

UDK: 159.9.072.533
<https://doi.org/10.31612/2616-4868.5.2023.07>

PSYCHOTHERAPEUTIC TOOLS IN DEALING WITH NEGATIVE PSYCHOEMOTIONAL STATES BY EXAMPLE OF ONLINE GAMES «TETRIS» AND «FARM»

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Summary

Introduction: The war has exacerbated the negative psycho-emotional states of people living in Ukraine and abroad. Right now, there is an urgent need for quality mental health care. The search for new effective and at the same time simple methods of providing relevant psychological and psychotherapeutic assistance determines the relevance of this research.

The aim: To investigate and prove the effectiveness of the dosed daily use of an online game as a psychotherapeutic tool in dealing with the negative psychoemotional states of people living abroad during the war in Ukraine.

Materials and methods: 500 people took part in the experimental research – Ukrainian immigrants in China, the USA, Portugal and Germany – 267 women and 233 men aged 18-35, who were randomly divided into control and experimental groups of 250 each. The research continued for 13 months. Methods: psychological counselling, psychoeducation, dosed daily using online games «Tetris» and «Farm» in the control and experimental groups, respectively. Diagnostic methods: Questionnaire for the detection of psychosomatic disorders, Depression Self-Assessment Scale and Anxiety Self-Assessment Scale.

Results: In the primary diagnosis, the following results were obtained: high rates of psychosomatic disorders in 70,8 % of the control and 66,7 % of the experimental groups; depression in 63,3 % of the control and 66,7 % of the experimental groups; high rates of anxiety in 66,7 % of the control and 70 % of the experimental groups. After using the online games «Tetris» and «Farm» in the control and experimental groups, respectively, the following results were obtained: high rates of psychosomatic disorders decreased to 37,5 % of people in the control group and 33,3 % in the experimental group; 33,3 % of people in the control group and 30 % in the experimental group have depression; high rates of anxiety were found in 33,3 % of people in the control group and 26,7 % in the experimental group, which is half as much as the previous indicators.

Conclusions: the results of the experimental research suggest that the dosed daily use of the online game «Farm» is an effective psychotherapeutic tool in dealing with negative psycho-emotional states, proven by the authors.

Key words: mental health, negative psychoemotional states, online game, psychological aid, psychotherapeutic tool

INTRODUCTION

Recently, the world has been experiencing a series of devastating events – climate change, natural disasters, pandemics, wars that cause migration and a deep economic crisis. During a full-scale war, the topic of mental health has become one of the most pressing in Ukraine and abroad, as the Center for Economic Strategy estimates that as of the

end of June 2023, 5,6-6,7 million Ukrainians are abroad because of the war [5]. The war has exacerbated the negative psycho-emotional states of people living in Ukraine and abroad. Since the beginning of the full-scale invasion of Ukraine, approximately 90 % of Ukrainians have at least one of the symptoms of anxiety or depression [4]. Since 2022, the most frequent requests to psychologists have been related to physical and mental health disorders, namely,

depressed mood, constant anxiety, sleep disturbances, tension and pain, exacerbation of chronic and new psychosomatic ailments. Right now, there is an urgent need for quality mental health care. The search for new effective and at the same time simple methods of providing relevant psychological and psychotherapeutic care determines the relevance of this research.

THE AIM OF THE STUDY

To investigate and prove the effectiveness of dosed daily use of an online game as a psychotherapeutic tool in dealing with negative psycho-emotional states of people living outside Ukraine during the war.

MATERIALS AND METHODS

An experimental research was conducted with the participation of 500 people aged 18–35. The survey sample included representatives of Ukrainian diasporas in China, the United States, Germany, and Portugal. The research was conducted online using the Google Forms and Telegram applications, in compliance with the «Code of Ethics for Psychologists» and with consent to the processing of personal data.

The experimental research consisted of 4 stages and lasted from June 2022 to September 2023:

At the first stage of the experiment (June 2022), the sample of subjects was randomly divided into two groups of 250 people each, a control group and an experimental group, according to a table of random numbers. The control group included 129 women and 121 men. The experimental group consisted of 142 women and 108 men.

