

Global trends in sports programs to improve family health and resilience: a systematic review as an effort to achieve well-being

Tendencias globales en programas deportivos para mejorar la salud y la resiliencia familiar: una revisión sistemática como esfuerzo para lograr el bienestar

Asep Solikin, Muhammad Andi Setiawan, Andi Riswandi Buana Putra
University Muhammadiyah of Palangkaraya (Indonesia)

Abstract. Lack of physical activity in daily life can lead to serious health problems, such as obesity, heart disease, and mental health disorders that negatively impact family resilience. Therefore, exercise is important to improve the health of family members, reduce the risk of disease, and strengthen social relationships, all of which contribute to better family resilience and well-being. Given the importance of exercise for health, this study focuses on How exercise programs can holistically improve family health and well-being. This study explored the relationship between exercise programs and their impact on family health, resilience, and well-being. The method used is a systematic literature review (SLR), which includes the selection of literature from various academic databases, Scopus, PubMed, Semantic Scholar, and Google Scholar, by setting clear inclusion and exclusion criteria to ensure the relevance and quality of the research and obtaining data that is worthy of being analysed as many as 23 scientific articles. Data analysis using the help of biblioshiny and NVivo. The results of this review indicate that participation in exercise programs improves individuals' physical and mental health and strengthens emotional and social relationships within the family, resulting in stronger bonds between family members. These findings highlight the importance of policies supporting family participation in physical activity and developing inclusive and flexible sports programs to address the challenges families face. Recommendations for future research include exploring the accessibility of sports programs for all population segments and paying attention to the potential negative impacts of involvement in organized sports. This study provides valuable insights into the vital role of sport in creating healthy and resilient families in a changing era.

Keywords: global trends, sports programs, family health, family resilience, well-being

Resumen. La falta de actividad física en la vida diaria puede conducir a graves problemas de salud, como obesidad, enfermedades cardíacas y trastornos de salud mental que afectan negativamente la resiliencia familiar. Por lo tanto, el ejercicio es importante para mejorar la salud de los miembros de la familia, reducir el riesgo de enfermedades y fortalecer las relaciones sociales, todo lo cual contribuye a una mejor resiliencia y bienestar familiar. Dada la importancia del ejercicio para la salud, este estudio se centra en cómo los programas de ejercicio pueden mejorar de manera integral la salud y el bienestar familiar. Este estudio exploró la relación entre los programas de ejercicio y su impacto en la salud, la resiliencia y el bienestar familiar. El método utilizado es una revisión sistemática de la literatura (SLR), que incluye la selección de literatura de varias bases de datos académicas, Scopus, PubMed, Semantic Scholar y Google Scholar, estableciendo criterios claros de inclusión y exclusión para asegurar la relevancia y calidad de la investigación y la obtención de datos que sean dignos de ser analizados hasta 23 artículos científicos. Análisis de datos utilizando la ayuda de biblioshiny y NVivo. Los resultados de esta revisión indican que la participación en programas de ejercicio mejora la salud física y mental de las personas y fortalece las relaciones emocionales y sociales dentro de la familia, lo que da como resultado vínculos más fuertes entre los miembros de la familia. Estos hallazgos resaltan la importancia de las políticas que apoyan la participación familiar en la actividad física y el desarrollo de programas deportivos inclusivos y flexibles para abordar los desafíos que enfrentan las familias. Las recomendaciones para futuras investigaciones incluyen explorar la accesibilidad de los programas deportivos para todos los segmentos de la población y prestar atención a los posibles impactos negativos de la participación en deportes organizados. Este estudio proporciona información valiosa sobre el papel vital del deporte en la creación de familias saludables y resilientes en una era cambiante.

Palabras clave: tendencias globales, programas deportivos, salud familiar, resiliencia familiar, bienestar

Fecha recepción: 11-10-24. Fecha de aceptación: 22-10-24

Muhammad andi setiawan
andisetiawan@umpr.ac.id

Introduction

Family health is a priority in global public health policies because the family is the basic unit of society that significantly impacts the well-being of individuals and communities (Hanson et al., 2019). Healthy families contribute to overall public health, as family members' health conditions influence each other (Booyesen et al., 2021). In addition, families also play an important role in the care and education of children, which impacts future generations (Daines et al., 2021). In a global context, challenges such as increasing rates of chronic diseases, mental health problems, and the nutritional crisis make attention to family health increasingly urgent (Mao & Agyapong, 2021). Family-focused health policies can create

an environment that supports access to health services, nutrition education, and the promotion of healthy lifestyles (Bethell et al., 2023). Improving family health is hoped to reduce disease burden, increase productivity, and create more resilient and prosperous communities (Morley et al., 2017). Therefore, prioritising family health in public health policy is a strategic step to achieve broader global health goals.

Family resilience is crucial in maintaining social and economic stability, especially in times of crisis or stress (Derscariu, 2023). Resilient families can better manage challenges, including natural disasters, economic crises, or health problems (Pusparini et al., 2023). This resilience creates a solid support system where family members help each other to overcome difficulties (Greeff & Holtzkamp,

2007). For example, in job or income loss situations, families with strong relationships and good communication can share resources, plan budgets wisely, and collectively reduce stress's impact. In addition, family resilience is also related to their ability to adapt and find creative solutions in difficult times (Herlusia et al., 2021). Families with emotional and social resilience can provide important mental support for family members who may experience anxiety or depression due to external stress (Nistor, 2023). Thus, improving family health and resilience is important for individual well-being and creating broader social and economic stability (Pierce & Stevermer, 2023). Public health policies emphasising family health and resilience can strengthen social structures that withstand various crises.

Family-based exercise programs can significantly improve families' physical and mental health through several mechanisms (Milkie et al., 2019). First, physical activity promotes healthier lifestyles among family members (Breslau et al., 2018). Together, exercise can improve physical fitness, reduce the risk of chronic diseases, and help control weight (Skovgaard et al., 2022). In addition, social interactions during exercise activities can strengthen emotional bonds between family members, create a sense of mutual support and improve communication (Tadros et al., 2022). There is a lot of empirical evidence that exercise positively impacts family well-being. Research shows that physically active families experience lower stress levels and improved mood, contributing to better mental health (Holmes et al., 2022). For example, a study conducted by Tadros et al., 2023 found that family-based exercise programs can increase children's self-esteem and happiness and reduce symptoms of depression and anxiety. In addition, these programs often encourage better nutrition education so that family members exercise and adopt healthy eating habits. Thus, family-based exercise programs improve physical health and contribute to mental well-being, creating a healthier and happier family environment (F. K. W. Ho et al., 2017).

Exercise is crucial in promoting a healthy lifestyle that can reduce the risk of physical and mental illness in families (Griffiths et al., 2024). Families can build sustainable healthy habits by integrating physical activity into daily routines (Erginer & Günüşen, 2018). Physical activity, such as walking, running, or playing sports, improves physical fitness and heart health and helps maintain a healthy weight, a preventive measure against chronic diseases such as diabetes and hypertension (Tuda et al., 2022). In addition, exercise is effective in improving mental health by stimulating the production of endorphins that can reduce symptoms of anxiety and depression (Romain et al., 2020). When families exercise together, they also build strong social bonds and increase emotional support for each other, which is important in dealing with life's stresses and challenges (Bochicchio et al., 2019). Therefore, by promoting an active and healthy lifestyle, sports can be an effective tool in creating physically and mentally healthier families and improving overall quality of life (Pape et al.,

2022). The phenomenon found in developing countries such as Indonesia shows that global trends in sports programmes are still uneven and tend to adjust to geographical location. Sports trends in rural areas tend to utilise simple equipment. Unlike in urban areas, trends in sports programmes in developed urban areas tend to be varied and utilise modern equipment and technology. In some other developing countries, sports programmes in their respective countries are more focused on the local wisdom that prevails in the community. Family sports programmes are growing rapidly in many countries, triggered by several key factors that encourage people to participate in physical activity together (Поліщук, 2023). One of the main drivers is the growing awareness of the importance of health and active lifestyles among families, especially in the context of increasing rates of obesity and chronic diseases associated with sedentary lifestyles (Evseev et al., 2020). In addition, public health campaigns launched by governments and international health organisations have also contributed to promoting physical activity as part of everyday life.

However, there are significant differences in the approach to exercise programmes in developed and developing countries. In developed countries, family sports programmes are often more structured and supported by adequate facilities and better access to training and resources (Tewari et al., 2023). For example, many developed countries have community centres that offer a range of sports programs for families, from fitness classes to sports tournaments (Tian, 2014). Meanwhile, in developing countries, family exercise programmes may focus more on informal participation and community engagement, often influenced by limited resources and infrastructure (Dallas et al., 2020). Here, such programmes may be locally organised activities, such as inter-family sports leagues or community events encouraging physical participation. While the approaches differ, they aim to improve family health and well-being through shared physical activity (Rubaie & Mohamed, 2022).

Sport is closely related to family resilience and well-being (Menge & Kayonga, 2022), effectively improving families' quality of life in the face of social and economic challenges (Akyürek & Soyer, 2024). By participating in physical activities together, families can develop important emotional and social resilience, which helps them cope with stresses and changes in life (Cover et al., 2012). For example, through sports, family members can learn to collaborate, communicate, and support each other, creating a positive and supportive environment. This positive and supportive environment is particularly important in difficult situations, such as job loss or health problems, where emotional support from family can strengthen their resilience. (Vaux-Bjerke et al., 2023).

Exercise programmes enhance family resilience and contribute to holistic well-being (Acharya & Rajendran, 2023; Gaeta, 2020). Through physical activity, families can improve physical health, directly related to a reduced risk

of chronic diseases (Kohli et al., 2021). Furthermore, exercise also contributes to mental health, helping to reduce symptoms of stress, anxiety and depression (Ariyanti et al., 2024). By building stronger social relationships among family members, exercise creates a sense of community and happiness, which are important aspects of psychological well-being (H. C. Y. Ho et al., 2020). Therefore, sport serves as a means to maintain physical health and as a foundation for creating greater resilience and well-being within the family (Oehme & Stern, 2014).

Conducting a systematic review of global trends in family-focused exercise programmes is essential to gain an in-depth and comprehensive understanding of the impact of such programmes on family health and well-being. Systematic reviews allow researchers to objectively collect, evaluate and analyse evidence from multiple sources, providing a clearer picture of the effectiveness of different approaches in family exercise programmes. Comprehensive data allows us to identify patterns, successes, and challenges in programme implementation, which is critical to inform evidence-based decisions.

The review provides valuable insights for future sport programme policy and practice development. By understanding the factors that influence programme success, policymakers can design initiatives that are more effective and responsive to community needs. For example, the review can reveal the specific needs of families across different social and cultural contexts so that policies can be tailored to increase participation and the positive impact of sports programmes. In addition, by highlighting best practices from successful programmes in different countries, the review can guide the development and implementation of more innovative and inclusive programmes worldwide. As such, this systematic review not only provides an understanding of existing trends but also provides a basis for formulating strategic measures that will support the health and well-being of families in the future.

