SPORT TK-EuroAmerican Journal of Sport Sciences

https://revistas.um.es/sportk Online ISSN: 2340-8812

Received: **10/04/2025.** Accepted: **03/08/2025.** Published: **01/12/2025**

Life satisfaction among sports participants: A systematic review

Endang Sepdanius[1, 2*], Adli Bin Mohd Sidi[2], Rini Afriani[1], Endarman Saputra[3], Mustakim Hasim[2]

[1] Universitas Negeri Padang, Indonesia.

[2] University Teknologi Mara, Malaysia.

[3] Claude Bernard University Lyon 1, France.

* Correspondence: Endang Sepdanius; endangsepdanius@fik.unp.ac.id

ABSTRACT

The aim of this study was to find evidence demonstrating that participating in sports activities has an impact on life satisfaction of individuals involved in these activities. The methodology followed the Preferred Reporting Items for Systematic Reviews (PRISMA) technique. Databases was searched using indexing services, including Scopus and Web of Science. A total of 13 articles met the inclusion criteria. The results showed that 1) Physical activity with social interaction and self-efficacy is important for improving life satisfaction and physical well-being across various age groups. 2) It is important to manage stress and fatigue that may arise, even though physical activity and good nutrition improve life satisfaction. 3) Body weight status and gender affect physical literacy and life satisfaction in children and adolescents. 4) Life satisfaction derived from physical activity has a significant long-term impact on health and future care needs. 5) Well-structured physical activity, whether in team practice or individual activities, can enhance life satisfaction and mental health. 6) The quality of experience in physical activity is more important than the duration in improving life satisfaction. By understanding the factors that mediate the relationship between physical activity and well-being, this research can help develop a more comprehensive theory of how physical activity affects mental and physical health.

KEYWORDS

Life Satisfaction; Sport Participation; Physical Activity; Well-Being

1. INTRODUCTION

Life satisfaction, a multifaceted construct often associated with overall well-being and quality of life, has been a focal point of numerous psychological and sociological studies (Liu et al., 2019). The engagement in sports and physical activities has long been hypothesized to positively influence life satisfaction due to its various physical, psychological, and social benefits (Yue et al., 2022). This systematic review aims to synthesize existing literature on the relationship between sports participation and life satisfaction, exploring the underlying mechanisms and contextual factors that may enhance or moderate this relationship.

Recent decades have witnessed a growing body of research highlighting the positive impact of sports participation on individual well-being (Nakamura et al., 2021). Participation in sports is not only associated with improved physical health outcomes, such as reduced risk of chronic diseases and enhanced physical fitness, but also with significant psychological benefits, including reduced symptoms of anxiety and depression, enhanced self-esteem, and better stress management (Mutz et al., 2019). Moreover, sports offer social benefits by fostering community engagement, social integration, and the development of supportive relationships (Bae et al., 2024).

Despite the recognized benefits, the extent and nature of the relationship between sports participation and life satisfaction remain complex and multifactorial. Various factors, such as the type and intensity of sports, frequency of participation, individual motivations, and socio-demographic characteristics, can influence this relationship (King et al., 2023). Additionally, cultural contexts and socio-economic conditions play a critical role in shaping the opportunities and experiences related to sports participation (Ghenţa et al., 2022).

Given the importance of understanding these dynamics, this systematic review collates and critically examines empirical studies from diverse geographical regions and cultural contexts. The review seeks to identify consistent patterns, highlight gaps in the current literature, and suggest directions for future research. By offering a comprehensive overview of how sports participation relates to life satisfaction, this review aims to provide valuable insights for policymakers, practitioners, and researchers dedicated to promoting well-being through physical activity and sports.

2. METHODS

To answer the research question on how empathy affects the attitudes and behaviors of participants in sports activities, we followed a comprehensive and transparent systematic review approach. This process includes the identification, selection, quality assessment, and synthesis of

results from relevant studies (Page et al., 2021). This review protocol was developed in accordance with PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) guidelines to ensure rigorous methodology and reproducible results. A systematic search strategy was conducted across various major electronic databases, including Scopus and Web of Science, using a predefined combination of keywords and Boolean operators. Additionally, clear inclusion and exclusion criteria were applied to select the most relevant and high-quality studies. Risk of bias assessment was performed using recognized tools, and data were extracted using standard forms to ensure consistency and reliability of results. With this approach, we aim to provide a comprehensive overview of life satisfaction in the context of sports, as well as to identify factors influencing the dynamics of participants' attitudes and behaviors.

