https://doi.org/10.53360/3080-3861-2025-4(4)-4
IRSTI: 16.21.29

I.A. Emir*, G. Zhanatbekkyzy, A. Tleuova
Shakarim University,
071412, Republic of Kazakhstan, Semey, 20 A Glinka str.
*ORCID: 0009-0002-5898-7891
*e-mail: issaemir03@gmail.com

IMPACT OF PHYSICAL ACTIVITIES UNDERTAKEN USING VR ON MENTAL WELL BEING, FOR FOREIGN LANGUAGE TEACHERS

Abstract. Mental well-being and language learning anxiety play a crucial role in the effectiveness and productivity of foreign language teaching. In recent years, growing attention has been given to the psychological health of educators; however, limited research has explored innovative approaches to supporting mental well-being, particularly in Central Asian contexts. This qualitative study explores the impact of virtual reality (VR)–based physical activities on the mental well-being of foreign language teachers at a university level. The study aimed to (1) examine teachers' understanding of their mental well-being, (2) identify their experiences, barriers, and facilitators related to engagement in regular physical activity, and (3) investigate their perceptions of physical activities undertaken using immersive VR.

Data were collected through semi-structured baseline and follow-up interviews. Participants took part in five VR-based physical activity sessions over a two-week period. Thematic analysis revealed that participants conceptualized mental well-being in diverse ways but commonly identified physical activity as a key strategy for managing stress, anxiety, depression, and mood. Traditional activities such as walking, running, stretching, and meditation were frequently reported. Findings from follow-up interviews indicated that although VR-based physical activities were initially challenging due to their novelty, they were perceived as engaging, enjoyable, and effective in temporarily improving mood and reducing anxiety. Participants reported increased immersion and distraction from daily stressors during VR sessions.

While the positive effects were short-term and VR was not viewed as a replacement for conventional physical activity, it was considered a valuable and innovative complementary tool. The study acknowledges limitations related to small sample size and lack of data saturation and recommends further large-scale qualitative and mixed-method studies.

Keywords: foreign language teachers, mental well being, language learning anxiety, foreign language, physical activity, qualitative study, virtual reality.

Introduction

Awareness of mental well-being, language learning anxiety can boost production and achievements in learning and teaching foreign languages. Over the last decade, studying mental health, mental well-being tends to be in demand. There are not specific definition of the word mental well-being, however according to the definition by the World Health Organization, mental well-being is a state of well-being that helps to determine the way of handling stress, anxiety relate to others, and help with a choice in life.

Language learning anxiety is an important psychological element that affects the way of students' learning foreign languages [1]. The language anxiety and elements of learning languages has not yet been discovered, especially in Central Asian countries. The purpose of the paper is to provide some background knowledge and guidance to foreign language learners and instructors on how to deal with psychological elements such as foreign language anxiety, stress and depression by perfoming physical activities.

Literature review. Language learning anxiety is identified as an important element of learning and speaking foreign languages that affect how well they learn foreign languages [2].

There is no internationally recognized definition for wellbeing yet mostly mental well being is defined as a positive state, that enables people to tackle stress and challenges including emotional, psychological and social well being.According to the World Health Organization (2004), mental wellbeing is fundamental to overall health and quality of life [3]. Moreover, it is defined as an individual's ability to boost their potential, work productivity and creatively, build strong relationships with other people.

This [2] article explores non clinical approaches to support mental health, focusing on improving outcomes for individuals with mental disorders. By emphasising social and environmental interventions such as supportive networks and community based programs rather than traditional clinical treatments.

Maintaining strong mental wellbeing can be difficult when experiencing symptoms of anxiety or stress. The impact of anxiety, stress, depression on mental well-being. Those who experience psychological problems such as depression, anxiety and stress are more likely to have an unstable mental status [4].Thus they could lead to digestive disorders, heart disease, obesity and chronic pain, respiratory illnesses and thyroid issues, but these are just a few of the potential effects of depression anxiety and stress that they could cause.

Apparently, physical activity plays a pivotal role in the management of mental health conditions, particularly depression and anxiety. Although people with stress tend to be less physically active than their non-depressed individuals, engaging in any exercise can lead to a significant reduction in depressive symptoms [5]. Not only do regular exercising improve mental wellbeing and reduce anxiety, but also enhance mood and productivity. Based on the American Psychological Association, even simple light running or walking can promote better sleep, improves concentration, and enhances overall resilience to stress. According to the study [20] running tends to be efficient tool for therapy and prevention in psychological conditions. According to the study [20] running tends to be efficient tool for therapy and prevention in psychological conditions. Study [21] showed that long distance walking has positive effect on mental health and well-being.

