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Educazione alla salute e promozione del benessere fisico nelle scuole europee: una narrative review.

Health education and fitness promotion in European schools: a narrative review.

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ABSTRACT ITALIANO

L'educazione alla salute e la promozione della forma fisica rivestono un ruolo cruciale nel promuovere l'attività fisica tra gli studenti delle scuole europee, apportando duraturi benefici al loro benessere fisico e mentale. Tuttavia, l'attuazione di programmi efficaci si scontra con sfide legate ai molteplici contesti culturali, sociali ed economici presenti in Europa.La presente ricerca esplora le migliori pratiche e le sfide nell'ambito dell'istruzione sanitaria e della promozione della forma fisica nelle scuole europee. L'obiettivo è individuare strategie di successo, valutarne l'impatto ed affrontare potenziali ostacoli. La revisione tiene conto della diversità culturale e regionale e ha coinvolto la consultazione di database come MEDLINE, CINAHL, ERIC e Google Scholar, portando all'identificazione di 48 articoli pertinenti.I risultati mostrano che le scuole europee attuano attivamente iniziative legate alla salute e alla forma fisica, spesso incorporando diverse attività fisiche nei loro programmi curriculari. Approcci completi, che includono educazione nutrizionale e attività extrascolastiche, migliorano il coinvolgimento degli studenti. Le sfide includono la limitatezza dei finanziamenti, la formazione insufficiente degli insegnanti e varie sfumature di atteggiamenti culturali verso l'attività fisica. La ricerca sottolinea l'importanza di un'educazione sanitaria olistica e della promozione della forma fisica nelle scuole europee. Il successo si basa su strategie basate su evidenze scientifiche, sulla collaborazione tra decisori politici ed educatori e sull'allocazione di risorse. Dare priorità all'inclusività e alla sensibilità culturale può migliorare l'efficacia di questi programmi nel promuovere uno stile di vita attivo tra gli studenti europei.

ENGLISH ABSTRACT

Health education and fitness promotion are crucial for encouraging physical activity among European school students, yielding lasting benefits for their physical and mental well-being. However, implementing effective programs faces challenges due to Europe's diverse cultural, social, and economic contexts.This study explores best practices and challenges in health education and fitness promotion in European schools. It aims to identify successful strategies, assess their impact, and address potential barriers. The review considers cultural and regional diversity and involved searching databases like MEDLINE, CINAHL, ERIC, and Google Scholar, resulting in 48 relevant articles.

Findings show European schools actively implement health and fitness initiatives, often incorporating various physical activities into their curricula. Comprehensive approaches, including nutritional education and extracurricular activities, enhance student engagement. Challenges include limited funding, inadequate teacher training, and varying cultural attitudes toward physical activity.

This study emphasizes the importance of holistic health education and fitness promotion in European schools. Success relies on evidence-based strategies, collaboration between policymakers and educators, and resource allocation. Prioritizing inclusivity and cultural sensitivity can enhance the effectiveness of these programs in promoting active lifestyles among European students.

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Introduction

Health education and fitness promotion hold vital significance in contemporary educational systems across Europe, aiming to instill a physically active lifestyle and overall well-being among students.

Recent years have borne witness to an increased acknowledgement of the positive effects of physical activity on both physical and mental health. Consequently, educational institutions in Europe have placed amplified emphasis on health education and fitness promotion as integral components of their curriculum.

The World Health Organization (WHO) lends support to the inclusion of physical activity in schools, accentuating its potential to alleviate the burden of non-communicable diseases and enhance academic performance. According to the WHO Global School Health Survey, more than 80% of European adolescents are not meeting the recommended levels of physical activity, underscoring the pressing need for effective health education and fitness promotion initiatives (WHO, 2022).

The objectives of health education and fitness promotion in European schools extend beyond cultivating an affection for sports and physical activities. These initiatives seek to equip students with knowledge, skills, and motivation to lead physically active lives, thereby establishing the groundwork for lifelong health and well-being. Research has evidenced that physically active students demonstrate enhanced cognitive functions, improved attention spans, and heightened academic performance (Bedard et al., 2019; Liu, Li & Li, 2023; Lynch, O'Donoghue, & Peiris, 2022).

An all-encompassing review of the literature indicates that effective health education and fitness promotion programs encompass diverse components, such as physical education classes, nutritional education, extracurricular activities, and supportive school environments (Neil-Sztramko, 2021). Such programs promote a holistic comprehension of health and fitness, encouraging students to adopt healthy behaviors both within and beyond the classroom.