This systematic review explores global trends in family-focused sports programmes and assesses their impact on family health, resilience and well-being. Key questions to be addressed include how exercise programmes can improve the health and well-being of family members and the factors that influence their success across different contexts. The results of this review are expected to provide valuable recommendations for developing more effective family-based sports programmes by highlighting strategies

and best practices from different countries. As such, this research aims to assist policymakers and programme providers in designing interventions that are responsive to the needs of families and provide practical guidance to improve health and well-being across the globe.

Methods

Type of research

Systematic literature review (SLR) is a research method that aims to identify, assess and interpret all studies relevant to a particular research question (Illera-Delgado et al., 2022; Nuñez et al., 2023). This process is conducted systematically to avoid bias and ensure reliable results (Simbolon, 2024). SLR is commonly used in scientific and academic research to summarise the results of previous studies and find patterns, gaps or new directions in a field (Ramos-Álvarez et al., 2024). This study used a systematic literature review approach to search and select relevant literature in several steps. First, we formulated clear research questions about the global trend of exercise programmes for families and their impact on health, resilience and well-being, guiding the literature search. Next, we established inclusion and exclusion criteria to ensure that the selected literature was relevant and of high quality by including studies that addressed exercise programmes, family health and well-being. After collecting the literature, the titles and abstracts were screened to identify studies that met the inclusion criteria, and eligible studies were then fully evaluated to ensure their relevance and methodological quality. The data obtained were organised and synthesised to formulate comprehensive conclusions. The results of this systematic review were reported transparently, following the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines, including flowcharts illustrating the literature selection process and thematic summaries of the findings. With this systematic approach, the study is hoped to provide a comprehensive and in-depth picture of global trends in exercise programmes for families and their impact on health and well-being.

Research inclusion and exclusion criteria

In the inclusion and exclusion stage, the researcher made criteria for selecting articles in this study. Table 1 below is the inclusion and exclusion criteria used in this systematic literature review research in the last ten years:

Table 1.
Inclusion and exclusion criteria

Criterion	Inclusion	Exclusion
Publication Date	Studies published between 2014 and 2024	Publications before 2014
Focus	Research that explicitly addresses sports programs	Studies that do not focus on sports programs
Result	Studies that assess the impact of family sports programs on physical health, mental health, or family well-being	Studies that do not address Health and well-being outcomes
Geographical Scope	Research conducted in various countries to provide a global view	Studies that focus only on one country or region without a global context
Published Source	Only journal articles have gone through a peer-review process	Studies from non-academic sources, including blogs, opinions, or unpublished reports

Using these inclusion and exclusion criteria, it was hoped to curate a pool of relevant and quality literature to provide valuable insights into the impact of family-based exercise programmes on health and well-being in current global trends.

Screening and eligibility assessment of articles

The literature search for this systematic review was conducted in several leading academic databases, such as PubMed, Scopus, Semantic Scholar and Google Scholar. The search keywords were sports, health, family, AND

well-being. The selection included a temporal restriction that only included publications between 2019 and 2024 to ensure the data and findings analysed reflected the latest trends related to the research conducted. In addition, a geographical restriction was applied to include studies from different countries worldwide, allowing for a comprehensive picture of family exercise programme practices and approaches in a global context. With this approach, it was hoped to gather relevant and quality literature to support the analysis of the impact of family-based exercise programmes on health and well-being.

Table 2.
Flowchart of the article search and selection process

Component	Information	Information
Identification	Data collection from the Scopus database with the keywords sports AND health AND family AND well-being (N=233)	
Screening	Selected article N=233	Excluded records (n = 13) type of publication (conference book and book chapter)
	Articles retrieved (n = 216)	Articles not taken (n = 20) Articles are excluded from the language used other than English
	Retrieved articles N=189	Articles excluded years not in the range 2014-2024 (n = 34)
	Articles rated for analysis N=155	Excluded records (n=132) Articles are excluded because they do not meet the criteria of title, abstract and research keywords
include	Studies included in the review (n=23)	

Data Analysis

Data from the selected studies were analysed and synthesised using two main software tools, R Studio with the Biblioshiny package and NVivo. The analysis process began with importing the data from the relevant literature into R Studio, where we conducted bibliometric analysis to identify trends, patterns and relationships in the data related to family-based exercise programmes, including the number of publications, leading authors and geographical distribution of studies. After gaining initial insights, we used NVivo for qualitative analysis by coding and categorising information from selected studies based on key themes. The synthesis process was conducted by combining the findings from both analysis methods, where the bibliometric analysis provided quantitative context regarding publication trends. In contrast, the qualitative analysis in NVivo provided in-depth insights into the relationship between exercise

programmes, family resilience and well-being. This combined approach is expected to answer the research questions comprehensively and thoroughly.

Results
Overview of research results

The results of this study show an increasing trend in research productivity over the period 2014-2024, with an average annual growth of 7.18%. There were 92 authors contributing to 23 research documents, with an average of 4 authors collaborating on each document. Although the number of single authors was only two people, the level of international collaboration was quite high at 13.04%. The study used an average of 111 author keywords (DE) and had an average document age of 3.52 years. Each document was cited an average of 8,696 times, demonstrating the significant impact of this research.

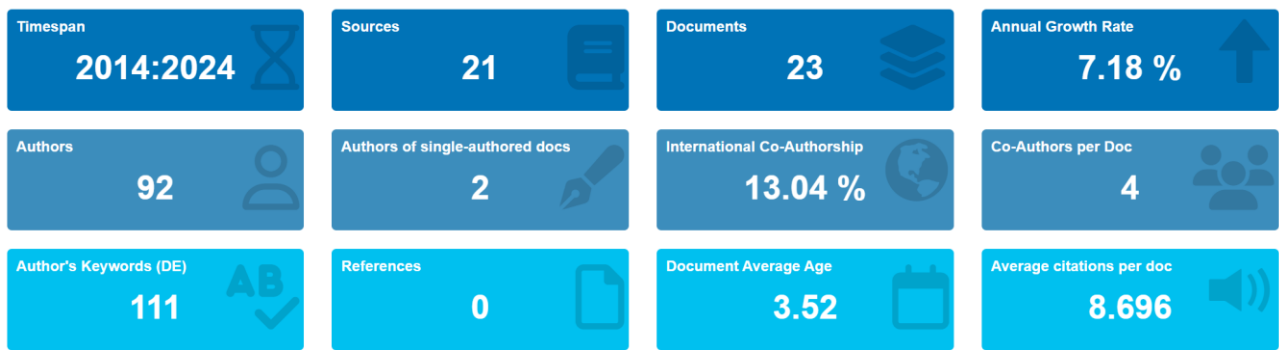


Figure 1. Research data

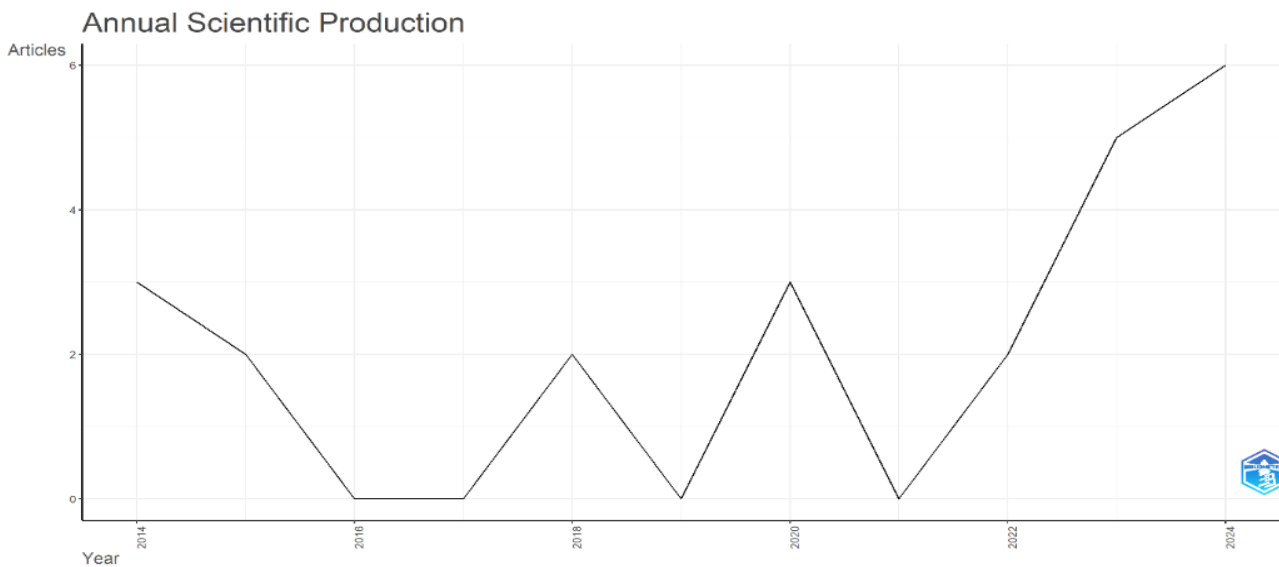


Figure 2. Annual scientific production graph

Based on the Annual Scientific Production graph that displays annual scientific production from 2014 to 2024, there are significant fluctuations in the number of articles produced each year. In 2014, two articles were published, but this number decreased in 2015, with only one article. In the period from 2016 to 2017, no articles were produced at all. 2018 showed a slight increase with two articles

published, but this number dropped back to zero in 2019. 2020 recorded a significant spike with three articles, but this trend did not continue in 2021 when it again showed zero publications. Starting in 2022, the trend of scientific production experienced a steady increase, with one article published that year, followed by four articles in 2023. The peak occurred in 2024, with six articles produced.

