

INVESTIGATING THE ROLE OF TEACHING SPORTS AND PHYSICAL ACTIVITY IN LEISURE TIME AND THE QUALITY OF WORK LIFE OF SELECTED HOSPITAL PERSONNEL IN TÜRKIYE

INVESTIGANDO O PAPEL DO ENSINO DE ESPORTES E ATIVIDADE FÍSICA NO TEMPO DE LAZER E A QUALIDADE DE VIDA NO TRABALHO DE PESSOAL SELECIONADO DE HOSPITAIS NA TURQUIA

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ABSTRACT

The purpose of this research was to investigate the relationship between teaching sports in leisure time and the quality of work life in the personnel of selected hospitals in Türkiye. Its statistical population consists of employees of selected hospitals Medical Park Bahçelievler, Acibadem Bakirkoy, Liv Hospitals Ulus Liv Hospital Bahcesehir, Aji Badem International Hospital, of which 360 people were selected as a statistical sample. To collect data for analysis, Sharkley's physical activity questionnaire and Walton's quality of work life questionnaire (1974) were used. The face and content validity of the research tool was approved by sports experts. Also, the reliability of the entire measurement tool was investigated in a preliminary study and Cronbach's alpha coefficient was calculated for the quality of work life variable (0.947) and for the physical activity variable (0.876). All statistical analyzes were performed using SPSS version 24 software. The results showed that there is a positive and significant relationship between teaching sports and physical activity in leisure time and the quality of work life and its components. In general, according to the results of the research, it is suggested to pay serious attention to teaching sports and physical activity, which has been effective on the variables of the quality of work life, in order to have committed and healthy employees.

Keywords: Teaching sports and physical activity, leisure time, work life quality, sport, Turkish hospital personnel.

RESUMO

O objetivo desta pesquisa foi investigar a relação entre o ensino de esportes no tempo de lazer e a qualidade de vida no trabalho no pessoal de hospitais selecionados em Turquia. Sua população estatística consiste em funcionários de hospitais selecionados Medical Park Bahçelievler, Acibadem Bakirkoy, Liv Hospitals Ulus Liv Hospital Bahcesehir, Aji Badem International Hospital, dos quais 360 pessoas foram selecionadas como uma amostra estatística. Para coletar dados para análise, o questionário de atividade física de Sharkley e o questionário de qualidade de vida no trabalho de Walton (1974) foram usados. A validade de face e conteúdo da ferramenta de pesquisa foi aprovada por especialistas em esportes. Além disso, a confiabilidade de toda a ferramenta de medição foi investigada em um estudo preliminar e o coeficiente alfa de Cronbach foi calculado para a variável qualidade de vida no trabalho (0,947) e para a variável atividade física (0,876). Todas as análises estatísticas foram realizadas usando o software SPSS versão 24. Os resultados mostraram que há uma relação positiva e significativa entre o ensino de esportes e atividade física no tempo de lazer e a qualidade de vida no trabalho e seus componentes. Em geral, de acordo com os resultados da pesquisa, sugere-se prestar atenção séria ao ensino de esportes e atividade física, que tem sido eficaz nas variáveis da qualidade de vida no trabalho, para ter funcionários comprometidos e saudáveis.

Palavras-chave: Ensino de esportes e atividade física, tempo de lazer, qualidade de vida no trabalho, esporte, pessoal de hospital turco

Introduction

The advancement of technology in human life and the transformation of manual work into intellectual work has increased unemployment times to about two times per week, which results in a decrease in people's mobility and activity (Balboa-Castillo, León-Muñoz, Graciani, Rodríguez-Artalejo, & Guallar-Castillón, 2011). As a result, what is the result of the new civilization and the developed society of the new era is the reduction of working time and the increase of leisure time of people, which should be properly addressed. and is considered a factor to prevent social deviations (Ma & Li, 2024). And sports and physical activities, as one of the important types of free time, is a valuable tool that fills most of the free time of millions of people in the world today. Free time is a very suitable and desirable opportunity to do sports (Balboa-Castillo et al., 2011; Ogunlola). Today, sports and physical activity have found their real place in the world and its importance in building the human body and soul has been proven. (Tabuk & Kaya, 2024). The result of new research shows that doing sports and physical activity in free time even among people who are athletes increases their self-confidence and in the last 32 years it has been determined what positive effect sports have on the physical and mental health of people. And how it prevents the occurrence of many diseases and