For the inclusion criteria, only studies published in 2024 years were included, involving participants of various ages and backgrounds, and evaluating the relationship between physical activity and life satisfaction. These studies could use either quantitative or qualitative methods and must be published in English. As for the exclusion criteria, studies that were not available in full text, as well as review or editorial articles without empirical data, were excluded.

2.1. Information Sources and Search Strategy

The databases used were Scopus and Web of Science. The keywords used were "Physical Activity AND Life Satisfaction AND Sports." The search strategy was conducted using a combination of these keywords with Boolean operators (AND). The search was limited to articles published since 2024 and only included studies published in English. The search results showed that there were 51 articles that met these criteria, consisting of 26 articles from Web of Science and 29 articles from Scopus. Mendeley was used to select duplicate data, resulting in the identification of duplicate entries.

2.2. Study Selection Process

Initial screening will be conducted by two independent reviewers who will assess the titles and abstracts to evaluate their suitability according to the inclusion criteria. From this process, 19 articles were found to be relevant to the theme. Articles that meet these initial criteria will then be reviewed in full text to ensure further suitability. If there is any disagreement between the reviewers, the issue will be resolved through discussion or by involving a third reviewer to reach a final decision. This process ensures that only genuinely relevant and high-quality articles will be included in the final analysis (Fig 1).