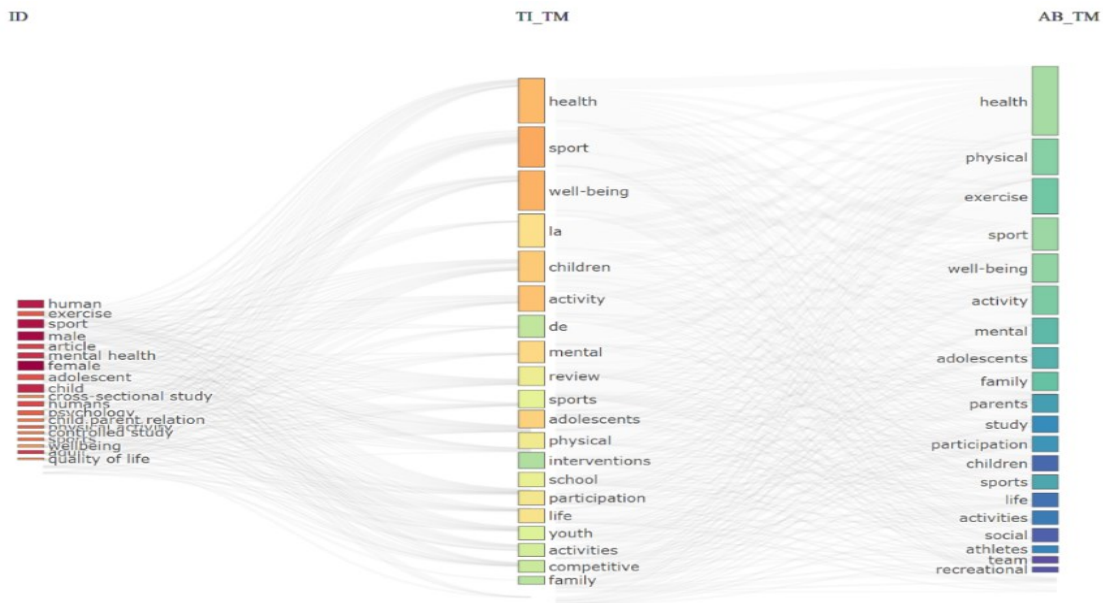


Figure 3. Linkage of research terms

This study identifies the interrelationships between various terms that appear in scientific articles' subjects, titles, and abstracts. Terms such as 'human,' 'exercise,' 'sport,' 'adolescent,' and 'mental health' in the ID column indicate the main topic of the study that is often related to keywords such as 'health,' 'sport,' 'well-being,' 'children,' and 'mental' in the TI_TM column, as well as words such as 'physical,' 'exercise,' 'sport,' and 'well-being' in the AB_TM column. The connecting lines show the consistent use of

these terms across different parts of the article; for example, the terms 'sport' and 'exercise' repeatedly appear across all three categories. This connection suggests a research focus on health, sport, fitness, and well-being, particularly concerning people, children, and young people. This diagram helps to understand the structure of topics frequently covered in scientific research, emphasising the mental and physical aspects of sporting activity and its impact on well-being.

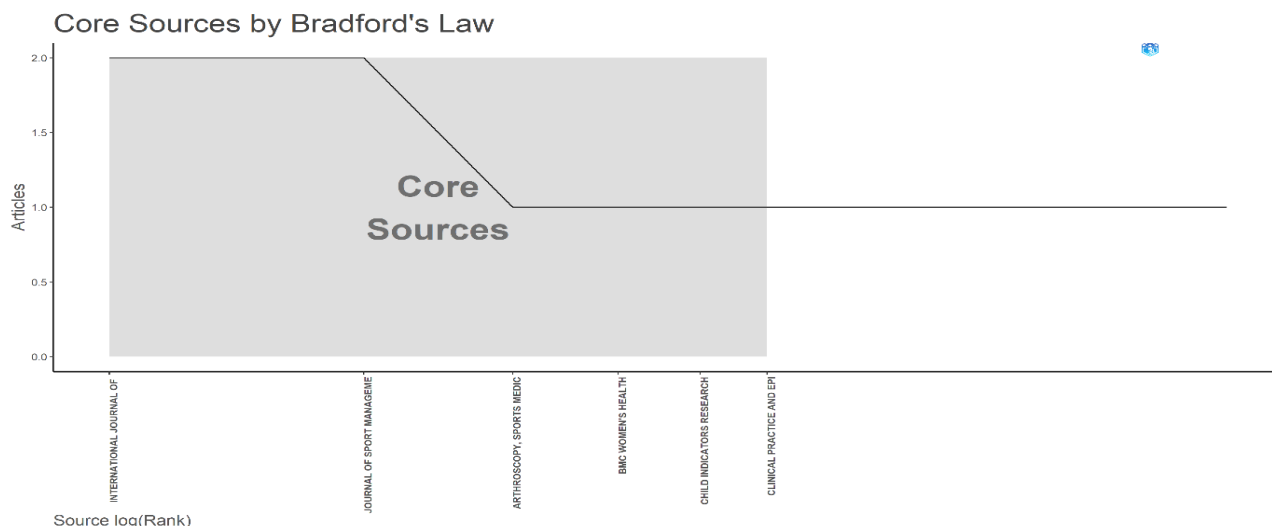


Figure 4. Core sources by Bradford's law

Figure 4 depicts a graph visualising core sources based on Bradford's Law, which shows the distribution of scholarly articles from different sources. The vertical axis shows the number of articles, while the horizontal axis displays the logarithmic rank of the sources. The shaded section with the text 'Core Sources' depicts core sources, meaning they are the most frequently referenced sources in the research. In this graph, core sources include journals such as the International Journal of Environmental Research and Public Health, Journal of Sport Management,

Arthroscopy, Sports Medicine and Rehabilitation, BMC Women's Health, Child Indicators Research, and Clinical Practice and Epidemiology in Mental Health. These journals dominated the number of articles used or cited in the research. This concept is based on Bradford's Law, which states that a small proportion of sources will generate a large proportion of the total references in a given scientific study. This concept suggests that these journals acted as

core sources in this study due to their significant document contributions.

Figure 5 shows a graph of resource production or data from 2014-2024, with annual occurrence as the Y-axis and years as the X-axis. Two sources (blue and pink) show a cyclic production pattern, appearing every three years and disappearing in the years in between. The first source (blue) appears in 2015, 2018, 2021, and 2023, while the second (pink) appears in 2014, 2017, 2020, and 2023. The third source (purple), which started appearing in 2022, appears as a new source that does not follow a cyclic pattern. This recurring production pattern may indicate periodic data sources characteristics, such as regularly published publications or research results, while new sources may reflect recent trends or innovations. These patterns can be utilised to predict future trends or explore the causes behind regular cycles.

Trend differences in terms of authors, countries and affiliations

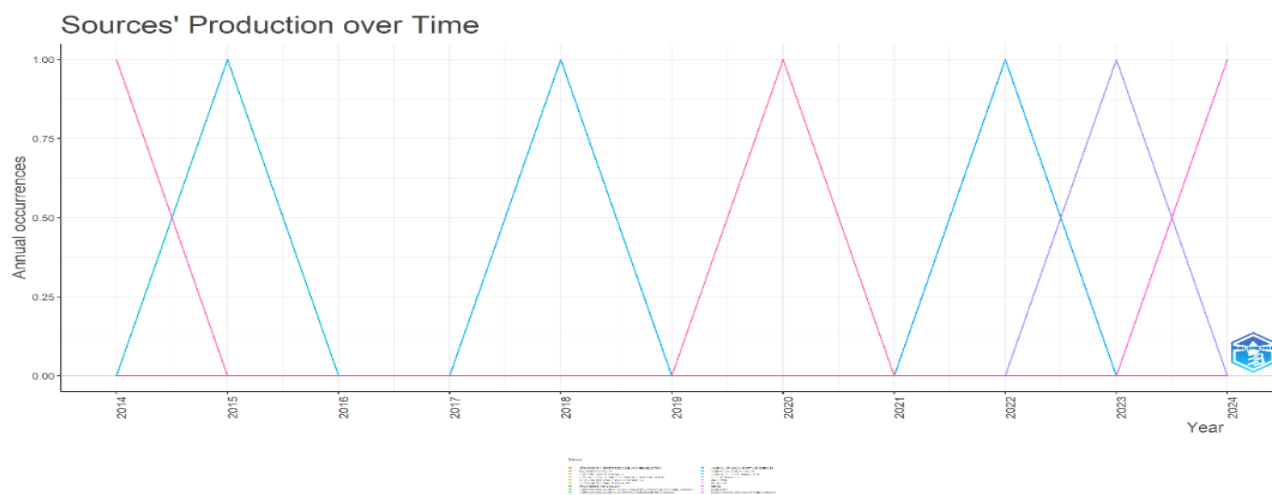


Figure 5. Production over time

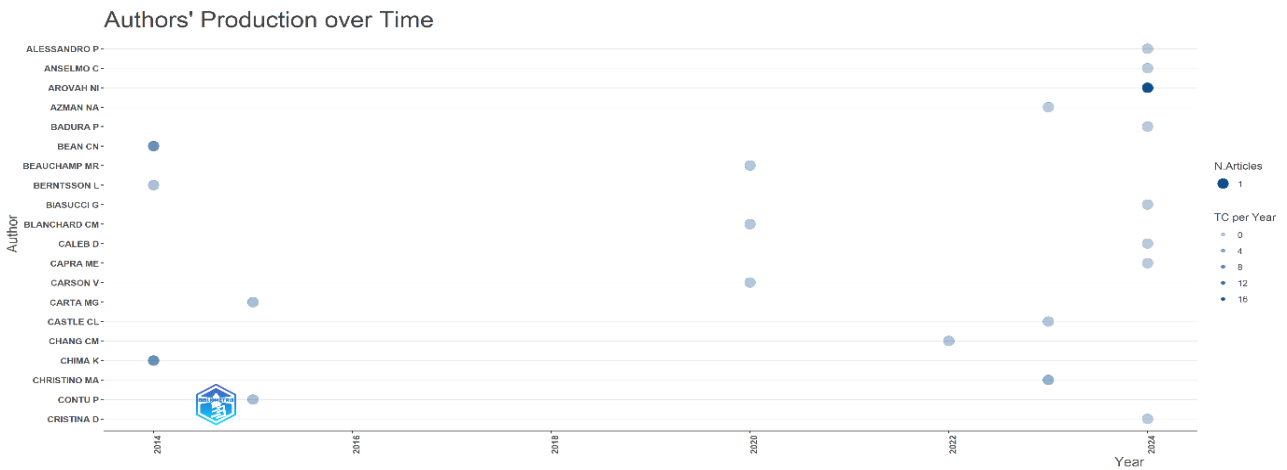


Figure 6. Author production over time

Figure 6 displays a graph of author production over time, with author names on the Y-axis and years on the X-axis. Each dot on the graph represents an article published by a particular author in a particular year, where the size of the dot represents the number of citations per year (TC per Year), and the dot's colour represents the number of articles (N Articles). Some authors, such as Beauchamp MR and Azman NA, showed consistent publication activity, especially in 2023 and 2024, while others, such as Chang CM, only appeared in certain years with limited production. Larger dot sizes for some authors, such as

Beauchamp MR in 2024, indicate their articles received more citations, signalling greater impact. Conversely, smaller dots indicate publications with fewer citations. A trend of increasing publications is seen for most authors in 2023 and 2024, with some darker dots signalling an increase in the number of articles. Overall, this graph shows that some active authors contribute consistently. In contrast, others show more sporadic contributions, giving an idea of their work's impact based on the number of citations received.