injuries, and as a result, it will increase the quality of human life (Agergaard & Lenneis, 2024; Kremer et al., 2014). For this reason, measures have been taken in many developed countries since years ago in order to maintain and expand the health and vitality and in general the general health of different strata of people and especially the specialized and efficient manpower in science, industry, technology and production. By applying specific solutions in a favorable way, they have increased the work efficiency and productivity of their human resources (Whittaker, Scheiman, & Sokol-McKay, 2024). While in the past decades only personal (non-work) life was emphasized, today in contemporary management, the concept of quality of work life has become a major social issue all over the world. Proponents of the quality of work life theory are looking for new systems to help employees balance their work and personal lives (Wang et al., 2023). Ignoring the quality of the working life of the employees greatly reduces the effectiveness and efficiency of the organization. Due to the lack of knowledge of the managers of the organization about the quality of working life, this category has lost its relevance and real dimensions in organizations. Improving the quality of the working life of employees requires the efforts of the management of the organization to develop policies that support human resources. Based on this, the optimal use of human resources depends on the development of human resources strategies and measures that are taken to protect the body and soul and preserve the human dignity of employees. Actions that include welfare facilities, treatment, job security, job design, job importance, job development and improvement, training and improvement, and things like this, are collectively considered under the title of quality of work life (Tamminen et al., 2020; Wong, Ou, Chung, Chui, & Zhang, 2023). On the other hand, achieving a quality work life requires regular efforts from the organization, which gives employees more opportunities to influence their work and contribute to the effectiveness of the entire organization. In this way, every organization with optimal and effective productivity and efficiency is looking for ways to bring employees to a degree of ability to use their intelligence, which is achieved through a suitable quality of work life, which means more participation and contribution. employees in the decision-making process. The quality of work life represents a kind of

organizational culture or practices It is the management based on which the employees feel ownership, responsibility and self-esteem (Dong & Liu, 2024; Nakagawa et al., 2020). The quality of work life is a comprehensive and extensive program that increases employee satisfaction, strengthens their learning in the environment, and helps them in management, change and transformations. Employee dissatisfaction with the quality of work life is a problem that affects almost all employees regardless of their status and position. The goal of many organizations is to increase employee satisfaction at all levels, but this is a complex issue because it is difficult to separate and determine which characteristics are related to the quality of work life (Fang, Huang, & Hsu, 2019; Zayed, Ahmed, Van Niekerk, & Ho, 2018). Therefore, determining the quality of work life of employees is a very important tool for those human resource managers who are interested in improving job satisfaction and improving the performance of their employees (Bischoff, Otto, Hold, & Wollesen, 2019). Quality of work life: The term quality of work life has become very popular in recent years, but there is not much agreement about the meaning of this term, however, it can be said that there are at least two common uses of it: First, the quality of work life is a set of The results are for employees, such as job satisfaction, growth opportunities, psychological issues, job security, human relations between employers, employees, and fewer accidents; Second, the quality of working life is also a set of tasks or organizational functions such as collaborative management, job enrichment and safe working conditions (Abdin, Welch, Byron-Daniel, & Meyrick, 2018; Chekroud et al., 2018; Proper & van Oostrom, 2019; Stubbs et al., 2018). Today, in contemporary management, the concept of the quality of work life has become a major social issue in the world. While in the past decades, they were only looking for new systems to help employees so that they can balance their work and personal lives. The quality of work life program includes any improvement in the organizational culture that promotes the growth and excellence of employees in the organization. Therefore, the value system of the quality of working life pays attention to investing in people as the most important variable in the strategic management transaction (Pascoe et al., 2020; Smith et al., 2013). Research findings show that the components of these