According to [6] virtual reality (VR) is a powerful tool for individuals to make new learning for the benefit of their mental well-being. Immersive VR creates interactive computer-generated worlds, which substitute real-world sensory perceptions with digitally generated ones, producing the sensation of actually being in life-sized new environments for workouts. (Such as meditation, yoga, fitness. etc) Moreover it makes treatment available at home or outside of clinical settings.

Nowadays, VR is known far and wide in therapeutic ways to deal with stress, depression and anxiety. In some studies quantitative survey ratings revealed that VR format of treatment showed considerable positive effects and satisfactions in reducing those mental disorders according to [7]. VR technology increases its usefulness several times as its computer graphical environments are depicted on a two-dimensional (2-D) which helps to create a comfortable environment to do physical activities.

Regarding the studies [11], [12] there are three types of Virtual Reality in general, which are immersive, non-immersive, and interactive. Immersive Virtual Reality has head mounted displays, body motion sensors, real time graphics, advanced interface device such as specialized helmets. Non-immersive Virtual Reality contains flat-screens such as television or computer screens. These screens are associated with joysticks, keyboards, and gamepads. To interact with virtual objects Interactive Virtual Reality utilizes devices such as gloves, digital glasses etc. which produces the real items sensations to be manipulated such as picking up apples.

The results of the experiment as stated in (by) [8] represents a comprehensive body of high-quality evidence that physical activity reduces depression and anxiety in the nonclinical population. The systematic search identified eight meta-analytic results from randomized trials examining the effects of physical activity on depression and anxiety. This means that physical activity (exercise) is important for mental health status in non-clinical mental health settings.

The main treatments for mental illnesses, which include mood and anxiety disorders, are psychotherapy. A sizable section of the population suffers from these conditions. However, healthcare systems find it challenging to meet demand due to the rising expense of treatment, which emphasises the need of successful self-help techniques. Psychological advantages of exercise have been demonstrated, especially for anxiety disorders, chronic fatigue syndrome, and mild to moderate depression. This straightforward and reasonably priced method has the potential to significantly impact mental health [9].

Enhancing mental health, particularly in older persons, requires physical activity. It may decrease the likelihood of depression and cognitive impairment, two conditions that are prevalent in

older adults. Incorporating physical activity into foreign language instruction can improve mental clarity and cognitive function, which in turn can improve student learning results by improving focus, retention, and anxiety levels. Physical exercise also aids in maintaining overall well-being, ensuring that teachers can engage with their students more effectively and contribute to a positive learning environment [10].

Nowadays, Virtual Reality exercises has been recognized to be a new approaches to promote Physical Activities and it is becoming to be used more in health promotion [16]. According to observations of researches, Virtual Reality exercises tends to enhance the psychological benefits of exercise and likelihood of long term exercise to be enhanced [17], [18]. According to the studies [19] there are three types of Virtual Reality in general, which are immersive, non-immersive, and interactive. Immersive Virtual Reality has head mounted displays, body motion sensors, real time graphics, advanced interface device such as specialized helmets. Non-immersive Virtual Reality contains flat-screens such as television or computer screens. These screens are associated with joysticks, keyboards, and gamepads. To interact with virtual objects Interactive Virtual Reality utilizes devices such as gloves, digital glasses etc. which produces the real items sensations to be manipulated such as picking up apple [19].

Aim

To make a qualitative exploration of how virtual reality based physical activities affect the mental health of foreign language teachers.

This study aimed to get three objectives:

1) Establish how people understand their mental well-being (baseline semi-structured interview)

2) Ask teachers about experiences, barriers and facilitators in engaging in normal physical activity routine (baseline semi-structured interview)

3) Discuss and establish what they felt about exercises undertaken using immersive VR (follow-up semi-structured interview)

Premise of objective

Baseline semi-structured interviews were conducted to address objectives 1 and 2. Possible questions:

Can you tell me what you understand mental well-being to be?

What does stress mean to you?

What does anxiety mean to you?

What does low mood mean to you?

Do you usually feel these feelings while you're teaching, like stress, anxiety, or low mood?