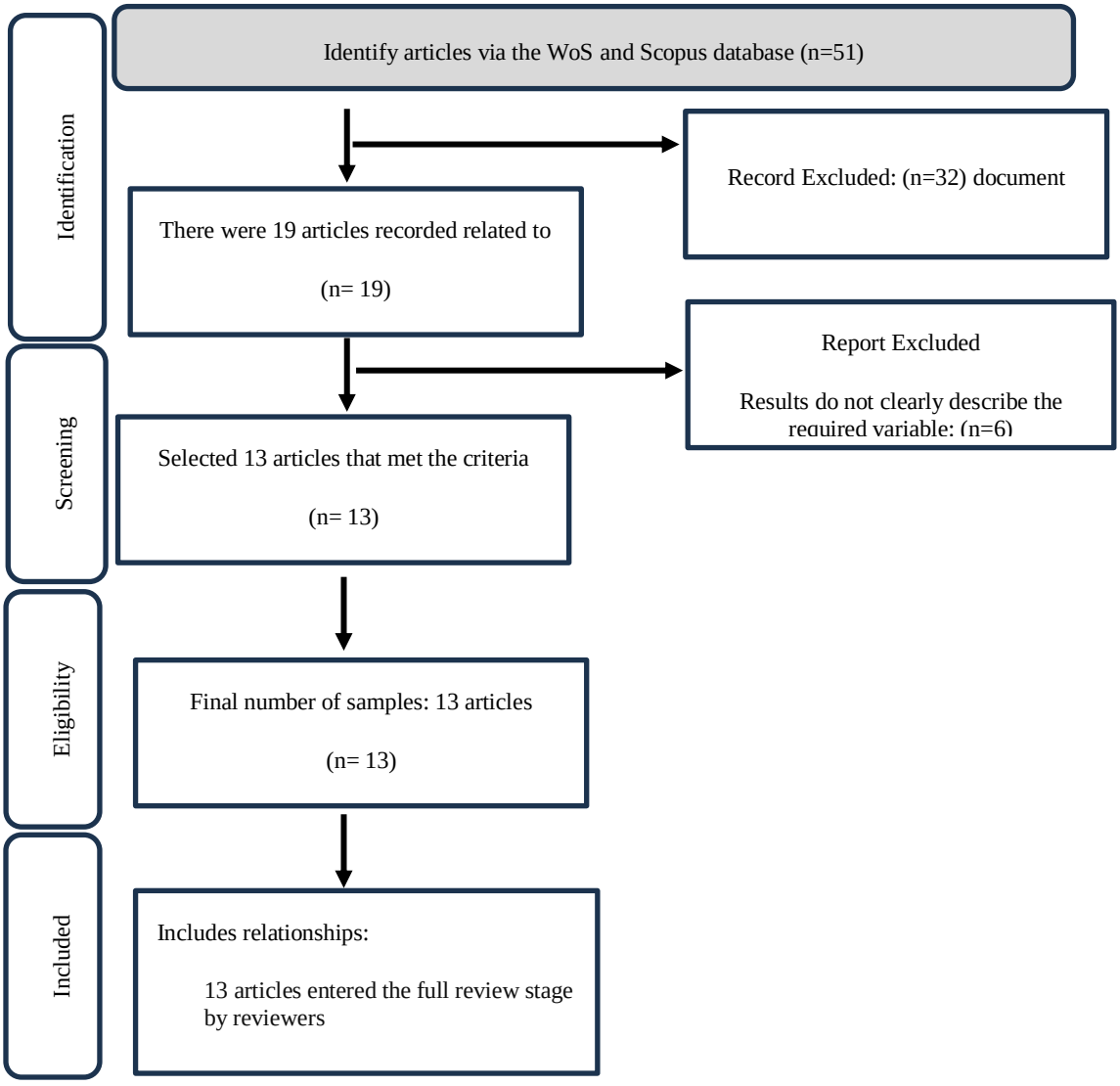

Figure 1. PRISMA flow diagram (Page et al., 2021)

2.3. Data Extraction

Data was extracted using a standard form that includes information about the authors, type of activity subjects, age, frequency period, training program, and final conclusions. The extraction process will be carried out by two independent reviewers who will extract the data and verify the consistency of the results to ensure the accuracy and reliability of the collected data. This step is crucial to maintain the quality and integrity of the data to be used in the subsequent analysis.

3. RESULTS

Table 1 shows a summary of studies included in the literature review, detailing their objectives, participants, types of physical activity, frequency/duration, and training programs.

Table 1. Summary of findings from the literature review

No	Authors	Objective	Participants	Type of Activity	Frequency Period	Training Program
1	Lu et al. (2024)	This study investigates the impact of dance interventions on physical function and quality of life among middle-aged and older adults.	The participants included 1,259 with the majority being female (968 females and 212 males). The ages ranged from middle-aged to older adults with various health backgrounds including healthy elderly, patients with Parkinson's disease, fibromyalgia, chronic heart failure, schizophrenia, postmenopausal women, and cancer survivors.	The types of dance activities assessed in the study included various dance genres such as Turkish folk dance, Waltz/Foxtrot, belly dance, Irish set dance, Agilando dance, traditional Greek dance, creative dance program, Argentine Tango, social dance, Flamenco dance, ballroom dancing, Indian folk dance, and Zumba.	The frequency of dance sessions varied between studies from once a week to five times a week. The duration of the intervention programs also varied from six weeks to 12 months. Typical session duration ranged from 45 to 90 minutes.	The training programs were structured based on various dance interventions and included the following components: Warm-up (10-20 minutes including stretching and low-intensity exercises), Dance phase (40-70 minutes focusing on specific dance steps and sequences), Cool-down (10-20 minutes including stretching and relaxation exercises).
2	Kan & Xie (2024)	This study investigates the impact of sports participation on life satisfaction among internal migrants in China, focusing on the mediating effects of social interaction	The sample consisted of 579 valid respondents from the 2017 Chinese General Social Survey (CGSS). The average age of participants was 42-46 years, and the sample included 283 males (48.9%).	The activities assessed included participation in physical exercise during leisure time and watching live sports events.	The frequency of sports participation included 5 levels: 1) Daily physical activity, 2) Several times a week, 3) Several times a month, 4) Several times a year or less, and 5) Never.	The study did not implement a specific sports program but analyzed self-reported data on participants' involvement in physical exercise and attendance at live sports events over the past year.