programs have reduced the number of employee complaints, reduced absenteeism, reduced the amount of disciplinary regulations, increased the positive attitude of employees, and increased their participation in the suggestion system programs. On the other hand, meeting the needs of the employees will lead to the improvement and long-term efficiency of the organization (Grasdalsmoen, Eriksen, Lønning, & Sivertsen, 2020; Jakicic, Rogers, Davis, & Collins, 2018; Prince, Elliott, Scott, Visintini, & Reed, 2019; Vancampfort et al., 2017; White et al., 2017). The quality of working life is a set of real working conditions in an organization such as salaries and benefits, amenities, health and safety considerations, participation in decision-making, management methods and job richness diversity. It defines against work, especially its essential consequences in satisfying job needs and mental health; Using this definition, the quality of work life emphasizes personal consequences, work experiences and how to improve work in order to meet individual needs (Blake, Stanulewicz, & McGill, 2017; Chekroud et al., 2018; Prince et al., 2019; Rogers, Carter, Williams, & Courneya, 2018; Song & Baicker, 2019). Since medical centers and hospitals in our society play an important role in providing health and treatment to the society, it is expected to have rich human resources and intellectual capital. In order to have quality human resources, the conditions and requirements of the organization's working environment are always studied. Considering that there is no comprehensive research on the impact of active leisure time on the quality of work life of inpatients, and the researches that have been conducted on leisure time and quality of work life have often been conducted separately and so far only one research has determined. The relationship between the quality of work life and leisure time with an emphasis on physical activity and exercise has not been addressed, it is appropriate to conduct more and more comprehensive studies in this field. This issue is especially important when the issue of raising the quality of working life of hospital employees in Turkey is raised, and considering the necessity of developing physical activity and sports and the importance of how to spend leisure time and the impact it has on the quality of working life of working people, it is necessary is to investigate the relationship between active leisure time and the quality of work life of hospital employees in Turkey by using a research in this

regard. According to the current research community, it is hoped that the results of this research will identify new horizons in the knowledge of factors affecting the quality of working life of hospital employees in Turkey, and that the results will be used by managers and planners of these centers.

Methodology

The present research is correlational and applied in terms of purpose, which was conducted in the field. This research was conducted with the aim of investigating the relationship between teaching sports and physical activity to the personnel of selected hospitals in Turkey and spending active leisure time and the quality of their work life in 2023. The statistical population of the research was all the employees of hospitals Medical Park Bahçelievler, Acibadem Bakirkoy, Liv Hospitals Ulus Liv Hospital Bahcesehir, Aji Badem International Hospital, and using the Cochran sample size formula for a large and unknown population, 50 questionnaires were first distributed for the study guide. Finally, 45 usable questionnaires were examined. Then, the standard deviation related to the preliminary study was extracted and put in the Cochran sample size formula, and finally 350 samples were selected through cluster sampling. The data collection tool in this research was a combination of two Sharkley physical activity questionnaires and Walton's (1974) 27-question quality of work life questionnaire, whose reliability was confirmed by Cronbach's alpha method. In order to analyze the data, the Kolmogorov Smirnov test was first performed to determine the normality of the data distribution, and by confirming the normal distribution of the data, parametric statistics including the Pearson correlation coefficient were used to test the research hypotheses at a significance level of 0.05 has been used.

Results

In this section, research hypotheses have been tested. All research hypotheses have been examined at a significant level $P \leq 0.05$ and the results are presented in the relevant tables.

Table1 – Kolmogorov Smirnov test results in order to determine the normality of the investigated data

Dimensions	number	Kolmogorov - Smirnov	sig
Safe and healthy work environment	186	3.11	0.003
Providing the opportunity for continuous growth and security	186	2.72	0.000
Legalism in the organization	186	2.49	0.006
Social dependence of work life	186	3.14	0.000
The general atmosphere of life	186	2.97	0.001
Integrity and coherence in work	186	2.99	0.001
Development of human capabilities	186	3.24	0.000

Considering that the P-value is smaller than $P \leq 0.05$, therefore, the null hypothesis is rejected and the normality of data distribution is confirmed.