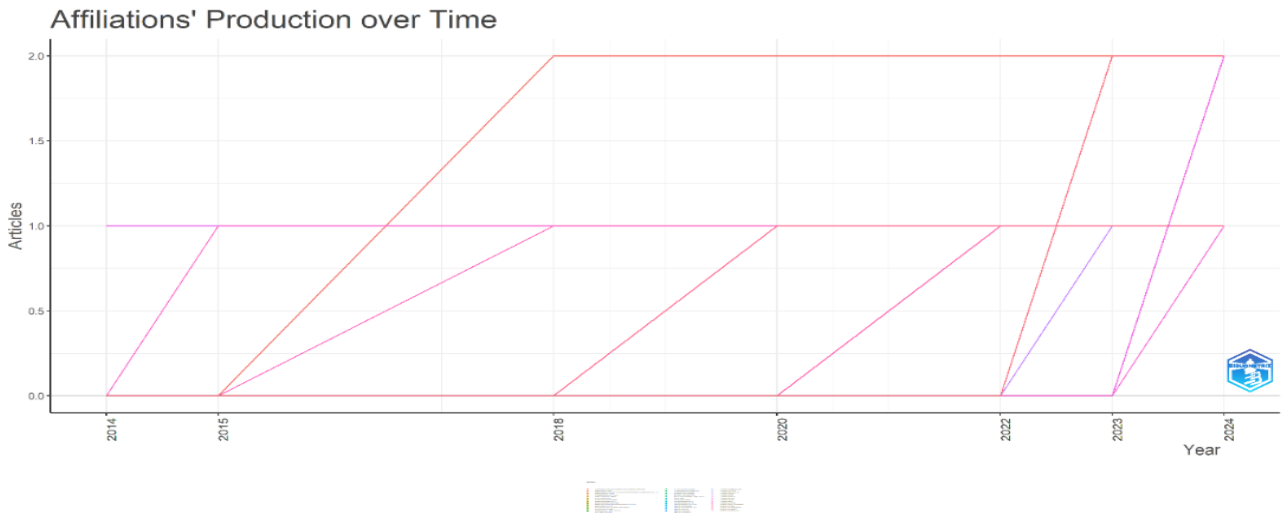


Figure 7. Affiliate production by year

Figure 7, titled 'Affiliate Production Over Time', illustrates the trend of article production by various affiliates from 2014 to 2024. The vertical axis shows the number of articles produced, while the horizontal axis shows the period. From 2014 to 2015, there was an increase in production, as indicated by the pink-coloured line reaching 1 article. However, from 2015 to 2018, this production did not increase. In 2018, the red line started to show an increase to reach two articles, and this figure

remained stable until 2022. The other affiliates marked with purple lines only started producing articles in 2022 but quickly increased sharply until 2023. From 2022, there is more intensive activity across affiliates, with the pink and red lines showing an increase in production to reach two articles in 2024. This trend shows a significant increase in research output in recent years, with more contributions from different affiliates, especially between 2022 and 2024.

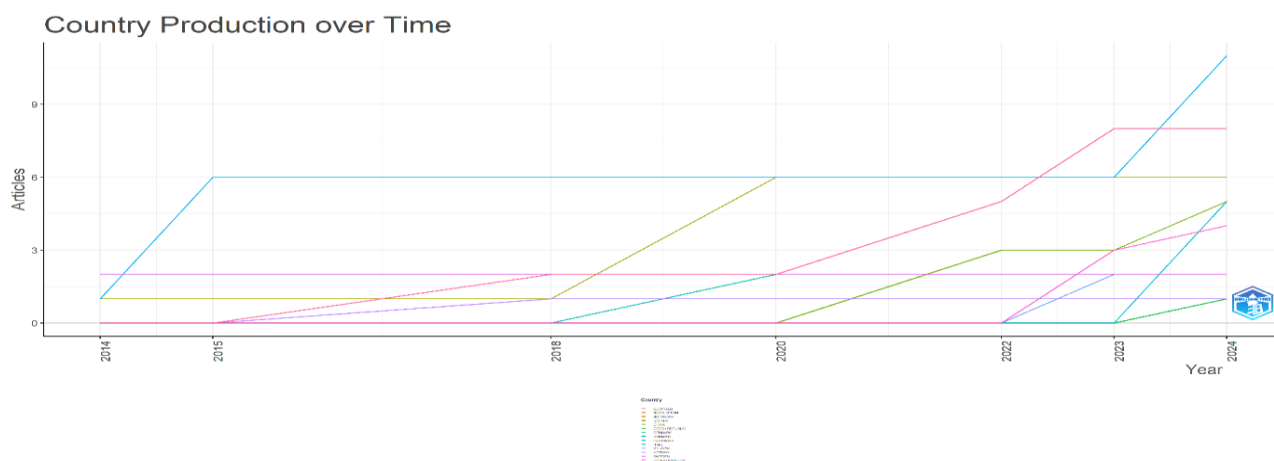


Figure 8. Country Production Over Time

Figure 8, titled 'Country Production Over Time', shows the trend of article production from countries from 2014 to 2024. The vertical axis shows the number of articles produced, while the horizontal axis shows the period from year to year. At the beginning of the period, some countries started article production, with the light blue line reaching three articles in 2015 and remaining stable until around 2021. Other lines, such as pink, yellow and green, show gradually increasing activity after 2020, particularly from 2022 to 2024. These countries show significant production

increases, with some reaching more than four articles by 2024, as seen from the pink and light blue lines. This trend shows that in the earlier timeframe (2014-2021), article production tended to stabilise or stagnate for some countries, but from 2022, there was a rapid increase in research output across countries. This increase reflects countries' more active engagement in academic publishing in recent years, with the highest concentration of article production from 2022 to 2024.

Global Trends in Sports Programmes

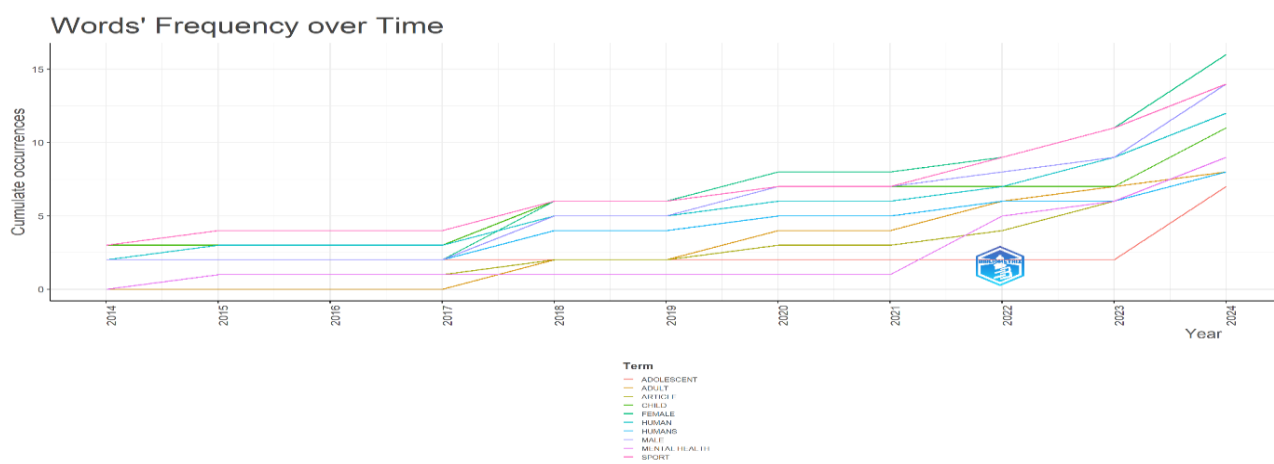


Figure 9. Cumulative frequency of words

Figure 9 shows the cumulative frequency of certain words from 2014 to 2024. The vertical axis (y-axis) depicts the cumulative number of occurrences of those words in the scientific literature. In contrast, the horizontal axis (x-axis) shows the progression from year to year. Each line represents a different term, and the rise of the line indicates an increase in the occurrence of that term over time. Some terms, such as 'adolescent,' 'article,' and 'mental health,' show a sharply increasing trend after 2020, signalling that attention to issues related to mental health and adolescents

has been increasing in recent years. The terms 'female,' 'male,' and 'sport' also showed a steady increase, with a slight acceleration after 2020, which may be related to the focus on research related to gender, sports, and physical activity. Meanwhile, other terms such as 'child' and 'adult' saw a more moderate but consistent increase. Overall, this graph emphasises an increasing trend in research related to demographics, mental health and physical activity over the past decade, with an acceleration in the frequency of certain terms, particularly after 2020.

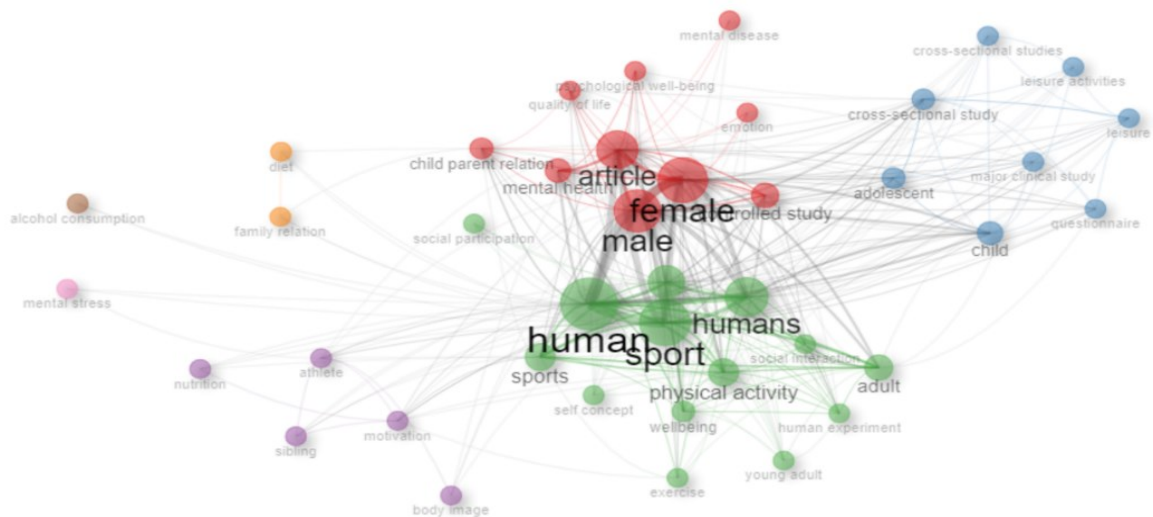


Figure 10. Connections between research topics

Figure 10 depicts a network visualisation showing the connections between topics frequently appearing in the literature related to mental health, physical activity and other variables. Several clusters of topics are shown in different colours. Green clusters highlight terms such as 'human,' 'sport,' 'physical activity,' and 'well-being,' showing the close relationship between physical activity and human well-being. The red cluster includes the terms 'female,' 'male,' 'mental health,' and 'article,' which seem to refer to research related to gender and mental health. On the other hand, blue clusters connect topics such as 'cross-sectional study,' 'child,' and 'leisure activities,' which illustrate the focus of research on leisure activities and child populations. The connections between these nodes show that many articles focus on the relationship between mental health, physical activity, and demographic factors, such as gender and age, using diverse research methodologies (such as cross-sectional studies). This network structure shows how various psychosocial, physical activity and demographic factors are interlinked in the reviewed scientific literature.