		and self-efficacy.			The average frequency of physical exercise was 3.11 (SD = 1.51) and watching live games was 4.66 (SD = 0.65).	
3	Kieltyka-Slowik et al. (2024)	This study investigates the relationship between physical activity (PA) and quality of life among elderly people aged 60-89 years living in their own homes and nursing homes.	The sample consisted of 341 respondents aged 60-89 years, including 273 females (80%) and 68 males (20%). Of these, 219 (64%) were aged 60-74 years, and 122 (36%) were aged 75-89 years. Additionally, 178 (52%) lived in their own homes, while 163 (48%) lived in nursing homes.	The physical activities assessed included vigorous intensity physical effort, moderate intensity physical effort, and moderate intensity walking.	The average total physical activity was measured in MET-minutes per week. The activities were classified into vigorous intensity, moderate intensity, and walking with weekly average values: Vigorous intensity: 3000.5 ± 1015.25 MET-minutes, Moderate intensity: 4061.9 ± 902.72 MET-minutes, Walking: 7311.1 ± 1054.29 MET-minutes.	Participants' physical activity levels were assessed using the International Physical Activity Questionnaire (IPAQ). Quality of life was evaluated using the WHOQOL-AGE questionnaire.
4	Qin et al. (2024)	This study investigates the effects of exercise training and dietary therapy on physical fitness,	The sample consisted of 25 male PLWHA divided into two groups: Intervention Group (IG) with 12 participants and Control	The activities involved included moderate-intensity aerobic exercise and dietary therapy involving	Exercise: 45 minutes of exercise (60-80% HRmax) 4 times a week for 4 weeks. The exercise included	The training program included: Warm-up: 3 minutes, Achieving Target Heart Rate: 3-4 minutes to

		quality of life, and immune response in people living with HIV/AIDS (PLWHA).	Group (CG) with 13 participants. Participants were selected based on the lack of exercise habits and nutritional supplements in the past six months.	nutritional supplement intake.	brisk walking or running. Dietary Therapy: Nutritional supplements taken 3 times a day for 4 weeks.	reach 60-80% HRmax, Main Exercise: Brisk walking or running for 45 minutes at the target heart rate, Cool-down: 3 minutes.
5	Wang et al. (2024)	This study investigates the combined effects of physical activity (PA) and fruit and vegetable (F&V) intake on life satisfaction (LS) among middle-aged and older adults.	The sample consisted of 10,317 adults aged 45 and above from the Taiwan Longitudinal Study on Aging (TLSA) followed over a 16-year period (1999-2015).	The activities assessed included: Physical Activity (PA) evaluated based on frequency, duration, and intensity, and Fruit and Vegetable (F&V) intake evaluated based on weekly consumption frequency.	Participants were categorized based on their PA and F&V intake: Low PA: Less than 150 minutes per week, High PA: 150 minutes or more per week, Low F&V intake: Less than 7 times per week, High F&V intake: 7 times or more per week.	The study did not implement a specific exercise program but observed participants' natural behavior over a 16-year period. The assessment was based on self-reported questionnaires measuring PA and F&V intake.
6	Urbano-Mairena et al. (2024)	This study investigates the role of life satisfaction (SWLS), gender, and body mass index (BMI) in physical literacy (PL) among Spanish children.	The study involved 135 children aged 8-12 years from Extremadura, Spain. Of these, 53.4% were female and 46.6% were male, with an average age of 10.09 years.	The activities assessed related to physical literacy included physical competency tests (e.g., agility tests, isometric plank tests, and PACER cardiorespiratory capacity tests), daily physical activity behavior (measured by steps taken and minutes of	Physical activity was measured daily using a wristband to record steps and minutes of physical activity.	Participants were assessed based on the Canadian Assessment of Physical Literacy 2 (CAPL-2) adapted into Spanish. This included physical competency tests, daily physical activity behavior monitoring, and surveys on knowledge, understanding,

				physical activity), knowledge and understanding (assessed through a questionnaire), and motivation and confidence (assessed through surveys).		motivation, and confidence.
7	Jimenez-Morcillo et al. (2023)	This study examines gender differences in body satisfaction perceptions, focusing on the influence of nutritional habits, psychological traits, and physical activity among strength training individuals.	The sample consisted of 605 strength training participants including 385 males and 224 females aged 20 to 35 years, all regularly engaged in strength training.	The activities assessed included strength training focusing on resistance training and aerobic exercise as part of overall physical activity programs.	Participants engaged in strength training with weekly frequencies ranging from 2 to 7 days. The volume of aerobic exercise was measured in minutes per week, and the intensity of strength training was measured based on the percentage of one repetition maximum (1RM) in various exercises.	The study evaluated participants' exercise habits including: Weekly training sessions categorized into aerobic and strength training. Strength training intensity measured in percentage 1RM for exercises such as back squat, deadlift, and bench press.
8	Bae et al. (2024)	This study investigates the longitudinal changes and relationship between sport grit and life satisfaction among Korean adolescents.	The sample consisted of 2,142 students (1,070 males and 1,072 females) from the Korean Children and Youth Panel Survey from 6th grade (2020) to 8th grade (2022). This survey covers ages 11 to 13 years.	The activities assessed included physical activities conducted outside school hours on weekdays and weekends. Exercise intensity was measured based on hours of exercise until sweating.	Exercise frequency was measured by: Hours of sports and physical activities outside school hours on weekdays. Hours of sports and physical activities on weekends.	The study did not implement a specific exercise program but analyzed self-reported exercise habits of the participants over three years.