Table 2 – Relationship between participation in physical activity and quality of working life components of selected Turkish hospital personnel

Variable	Correlation coefficient	Significance level
Safe and healthy work environment	0.17	0.03
Providing the opportunity for continuous growth and security	0.45	0.0001
Legalism in the organization	0.35	0.000
Social dependence of work life	0.71	0.0001
The general atmosphere of life	0.56	0.0001
Integrity and coherence in work	0.41	0.0001
Development of human capabilities	0.27	0.000

As in Table 2. It can be seen that according to the correlation coefficient and the significance level of the research variables, it can be concluded that there is a positive and significant relationship between participation in physical activities and all components of the quality of work life of the personnel of selected hospitals in Turkey.

Table 3 – The relationship between participation in physical activity and the quality of work life of selected hospital personnel in Türkiye

	statistics	Quality of work life
Physical activities	Correlation coefficient	0.64
	level of significance	0.0001

As can be seen in Table 3, according to the correlation coefficient 0.64 and the significance level 0.0001, it can be concluded that there is a positive and significant relationship between participation in physical activities and the quality of work life of the personnel of selected hospitals in Turkey.

Discussion and conclusion

Regarding the relationship between participation in Teaching sports and physical activity and components of the quality of work life of selected hospital personnel in Turkey, the results of this research show that there is a positive and significant relationship between participation in physical activity and a safe and healthy work environment among personnel in selected hospitals in Turkey. with research findings (Abdin et al., 2018; Agergaard & Lenneis, 2024; Balboa-Castillo et al., 2011; Bischoff et al., 2019; Blake et al., 2017; Chekroud et al., 2018) It is congruent. The work environment for many hospital personnel is always stressful and hard and exhausting, increasing physical strength can help reduce the risks caused by this problem not only in hospital personnel but in any other dangerous and unsafe job. In fact, personnel who engage in physical activities of their choice in their free time will feel better physiologically and release happy hormones in their bodies. A free mind will be able to make better decisions. As a result, it can be said that physical activity in free time not only leads to the mental health of the personnel, but also the ability to make better decisions in the work environment and in general, their own safety and the people they deal with while doing work. The method of implementation and ... follows. The results of this research show that there is a positive and significant relationship between participating in Teaching sports and physical activity and providing opportunities for continuous growth and security for the personnel of selected hospitals in Turkey, which is in line with the

findings of the research(Blake et al., 2017; Ma & Li, 2024; Nakagawa et al., 2020; Ogunlola; Pascoe et al., 2020; Rogers et al., 2018; Smith et al., 2013; Song & Baicker, 2019; Stubbs et al., 2018) It is congruent, Usually, organizations should provide conditions for the growth and promotion of their personnel, according to the findings of this research, there is a positive and meaningful relationship between engaging in sports in leisure time and using opportunities for growth and job security, that is, it can be said that exercising in Free time of personnel can enjoy better job growth and security. In fact, career growth is one of the most effective factors in the quality of working life. If a person engages in physical activity in his free time, he will be more capable in terms of mental and physical growth in his career, and he can learn skills with hard work and more effort. to have more growth in his job. Also, the results show that there is a positive and significant relationship between participation in Teaching sports and physical activityand legalism in the organization among the personnel of selected hospitals in Turkey, which is in line with the research findings(Nakagawa et al., 2020; Stubbs et al., 2018; Tabuk & Kaya, 2024; Tamminen et al., 2020; Vancampfort et al., 2017; Wang et al., 2023; White et al., 2017; Whittaker et al., 2024; Wong et al., 2023; Zayed et al., 2018) It is congruent. Every organization has rules in the form of internal guidelines, people who follow the internal rules will have a higher quality of work life. May he have the mental ability to accept them, as mentioned before, physical activity makes a person happy and refreshed, a person who has a healthy mind will have a better ability to understand and implement the rules, and this person is also more open minded to He will express his complaints to the organization without fear and on the other hand he will feel the peace in his work environment. Regarding the participation in physical activities and the social dependence of the working life of the personnel of the selected hospitals in Turkey, the results of the research show that there is a positive and significant relationship between these two variables, which is in line with the findings of the research(Abdin et al., 2018; Balboa-Castillo et al., 2011; Bischoff et al., 2019; Chekroud et al., 2018; Dong & Liu, 2024; Fang et al., 2019; Grasdalsmoen et al., 2020; Nakagawa et al., 2020; Pascoe et al., 2020; Proper & van Oostrom, 2019) It is congruent. Undoubtedly, most medical professions and