What do you do (coping mechanisms) normally do in periods of stress, anxiety, or low mood?

What do you do to cope with stress?

What do you do to cope with a low mood?

Are these effective?

Please describe your usual exercise regime.

How does exercise usually make you feel?

How effective, for you personally, is exercise in terms of improving your mental well-being?

Explain to me what you understand VR to be.

Have you used Virtual Reality (VR) before? (Please elaborate for example: where, when, and what was the experience like for you?).

Do you think it is a good idea to combine exercise with virtual reality?

How are you feeling about the coming week of using VR for exercise?

Follow up Interview

Tell me about your experience of using the VR headsets for exercise during the last week?

Did you find any benefits and or negatives in terms of conducting physical activities undertaken using VR?

How did the experience make you feel?

Was it comfortable?

Did it hit your expectations?

Practically, how was the experience?

What was it like wearing the headset?

What did you think of the games?

How did the experience differ from your normal experience of exercise?

Do you think there are risks and/or benefits involved with bringing virtual reality sports games to gyms or wellness centers?

After your experience in this study, have you changed your opinion about whether it is a good idea to combine exercise with virtual reality?

Is there anything else you would like to discuss?

Materials and Methods

Experimental plan (procedure)

Participants were asked to engage in training at the Shakarim University gym or at home conduct 5 sessions x 30 minutes physical activities undertaken using VR technology, Oculus Quest 2 headset (individually). The headset included VR glasses, pair of joysticks and headphones.

Phenomenological study

Qualitative semi-structured interviews with each participant, before (baseline)and after physical activities, wereconducted in order to gain in-depth data about their perceptions and experinces of using Virtual Rreality glasses. An interview schedule were constructed prior to the study in order to guide conduct of the interviews. The purpose of the baseline interview was to establish how participants understand their mental well- being. And also ask and identify their experience , barriers and facilitators in engaging in normal physical activity routine. After participants performed 5 physical activities sessions undertaken using Virtual Reality technology of 30 minutes each (based on recommendation of https://www.mentalhealth.org.uk/publications/how-to-using-exercise). This study will not dictate or modify their normal exercise sessions, Virtual Reality set was only used during the physical activity. After completion of the last session participants were interviewed once again to discuss their experience and opinions of using the Virtual Reality glasses. The length of the interviews were: approximately 20 minutes for the baseline and 45-60 minutes for the follow-up interview. Written informed consent for participation and data collection, and audio recording were obtained from all participants.

TA

Thematic analysis (TA) was used by Analysis of the qualitative semi-structured interviews. Thematic analysis is an approach to qualitative study with an idiographic focus, which leads to sense of given phenomena by expressing common individuals' insights in a given context.

Steps to be undertaken were:

1. Each interview was transcribed verbatim (word to word)

Mobile phone was used to record the interviews. (base-line interviews and fallow-up). The recording was used to transcribe the interview verbatim.

2. Coding was done.

The main findings were highlighted to be chosen for analysis.

3. Thematic Analysis.

The main findings were analysed and interpreted. Quotes were used to point to the statement.

Participants

This study required participants who were regular gym users or who had already been doing physical activities. Age of participants had to be 18+.

Expected number of participants or sample size:10. According to the risk of drop out, a sample size of 3 participants was selected.

Due to some reasons, some participants dropped out of the study and just 3 people participated. Due to the requirement of the study, this study was conducted in the faculty/student gym on site at Shakarim University.

Results and Discussion

Objective 1

Establish how people understand their mental well-being and VR

Being mentally healthy is being able to express feelings. For instance, in P-1states «when you feel anxiety, when you feel stressed, depressed. They're all about mental well-being».

In P-2 states, «it deals with all emotions and state of person». P-2 associates being mentally healthy with the ability to be able to make good decisions. For P-3 states, «I guess it means not to be stressed and nervous about your surroundings». They all associate stress differently. P-1 describes stress as a bad mood caused by challenges like delivering a difficult lesson or worrying about students' reception.