At the second stage of the experiment (June–July 2022), psychodiagnostics was conducted to identify existing negative conditions using the following methods: Questionnaire for the Detection of Psychosomatic Disorders [2], Depression Self-Assessment Scale [2], Anxiety Self-Assessment Scale [1], and the results were calculated. These methods are questionnaires with closed questions (yes or no answers, number of questions from 24 to 30) and contain the instruction «Please mark the statement that applies to you and your mood for at least the last two weeks. Be honest in your answers». In case of 6–7 or more affirmative answers, a recommendation was given to consult a psychologist and/or a specialist in psychosomatic medicine to more successfully address the issues indicated in the questionnaire.

At the third stage of the experiment (August 2022–August 2023), the Tetris game was used as a psychotherapeutic tool in the control group and the Farm game in the experimental group, respectively. Participants were asked to play these online games for 20 minutes daily.

In the fourth stage of the experiment (September 2023), psychodiagnostics was again conducted using the

same methods as in the second stage of the experiment and the data of the experimental study were calculated.

RESEARCH RESULTS AND DISCUSSIONS

In June–July 2022, psychodiagnostics was conducted using the following methods: a questionnaire for the detection of psychosomatic disorders (for adults), a depression self-assessment scale (screening test), an anxiety self-assessment scale, and the following results were obtained.

The questionnaire for detecting psychosomatic disorders (for adults) revealed the following results: 70,8 % of the respondents in the control group and 66,7 % of the respondents in the experimental group have high rates of psychosomatic disorders ≥ 6 . According to the depression self-assessment scale (screening test), 63,3 % of respondents in the control group and 66,7 % in the experimental group have high depression scores ≥ 7 ; according to the anxiety self-assessment scale, 66,7 % of respondents in the control group and 70 % of respondents in the experimental group have high anxiety scores ≥ 7 . The most significant indicators of experiencing negative psychoemotional states in both groups were bad mood, feelings of hopelessness, intolerance and irritability, sleep disturbances, constant mental and physical fatigue, anxious thoughts, fears, loss of interest in life, crying, constant sadness and depression, weight changes, palpitations, indifference, body pain, inability to concentrate, slowing down of motor activity, problems with sexual function, constant worry. The condition, characterized by a persistent decrease in mood and loss of the ability to experience joy, a pessimistic view of what is happening around, as well as low self-esteem, loss of interest in habitual activities and slowed motor activity, indicates negative changes in mental health, reduces a person's ability to work and quality of life.

As a rule, psychological assistance and psychotherapy include a series of structured sessions in which a specialist helps a person identify and change behavioral patterns (isolation, inactivity, avoidance of problem solving) and cognitive reactions (destructive thinking, exaggeration of negative events, downplaying positive accents) [1]. Since not all participants were able to receive psychotherapy sessions on a regular basis, a universal and accessible method was chosen – an online game. The game «Tetris» was used in the control group, as it has already been proven to be a psychotherapeutic tool and recommended by the Department of Medical Psychology, Psychosomatic Medicine and Psychotherapy of the Bogomolets National Medical University and has been called a «cognitive antibiotic» [6] and the game «Farm», which was used in the experimental group as a psychotherapeutic tool for the first time.

After the recommended dosed use of the online games «Tetris» in the control group and «Farm» in

the experimental group, respectively, the following results were obtained: according to the questionnaire for detecting psychosomatic disorders (for adults) – 37,5 % of respondents in the control group and 33,3 % of respondents in the experimental group have high rates of psychosomatic disorders ≥ 6 ; according to the depression self-assessment scale (screening test), 33,3 % of respondents in the control group and 30 % in the experimental group have high rates of depression ≥ 7 ; 33,3 % of respondents in the control group and 26,7 % of respondents in the experimental group had high anxiety scores ≥ 7 , indicating a decrease in the number of people with negative conditions than the results of the preliminary diagnosis. The data show that after dosed daily use of online games, the experience of negative psychoemotional states decreased in both groups. Those individuals whose scores did not decrease were recommended to see a psychiatrist for adequate medication treatment.