					Hours of exercise until sweating over the past week. Response options for exercise time ranged from none to more than 4 hours.	
9	Hasegawa (2024)	This study investigates how elderly individuals' satisfaction with their physical activity during winter and spring relates to future health indicators and care needs.	The sample consisted of elderly individuals aged 65 and above living independently in the community and members of senior citizen clubs in Tobetsu City, northern Japan. The initial winter 2019 survey involved 181 respondents with 145 respondents completing all three surveys during the study period.	The activities assessed included general physical activity levels perceived by the individuals themselves, specifically their satisfaction with physical activity during winter and spring.	The study did not specify exact physical activity frequencies but measured perceived satisfaction with physical activity levels during different seasons: Winter: January to February 2019. Spring: May 2019.	No specific exercise program was implemented in the study. Instead, participants' satisfaction with their physical activity was assessed using questionnaires including the Kihon Checklist (KCL) consisting of 25 items used to screen for frailty. Cardiovascular Health Study (CHS) criteria were used to assess frailty based on weight loss, difficulty climbing stairs, fatigue, reduced walking speed, and lack of physical activity. Quality of Life (QOL): Measured using the Japanese version of the EuroQoL-5

						Dimensions-5 Level (EQ-5D-5L).
10	Li et al. (2024)	This study explores the relationship between physical activity frequency and its impact on mental health, life satisfaction, and self-assessed health among adolescents.	The sample consisted of 3,578 Chinese high school students including male and female participants aged 15-18 years.	The types of activities assessed included physical activity with varying frequencies: Low, moderate, and high frequency physical activities.	Physical activity frequency was categorized into: Never, Rarely, Often, and Always.	Participants completed questionnaires assessing mental health, physical activity frequency, life satisfaction, and self-assessed health.
11	Codina et al. (2020)	The study participants were 953 men and 947 women engaging in physical activity (PA) at least 3-12 days a week aged 18 to 28 years.	The activities involved included various physical exercises and sports. Participants were grouped into four clusters based on their PA content goals: 1) Health management (n=652), 2) Team skills (n=412), 3) Social recognition (n=494), and 4) Low goals (n=342).	Participants engaged in physical activity on average 3.17 days per week, 66 minutes per day, and 212 minutes per week.	The study did not focus on specific training programs but analyzed self-reported content goals of participants, psychological need satisfaction, and experiences leading to their regular physical activity practices.	The study concluded that: The impact of physical activity on life satisfaction (SWL) varied depending on the content goals in PA. The main findings included a focus on team practices fostering skill development and perceived competence or individual activities facilitating health management and group affiliation.
12	Babakhanian et al. (2024)	This study investigates the impact of early retirement due to sports injuries on the physical	The study involved 40 retired elite Iranian athletes aged 55 to 70 years who retired due to sports injuries.	The athletes primarily participated in skiing, wrestling, and mountaineering before early retirement.	Participants were classified based on their current physical activity levels: Active	The study did not detail specific exercise programs but emphasized the comparison between active