P2 defines stress as «when everything goes bad or not as planned», Also P-3 considers stress as «Stress, it's when you are unable to think clearly when you are not focusing on your goals and other». All participants described anxiety in a different way. P-1 and P-3 connected with emotions. P-1 associates anxiety with a reflection of bad emotion. P-3 associates anxiety with a state of not being able to deal with emotions and thoughts. Teaching is a common source of both stress and anxiety for P1 and P2, while P3 relates it more to social confidence. P1 thinks low mood is a mix of stress, anxiety and depression. P2 attributes low mood to environmental factors like, Bad people and bad weather while P3 links it to external disruptions. When someone or something's full of your day and you are not willing to do anything but just lie and maybe listen to music. To the question if they feel these feelings often during heir lesson P-1 said that he feels anxious sometimes and stressed when delivering challenging lessons. P2 experiences stress from unpreparedness and anxiety about student acceptance saying «Yes, I do. I often feel anxious about whether the students would accept me».

P3 states, «Not as much now, but I used to feel stressed and anxious when I first started teaching». According to the question, during periods of stress, anxiety, or low mood P2 and P3 value physical activities like cycling and walking for relaxation and clarity, while P1 relies on breathing exercises, music, and social interaction to cope. All members consider physical activity to be effective in reducing stress and anxiety and improving mental well-being. P-3 states «so, I think exercise is one way to release stress and negative emotions, so it helps a lot. And after that your body and mind get rid of everything that bothers you at least for a time». P-2 states «as I mentioned, it is really important. To be mentally healthy you need to be physically healthy.

Objective 2

Ask teachers about experiences, barriers and facilitators in engaging in normal physical activity routine (baseline semi-structured interview)

All three participants do not have any barriers, however two of them have specific regimes to do physical activities. P-1 goes to gym, and P-2 does exercises and sometimes plays volleyball. P-3 doesn't have any specific regime P-3 states: «Well l am physically a lazy person and I only do physical activities in summer. It's when I help my dad in the garden to plant some vegetables and collect them». However P-1 has a regular regime P-1 states: «I go to gym twice a week for 40 minutes for one session». Also P-1 added that P-1 does push-ups at home approximately for 10-15 minutes. For P-2 doing an exercise and having a regime is important P-2 states: «I do sketching exercises for 20 minutes every morning».

They all think that exercise is a good tool for better mood. Every time after doing some exercises P-1 feels relieved, P-2 feels refreshed and relaxed, however P-3 finds it a bit tiring. P-2 states: «Of course, I feel relaxed and cheerful because it makes me more energetic». P-3 feels tired after physical activity, and also considers physical activity to be a stress reducer which builds up new energies. P-3 states: «I feel drained and low on energy for the rest of the day, but after a few hours of doing exercise, my mood seems to improve».

All three participants consider physical activity to be effective in reducing stress and anxiety and improving mental well-being. P-1 states: «So I find it very effective. Because, like, a healthy body is attached to a healthy mood». P-2 finds physical activity to be effective in improving mental well-being. P-2 states: «You can relax and you can clarify your mind. You can just think about new plants, new ideas, so that's why it's really important to clearly clarify your mind».

P-1 understands VR to be like an immersion into another reality. P-1 states: «It's like a setup with components such as headphones, glasses, and a joystick, allowing you to play and fully immerse in the

game, so it feels real». P-3 states: «VR is like a key to another reality, by using this tool you can see, experience things that you otherwise couldn't see in the real world». P-2 understands virtual reality to be similar to what P-1 describes.

From all participants only two of them have experienced virtual devices. P-1 used VR in a project at university. P-1 states: «I conducted an experiment using VR glasses. Also, my roommate and I played, we had fun». P-3 have never experienced VR.

All three participants find it's a good idea to combine exercise with virtual reality. P-1 states: «It's convenient, also, sometimes it's boring to exercise, but virtual reality makes it more effective and interesting». P-2 states: «This idea could encourage people to exercise regularly and make workouts feel more like a fun game or activity I think ». P-2 states: «Yeah, I think it makes exercise more interesting and helps people enjoy it while they are doing exercises». P-3 found using VR reduces stress.

All of the participants feel excited about the coming week of using VR for exercise. P-1 and P-2 both consider it to be engaging and fun. P-1 states: «I'm excited to try VR for exercise this coming week. It seems like a fun way to stay active and mix things up»! However P-3 is unsure about it but wants to try. P-3 states: I'm a bit unsure about using VR for exercise, but I'm open to giving it a try and seeing how it works».