European schools have adopted diverse approaches to health education and fitness promotion, considering the continent's rich cultural and regional diversity. For instance, Nordic countries have spearheaded the promotion of outdoor education and physical activity in natural settings, recognizing its favorable impact on mental well-being and academic outcomes (Kjønniksen, Wiium & Fjørtoft, 2022). Mediterranean countries have integrated traditional physical activities, such as dancing and local sports, into their curriculum to preserve cultural heritage and promote active lifestyles (Gallotta et al., 2022).

However, despite these commendable efforts, several challenges persist in implementing health education and fitness promotion in European schools. Financial constraints, limited resources, and a lack of qualified personnel often hinder the development and execution of comprehensive programs (Pate et al., 2019). Additionally, cultural attitudes and societal norms regarding physical activity exhibit considerable variation across Europe, necessitating tailor-made approaches for each region (Forest, Lenzen & Öhman, 2018).

The purpose of this narrative review is to critically analyze health education and fitness promotion in European schools by synthesizing current research, best practices, and challenges. By examining successful strategies and potential obstacles, this review endeavors to provide insights to policymakers, educators, and stakeholders on designing and implementing effective health promotion programs across diverse European contexts.

Subsequent sections of the review will delve into the objectives, methodology, results, and conclusions of pertinent studies, shedding light on the impact of health education and fitness promotion on students' well-being and academic performance. The synthesis of literature will highlight promising practices that can be shared and adapted among European countries to foster a physically active and healthier generation.

Objectives

The primary aim of this evaluation is to critically analyze the state of health education and fitness promotion in European schools. The study focuses on assessing the effectiveness of various initiatives and identifying best practices. The specific objectives of this review encompass the following.

Evaluation of Health Education Programs: This review seeks to gauge the effectiveness of health education programs in European schools concerning their role in promoting physical activity and cultivating healthy behaviors among students. Through a synthesis of pertinent research, the extent to which these programs contribute to enhanced physical fitness, improved knowledge of health-related topics, and the adoption of healthy lifestyle choices will be determined.

Assessment of Physical Education in Schools: The review will scrutinize the role of physical education classes in promoting physical activity and overall well-being among students. By considering the diverse physical education curricula implemented across European countries, key elements leading to successful outcomes and increased engagement will be identified.

Exploration of Nutritional Education Integration: Nutritional education constitutes a vital aspect of health education as it significantly influences students' dietary habits. This review will investigate how European schools incorporate nutritional education into their health promotion programs and analyze its impact on students' dietary choices and overall health.

Identification of Effective Fitness Promotion Strategies: The review will delve into the various fitness promotion strategies implemented in European schools, encompassing extracurricular activities, sports clubs, and community engagement. By evaluating the effectiveness of these strategies, approaches that successfully encourage students to engage in regular physical activities outside of the school environment will be identified.

Understanding the Role of School Environment: The influence of the school environment on health education and fitness promotion will be taken into account. Factors such as access to sports facilities, availability of healthy food options, and the overall school culture concerning physical activity will be analyzed to ascertain their impact on students' health behaviors.

Examination of Challenges and Barriers: To provide a comprehensive perspective, the review will identify and analyze challenges and barriers faced by European schools in the implementation of health education and fitness promotion programs. Understanding these obstacles will enable the proposal of strategies to address them and enhance program effectiveness.

By achieving these objectives, this comprehensive review aims to offer valuable insights into the current landscape of health education and fitness promotion in European schools. The findings will contribute to evidence-based recommendations that inform the development of effective and culturally sensitive health promotion programs, ultimately fostering a physically active and healthier generation of European students.

Methodology

To accomplish this narrative review appropriate keywords were identified to find individual studies that were pertinent to the current aim of the review. The search used the terms "health education" OR "fitness promotion" OR "physical activity "AND "European schools". A search of the literature has been conducted drawing from the databases MEDLINE (pubmed) (n = 2), CINAHL (n = 273) ERIC (n = 189) as primary sources, and from Google Scholar (n = 5540) as secondary source, in the last 10 years (January 2014-June 2023). Abstracts and main texts has been reviewed immediately after all duplicates were removed. The overall 48 articles focusing on the health education, fitness promotion and physical activity in European schools have been synthesized, and integrated them into the main text, which was organized in sections following a narrative style (Demiris, Parker Oliver & Washington (2019). The search will focus on peer-reviewed articles published within the last decade to ensure the inclusion of recent research.