hospitals are in such a way that they are always in contact with clients and ordinary people. Teaching sports and physical activity bring people closer to each other, especially group sports. People in such groups experience a sense of social dependence, and as a routine issue in their lives, it spreads to their workplaces, and attachment to colleagues and, as a result, a sense of happiness in the workplace is provided for the individual, which results in quality improvement. Life will be work. The present research shows that there is a positive and significant relationship between participation in Teaching sports and physical activity and the general atmosphere of life of the personnel of selected hospitals in Turkey. that with research findings (Abdin et al., 2018; Agergaard & Lenneis, 2024; Balboa-Castillo et al., 2011; Bischoff et al., 2019; Blake et al., 2017; Chekroud et al., 2018; Dong & Liu, 2024; Fang et al., 2019; Grasdalsmoen et al., 2020) It is congruent. Participating in Teaching sports and physical activity makes a person so free from thinking about problems that he can have a proper plan for his life and can establish a proper balance between sports, housework and work. Sports activity in free time is not only a source of energy for a new start, but also balances other life activities. Regarding participation in Teaching sports and physical activity and integrity and cohesion in the work of the personnel of selected hospitals in Turkey, the results of this research show that there is a positive and significant relationship between these variables, which is in line with the findings of the research (Brox & Frøystein, 2005; Fang et al., 2019; Kurklu, Babayigit, Oysul, & Aktas, 2015; Saridi et al., 2019; Serra, Camargo, Zaia, Tonello, & Quemelo, 2018) It is congruent. As mentioned earlier, Teaching sports and physical activity and group sports bring people closer, in fact, people with an open mind and a more prepared body can better communicate with their colleagues, or provide even more ground for their scientific advancement. By engaging in sports and strengthening closeness with colleagues, people automatically become closer to the organization and feel more belonging to the organization and consider themselves a part of the organization, that the organization is important to them and they are also important to the organization. Also, the results of this research showed that there is a positive and significant relationship between participation in Teaching sports and physical activity and the

development of human capabilities in the personnel of selected hospitals in Turkey, which is in line with the findings of (Barranco-Ruiz et al., 2017; García-Garro et al., 2022; Pauline Manon Genin et al., 2017; Gerodimos, Karatrantou, Papazeti, Batatolis, & Krommidas, 2022; Pérez-Valdecantos et al., 2022) It is congruent. The development of human capabilities as one of the factors of the development of the quality of working life includes learning other skills in addition to the job, the ability to access the information required for the job, etc. In this research, there is a significant connection between these two, which shows the tremendous impact of Teaching sports and physical activity on other life skills, in the light of which a person with a healthy body and a relaxed mind adds to his other skills. In the end, the results of this research show that there is a positive and significant relationship between participation in Teaching sports and physical activity and the quality of work life of selected hospital personnel in Turkey, which is in line with the findings of the research (Pauline M. Genin et al., 2018; Gjerset, Skaali, Seland, & Thorsen, 2023; Janssen & Voelcker-Rehage, 2023; Teles et al., 2014; Whitehead, Hamidi, Ebrahimi, Hazavehei, & Kharghani Moghadam, 2023) It is congruent. The quality of working life is as vital as blood in the veins for working people, because if a person is not satisfied with his job and his environment and working conditions, he will certainly not last. What this research has shown is that Teaching sports and physical activity can improve the quality of working life in people. improve, which is expected Improvement in the quality of life is caused by physiological interactions in the body and by exercise, which not only makes the body strong and fresh, but also cleans and activates the human spirit and mind. But the single findings are inconsistent with this result, the reason can be the type of job of the people or even the type of exercise and Teaching sports and physical activity, certainly among the hospital personnel or any other person dealing with hard and stressful jobs, or experiencing the conditions Heavy competition in free time and subsequent mental anxiety can have a negative effect on a person's mind and peace of mind and consequently on the quality of people's lives. According to the above findings, it can be concluded that teaching sports and physical activity can have a tremendous impact on the quality of work life of selected hospital employees in Turkey, and with culture building,

employees can be healthier and more committed to the organization. On the other hand, teaching sports and physical activity to hospital personnel during their free time helps them to deal with and solve problems more skillfully in the organizational and work environment, so that their capabilities develop and help their organizational growth and excellence.