Objective 3

Discuss and establish what they felt about exercises undertaken using immersive VR

All three participants consider physical activities undertaken using virtual reality (VR) i.e. VR games to be effective on mental well-being. According to the responses of follow-up interview, VR exercises are good way to reduce stress and anxiety, however it doesn't last long. P-1 finds that Physical activity reduces stress. However P-1, suggests that it doesn't last long. P-1 states: «well perhaps yeah, but positive mood did not last so long, so I think it is temporally». P-1 wasn't totally satisfied with VR games as well as it didn't hit participant's expectation. P-1 didn't find Using VR set to be comfortable. P-1 states: «to be honest, I didn't wear my own glasses and that's why it was a little bit not cozy». P-1 also suggests that Virtual Reality headset is heavy to use. P-1 states: «it is a little bit heavy to play with it». P-2 suggest physical activities undertaken using VR to be comfortable and effective on mental well-being. P-2 states «yes, completely yeah. Ten out of ten». (Question did you feel that VR games helped to improve positive mood? Did you feel that VR games helped to reduce anxiety, stress and depression?). P-2 suggests that VR set is very comfortable. P-2 states: «OH, yes actually it was comfortable». To the question «what was it like to wear headset»? P-2 states: «it was comfortable». P-2 finds VR exercise to be more interesting and more attractive. P-2 states: «When I am wallking I am just listening to music, when I am using VR, you are feeling yourself as if you are in another place, as you are in virtual world, you are forgetting completely your surroundings and f you feel like you are in another universe». P-2 suggests some benefits: VR set can be used anywhere, anytime. P-2 didn't find any negative aspects of using VR set. P-3 finds novice in using technology. P-2 states: «so the experience itself was really new to me and it was new for me, and it was beyond of my expectations». P-2 suggests physical activities undertaken Using VR set to be effective on mental well-being as well as it reduces stress and anxiety and increases mood. P-3 states: «the beneficial part is that it really helped me to release the stress and to be more positive on things, I guess». Also P-3 states: «it also increases your mood», «I think the effect is the same. So the effect is stress relief»., «Because the effect is really enormous. You cannot deny the fact that it has a point of effect», «yes, it definitely does. After the games, at least for one or half an hour, you feel really relieved. At least for some part of time you forget about the concerns and all that». P-3 finds VR set to be a new thing to implement, however, in P-3 concern it will never replace sport, despite it having the same effect. P-3 experienced VR set to be not so comfortable, also not so difficult to learn. Due to the fact that P-3 implemented new technology, it found it not to be so comfortable. P-3 states: «the difference is that I had to get used to it and it might take a little bit more time». Due to responses, P-3 suggests Physical activities undertaken using VR sets to be more interesting compared to normal exercises. P-3 states: «so, maybe it has the same effect. So for having fun and trying a new thing, it's a really good thing, I think», «it was cool, I would say. And it was at some point really entertaining». P-3 didn't find the effect of physical activities undertaken using VRto last long. P-3 states: «I would say temporarily, yes, but I wouldn't say

that will decrease it, but at some point it might help you to stop for a moment, think about switching off to other things» (Table 1).

Table 1 – Main finding

1	2
1) Establish how people understand their mental well-being (baseline semi-structured interview)	P-1 believes being mentally healthy means being able to control emotions. P-1 associates stress with a bad mood caused by challenges like delivering difficult lessons or worrying about students' reception. P-1 views anxiety as a reflection of bad emotions. P-1 links low mood to a loss of interest in activities. To cope with stress, anxiety, or low mood, P-1 relies on breathing exercises, music, and social interaction. P-1 considers physical activity to be very effective in reducing stress and anxiety and improving mental well-being. P-1 has a consistent routine, going to the gym twice a week for 40 minutes and doing push-ups at home for 10-15 minutes. P-1 is enthusiastic about the idea of combining exercise with VR, believing it can make workouts more engaging and enjoyable. P-1 is excited to try VR for exercise, describing it as a fun and innovative way to stay active. According to P-2, is the ability to handle emotions and make good decisions. P-2 defines stress as «when everything goes bad or not as planned» and considers anxiety to be a part of emotions and mental states. P-2 attributes low mood to environmental factors such as bad weather and negative people. Stress and anxiety during lessons stem from unpreparedness and fear of student acceptance, as P-2 states, «I often feel anxious about whether the students would accept me». P-2 finds the concept of virtual reality (VR) exciting and sees it as an engaging way to immerse oneself in a different reality, similar to how P-1 described it. Although P-2 hasn't used
	VR devices much, they believe combining VR with exercise could make workouts more fun and enjoyable. P-3 believes being mentally healthy means staying calm and avoiding stress or nervousness about one's surroundings. They describe stress as the inability to think clearly or focus on goals, while anxiety is linked to difficulty managing emotions and thoughts. For P-3, a low mood often results from external disruptions. To manage stress, P-3 values physical activities like cycling and walking, though they don't follow a strict routine. They describe themselves as physically lazy, engaging in physical activity primarily during the summer when helping in the garden. When it comes to virtual reality (VR), P-3 finds it fascinating as a way to experience things that aren't possible in real life. Although they haven't used VR devices before, they believe combining VR with exercise could make workouts more enjoyable. While slightly unsure, they're open to trying VR for exercise and curious to see how it works.

