) and

Table 5. Assessment of anxiety, working capacity, activity, mood and well-being (according to the AWAMW method) of the adult population of Ukraine (35-60 years old) at the beginning and end of adaptive sports games, points

Indicators		At the beginning of the class	At the end of the class	\Delta x	Assessment of reliability	
		X ± s	X ± s	DM ± SD	t	Sig. (2-tailed)
Anxiety	women (n = 28)	63.1 ± 7.13	45.6 ± 4.83	17.5 ± 4.02	23.018	< 0.001
	men (n = 25)	61.8 ± 6.49	47.3 ± 3.66	14.5 ± 3.95	18.336	< 0.001
Working capacity	women (n = 28)	28.5 ± 7.45	41.2 ± 5.29	12.7 ± 4.38	15.315	< 0.001
	men (n = 25)	30.4 ± 6.36	41.8 ± 3.73	11.4 ± 4.01	14.260	< 0.001
Activity	women (n = 28)	24.8 ± 8.58	46.1 ± 6.03	21.3 ± 6.02	18.726	< 0.001
	men (n = 25)	22.6 ± 7.28	43.5 ± 6.44	20.9 ± 5.05	20.683	< 0.001
Mood	women (n = 28)	31.4 ± 7.16	49.7 ± 3.86	18.3 ± 4.82	20.004	< 0.001
	men (n = 25)	29.4 ± 6.25	47.7 ± 4.07	18.3 ± 3.97	22.963	< 0.001
Well-being	women (n = 28)	25.3 ± 6.66	39.2 ± 5.30	13.9 ± 4.82	15.235	< 0.001
	men (n = 25)	23.1 ± 6.48	36.4 ± 5.05	13.3 ± 4.41	15.091	< 0.001

Table 6. Assessment of anxiety, working capacity, activity, mood and well-being (using the AWAMW method) of elderly people in Ukraine (60 years and older) at the beginning and end of adaptive sports games, points

Indicators		At the beginning of the class	At the end of the class	\Delta x	Assessment of reliability	
		X ± s	X ± s	DM ± SD	t	Sig. (2-tailed)
Anxiety	women (n = 26)	75.8 ± 8.61	52.3 ± 7.13	23.5 ± 4.20	28.530	< 0.001
	men (n = 18)	80.4 ± 9.62	56.8 ± 6.11	23.6 ± 6.25	16.084	< 0.001
Working capacity	women (n = 26)	15.6 ± 6.15	29.5 ± 5.52	13.9 ± 2.87	24.743	< 0.001
	men (n = 18)	17.4 ± 6.32	30.4 ± 5.93	13.0 ± 2.89	19.102	< 0.001
Activity	women (n = 26)	23.7 ± 8.16	48.3 ± 7.70	24.6 ± 4.70	26.661	< 0.001
	men (n = 18)	21.5 ± 7.69	44.1 ± 6.90	22.6 ± 2.83	33.882	< 0.001
Mood	women (n = 26)	32.4 ± 7.63	51.6 ± 6.18	19.2 ± 4.71	20.751	< 0.001
	men (n = 18)	30.7 ± 7.32	48.4 ± 4.93	17.7 ± 2.84	26.307	< 0.001
Well-being	women (n = 26)	20.4 ± 6.49	38.6 ± 5.21	18.2 ± 4.11	22.609	< 0.001
	men (n = 18)	19.8 ± 5.78	36.9 ± 5.16	17.1 ± 2.17	33.469	< 0.001

mood by 18.3 points ($t = 20.004$; $p < 0.001$). Along with this, men significantly improved their anxiety scores by 14.5 points ($t = 18.336$; $p < 0.001$), activity by 20.9 points ($t = 20.683$; $p < 0.001$) and mood by 18.3 points ($t = 22.963$; $p < 0.001$).

In men and elderly women from Ukraine, significant changes were obtained for all indicators except working capacity (Table 6). Anxiety indicators in women decreased by 23.5 points ($t = 28.530$; $p < 0.001$), in men – by 23.6 points ($t = 16.084$; $p < 0.001$). In women, the activity level increased by 24.6 points ($t = 26.661$; $p < 0.001$), mood – by 19.2 points ($t = 20.751$; $p < 0.001$) and well-being – by 18.2 points ($t = 22.609$; $p < 0.001$). Men also showed improvements in activity indicators – by 22.6 points ($t = 33.882$; $p < 0.001$), mood – by 17.7 points ($t = 26.307$; $p < 0.001$) and well-being – by 17.1 points ($t = 33.469$; $p < 0.001$).

Dicussion

This study aimed to evaluate the effectiveness of the implementation of projects for the introduction of adaptive games on the psycho-emotional state of mental health of

different groups of the population of Poland and Ukraine. The main conclusion showed that participation in events on adaptive sports games had a positive effect on such indicators of the psycho-emotional state (well-being, activity, mood, working capacity and anxiety) of different groups of the population, both in Poland and Ukraine.

Psycho-emotional state is one of the key components of mental health. Chronic negative psycho-emotional state, such as constant stress, anxiety or depression, can negatively affect mental health, leading to the development of mental disorders (Polikanova et al., 2020). The current study and its results confirm the data of preliminary studies on the impact of sports activities on the mental health of people of all ages.

A study by Paluska et al. (2020), found that physical activity plays an important role in the treatment of mild to moderate mental illness, especially depression and anxiety. Results from a study by Eather et al. (2023), showed that participation in any sport (team or individual) is beneficial for improving mental health and social outcomes among adults. At the same time, team sports provide more powerful benefits for mental and social outcomes in adulthood.