Figure 11. a theme diagram classifies various themes based on the degree of development (Density) on the Y-axis and the degree of relevance (Centrality) on the X-axis. This graph is divided into four quadrants: the themes "adolescents," "family structure," and "life satisfaction" are in the Niche Themes quadrant, indicating that these themes are highly developed but have low relevance in the general context. There are no themes in the Motor Themes

quadrant, meaning there are no themes that are highly developed and relevant simultaneously. The theme "well-being" is in the Emerging or Declining Themes quadrant, indicating that this theme may be declining in relevance or has not yet fully developed. Meanwhile, the themes "physical activity," "adolescence," and "well-being competition" are in the Basic Themes quadrant, indicating high relevance but still low development. This figure shows that some themes are developing in a particular context, while more relevant themes require further development in research.

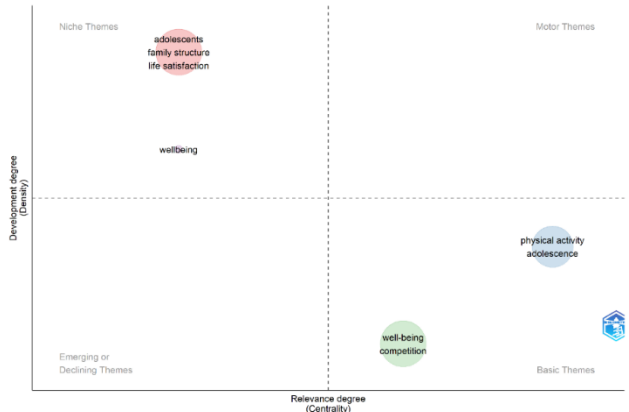


Figure 11. Research Theme Development

Article analysis

Table 3.
Article analysis

Authors	Year	Type of Research	Subject	Places and locations	result	Implication	Recommendations
(Capra et al., 2024)	2024	Narrative review.	Kids and teenagers who do physical activity, sports	Non-specific	This study addresses the nutritional needs of active children and adolescents and the	Paediatricians must provide appropriate nutritional counselling to support children and	Counselling should include sports performance, well-being, growth, and

Table 3.

Article analysis

Authors	Year	Type of Research	Subject	Places and locations	result	Implication	Recommendations
					risks of excessive supplementation and eating disorders.	adolescents' well-being, growth, and neurodevelopment.	neurocognitive development of children and adolescents.
(Evseev et al., 2020)	2022	Instrumental case studies.	Identified fans of the women's professional basketball team.	No specifics	Studies show participants' meaning in life comes from family relationships, women's sports support, and mental health from team support.	The study shows that close relationships with family and friends have more effect on social justice and the mental well-being of female sports fans.	It is important to explore the role of social relationships and mental health in sports fandom to enhance the meaning of adult fans' lives.
(Wan Abdul Rahim et al., 2023)	2023	Cross-sectional study.	137 elderly living in Kedah, Malaysia	Kedah, Malaysia.	Most of the elderly in Kedah remain active post-pandemic, especially in reading and watching TV, supported by their families.	The importance of promoting diverse recreational activities to improve the quality of life of the elderly	Professionals and caregivers must develop strategies to include recreational activities to support healthy ageing.
(D'anna et al., 2015)	2015	Quantitative research with comparative design.	Athlete at the Faculty of Education, University of Alicante.	Faculty of Education, University of Alicante.	Involvement in competitive sports can improve an individual's self-esteem and performance.	Competitive sports improve individual self-esteem and performance.	Encourage competitive sports participation for the development of positive self-esteem in adolescents.
(Suryadi et al., 2024)	2024	Systematic review.	Physical activity and health of the elderly.	The article is taken from ScienceDirect and PubMed databases.	Twelve weeks of moderate-high exercise improves the physical and cognitive health of the elderly and prevents a decline in physical function.	The importance of health exercises to improve the quality of life and health of the elderly, as well as reduce social isolation	Develop strategies with families and health professionals to support older adults' physical activity.
(Grant et al., 2020)	2020	A randomised controlled trial with a three-group design.	Inactive parents with children under 13.	Greater Victoria Province, British Columbia, Canada.	Evaluate the impact of sports participation, individuals and teams, on quality of life and relationship satisfaction.	This research can increase exercise participation in adults and support public health initiatives for parents and families.	Develop exercise programs to encourage physical activity to improve psychosocial outcomes for parents and children.
(Chart et al., 2015)	2015	Systematic review.	School interventions for youth mental health.	Some European countries (based on epidemiological studies).	Identify evidence of school interventions for mental health, including health programs, mental disorder management, and bullying.	The results of this review provide insights for research and interventions in support of mental health policies in European schools.	Develop better European policies to support students' mental health and well-being in schools.
(Fang et al., 2024)	2024	Quantitative research	Physical activity's impact on well-being across social classes.	Data was taken from China Family Panel Studies from 2018 to 2020.	Physical activity significantly impacts subjective well-being in the middle class, moderate in the lower class, and less obvious in the upper class.	These findings emphasise the need to consider social stratification in promoting subjective well-being through sport.	Develop more effective strategies to improve subjective well-being across different social strata through increased physical participation.
(Misener, 2020)	2020	Autoethnography.	Parents' experience supporting children in sports.	Community sports environment.	Parents can improve well-being by participating in physical activity and supporting children.	These findings emphasise that parental well-being is important in developing children's sports.	Encourage community sports practices that care about the well-being of parents through participation in physical activity.
(Bean et al., 2014)	2014	Review of studies.	Negative effects of organised sports on families.	Non-specific	This review identified the negative effects of organised sport on young athletes and their families and proposed a model of participation outcomes.	Exercise has positive benefits, but significant negative impacts must be considered, especially in the family context.	Optimise the youth sports experience and family health by developing strategies to minimise the negative impacts of organised sports.
(Berntsson & Ringsberg, 2014)	2014	Correlational studies.	Activities of parents with their children and children's health	Sweden, using data from the 2011 NordChild study.	Positive activities for children 2-17 years old: playing, watching, exercising; Negatives: internet and PR.	Family and home are important environments for children's healthy development.	There needs to be an increased focus on parental activities that support the child's health and attention to the time pressures that affect their interactions.
(Mazzuco & Meggiolaro, 2014)	2014	Correlational studies.	Family structure's influence on adolescent health	Italy	Family structure affects adolescent health through	A deeper understanding of the interaction of family structure and	Research is needed to explore the relationship between family structure

Table 3.

Article analysis

Authors	Year	Type of Research	Subject in Italy.	Places and locations	result	Implication	Recommendations and health behaviour.
(Pi et al., 2022)	2022	Scale development and validity analysis.	20 Taiwanese adults in recreational sports.	Taiwan.	parental behaviour and the economy. Four factors were found on the scale: life satisfaction, physical and mental health, family development, and positive feelings.	factors influencing adolescent health behaviour is needed. The Recreational Sports Well-being Scale can be used to measure the well-being of future participants.	The use of scale in further research to explore the relationship between recreational sports participation and subjective well-being.
(Gurko, 2023)	2023	Longitudinal research	Teenagers aged 14–16 in Moscow.	Moscow	Adolescents' quality of life has improved since the 2000s, with more satisfaction, altruism, and wealth.	Research emphasises the importance of parental communication skills in educating adolescents for psychological well-being.	More focus should be on family factors, particularly positive communication and emotional support, to enhance adolescents' psychological well-being.
(Mann et al., 2018)	2018	Quantitative research	13,166 third graders from the 1998-1999 Early Childhood Longitudinal Study.	Multiple US locations with demographic and environmental variations.	Participation in team sports was associated with fewer internalising and externalising behaviours reported by children and teachers.	This study highlights the importance of physical activity programs like team sports to improve children's health and well-being.	To support their mental and behavioural health, further efforts are needed to create and maintain physical activity programs among school-age children.
(Herbert et al., 2020)	2020	Literature review	The pandemic increased inactivity and mental health issues.	German and English.	Physical activity and regular exercise can protect mental and physical health.	Support to maintain physical activity during lockdown is important to prevent long-term mental and physical health risks.	This study recommends exercise interventions focusing on low- to moderate-intensity aerobic exercise for all age groups.
(Roessler & Muller, 2018)	2018	Qualitative research	Female athletes: competitive and recreational groups.	Local training centre and Danish Athletics Association.	Recreational athletes prioritise activity, while competitive athletes focus on achieving through competition.	Biography and environment influence an athlete's experience, while sports culture is important for physical activity and competition.	Further research is needed to uncover conflicts and relationships in sports culture to improve female athletes' physical well-being.
(Lodovica et al., 2024)	2024	Quantitative with survey design.	Two thousand eight hundred nineteen high school students in Italy (951 males).	Schools in Italy.	Physical activity generally improves Health-Related Quality of Life (HRQoL).	The frequency of physical activity is positively related to HRQoL and risk behaviour, preventing degenerative diseases and promoting healthy living education.	It is important to implement strategies that promote sports practice to improve adolescents' physical and mental health and quality of life.
(Mhaka-Mutepfa et al., 2024a)	2024	Quantitative with cross-sectional design.	422 people from Botswana.	Botswana, with data collected online.	Significant differences in well-being, QOR, and loneliness existed between before and during COVID-19.	The results show the importance of considering the variables predictors of well-being and loneliness to reduce the impact of the pandemic.	Stakeholders need to be aware of the impact of predictor variables on well-being and loneliness to mitigate the impact of the pandemic.
(Sutcliffe et al., 2023)	2023	Automatic, descriptive thematic analysis.	Eighteen parents (12 mothers, six fathers) in Australia.	Australia, through semi-structured interviews.	Five themes of parental mental health in adolescent sports: unity, conflict, balance, emotion, and improvement.	Positive and negative experiences related to the mental health of parents.	Design a youth sports program that involves all stakeholders, including parents.
(Castle et al., 2023)	2023	Descriptive survey.	Eighteen veterans, disabled military personnel, and their families.	Preparatory camp in the UK, ahead of the 2022 Warrior Games.	Family is the main support, while motivation comes from the country's representation and awareness of the Ukrainian situation.	Providing insight into the participants' health and well-being and the event's important role in achieving collective goals amid Ukraine's unique situation.	Focus on emotional support and program development that considers veterans' needs.
(van Niekerk et al., 2023)	2023	Expert opinion.	Female athletes	Not specific.	Female athletes face unique stresses that impact mental health and injury recovery.	Orthopaedic surgeons need to understand the psychological aspects that affect female athletes in order to provide better support in their recovery.	Integrate questions about the psychological well-being of female athletes in routine practice and work closely with multidisciplinary teams.
(Badura et al., 2024)	2024	Quantitative research with multivariate regression analysis.	Teenagers aged 11-15 years.	Czech data from the 2021/2022 Health Behaviour in School-aged Children study.	Teens who enjoy organised leisure activities (OLTAs) report better mental	The pleasure of participating in OLTAs is essential for adolescent mental health, while	Encourage adolescents to enjoy their participation in OLTAs to improve their mental

Table 3.
Article analysis

Authors	Year	Type of Research	Subject	Places and locations	result	Implication	Recommendations
					well-being.	obligations have a smaller impact.	well-being.