Continuation of Table 1

1	2
2) Ask people about experiences, barriers and facilitators in engaging in normal physical activity routine (baseline semi-structured interview)	P-1 needs gym, follow regime: twice a week, 40 min for 1 session. P-2 needs a yoga mat, resistance bands and volleyball court, follow regime: scretching exercises every morning for 20 min. Play volleyball twice in a month. P-3 no regime: don't participate in any physical exercise or activity.
3) Discuss and establish what they felt about exercises undertaken using immersive VR (follow-up semi-structured interview).	P-1 found the effect convenient. P-1 found that using VR enhances the effectiveness of exercises P-1 found using VR to be stimulating and comfortable. P-1 totally satisfied. P-2 found using VR to be interesting. P-2 would love to continue using VR. VR hit P-1 expectation. P-2 found VR to reduce stress, anxiety and improve mood and mental well-being. P-3 found using VR reduces stress P-3 found using VR to be more interesting than normal exercises. P-3 found using VR to reduce stress and improve mental well-being.

Conclusion

The study was conducted by following a qualitative approach. The Aim of the study was to make a qualitative exploration of participant's experiences of physical activities using VR on general mental well-being. Semi structured interviews i.e. baseline semi structured interview and follow up semi structured interview were used to address the objectives. Objective 1 was to establish how people understand their mental well-being. Objective 2 was to ask people about experiences, barriers and facilitators in engaging in normal physical activity routine. Objective 3 was to Discuss and establish what they felt about exercises undertaken using immersive VR. All three interviews were conducted and aims were addressed. Findings state that participants understand their mental well-being in different ways. However they use approaches to deal with stress, anxiety, depression and mood. They use different approaches; however, findings suggest that they use one approach in common, which is physical activities. Participants do different physical activities, such as running, meditating, stretching and walking. Participants find physical activity to be a good tool to reduce stress, depression, anxiety and improve mood. Beside physical activities, participants implement other approaches such as meditation. Five sessions of physical activities were conducted undertaken using Virtual Reality set. Two weeks sessions were suggested based on recommendation of https://www.mentalhealth.org.uk/publications/how-to-using-exercise. Follow up interviews were conducted. Findings suggest that physical activities undertaken using VR set can be challenging. Due to the novelty, it is not found to be comfortable; however, it is not so difficult to learn how to utilize VR. According to the findings, VR exercises tend to be more interesting way to do physical activities. Virtual Reality set immerses individuals into different world, where individuals can forget worries and focus more on games. Physical activities undertaken using Virtual reality set are found to be an entertaining and helpful approach to improve mood. Findings state that the effect of physical activities undertaken using Virtual Reality set temporarily, sometimes doesn't last long. At least for an hour, effects make people forget the worrying. Findings suggest that VR will never replace sport, however it is good to implement something new and innovative.

The study had limitations where small scale exploratory study was conducted. Due to several reasons, such as ethical committee approval was received late and small size of participants were recruited. Due to the fact that the small size data saturation did not reach. Due to the limitations, this study suggests conducting other studies with more amount of participants.