		condition, quality of life (QOL), self-esteem, and self-worth of active and inactive elite Iranian athletes.	Participants were divided into two groups: Active Group with 20 athletes continuing to engage in sports activities and Inactive Group with 20 athletes not engaging in sports activities.		Group engaged continuously in light sports activities. Inactive Group had no involvement in sports activities post-retirement.	and inactive lifestyles post-retirement.
13	Tomasone et al. (2024)	This study investigates the relationship between sports participation and subjective well-being (SWB) among adults with physical disabilities, focusing on whether the quality of participation is more important than the quantity.	The study involved 535 adults with physical disabilities recruited through a national survey. Participants were divided into two groups: Sports Group: 271 participants (62% male, average age 44 ± 14 years) and Exercise Group: 264 participants (42% male, average age 57 ± 14 years).	The activities involved were categorized into sports and exercise. Sports: Recreational or high-level sports oriented towards goals and competition. Exercise: Planned, structured, repetitive activities aimed at improving or maintaining physical fitness.	Sports Group: Participants reported an average of 320 ± 290 minutes of sports activity per week. Exercise Group: Participants reported an average of 124 ± 212 minutes per week of strength training and aerobic exercise.	The study did not focus on specific training programs but emphasized the difference between performance aspects (frequency, intensity, time involved) and experiential aspects (quality of participation) of sports and exercise.

4. DISCUSSION

Physical activity has long been recognized as a crucial factor in enhancing the quality of life and overall well-being of individuals. Numerous studies have shown that engaging in physical activities not only provides physical benefits but also positively impacts mental well-being and life satisfaction. Physical activity can improve physical functioning, reduce the risk of chronic diseases, and strengthen mental health through various mechanisms such as increased social interaction, self-efficacy, and stress reduction. In this context, this systematic review aims to examine the impact of various forms of physical activity, including dance and other exercises, on quality of life and life satisfaction across different age groups.

Dance interventions have been shown to significantly improve physical function, balance, posture control, and quality of life in middle-aged and older adults. Adherence rates to dance interventions are higher compared to physiotherapy, self-care, conventional therapy, as well as aerobic and resistance exercises (Lu et al., 2024). This suggests that dance can be an effective and enjoyable alternative for improving physical health in these age groups. Additionally, participation in physical activities such as exercise and attending live sports events also has a positive impact on life satisfaction, particularly among internal migrants in China. The relationship between sports participation and life satisfaction is mediated by social interaction and self-efficacy (Kan & Xie, 2024). Generally, physical activity, including exercise, has been proven to enhance the quality of life in older adults, where higher levels of physical activity are associated with better quality of life scores (Kieltyka-Slowik et al., 2024). In conclusion, physical activity, especially those involving social interaction and self-efficacy, is essential for improving quality of life and physical well-being across various age groups.

Quality of life also shows improvements in terms of physical satisfaction, confidence in physical efficacy, and emotional feelings towards eating in the intervention group. However, there is an increased perception of stress due to fatigue (Qin et al., 2024). Additionally, both high physical activity (PA) intake and high fruit and vegetable (F&V) intake are significantly associated with higher life satisfaction. The combination of high PA and high F&V intake results in the highest life satisfaction compared to the combination of low PA and low F&V intake (Wang et al., 2024). In conclusion, while physical activity and good nutrition improve quality of life, it is important to manage stress and fatigue that may arise from increased activity.

Research also indicates that children with normal weight achieve higher levels of physical literacy and life satisfaction compared to overweight and obese children. Physical literacy is positively related to life satisfaction but negatively related to BMI. Boys exhibit higher levels of physical literacy and life satisfaction compared to girls (Urbano-Mairena et al., 2024). Additionally, girls engage in training sessions with greater volume than boys, reflecting their concerns about body satisfaction and social pressure (Jimenez-Morcillo & Clemente-Suárez, 2024). Based on this information, it can be concluded that weight status and gender influence physical literacy and life satisfaction among children and adolescents.

Research on the relationship between physical activity and life satisfaction also shows interesting results across different age groups and conditions. Among Korean adolescents, there is a consistent decline in exercise, resilience, and life satisfaction over three years of school. There is a significant longitudinal relationship between sports, resilience, and life satisfaction, where higher

resilience is associated with initial exercise levels and higher life satisfaction (Bae et al., 2024). Satisfaction with physical activity during winter has a stronger correlation with future care needs compared to satisfaction during spring. Those with low satisfaction in winter are more likely to require increased care three years later, indicating that low satisfaction with physical activity is associated with higher frailty scores (Hasegawa, 2024). In conclusion, satisfaction with physical activity has a significant long-term impact on health and future care needs, making it important to promote enjoyable and adequate physical activity throughout the year.