CONCLUSIONS

In the course of the experimental research, it was found that:

1. Negative psycho-emotional states, such as depression and anxiety, burdened by psychosomatic

manifestations, are experienced by 60-90 % of Ukrainians during the war.

2. Not all Ukrainians who are outside of Ukraine, due to various circumstances, can receive quality psychological care, which significantly affects their mental health.

3. The dosed daily use of the online game «Farm» is an effective psychotherapeutic tool in dealing with negative psychoemotional states, proven by the authors.

PROSPECTS FOR FURTHER RESEARCH

The results obtained in the course of this experimental research are the basis for a more detailed study of the problem and the search for the latest therapeutic tools for dealing with negative psychoemotional states. It also seems possible to include this issue in the educational programs of the specialties 053 «Psychology» and 225 «Medical Psychology» in higher education institutions.

FUNDING AND CONFLICT OF INTERESTS

The authors declare that there is no conflict of interests. The research was funded by self-financing.

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Резюме

ПСИХОТЕРАПЕВТИЧНІ ЗАСОБИ В РОБОТІ З НЕГАТИВНИМИ ПСИХОЕМОЦІЙНИМИ СТАНАМИ НА ПРИКЛАДІ ОНЛАЙН ІГОР «ТЕТРИС» ТА «ФЕРМА»

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Вступ: Війна призвела до загострення негативних психоемоційних станів людей, які мешкають в Україні та за її межами. Саме зараз є гостра необхідність в отриманні якісної допомоги в галузі психічного здоров'я. Пошук нових ефективних та водночас простих методів надання актуальної психологічної та психотерапевтичної допомоги зумовлює актуальність наведеного дослідження.

Мета дослідження: дослідити та довести ефективність дозованого щоденного застосування онлайн гри як психотерапевтичного засобу в роботі з негативними психоемоційними станами осіб, які під час війни в Україні проживають за її межами.

Матеріали та методи: в експериментальному дослідженні взяли участь 500 осіб – представники української діаспори в Китаї, США, Португалії та Німеччині, – 271 жінки та 229 чоловіків віком 18-35 років, яких у рандомному порядку було поділено на контрольну та експериментальну групи по 250. Тривалість дослідження – 13 місяців. Методи роботи: психологічне консультування, психоосвіта, дозоване щоденне використання онлайн ігор «Тетрис» та «Ферма» у контрольній та експериментальній групі відповідно. Діагностичні методи: Анкета для виявлення психосоматичних розладів, Шкала самооцінки депресії та Шкала самооцінки тривоги. **Результати:** у первинній діагностиці отримано результати: високі показники психосоматичних розладів у 70,8 % осіб контрольної та 66,7 % експериментальної груп; показники депресії у 63,3 % осіб контрольної та 66,7 % експериментальної груп; високі показники тривожності у 66,7 % осіб контрольної та 70 % експериментальної груп. Після використання онлайн ігор «Тетрис» та «Ферма» в контрольній та експериментальній групах відповідно, отримано результати: високі показники психосоматичних розладів знизились до 37,5 % осіб у контрольній та 33,3 % в експериментальній групі; наявні показники депресії мають 33,3 % осіб у контрольній та 30 % в експериментальній групі; високі показники тривожності виявлено у 33,3 % осіб у контрольній та 26,7 % в експериментальній групі, що вдвічі менші за попередні показники.

Висновки: результати експериментального дослідження дають змогу стверджувати, що дозоване щоденне використання онлайн гри «Ферма» є доведеним авторами ефективним психотерапевтичним засобом в роботі з негативними психоемоційними станами.

Ключові слова: психічне здоров'я, негативні психоемоційні стани, онлайн гра, психологічна допомога, психотерапевтичний засіб