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I.A. Emir*, G. Zhanatbekkyzy, A. Tleuova
Шәкәрім университеті,
071412, Қазақстан Республикасы, Семей қ., Глинка к-сі 20 А
*ORCID: 0009-0002-5898-7891
*e-mail: issaemir03@gmail.com

ВИРТУАЛДЫ ШЫНДЫҚТЫ ҚОЛДАНУДА ЖҮЗЕГЕ АСЫРЫЛАТЫН ФИЗИКАЛЫҚ ЖАТТЫҒУЛАРДЫҢ ШЕТ ТІЛІ МҰҒАЛІМДЕРІНІҢ ПСИХИКАЛЫҚ ӘЛ-АУҚАТЫНА ӘСЕРІ

Аңдатпа. Шет тілін оқытудың тиімділігі мен өнімділігінде психикалық әл-ауқат пен тіл үйренуге деген алаңдаушылық шешуші рөл атқарады. Соңғы жылдары тәрбиешілердің психологиялық денсаулығына көбірек көңіл бөлінуде; дегенмен, шектеулі зерттеулер психикалық әл-ауқатты қолдаудың инновациялық тәсілдерін, әсіресе Орталық Азия контекстінде зерттеді. Бұл сапалы зерттеу виртуалды шындыққа (VR) негізделген физикалық белсенділіктің университет деңгейіндегі шет тілі мұғалімдерінің психикалық әл-ауқатына әсерін зерттейді. Зерттеу (1) мұғалімдердің олардың психикалық әл-ауқаты туралы түсінігін зерттеуге, (2) олардың тұрақты физикалық белсенділікпен айналысуға байланысты тәжірибелерін, кедергілерін және фасилитаторларын анықтауға және (3) иммерсивті виртуалды шындықты қолдану арқылы жүзеге асырылатын физикалық белсенділік туралы түсініктерін зерттеуге бағытталған.

Деректер жартылай құрылымдалған бастапқы және кейінгі сұхбаттар арқылы жиналды. Қатысушылар екі апта ішінде виртуалды шындыққа негізделген бес физикалық белсенділікке қатысты. Тақырыптық талдау қатысушылардың психикалық әл-ауқатты әртүрлі тәсілдермен тұжырымдағанын, бірақ әдетте физикалық белсенділікті стрессті, мазасыздықты, депрессияны және көңіл-күйді басқарудың негізгі стратегиясы ретінде анықтағанын көрсетті. Жаяу жүру, жүгіру, созылу және медитация сияқты дәстүрлі әрекеттер туралы жиі хабарланған. Кейінгі сұхбаттардың нәтижелері виртуалды шындыққа негізделген физикалық белсенділік бастапқыда жаңашылдығына байланысты қиын болғанымен, көңіл-күйді уақытша жақсарту және алаңдаушылықты азайту үшін тартымды, жағымды және тиімді деп қабылданғанын көрсетті. Қатысушылар виртуалды шындық сеанстары кезінде суға түсудің жоғарылауы және күнделікті стресстік факторлардан алшақтау туралы хабарлады.

Оң әсерлер қысқа мерзімді болғанымен және VR әдеттегі физикалық белсенділікті алмастыратын құрал ретінде қарастырылмаса да, ол құнды және инновациялық қосымша құрал болып саналды. Зерттеу шағын үлгі өлшеміне және деректердің қанықтылығының болмауына байланысты шектеулерді мойындайды және одан әрі ауқымды сапалы және аралас әдістерді зерттеуді ұсынады.

Тірек сөздер: шет тілі мұғалімдері, психикалық әл-ауқат, тіл үйренудегі мазасыздық, шет тілі, дене белсенділігі, сапалы оқу, виртуалды шындық.

I.A. Emir*, G. Zhanatbekkyzy, A. Tleuova
Шәкәрім университет,
071412, Республика Казахстан, г. Семей, ул. Глинки, 20 А
*ORCID: 0009-0002-5898-7891
*e-mail: issaemir03@gmail.com

ВЛИЯНИЕ ФИЗИЧЕСКИХ НАГРУЗОК, ВЫПОЛНЯЕМЫХ С ИСПОЛЬЗОВАНИЕМ ВИРТУАЛЬНОЙ РЕАЛЬНОСТИ, НА ПСИХИЧЕСКОЕ БЛАГОПОЛУЧИЕ ПРЕПОДАВАТЕЛЕЙ ИНОСТРАННЫХ ЯЗЫКОВ

Аннотация. Психическое благополучие и тревожность при изучении языка играют решающую роль в эффективности и продуктивности преподавания иностранных языков. В последние годы психологическому здоровью преподавателей уделяется все больше внимания; однако в ограниченных исследованиях изучались инновационные подходы к поддержанию психического благополучия, особенно в условиях Центральной Азии. Это качественное исследование исследует влияние физической активности, основанной на виртуальной реальности (VR), на психическое благополучие преподавателей иностранных языков на университетском уровне. Целью исследования было (1) изучить понимание учителями своего психического благополучия, (2) выявить их опыт, барьеры и помощников, связанных с регулярной физической активностью, и (3) изучить их восприятие физических нагрузок, выполняемых с использованием иммерсивной виртуальной реальности.