Research also shows that life satisfaction and self-rated health play an important role in the relationship between physical activity frequency and mental health. Life satisfaction and self-rated health play a significant mediating role in the relationship between physical activity frequency and mental health. Low-frequency physical activity has the most significant mediating effect on mental health through life satisfaction (Li et al., 2024). The impact of physical activity on life satisfaction (SWL) varies depending on the goals of the activity. Key findings include a focus on team practices that encourage the development of perceived skills and competence or individual activities that facilitate health management and group affiliation (Codina et al., 2024). In conclusion, well-structured physical activities, whether in the form of team practices or individual activities, can significantly enhance life satisfaction and mental health through the mediating role of life satisfaction and self-rated health.

Research also highlights the importance of quality physical activity in improving individual well-being. Active groups report higher scores for quality of life (QOL), self-esteem, and physical satisfaction compared to inactive groups (Babakhanian et al., 2024). The quality of participation in sports and exercise (sense of belonging, mastery, autonomy, challenge, engagement, and meaning) explains more variance in subjective well-being measures than the quantity of participation (time spent) (Tomasone et al., 2024). In conclusion, the quality of experience in physical activity is more important than the duration of the activity in improving quality of life, self-esteem, and physical satisfaction.

These findings indicate that quality physical activity, including dance and other exercises, can significantly enhance physical function, balance, posture control, and quality of life across various age groups. These improvements apply not only to middle-aged and older adults but also to children and adolescents. It is important for health and fitness practitioners to promote physical activities that are not only effective but also enjoyable to improve adherence and health outcomes. Additionally, integrating social interaction and self-efficacy into physical activity programs can further enhance life satisfaction and mental well-being.

Theoretically, this research reinforces the concept that physical activity plays an important role in improving subjective well-being through various mechanisms, including social interaction, self-efficacy, and stress management. This research also emphasizes the importance of quality participation in physical activity over its quantity. By understanding the factors mediating the relationship between physical activity and well-being, this research can help develop a more comprehensive theory on how physical activity affects mental and physical health.

5. CONCLUSIONS

Overall, physical activity plays an important role in enhancing the quality of life to achieve well-being through various mechanisms such as increased social interaction, self-efficacy, and stress reduction through sports activities. The practical and theoretical implications of these findings can assist in the development of more effective and comprehensive health programs. However, further research is needed to address existing limitations and deepen the understanding of the long-term impact of physical activity on physical, psychological, and social health.

6. REFERENCES

1. Babakhanian, S., KarimiZadeh Ardakani, M., Hani Mansori, M., & Naderifar, H. (2024). A Comparative Study of Self-Esteem, Quality of Life, Health, and Physical Satisfaction among Active and Inactive Iranian Elite Athletes after Early Retirement Due to Sports Injuries. *Journal of Rehabilitation Sciences & Research*, *11*(1), 43-49.
2. Bae, M. H., Zhang, X. Y., & Lee, J. S. (2024). Exercise, grit, and life satisfaction among Korean adolescents: a latent growth modeling analysis. *BMC Public Health*, *24*(1), 1-9. https://doi.org/10.1186/s12889-024-18899-8
3. Codina, N., Pestana, J. V., Valenzuela, R., & Giménez, N. (2020). Procrastination at the Core of Physical Activity (PA) and Perceived Quality of Life: A New Approach for Counteracting Lower Levels of PA Practice. *International Journal of Environmental Research and Public Health*, *17*(10), 1-13. https://doi.org/10.3390/ijerph17103413
4. Ghenţa, M., Matei, A., Mladen-Macovei, L., & Bobârnat, E.-S. (2022). Factors associated with the participation of older adults in cultural and sports activities. *International Journal of Environmental Research and Public Health, 19*(10), 1–22. https://doi.org/10.3390/ijerph19106244
5. Hasegawa J. (2024). Elderly Individuals' Satisfaction With Own Physical Activity Predicts Their Need for Care 3 Years Later. *Gerontology & Geriatric Medicine*, *10*, 1-7. https://doi.org/10.1177/23337214241249917
6. Jimenez-Morcillo, J., & Clemente-Suárez, V. J. (2023). Gender Differences in Body Satisfaction Perception: The Role of Nutritional Habits, Psychological Traits, and Physical Activity in a Strength-Training Population. *Nutrients*, *16*(1), 1-14. https://doi.org/10.3390/nu16010104
7. Kiełtyka-Słowik, A., Michalik-Marcinkowska, U., & Zawadzka, B. (2024). The association between physical activity and quality of life among people aged 60-89 living in own homes and nursing homes. *BMC Geriatrics*, *24*(1), 1-8. https://doi.org/10.1186/s12877-024-04898-2
8. King, B. F., Macdonald, J., Stoff, L., Nettnin, E., Jayaraman, A., Goldman, J. G., & Rafferty, M. (2023). Activity monitoring in Parkinson disease: A qualitative study of implementation