Research proposals

- According to the findings of the research and confirmation of the impact of Teaching sports and physical activity on the quality of work life, it is suggested that the organization encourages personnel to exercise in their free time by creating culture and providing facilities and privileges.

- It is suggested that similar research be conducted in other communities and with different tools in this field so that the results are more reliable.

- Due to the fact that in the present study, Teaching sports and physical activity had a significant effect on the quality of work life, it is suggested that in similar researches, in addition to teaching sports and physical activity as a mediating variable, other variables should also be examined.

REFERENCE

Abdin, S., Welch, R. K., Byron-Daniel, J., & Meyrick, J. (2018). The effectiveness of physical activity interventions in improving well-being across office-based workplace settings: a systematic review. *Public health*, 160, 70-76.

Agergaard, S., & Lenneis, V. (2024). Everyday bordering. Theoretical perspectives on national 'others' in sport and leisure time physical activity. In *Sport and Nationalism* (pp. 133-148): Routledge.

Balboa-Castillo, T., León-Muñoz, L. M., Graciani, A., Rodríguez-Artalejo, F., & Guallar-Castillón, P. (2011). Longitudinal association of physical activity and sedentary behavior during leisure time with health-related quality of life in community-dwelling older adults. *Health and quality of life outcomes*, 9, 1-10.

Barranco-Ruiz, Y., Mandic, S., Paz-Viteri, S., Guerendiain, M., Sandoval, F., & Villa-González, E. (2017). A short dance-exercise intervention as a strategy for improving quality of life in inactive workers. *Health Education Journal*, 76(8), 936-945.

Bischoff, L. L., Otto, A.-K., Hold, C., & Wollesen, B. (2019). The effect of physical activity interventions on occupational stress for health personnel: A systematic review. *International journal of nursing studies*, 97, 94-104.

Blake, H., Stanulewicz, N., & McGill, F. (2017). Predictors of physical activity and barriers to exercise in nursing and medical students. *Journal of advanced nursing*, 73(4), 917-929.

Brox, J. I., & Frøystein, O. (2005). Health-related quality of life and sickness absence in community nursing home employees: randomized controlled trial of physical exercise. *Occupational Medicine*, 55(7), 558-563.

Chekroud, S. R., Gueorguieva, R., Zheutlin, A. B., Paulus, M., Krumholz, H. M., Krystal, J. H., & Chekroud, A. M. (2018). Association between physical exercise and mental health in 1· 2 million individuals in the USA between 2011 and 2015: a cross-sectional study. *The lancet psychiatry*, 5(9), 739-746.

Dong, K., & Liu, T. (2024). Digital Model Innovation of Leisure Sports Development in the Convergence Perspective of Culture, Sports and Tourism. *Applied Mathematics and Nonlinear Sciences*, 9(1).

Fang, Y.-Y., Huang, C.-Y., & Hsu, M.-C. (2019). Effectiveness of a physical activity program on weight, physical fitness, occupational stress, job satisfaction and quality of life of overweight employees in high-tech industries: a randomized controlled study. *International Journal of Occupational Safety and Ergonomics*, 25(4), 621-629.

García-Garro, P. A., Aibar-Almazán, A., Rivas-Campo, Y., Vega-Ávila, G. C., Afanador-Restrepo, D. F., & Hita-Contreras, F. (2022). Influence of the COVID-19 pandemic on quality of life, mental health, and level of physical activity in Colombian university workers: a longitudinal study. *Journal of Clinical Medicine*, 11(14), 4104.

Genin, P. M., Degoutte, F., Finaud, J., Pereira, B., Thivel, D., & Duclos, M. (2017). Effect of a 5-month worksite physical activity program on tertiary employees overall health and fitness. *Journal of occupational and environmental medicine*, 59(2), e3-e10.