The inclusion criteria for selected studies will be based on relevance to health education and fitness promotion in European schools, including studies that address the impact of various interventions, strategies, and programs aimed at promoting physical activity and overall well-being among students. Studies that report on outcomes related to physical fitness, health knowledge, and lifestyle behaviors will be considered.

The research team will independently review and assess the quality of selected studies using predefined criteria to ensure rigor and validity. Any discrepancies in the study selection process will be resolved through discussion and consensus. Data will be extracted from the selected studies and organized thematically to address the specific objectives of the review.

The synthesis of findings will be conducted using a narrative approach, providing a comprehensive overview of the current state of health education and fitness promotion in European schools. The review will also consider the cultural and regional diversity across European countries to identify successful practices that may be applicable in different contexts.

The limitations of this review include potential language bias, as only English-language publications will be considered, and the possibility of publication bias, where positive results are more likely to be published (McShane, Böckenholt & Hansen, 2016). Despite these limitations, this review aims to provide valuable insights into effective health

education and fitness promotion strategies that can contribute to the promotion of physical activity and improved overall health among European students.

Results

Evaluating the impact of health education programs

The impact of health education programs in European schools in promoting physical activity and healthy behaviors can be significant. Here are some key findings from the search results:

Comprehensive School Physical Activity Programs (CSPAP) coordinate physical activity opportunities for school-age children through physical education, programs offered before/after school and during the school day, and community engagement. They aim to integrate physical activity into the school curriculum and improve health and on-task behaviors (Castelli et al., 2022).

Health education plays an important role in promoting and protecting health and shaping life skills (Pankowska, 2020). It not only affects schools but also has an impact on families and the local community. It emphasizes learning how to take care of one's own health and that of others, aligning with the changing health problems affecting society.

Full-day schools with their afterschool programs (ASPs) have an impact on children's daily physical activity and sedentary behavior. Kuritz et al. (2020) have shown that children attending full-day schools have higher levels of moderate-to-vigorous physical activity and lower levels of sedentary behavior during ASPs compared to teaching hours and leisure time.

Holistic prevention interventions in primary schools can enhance health literacy and physical activity Arnaiz et al. (2022). These interventions involve comprehensive health programs, interprofessional teams, and partnerships with the ministry of education and ministry of health. They aim to incorporate health promotion interventions within established educational structures and bring about sustainable changes.

School interventions based on playful activities have been shown to increase children's knowledge about health and potentially affect healthy habits. These programs involve training teachers on health topics and delivering classes on cardiovascular health to students. However, the impact on health knowledge may vary.

The ActTeens physical activity program (Stabelini et al., 2022) aims to improve physical activity behaviors, physical fitness, cardiometabolic health, and mental health in adolescents. The program includes structured physical activity sessions, self-monitoring and goal setting, and healthy lifestyle guidance.

Overall, health education programs in schools have the potential to promote physical activity and healthy behaviors among students. These programs often involve comprehensive approaches, partnerships, and a focus on integrating physical activity into the school curriculum. However, the impact may vary depending on the specific program and implementation strategies.

Assessing the role of physical education in schools

The assessment of the role of physical education (PE) in European schools revealed its crucial contribution to promoting physical activity and overall well-being among students. Numerous studies indicated that well-structured and engaging PE classes positively influenced students' attitudes towards physical activity, leading to increased participation in sports and fitness activities (Wiium, 2021; Gallè et al., 2016; García-Hermoso et al., 2021).

PE classes that emphasized skill development, teamwork, and inclusivity were found to be particularly effective in enhancing students' physical fitness and fostering a positive attitude towards exercise (Hovdal et al. 2021; Kolovelonis & Goudas, 2023; Opstoel et al., 2020). Moreover, longitudinal studies demonstrated a positive correlation between regular participation in PE and improved academic performance, highlighting the potential of PE to support holistic student development (García-Hermoso et al., 2021).

Furthermore, the review identified that the role of PE teachers was vital in creating a supportive and encouraging environment for students to explore different physical activities and sports (Van Doren et al., 2021). Teachers who adopted a student-centered approach and provided personalized feedback were more successful in motivating students to stay physically active and develop a lifelong interest in sports (Gomes et al., 2023). Laschke et al. (2023) describe numerous techniques and strategies for designing health classes, emphasising the importance of strengthening those methods and tactics that assist students in permanently integrating health-promoting habits into their everyday lives. The study already offers some findings to enhance the long-term impact of health education and provides an essential contribution to the practitioner-research gap. Some schools reported a lack of adequate sports facilities and equipment, hindering the delivery of diverse and engaging PE classes (Bevans et al., 2010).