determinants. *Journal of Neurologic Physical Therapy, 47*, 189–199. https://doi.org/10.1097/NPT.0000000000000451
9. Li, W., Gao, Y., Liu, G., Hao, R., Zhang, M., & Li, X. (2024). Shifting the paradigm: A fresh look at physical activity frequency and its impact on mental health, life satisfaction, and self-rated health in adolescents. *International Journal of Mental Health Promotion, 26*(2), 83–92. https://doi.org/10.32604/ijmhp.2023.042014
10. Liu, T., Zeng, X., Chen, M., & Lan, T. (2019). The harder you work, the higher your satisfaction with life? The influence of police work engagement on life satisfaction: A moderated mediation model. *Frontiers in Psychology, 10*, 1-11. https://doi.org/10.3389/fpsyg.2019.00826
11. Lu, J. T., Abd Rahman, N. A., Wyon, M., & Shaharudin, S. (2024). The effects of dance interventions on physical function and quality of life among middle-aged and older adults: A systematic review. *PLOS ONE, 19*(4), 1–24. https://doi.org/10.1371/journal.pone.0301236
12. Mutz, M., Müller, J., & Göring, A. (2018). Outdoor adventures and adolescents' mental health: daily screen time as a moderator of changes. *Journal of Adventure Education and Outdoor Learning, 19*(1), 56–66. https://doi.org/10.1080/14729679.2018.1507830
13. Page, M. J., McKenzie, J. E., Bossuyt, P. M., Boutron, I., Hoffmann, T. C., Mulrow, C. D., Shamseer, L., Tetzlaff, J. M., Akl, E. A., Brennan, S. E., Chou, R., Glanville, J., Grimshaw, J. M., Hróbjartsson, A., Lalu, M. M., Li, T., Loder, E. W., Mayo-Wilson, E., McDonald, S., McGuinness, L. A., … Moher, D. (2021). The PRISMA 2020 statement: an updated guideline for reporting systematic reviews. *BMJ, 372*, 1-9. https://doi.org/10.1136/bmj.n71
14. Qin, X. M., Allan, R., Park, J. Y., Kim, S. H., & Joo, C. H. (2024). Impact of exercise training and diet therapy on the physical fitness, quality of life, and immune response of people living with HIV/AIDS: a randomized controlled trial. *BMC Public Health, 24*(1), 1-14. https://doi.org/10.1186/s12889-024-17700-0
15. Tomasone, J., Latimer-Cheung, A., Sinden, A., Martin Ginis, K., & Gee, C. (2024). Relationships between sport and exercise participation and subjective well-being among adults with physical disabilities: Is participation quality more important than participation quantity?. *Psychology of Sport and Exercise, 70*(2), 1-19. https://doi.org/10.1016/j.psychsport.2023.102535
16. Urbano-Mairena, J., Mendoza-Muñoz, M., Carlos-Vivas, J., Pastor-Cisneros, R., Castillo-Paredes, A., Rodal, M., & Muñoz-Bermejo, L. (2024). Role of Satisfaction with Life, Sex and Body Mass Index in Physical Literacy of Spanish Children. *Children, 11*(2), 1-12. https://doi.org/10.3390/children11020181
17. Wang, R. S., Huang, Y. N., Wahlqvist, M. L., Wan, T. T. H., Tung, T. H., & Wang, B. L. (2024). The combination of physical activity with fruit and vegetable intake associated with life satisfaction among middle-aged and older adults: a 16-year population-based cohort study. *BMC Geriatrics, 24*(1), 1-13. https://doi.org/10.1186/s12877-023-04563-0

AUTHOR CONTRIBUTIONS

All authors listed have made a substantial, direct and intellectual contribution to the work, and approved it for publication.

CONFLICTS OF INTEREST

The authors declare no conflict of interest.

FUNDING

This research received no external funding.

COPYRIGHT