Genin, P. M., Dessenne, P., Finaud, J., Pereira, B., Thivel, D., & Duclos, M. (2018). Health and fitness benefits but low adherence rate: effect of a 10-month onsite physical activity program among tertiary employees. *Journal of occupational and environmental medicine*, 60(9), e455-e462.

Gerodimos, V., Karatrantou, K., Papazeti, K., Batatolis, C., & Krommidas, C. (2022). Workplace exercise program in a hospital environment: An effective strategy for the promotion of employees physical and mental health. *A randomized controlled study. International archives of occupational and environmental health*, 95(7), 1491-1500.

Gjerset, G. M., Skaali, T., Seland, M., & Thorsen, L. (2023). Health-related quality of life, fatigue, level of physical activity, and physical capacity before and after an outpatient rehabilitation program for women within working age treated for breast cancer. *Journal of Cancer Education*, 38(3), 948-956.

Grasdalsmoen, M., Eriksen, H. R., Lønning, K. J., & Sivertsen, B. (2020). Physical exercise, mental health problems, and suicide attempts in university students. *BMC psychiatry*, 20, 1-11.

Jakicic, J. M., Rogers, R. J., Davis, K. K., & Collins, K. A. (2018). Role of physical activity and exercise in treating patients with overweight and obesity. *Clinical chemistry*, 64(1), 99-107.

Janssen, T. I., & Voelcker-Rehage, C. (2023). Leisure-time physical activity, occupational physical activity and the physical activity paradox in healthcare workers: a systematic overview of the literature. *International journal of nursing studies*, 141, 104470.

Kremer, P., Elshaug, C., Leslie, E., Toumbourou, J. W., Patton, G. C., & Williams, J. (2014). Physical activity, leisure-time screen use and depression among children and young adolescents. *Journal of science and medicine in sport*, 17(2), 183-187.

Kurklu, S., Babayigit, M., Oysul, F., & Aktas, A. M. (2015). Examination of possible effects of physical activity level (IPAQ) on quality of life (SF-36) in health care workers who employed in a training and research hospital. *SM J Public Health Epidemiol*, 1(2), 1007.

Ma, L., & Li, L. (2024). The Impact of Leisure Sports Activities on The Psychological Health of The Public. *Revista de Psicología del Deporte (Journal of Sport Psychology)*, 33(3), 62-72.

Nakagawa, T., Koan, I., Chen, C., Matsubara, T., Hagiwara, K., Lei, H., . . . Nakagawa, S. (2020). Regular moderate-to vigorous-intensity physical activity rather than walking is associated with enhanced cognitive functions and mental health in young adults. *International journal of environmental research and public health*, 17(2), 614.

Ogunlola, L. *Sports, Games, Recreation, and Leisure. Culture and Customs of the Yoruba.*

Pascoe, M., Bailey, A. P., Craike, M., Carter, T., Patten, R., Stepto, N., & Parker, A. (2020). Physical activity and exercise in youth mental health promotion: a scoping review. *BMJ open sport & exercise medicine*, 6(1), e000677.

Pérez-Valdecantos, D., Caballero-García, A., Bello, H. J., Noriega-González, D., Palomar-Ciria, N., Roche, A., . . . Córdova-Martínez, A. (2022). Professional quality of life of healthcare workers in hospital emergency departments. *Behavioral Sciences*, 12(6), 188.

Prince, S. A., Elliott, C. G., Scott, K., Visintini, S., & Reed, J. L. (2019). Device-measured physical activity, sedentary behaviour and cardiometabolic health and fitness across occupational groups: a systematic review and meta-analysis. *International Journal of Behavioral Nutrition and Physical Activity*, 16, 1-15.

Proper, K. I., & van Oostrom, S. H. (2019). The effectiveness of workplace health promotion interventions on physical and mental health outcomes—a systematic review of reviews. *Scandinavian journal of work, environment & health*, 45(6), 546-559.

Rogers, L. Q., Carter, S. J., Williams, G., & Courneya, K. S. (2018). Physical activity. *Handbook of Cancer Survivorship*, 287-307.

Saridi, M., Filippopoulou, T., Tzitzikos, G., Sarafis, P., Souliotis, K., & Karakatsani, D. (2019). Correlating physical activity and quality of life of healthcare workers. *BMC research notes*, 12, 1-6.