The above studies provide valuable insights into the influence of physical activity and social relationships on individuals' physical, mental and well-being across age groups and conditions. For example, a study Capra et al., 2024 highlighted the importance of proper nutrition for physically active children and adolescents to support their development. Meanwhile, Delia et al., 2022 showed that being a sports fan, especially a female sports team, can provide meaning in life through social relationships and family support, which are important for fans' mental well-being. Wan Abdul Rahim et al., 2023 Also found that participating in recreational activities such as reading or watching TV, supported by family, helped maintain the quality of life of older adults in Kedah, Malaysia, post-pandemic.

The implications of these studies suggest that physical activity and social support are important for physical health and play a role in mental and social well-being. Comprehensive nutritional counselling is crucial for children and adolescents to support growth and sports performance. In contrast, for sports fans, social relationships with family and friends have a significant impact on their mental health. In older adults, the promotion of diverse recreational activities is needed to ensure optimal physical and mental well-being, especially after periods of social isolation during the pandemic. Recommendations from these studies include developing better intervention programs to support mental, physical, and social health across groups. For children and adolescents who participate in sports, a holistic approach that includes nutritional counselling and attention to the risk of eating disorders is needed. In older adults, healthcare providers and caregivers are advised to encourage participation in physical activity that is appropriate for their condition to support healthy ageing. In addition, it is important to explore the role of social connections in sports fandom and its impact on mental well-being.

Discussion

Exercise, health, and family well-being are closely related to shaping a better quality of life for each family member (Castle et al., 2023). Physical activity not only serves to improve physical health but also provides significant mental and emotional benefits (Wang et al., 2022). Families who exercise together tend to have stronger social bonds, which can improve communication, trust, and support among family members. In addition, exercise acts as a medium to reduce stress and improve mood, thereby creating a positive environment at home. Given the importance of exercise in the context of family health and well-being, efforts to promote physical activity as part of daily routines become increasingly crucial, not

only for individual well-being but also for strengthening the resilience and happiness of the family as a whole (Mhaka-Mutepfa et al., 2024b).

The literature analysis shows a significant relationship between exercise, health, and family well-being. Exercise, especially in a family context, is beneficial for the physical and mental health of individuals and plays an important role in strengthening the emotional and social resilience of families. A study by (Delia et al., 2022) shows how being a sports fan can improve mental health through the formation of meaning in life and social relationships, including in the family environment. This study shows that sports serve as a medium that not only improves individual well-being but also strengthens social bonds within the family.

In the context of family resilience, sports serve as a means to strengthen emotional bonds between family members. Physical activity carried out together between parents and children plays a role in improving the emotional well-being of the family as a whole. Research Berntsson & Ringsberg, 2014 emphasises that physical activity with parents and children is important for developing children's health and contributes to the family's emotional stability. Result Misener, 2020 it also shows how parental involvement in their children's sports activities improves family well-being and stability. This research strengthens the argument that sports provide physical and psychological benefits in the form of joint family participation. However, integrating sports programs into family routines faces several challenges. One of the main challenges is the lack of time due to competing priorities between work, household responsibilities, and limited access to family-friendly sports facilities. Result Grant et al., 2020 highlight the difficulties experienced by parents with young children in finding time to participate in sports activities, emphasising that sports programs need to be more flexible and accessible to overcome this obstacle. The development of inclusive and affordable sports facilities and programs can be a solution to increase family involvement in physical activity.

Globally, the trend of sport and well-being has gained greater attention, especially after the COVID-19 pandemic, which highlighted the importance of physical activity in maintaining physical and mental health. A study by Fang et al., 2024 showed the positive impact of sport on subjective well-being, especially in the middle social class. The global implication of this trend is the need to develop more inclusive and diverse interventions to ensure sport participation across all levels of society. This implication highlights the importance of equal access to sports programs for families from different economic and social backgrounds.

The implications of the discussion on the relationship between sport, health and family well-being include several important aspects that need to be considered by

policymakers and the public. First, a more holistic family health policy is needed that encourages family participation in physical activity, considering that the benefits of sports are not only limited to physical health but also strengthen social and emotional bonds between family members. Therefore, family sports programs must be designed to be affordable, flexible and easily accessible to all levels of society. In addition, inclusive and flexible sports programs must consider time constraints and family responsibilities, especially for those with busy jobs. For example, providing open sports facilities after work hours and physical activities involving all family members would be very beneficial. Raising awareness of the social and emotional benefits of sports also needs to be increased so that the public understands that sport is not only for physical health but also for strengthening family relationships and improving mental and emotional well-being.

Furthermore, policies that support work-life balance, including incentives from the workplace for participation in physical activity, are needed. Facilities such as childcare at sports centres will also help parents who want to exercise without being burdened by caregiving responsibilities. More inclusive sports interventions are also important, particularly to reach families from low socio-economic backgrounds by providing easier and more affordable access to sports. It is also important to balance the benefits of sport with the potential negative impacts on mental health, particularly in organised sports, so that sport does not become a source of stress for families. Further research is also needed to better understand the impact of sport on family well-being across different social, cultural and economic contexts. Technology can also play an important role in facilitating family participation in sports, for example, through apps or online programs that make sports activities more flexible and accessible.

Overall, sport has a significant role in improving families' physical, mental and social well-being. However, this requires support from inclusive policies, flexible approaches and interventions that consider the needs and challenges faced by families across society. Recommendations for future research include exploring more deeply how sports programs can be made accessible to families across society. In addition, there is a need to pay more attention to the potential negative impacts of organised sports involvement on family mental health and well-being, as noted by (Bean et al., 2014; Latif et al., 2024; Wicker et al., 2020). Research should also focus on developing public health policies that holistically support family physical participation, taking into account family members' psychological and physical well-being.

Conclusions

The conclusions of this study confirm that sport plays a central role in improving family health and well-being. Through physical activity together, families can strengthen emotional bonds, improve communication, and create a

positive environment. Research shows that parental involvement in their children's sports contributes to children's emotional stability and health, improving overall family well-being. However, challenges in integrating sport into family routines, such as time constraints and access to family-friendly facilities, must be addressed through more inclusive policies and accessible programs. Globally, there is increasing attention to sports and family well-being, especially following the COVID-19 pandemic, highlighting the importance of physical activity for mental and physical health. There is an urgent need to develop more inclusive and diverse interventions to enable all segments of society to participate in sports. Policies that support work-life balance, as well as facilities that are accessible to all family members, are essential to encourage participation in physical activity. Further research is needed to better understand the impact of sport on family well-being and address the potential negative impacts of organised sport. With the right approach, sports can be an effective tool in building family health and resilience.

References

- Acharya, V., & Rajendran, A. (2023). A holistic model of resources to enhance the doctoral student's well-being. *International Journal of Educational Management*, 37(6/7), 1445–1480. <https://doi.org/10.1108/IJEM-11-2022-0457>
- Akyürek, Z., & Soyer, F. (2024). Having a disabled child: Relationship between psychological well-being and family resilience: Engelli çocuğa sahip olma: Psikolojik iyi oluş ve aile yılmazlık durumu ilişkisi. *Journal of Human Sciences*, 21(3), 283–291. <https://doi.org/10.14687/jhs.v21i3.6477>
- Ariyanti, S., Cahyono, D., Sima, Y., Pannyiwi, R., & Masdarwati, M. (2024). The effect of a structured physical exercise program on the psychological well-being of the elderly in nursing homes. *Journal of Midwifery and Nursing*, 6(2), Article 2. <https://doi.org/10.35335/jmn.v6i2.5154>
- Badura, P., Svacina, K., & Hallingberg, B. (2024). It doesn't matter if I feel obliged as long as I enjoy it: The associations between organized leisure-time activities and adolescents' mental health and wellbeing. In *Journal of Adolescence* (Vol. 96, Issue 6, pp. 1368–1378). John Wiley and Sons Inc. <https://doi.org/10.1002/jad.12331>
- Bean, C. N., Fortier, M., Post, C., & Chima, K. (2014). Understanding how organized youth sport may be harming individual players within the family unit: A literature review. In *International Journal of Environmental Research and Public Health* (Vol. 11, Issue 10, pp. 10226–10268). MDPI. <https://doi.org/10.3390/ijerph111010226>
- Berntsson, L., & Ringsberg, K. (2014). Swedish parents' activities together with their children and children's health: A study of children aged 2–17 years. In