Данные были собраны с помощью полуструктурированных исходных и последующих интервью. Участники приняли участие в пяти сеансах физической активности с использованием виртуальной реальности в

течение двух недель. Тематический анализ показал, что участники по-разному оценивали психическое благополучие, но в целом определяли физическую активность как ключевую стратегию борьбы со стрессом, тревогой, депрессией и хорошим настроением. Часто упоминались традиционные виды деятельности, такие как ходьба, бег, растяжка и медитация. Результаты последующих интервью показали, что, хотя физические упражнения на основе виртуальной реальности изначально были сложными из-за их новизны, они воспринимались как увлекательные, приятные и эффективные для временного улучшения настроения и снижения тревожности. Участники сообщили о более глубоком погружении и отвлечении от ежедневных стрессовых факторов во время сеансов виртуальной реальности.

Несмотря на то, что положительный эффект был кратковременным и виртуальная реальность не рассматривалась как замена обычной физической активности, она считалась ценным и инновационным дополнительным инструментом. В исследовании признаются ограничения, связанные с небольшим размером выборки и недостаточной насыщенностью данных, и рекомендуются дальнейшие крупномасштабные исследования с использованием качественных и смешанных методов.

Ключевые слова: преподаватели иностранного языка, психическое благополучие, тревога при изучении языка, иностранный язык, физическая активность, качественное обучение, виртуальная реальность.

Information about the authors

Issa Emir* – Msc in sport medicine and rehabilitation, master of pedagogical science, lecturer of the Department of foreign and russian languages Shakarim University, Republic of Kazakhstan, Semey, e-mail: issaemir03@gmail.com, ORCID: https://orcid.org/0009-0002-5898-7891.

Gulim Zhanatbekkyzy – student of the Department of foreign and russian languages Shakarim University, Republic of Kazakhstan, Semey, e-mail: gulimzanatbekovna@gmail.com, ORCID: https://orcid.org/0009-0001-3259-4910.

Aida Tleuova – student of the Department of foreign and russian languages Shakarim University, Republic of Kazakhstan, Semey, e-mail: tleuovaaida8@gmail.com, ORCID: https://orcid.org/0009-0008-1197-5790.

Авторлар туралы мәлімет

Эмир Иса Ардақұлы* – спорттық медицина және реабилитация магистрі, педагогика ғылымдарының магистрі, «Шәкәрім университеті» КеАҚ шетел және орыс тілдері кафедрасының оқытушысы, Қазақстан Республикасы, Семей, e-mail: issaemir03@gmail.com, ORCID: https://orcid.org/0009-0002-5898-7891.

Жанатбекқызы Гүлім – «Шәкәрім университеті» КеАҚ шетел және орыс тілдері кафедрасының студенті, Қазақстан Республикасы, Семей, e-mail: gulimzanatbekovna@gmail.com, ORCID: https://orcid.org/0009-0001-3259-4910.

Тлеуова Аида – «Шәкәрім университеті» КеАҚ шетел және орыс тілдері кафедрасының студенті; Қазақстан Республикасы; Семей, e-mail: tleuovaaida8@gmail.com, ORCID: https://orcid.org/0009-0008-1197-5790.

Информация об авторах

Эмир Иса Ардакулы* – магистр спортивной медицины и реабилитации, магистр педагогических наук, преподаватель кафедры иностранных и русских языков НАО «Шәкәрім университет», Республика Казахстан, Семей, e-mail: issaemir03@gmail.com, ORCID: https://orcid.org/0009-0002-5898-7891.

Жанатбеккызы Гулим – студентка кафедры иностранных и русских языков НАО «Шәкәрім университет», Республика Казахстан, Семей, e-mail: gulimzanatbekovna@gmail.com, ORCID: https://orcid.org/0009-0001-3259-4910.

Тлеуова Аида – студентка кафедры иностранных и русских языков НАО «Шәкәрім университет», Республика Казахстан, Семей, e-mail: tleuovaaida8@gmail.com, ORCID: https://orcid.org/0009-0008-1197-5790.

Received 28.10.2025
Revised 18.12.2025
Accepted 26.12.2025