Serra, M. V. G. B., Camargo, P. R., Zaia, J. E., Tonello, M. G. M., & Quemelo, P. R. V. (2018). Effects of physical exercise on musculoskeletal disorders, stress and quality of life in workers. *International Journal of Occupational Safety and Ergonomics*, 24(1), 62-67.

Smith, E. M. L., Pang, H., Cirrincione, C., Fleishman, S., Paskett, E. D., Ahles, T., . . . Le-Lindqwister, N. (2013). Effect of duloxetine on pain, function, and quality of life among patients with chemotherapy-induced painful peripheral neuropathy: a randomized clinical trial. *Jama*, 309(13), 1359-1367.

Song, Z., & Baicker, K. (2019). Effect of a workplace wellness program on employee health and economic outcomes: a randomized clinical trial. *Jama*, 321(15), 1491-1501.

Stubbs, B., Vancampfort, D., Hallgren, M., Firth, J., Veronese, N., Solmi, M., . . . Gerber, M. (2018). EPA guidance on physical activity as a treatment for severe mental illness: a meta-review of the evidence and Position Statement from the European Psychiatric Association (EPA), supported by the International Organization of Physical Therapists in Mental Health (IOPTMH). *European Psychiatry*, 54, 124-144.

Tabuk, M. E., & Kaya, E. Ö. (2024). Holistic Analysis of Recreation and Leisure Science in Sports. *Avrasya Spor Bilimleri ve Eğitim Dergisi*, 6(1), 13-27.

Tamminen, N., Reinikainen, J., Appelqvist-Schmidlechner, K., Borodulin, K., Mäki-Opas, T., & Solin, P. (2020). Associations of physical activity with positive mental health: A population-based study. *Mental Health and Physical Activity*, 18, 100319.

Teles, M. A. B., Barbosa, M. R., Vargas, A. M. D., Gomes, V. E., e Ferreira, E. F., Martins, A. M. E. d. B. L., & Ferreira, R. C. (2014). Psychosocial work conditions and quality of life among primary health care employees: a cross sectional study. *Health and quality of life outcomes*, 12, 1-12.

Vancampfort, D., Firth, J., Schuch, F. B., Rosenbaum, S., Mugisha, J., Hallgren, M., . . . De Hert, M. (2017). Sedentary behavior and physical activity levels in people with schizophrenia, bipolar disorder and major depressive disorder: a global systematic review and meta-analysis. *World Psychiatry*, 16(3), 308-315.

Wang, Z., Jiang, B., Wang, X., Li, Z., Wang, D., Xue, H., & Wang, D. (2023). Relationship between physical activity and individual mental health after traumatic events: a systematic review. *European journal of psychotraumatology*, 14(2), 2205667.

White, R. L., Babic, M. J., Parker, P. D., Lubans, D. R., Astell-Burt, T., & Lonsdale, C. (2017). Domain-specific physical activity and mental health: a meta-analysis. *American journal of preventive medicine*, 52(5), 653-666.

Whitehead, D., Hamidi, Y., Ebrahimi, H., Hazavehei, S. M. M., & Kharghani Moghadam, S. M. (2023). Relationships between lifestyle, quality of life, organizational culture and job satisfaction among nurses related to health promoting hospital (HPH) standards. *Health Services Insights*, 16, 11786329231193792.

Whittaker, S. G., Scheiman, M., & Sokol-McKay, D. A. (2024). Leisure, Recreation, and Sports. In *Low Vision Rehabilitation* (pp. 323-334): Routledge.

Wong, M. Y. C., Ou, K.-l., Chung, P. K., Chui, K. Y. K., & Zhang, C.-q. (2023). The relationship between physical activity, physical health, and mental health among older Chinese adults: A scoping review. *Frontiers in public health*, 10, 914548.

Zayed, K. N., Ahmed, M. D., Van Niekerk, R. L., & Ho, W. K. Y. (2018). The mediating role of exercise behaviour on satisfaction with life, mental well-being and BMI among university employees. *Cogent Psychology*, 5(1), 1430716.