- Scandinavian Journal of Public Health* (Vol. 42, pp. 41–51). <https://doi.org/10.1177/1403494814544901>
- Bethell, C. D., Wells, N., Bergman, D., Reuland, C., Stumbo, S. P., Gombojav, N., & Simpson, L. A. (2023). Scaling Family Voices and Engagement to Measure and Improve Systems Performance and Whole Child Health: Progress and Lessons from the Child and Adolescent Health Measurement Initiative. *Maternal and Child Health Journal*. <https://doi.org/10.1007/s10995-023-03755-9>
- Bochicchio, L., Stefancic, A., Gurdak, K., Swarbrick, M., & Cabassa, L. J. (2019). “We’re All in this Together”: Peer-specialist Contributions to a Healthy Lifestyle Intervention for People with Serious Mental Illness. *Administration and Policy in Mental Health and Mental Health Services Research*, 46(3), 298–310. <https://doi.org/10.1007/s10488-018-0914-6>
- Booyesen, F., Botha, F., & Wouters, E. (2021). Conceptual causal models of socioeconomic status, family structure, family functioning and their role in public health. *BMC Public Health*, 21(1), 191. <https://doi.org/10.1186/s12889-021-10214-z>
- Breslau, J., Leckman-Westin, E., Yu, H., Han, B., Pritam, R., Guarasi, D., Horvitz-Lennon, M., Scharf, D. M., Pincus, H. A., & Finnerty, M. T. (2018). Impact of a Mental Health Based Primary Care Program on Quality of Physical Health Care. *Administration and Policy in Mental Health and Mental Health Services Research*, 45(2), 276–285. <https://doi.org/10.1007/s10488-017-0822-1>
- Capra, M. E., Stanyevic, B., Giudice, A., Monopoli, D., Decarolis, N. M., Esposito, S., & Biasucci, G. (2024). Nutrition for Children and Adolescents Who Practice Sport: A Narrative Review. In *Nutrients* (Vol. 16, Issue 16). Multidisciplinary Digital Publishing Institute (MDPI). <https://doi.org/10.3390/nu16162803>
- Carta, M. G., Di Fiandra, T., Rampazzo, L., Contu, P., & Preti, A. (2015). An overview of international literature on school interventions to promote mental health and well-being in children and adolescents. In *Clinical Practice and Epidemiology in Mental Health* (Vol. 11, pp. 16–20). Bentham Science Publishers B.V. <https://doi.org/10.2174/1745017901511010016>
- Castle, C. L., Heinze, N., & Gomes, R. S. M. (2023). A cross-sectional study of sleep, mood, well-being, motivations, and perceived support in Ukrainian veterans and active-duty military personnel with disability, and their supporters, preparing for a sporting event. In *Frontiers in Psychology* (Vol. 14). Frontiers Media S.A. <https://doi.org/10.3389/fpsyg.2023.1089735>
- Cover, K., Hanna, M., & Barnes, M. R. (2012). A Review and Proposed Treatment Approach for the Young Athlete at High Risk for the Female Athlete Triad. *ICAN: Infant, Child, & Adolescent Nutrition*, 4(1), 21–27. <https://doi.org/10.1177/1941406411430986>
- Daines, C. L., Hansen, D., Novilla, M. L. B., & Crandall, A. (2021). Effects of positive and negative childhood experiences on adult family health. *BMC Public Health*, 21(1), 651. <https://doi.org/10.1186/s12889-021-10732-w>
- Dallas, I., Ntoumanis, I., Karatza, F., & Makris, G. C. (2020). Network analysis of countries’ partnership in European sports programs: Erasmus+ sport. *International Journal of Advanced Statistics and Probability*, 8(1), Article 1. <https://doi.org/10.14419/ijasp.v8i1.30329>
- D’anna, C., Rio, L., & Paloma, F. G. (2015). Competitive sport and self-concept in adolescent. In *Journal of Human Sport and Exercise* (Vol. 10, Issue Specialissue1, pp. S425–S429). University of Alicante. <https://doi.org/10.14198/jhse.2015.10.Proc1.35>
- Delia, E. B., James, J. D., & Wann, D. L. (2022). Does Being a Sport Fan Provide Meaning in Life? In *Journal of Sport Management* (Vol. 36, Issue 1, pp. 45–55). Human Kinetics Publishers Inc. <https://doi.org/10.1123/jsm.2020-0267>
- Derscariu, V.-S. (2023). Resilience vs. Disability: effective coping approaches in the context of a family crisis. *Scientific Annals of the “Alexandru Ioan Cuza” University, Iași. New Series SOCIOLOGY AND SOCIAL WORK Section*, 16(1), Article 1. <https://doi.org/10.47743/asas-2023-1-727>
- Erginer, D. K., & Günüşen, N. P. (2018). Determination of physical health status and healthy lifestyle behaviors of individuals with mental illness. *Perspectives in Psychiatric Care*, 54(3), 371–379. <https://doi.org/10.1111/ppc.12261>
- Evseev, O. E., A. A., Y. V., & A. S. (2020). All-Russian Physical Education And Sports Program “Ready For Labor And Defense” (GTO). *Human. Sport. Medicine*, 20(S1), Article S1. <https://doi.org/10.14529/hsm20s104>
- Fang, Y., Zhang, Y., & Zheng, H. (2024). Physical Activity and Subjective Well-Being: A Social Stratification Perspective. In *Leisure Sciences*. Routledge. <https://doi.org/10.1080/01490400.2024.2371932>
- Gaeta, T. J. (2020). Need for a holistic approach to reducing burnout and promoting well-being. *Journal of the American College of Emergency Physicians Open*, 1(5), 1050–1051. <https://doi.org/10.1002/emp2.12111>
- Grant, S. J., Beauchamp, M. R., Blanchard, C. M., Carson, V., & Rhodes, R. E. (2020). Promoting sport participation during early parenthood: A randomized controlled trial protocol. In *Trials* (Vol. 21, Issue 1). BioMed Central Ltd. <https://doi.org/10.1186/s13063-020-4158-x>
- Greeff, A. P., & Holtzcamp, J. (2007). The Prevalence of Resilience in Migrant Families. *Family & Community Health*, 30(3), 189. <https://doi.org/10.1097/01.FCH.0000277762.70031.44>
- Griffiths, C., Silva, K. da, Sheldon, A., & Smith, G. (2024). “Well-Track” Healthy Lifestyle (Physical Activity, Sleep

- Hygiene, Diet, Wearable Activity Tracker) Coaching in Severe Mental Illness (SMI). *Psychology*, 15(7), Article 7. <https://doi.org/10.4236/psych.2024.157071>
- Gurko, T. A. (2023). The Dynamics of Life Activity and Factors of Teenagers Well-being; [Динамика жизнедеятельности и факторы благополучия подростков]. In *Mir Rossii* (Vol. 32, Issue 4, pp. 119–137). National Research University, Higher School of Economics. <https://doi.org/10.17323/1811-038X-2023-32-4-119-137>
- Hanson, C. L., Crandall, A., Barnes, M. D., Magnusson, B., Novilla, M. L. B., & King, J. (2019). Family-Focused Public Health: Supporting Homes and Families in Policy and Practice. *Frontiers in Public Health*, 7, 59. <https://doi.org/10.3389/fpubh.2019.00059>
- Herbert, C., Gilg, V., Sander, M., Kobel, S., Jerg, A., & Steinacker, J. M. (2020). Preventing mental health, well-being and physical activity during the corona pandemic – recommendations from psychology and sports medicine; [Empfehlungen für bewegung und körperliche aktivität zur prävention von mentaler gesundheit und wohlbefinden während der corona-pandemie]. In *Deutsche Zeitschrift für Sportmedizin* (Vol. 71, Issue 10, pp. 249–257). Dynamic Media Sales Verlag. <https://doi.org/10.5960/dzsm.2020.458>
- Herlusia, S. I., Paramita, T., Witni, V., & Susilorini, B. (2021). *Unearthing the Role of Female Breadwinners in Family Resilience During a Crisis*: 228–235. <https://doi.org/10.2991/assehr.k.210423.033>
- Ho, F. K. W., Louie, L. H. T., Wong, W. H., Chan, K. L., Tiwari, A., Chow, C. B., Ho, W., Wong, W., Chan, M., Chen, E. Y. H., Cheung, Y. F., & Ip, P. (2017). A Sports-Based Youth Development Program, Teen Mental Health, and Physical Fitness: An RCT. *Pediatrics*, 140(4), e20171543. <https://doi.org/10.1542/peds.2017-1543>
- Ho, H. C. Y., Mui, M. W., Wan, A., Yew, C. W., & Lam, T. H. (2020). Happy Family Kitchen Movement: A Cluster Randomized Controlled Trial of a Community-Based Family Holistic Health Intervention in Hong Kong. *Journal of Happiness Studies*, 21(1), 15–36. <https://doi.org/10.1007/s10902-018-00071-w>
- Holmes, M. R., Berg, K. A., Bender, A. E., Evans, K. E., Kobulsky, J. M., Davis, A. P., & King, J. A. (2022). The Effect of Intimate Partner Violence on Children's Medical System Engagement and Physical Health: A Systematic Review. *Journal of Family Violence*, 37(8), 1221–1244. <https://doi.org/10.1007/s10896-021-00291-4>
- Illera-Delgado, L. J., Aranda, L. M. M., & Gea-García, G. M. (2022). Evaluación de los factores clave que intervienen en la técnica de la salida de natación: Un estudio piloto con estudiantes de educación secundaria (Assessment of key factors involved in the swimming start technique: a pilot study with secondary education students). *Retos*, 46, 941–949. <https://doi.org/10.47197/retos.v46.92794>
- Kohli, A., Shaw, B., Guntzberger, M., Aubel, J., Coulibaly, M., & Igras, S. (2021). Transforming social norms to improve girl-child health and well-being: A realist evaluation of the Girls' Holistic Development program in rural Senegal. *Reproductive Health*, 18(1), 243. <https://doi.org/10.1186/s12978-021-01295-5>
- Latif, R. A., Majeed, H. A., Tumijan, W., Tajri, A. A., Rajli, M. A., Hidayat, Y., & Hambali, B. (2024). Enhancing Athletic Well-Being: Unravelling the Impact of Social Support. *Information Management and Business Review*, 16(3(I)), 248–256. [https://doi.org/10.22610/imbr.v16i3\(I\).3796](https://doi.org/10.22610/imbr.v16i3(I).3796)
- Lodovica, L. M. F., Francesca, M., Paolo, P., Gabriele, T., Anselmo, C., Caleb, D., Cristina, D., Irene, M., & Alessandro, P. (2024). The effects of different levels of sports activity on health-related quality of life and lifestyle habits in high school Italian students. In *European Journal of Pediatrics* (Vol. 183, Issue 9, pp. 4041–4048). Springer Science and Business Media Deutschland GmbH. <https://doi.org/10.1007/s00431-024-05661-w>
- Mann, M., Silver, E. J., & Stein, R. E. K. (2018). Active Commuting to School, Physical Activity, and Behavior Problems Among Third-Grade Children. In *Journal of School Health* (Vol. 88, Issue 10, pp. 734–743). Blackwell Publishing Ltd. <https://doi.org/10.1111/josh.12677>
- Mao, W., & Agyapong, V. I. O. (2021). The Role of Social Determinants in Mental Health and Resilience After Disasters: Implications for Public Health Policy and Practice. *Frontiers in Public Health*, 9, 658528. <https://doi.org/10.3389/fpubh.2021.658528>
- Mazzucco, S., & Meggiolaro, S. (2014). Family structures and health behaviour in adolescents. In *Child Indicators Research* (Vol. 7, Issue 1, pp. 155–175). <https://doi.org/10.1007/s12187-013-9207-5>
- Menge, R., & Kayonga, C. S. (2022). Coping Strategies Among International Students During Covid 19 In Sweden. *European Journal of Social Sciences Studies*, 7(5), Article 5. <https://doi.org/10.46827/ejsss.v7i5.1288>
- Mhaka-Mutepfa, M., Jabuyer Biswas, M., M. Mfolwe, L., Mathoothe, K. D., & Hasan, M. T. (2024a). Well-Being, Loneliness, and Quality of Relationships Before and During the COVID-19 Pandemic in Botswana. In *SAGE Open* (Vol. 14, Issue 2). SAGE Publications Inc. <https://doi.org/10.1177/21582440241251540>
- Mhaka-Mutepfa, M., Jabuyer Biswas, M., M. Mfolwe, L., Mathoothe, K. D., & Hasan, M. T. (2024b). Well-Being, Loneliness, and Quality of Relationships Before and During the COVID-19 Pandemic in Botswana. *Sage Open*, 14(2), 21582440241251540. <https://doi.org/10.1177/21582440241251540>
- Milkie, M. A., Nomaguchi, K., & Schieman, S. (2019). Time Deficits with Children: The Link to Parents' Mental and Physical Health. *Society and Mental Health*, 9(3), 277–295.