Therefore, the implementation of a completely new approach to mental rehabilitation and socialization of different groups of the population, including people with special needs, occurred due to the use of adaptive games, which allowed developing new skills and integrating into social life through sports events. The main goal of adaptive sports games for different groups of the population is: solving compensatory and preventive problems; improvement of educational and health-improving functions. The main goal of the projects was the popularization of adaptive sports games among different groups of the population, including people with special needs, in order to achieve their social and psychological rehabilitation and adaptation.

Active leisure time spending through adaptive games is aimed at enriching and strengthening the social integration of people, including those with disabilities, while focusing on passive and unmotivated leisure reduces their overall vitality and contributes to deepening social isolation. Therefore, one of the important tasks of the project is the psychological guidance of people to get out of a static state, which for some has become a habit during the COVID-19 pandemic in the world and martial law in Ukraine. The principle of mental comfort is characterized by the creation of an atmosphere of relaxation and trust in the process of social and psychological rehabilitation and adaptation, which, based on internal motives, will stimulate people's activity. These data are confirmed by the study by Mulyk et al. (2024), which proved the effectiveness of using adaptive sports games on the psycho-emotional state and sensorimotor response of military personnel undergoing rehabilitation.

Currently, WAM and AWAMW methods are widely used in scientific research to determine the psycho-emotional state of individuals of all ages. The use of the WAM method is presented in the study by Romualdas et al. (2013), which presents the characteristics of well-being, activity, mood and optimism of adolescents involved in sports. The study by Polikanova et al., 2020 highlights the well-being, activity and mood of wrestling athletes under the influence of intense physical activity. The AWAMW method is presented in the works of Podrigalo et al. (2014) and Imas et al. (2021). This method was used in the study of Mulyk et al. (2024), which determined the psychological state of military personnel undergoing rehabilitation. The results show that the WAM and AWAMW methods make it easy to assess the psycho-emotional state of people of all ages. Therefore, the AWAMW method was used to determine the influence of engaged in adaptive games on the psycho-emotional state of the adult population, and the WAM method was used for children. This allowed us to obtain informative data on the assessment of anxiety, performance, activity, well-being and mood of the participants in the Polish and Ukrainian projects.

The use of adaptive games in Poland allowed children aged 8-12 years to increase their levels of well-being, activity and mood. At the same time, for the adult population (35-60 years old), engaging in adaptive games had a positive effect on the manifestation of activity, improving mood and well-being. Also, elderly people (60 years and older) significantly improved their anxiety, activity, mood and well-being indicators under the influence of adaptive games. Adaptive games implemented in Ukraine also allowed to positively influence people of different ages. Due to the event held on adaptive sports games, children aged 8-12 years improved

their well-being, activity and mood indicators. Thanks to adaptive sports games, the adult population of Ukraine, including the elderly, has seen a decrease in anxiety levels and a significant increase in activity, mood and well-being.

Therefore, it can be stated that participation in the event using adaptive sports games had a positive effect on the psycho-emotional state of different groups of the population. At the same time, in our opinion, long-term training in adaptive sports games will form stable and high indicators of well-being, activity, mood, performance, and will also be reflected in a significant decrease in anxiety. Which is very important in the adaptation of the body to the stabilization of the psychological state of people.

Conclusions

This study highlights the potential of adaptive sports games to improve mental health of different population groups. The results also indicate the effectiveness of the implementation of projects to introduce adaptive games on the psycho-emotional state of different population groups both in Poland and Ukraine.

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Conflicts of Interest

Authors have no conflict of interest to disclose.

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Визначення впливу занять адаптивними іграми на психоемоційний стан осіб різного віку Польщі та України

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Авторський вклад: А – дизайн дослідження; В – збір даних; С – статаналіз; D – підготовка рукопису; E – збір коштів

Реферат. Стаття: 9 с., 6 табл., 1 рис., 25 джерел.

Мета. Визначити ефективність реалізації проєктів впровадження адаптивних спортивних ігор на психоемоційний стан різних груп населення Польщі та України.

Матеріали і методи. Всього у дослідженні взяла участь 341 особа: 117 дітей (8-12 років), 118 осіб середнього віку (35-60 років) та 116 людей похилого віку (60 років і старше). Учасники дослідження були умовно поділені на дві групи: які брали участь у польському проєкті «Академічний центр спортивно-оздоровчих ігор для активізації людей з особливими потребами» (56 дітей, 65 дорослих, 73 людини похилого віку), та ті, які брали участь у польсько-українському проєкті, безпосередньо в Україні, «Український центр ерготерапії через адаптивні ігри» (61 дитина, 53 дорослих, 44 особи похилого віку). Усі учасники дослідження вперше брали участь у спортивних заходах з адаптивних ігор (Cornhole, Jocollo, Elastik, Kulbutto, Boccia, Pała laka). На початку та наприкінці заходів з адаптивних ігор проводилось опитування учасників. Для визначення психоемоційного стану дітей використовувалась методика САН (самопочуття, активність, настрій), особливості психологічного стану дорослих оцінювалися за допомогою стандартного тесту ТРАНС (тривожність, працездатність, активність, настрій, самопочуття).

Результати. Аналіз отриманих результатів дослідження виявив позитивні зміни психоемоційного стану різних груп населення Польщі та України під впливом заняття адаптивними спортивними іграми. Також у дорослого населення, у тому числі й людей похилого віку, Польщі та України завдяки адаптивним спортивним іграм знизився рівень тривожності та значно підвищились показники активності, настрою та самопочуття.

Висновки. Це дослідження підкреслює потенціал адаптивних спортивних ігор для покращення психічного здоров'я різних груп населення. Також отримані результати свідчать про ефективність реалізації проєктів впровадження адаптивних ігор на психоемоційний стан різних груп населення, як в Польщі, так і в Україні.

Ключові слова: психоемоційних стан, адаптивні ігри, діти, дорослі, літні люди, проєкт.

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