- <https://doi.org/10.1177/2156869318767488>
- Misener, K. E. (2020). Parent Well-being through community youth sport: An autoethnography of “sideline” participation. In *Journal of Sport Management* (Vol. 34, Issue 4, pp. 329–340). Human Kinetics Publishers Inc. <https://doi.org/10.1123/JSM.2019-0201>
- Morley, C. P., Rosas, S. R., Mishori, R., Jordan, W., Jarris, Y. S., Competencies Work Group, F. M. H., & Prunuske, J. (2017). Essential Public Health Competencies for Medical Students: Establishing a Consensus in Family Medicine. *Teaching and Learning in Medicine*, 29(3), 255–267. <https://doi.org/10.1080/10401334.2016.1268964>
- Nistor, L.-D. (2023). Refugees between family crisis and resilience. Case study on ukrainian refugees in romania. *Scientific Annals of the “Alexandru Ioan Cuza” University, Iași. New Series Sociology and Social Work Section*, 16(1), Article 1. <https://doi.org/10.47743/asas-2023-1-725>
- Núñez, W. A. N., Navarro, J. R. S., & Pérez, Y. S. (2023). Análisis sistémico del contexto mundial de gestión deportiva: Aportes significativos de la revista retos (Systemic analysis of the world context of sports management: significant contributions of the retos review). *Retos*, 48, 481–493. <https://doi.org/10.47197/retos.v48.96951>
- Oehme, K., & Stern, M. J. (2014). Supervised Visitation and Family Financial Well-Being: Broadening Access to Community Services for Low-Income Parents in the Court System. *Family Court Review*, 52(2), 282–297. <https://doi.org/10.1111/fcre.12091>
- Pape, L. M., Adriaanse, M. C., Kol, J., van Straten, A., & van Meijel, B. (2022). Patient-reported outcomes of lifestyle interventions in patients with severe mental illness: A systematic review and meta-analysis. *BMC Psychiatry*, 22(1), 261. <https://doi.org/10.1186/s12888-022-03854-x>
- Pi, L.-L., Chang, C.-M., & Lin, H.-H. (2022). Development and Validation of Recreational Sport Well-Being Scale. In *International Journal of Environmental Research and Public Health* (Vol. 19, Issue 14). MDPI. <https://doi.org/10.3390/ijerph19148764>
- Pierce, R. P., & Stevermer, J. J. (2023). Disparities in the use of telehealth at the onset of the COVID-19 public health emergency. *Journal of Telemedicine and Telecare*, 29(1), 3–9. <https://doi.org/10.1177/1357633X20963893>
- Pusparini, M. D., Atmaja, F. F., Hidayat, A. R., Fiddareini, F., & Fachri, Z. M. (2023). Enhancing the financial stability of families by promoting knowledge and planning in Islamic finance. *Asian Journal of Community Services*, 2(6), Article 6. <https://doi.org/10.55927/ajcs.v2i6.4670>
- Ramos-Álvarez, O., García-Romero, C., & Arufe-Giraldez, V. (2024). 20 años de investigación científica de la revista Retos, nuevas tendencias en Educación Física, Depor-tes y Recreación: Análisis bibliométrico (20 years of scientific research by the journal Retos, new trends in Physical Education, Sports and Rec-reation: a bibliometric analysis). *Retos*, 54, 355–361. <https://doi.org/10.47197/retos.v54.102798>
- Roessler, K. K., & Muller, A. E. (2018). “I don’t need a flat tummy; I just want to run fast”—Self-understanding and bodily identity of women in competitive and recreational sports. In *BMC Women’s Health* (Vol. 18, Issue 1). BioMed Central Ltd. <https://doi.org/10.1186/s12905-018-0639-4>
- Romain, A. J., Trottier, A., Karelis, A. D., & Abdel-Baki, A. (2020). Do Mental Health Professionals Promote a Healthy Lifestyle among Individuals Experiencing Serious Mental Illness? *Issues in Mental Health Nursing*, 41(6), 531–539. <https://doi.org/10.1080/01612840.2019.1688436>
- Rubaie, A., & Mohamed, N. A. (2022). A proposal to activate the role of early intervention programs for the rehabilitation of mothers of children with Down syndrome, in light of the Saudi vision 2030. *Journal of Education and Health Promotion*, 11(1), 18. https://doi.org/10.4103/jehp.jehp_468_21
- Simbolon, M. E. M. (2024). The Retos journal is in the second quartile of Scopus: A bibliometric analysis from 2016 to 2023. *Retos*, 56, 427–432. <https://doi.org/10.47197/retos.v56.104120>
- Skovgaard, A. M., Bakermans-Kranenburg, M., Pontoppidan, M., Tjørnhøj-Thomsen, T., Madsen, K. R., Voss, I., Wehner, S. K., Pedersen, T. P., Finseth, L., Taylor, R. S., Tolstrup, J. S., & Ammitzbøll, J. (2022). The Infant Health Study - Promoting mental health and healthy weight through sensitive parenting to infants with cognitive, emotional, and regulatory vulnerabilities: Protocol for a stepped-wedge cluster-randomized trial and a process evaluation within municipality settings. *BMC Public Health*, 22(1), 194. <https://doi.org/10.1186/s12889-022-12551-z>
- Suryadi, D., Susanto, N., Faridah, E., Wahidi, R., Samodra, Y. T. J., Nasrulloh, A., Suganda, M. A., Wati, I. D. P., Sinulingga, A., Arovah, N. I., & Dewantara, J. (2024). Exercise for health in old age: Comprehensive review examining the benefits and efficacy of interventions; [Ejercicio para la salud en la vejez: Revisión exhaustiva de los beneficios y la eficacia de las intervenciones]. In *Retos* (Vol. 55, pp. 88–98). Federacion Espanola de Docentes de Educacion Fisica. <https://doi.org/10.47197/RETOS.V55.103771>
- Sutcliffe, J. T., Kelly, P. J., & Vella, S. A. (2023). A qualitative examination of parental mental health and well-being in youth sport. In *International Journal of Sport and Exercise Psychology*. Routledge. <https://doi.org/10.1080/1612197X.2023.2268625>
- Tadros, E., Durante, K. A., McKay, T., Barbini, M., & Hollie, B. (2022). Mental health, perceived consensus of coparenting, and physical health among incarcerated fathers and their nonincarcerated, romantic partners. *Families, Systems & Health: The Journal of Collaborative*

- Family Healthcare*, 40(2), 210–224.
<https://doi.org/10.1037/fsh0000671>
- Tadros, E., Hutcherson, R., & Aguirre, N. (2023). How is Family Therapy Discussed in the Literature on Incarceration?: A Systematic Review. *The American Journal of Family Therapy*, 51(5), 673–691.
<https://doi.org/10.1080/01926187.2022.2031343>
- Tewari, N., Saji, S., Srivastav, S., Alani, A., Mathur, V. P., & Rahul, M. (2023). Sports-Related Traumatic Orofacial and Dental Injuries in Asian Countries. *Asia Pacific Journal of Public Health*, 35(2–3), 234–234.
<https://doi.org/10.1177/10105395231153454>
- Tian, Y. (2014). [Physical exercise, fitness and health: A decade of sport for all and health promotion in China]. *Sheng Li Ke Xue Jin Zhan [Progress in Physiology]*, 45(4), 243–246.
- Tuda, D., Stefancic, A., Hawes, M., Wang, X., Guo, S., & Cabassa, L. J. (2022). Correlates of Attendance in a Peer-Led Healthy Lifestyle Intervention for People with Serious Mental Illness Living in Supportive Housing. *Community Mental Health Journal*, 58(4), 761–769.
<https://doi.org/10.1007/s10597-021-00881-y>
- van Niekerk, M., Matzkin, E., & Christino, M. A. (2023). Psychological Aspects of Return to Sport for the Female Athlete. In *Arthroscopy, Sports Medicine, and Rehabilitation* (Vol. 5, Issue 4). Elsevier Inc.
<https://doi.org/10.1016/j.asmr.2023.04.021>
- Vaux-Bjerke, A., John, D. H., & Piercy, K. L. (2023). Evaluating the Science to Inform the Physical Activity Guidelines for Americans Midcourse Report. *Journal of Healthy Eating and Active Living*, 3(1), Article 1.
<https://doi.org/10.51250/jheal.v3i1.55>
- Wan Abdul Rahim, W. S., Azman, N. A., Mohd Poot, E. F., Dahlan, A., & Zainudin, A. F. (2023). Association Of Leisure Participation And Social Support Of Older Persons In Kedah. In *Journal of Health and Translational Medicine* (Vol. 26, Issue Special Issue 2, pp. 96–101). Faculty of Medicine, University of Malaya.
<https://doi.org/10.22452/jummec.sp2023no2.11>
- Wang, P., Wei, X., Yingwei, X., & Xiaodan, C. (2022). The Impact of Residents' Leisure Time Allocation Mode on Individual Subjective Well-being: The Case of China. *Applied Research in Quality of Life*, 17(3), 1831–1866.
<https://doi.org/10.1007/s11482-021-10003-1>
- Wicker, P., Dallmeyer, S., & Breuer, C. (2020). *Elite Athlete Well-Being: The Role of Socioeconomic Factors and Comparisons With the Resident Population*.
<https://doi.org/10.1123/jsm.2019-0365>
- Поліщук, В. В. (2023). The value of physical culture and sports facilities in the formation of a healthy lifestyle. *Науковий Часопис Українського Державного Університету Імені Михайла Драгоманова*, 3K(162), Article 3K(162).
[https://doi.org/10.31392/NPU-nc.series15.2023.3K\(162\).64](https://doi.org/10.31392/NPU-nc.series15.2023.3K(162).64)

Datos de los/as autores/as:

Asep Solikin
muhammad andi setiawan
Andi Riswandi Buana Putra

asepsolikin@umpr.ac.id
andisetiawan@umpr.ac.id
andiRBP@umpr.ac.id

Autor/a
Autor/a
Autor/a