Overall, the results demonstrate that well-designed and effectively delivered PE classes play a critical role in promoting physical activity and fostering a positive attitude towards exercise among European students. Addressing challenges and investing in PE teacher training and resources can further enhance the impact of PE programs on students' well-being and overall health.

Exploring the integration of nutritional education

The exploration of the integration of nutritional education in European schools revealed its significant impact on students' dietary choices and overall health. Studies consistently demonstrated that comprehensive nutritional education programs positively influenced students' knowledge of healthy eating habits and improved their dietary behaviors (Andueza et al., 2023; Kendel Jovanović, Janković & Pavčić ŽeŽelj, 2023; Szczepańska et al., 2022).

Nutritional education programs that adopted a hands-on and interactive approach, such as cooking workshops and school gardens, were found to be particularly effective in promoting healthy eating behaviors (Labbé et al., 2023; Holloway et al., 2023). These practical experiences provided students with a deeper understanding of nutrition and encouraged them to make healthier food choices both at school and home.

Moreover, longitudinal studies indicated that students who received regular nutritional education were more likely to maintain healthy dietary habits into adulthood, reducing the risk of developing diet-related chronic diseases (Małachowska et al., 2023; Movassagh et al., 2017).

Furthermore, the review highlighted the essential role of teachers and parents in supporting and reinforcing nutritional education messages. Collaborative efforts between schools and families were found to enhance the effectiveness of nutritional education initiatives, creating a consistent and conducive environment for healthy eating habits (Gardner et al., 2023).

However, challenges in implementing nutritional education were identified, including limited curriculum time, lack of qualified nutrition educators, and resistance to change in school food environments (Medeiros et al., 2022).

Overall, the results emphasize the importance of integrating nutritional education in European schools to promote healthy dietary behaviors among students. By adopting innovative and practical approaches and fostering collaboration between schools and families, nutritional education can play a pivotal role in cultivating a culture of healthy eating among European students.

Identifying effective fitness promotion strategies

The identification of effective fitness promotion strategies in European schools revealed a range of approaches that successfully encouraged students to engage in regular physical activity. Studies highlighted the positive impact of extracurricular activities and sports clubs in motivating students to participate in various physical activities beyond regular PE classes (Neil-Sztramko et al., 2021; Volf et al., 2022).

Innovative physical education program called the Health Club (HC) approach in a high school setting indicated that the HC approach led to high levels of MVPA among the participants (McNamee et al., 2017). Furthermore, the results showed that the HC approach led to greater perceived control over their physical activity, improved physical self-concept across multiple domains, more positive feelings about appearance and strength, and overall more positive global statements about their physical selves after the intervention.

Moreover, initiatives that emphasized student autonomy and choice, allowing them to select physical activities based on their interests and preferences, were found to be particularly effective in promoting sustained engagement (Wendt et al., 2023).

Incorporating technology and digital platforms as part of fitness promotion strategies emerged as a promising trend. Fitness apps, activity trackers, and online challenges were shown to enhance students' motivation and accountability, promoting a sense of competition and camaraderie (Parker et al., 2020; Swindle et al., 2022).

Furthermore, the review emphasized the significance of school-community partnerships in fostering fitness promotion. Collaborations with local sports organizations and community fitness centers provided students with access to a broader range of physical activities and resources (Bejster et al., 2022; Schwartz et al., 2023).

However, the success of fitness promotion strategies was dependent on the continuous support and involvement of teachers and school leadership. Enthusiastic and committed educators played a crucial role in promoting fitness initiatives and creating a supportive school environment (Mak et al., 2021).

Despite the positive outcomes, challenges in implementing fitness promotion strategies were identified, including budget constraints, time limitations, and a lack of awareness about available resources (Wendt et al., 2023).

Overall, the results underscore the importance of tailoring fitness promotion strategies to suit the interests and needs of students while leveraging technology and community partnerships. By fostering a supportive school culture and involving dedicated educators, fitness promotion can effectively encourage European students to lead active and healthier lifestyles.

Examining challenges and barriers

The examination of challenges and barriers in implementing health education and fitness promotion programs in European schools revealed several significant obstacles that hindered the effectiveness of these initiatives. Financial constraints emerged as a prominent challenge, with limited funding often impeding the development and sustainability of comprehensive health promotion programs (Ferreira Silva et al., 2022; Sulz et al., 2023).

Moreover, the lack of qualified personnel and resources posed challenges in delivering high-quality health education and fitness promotion activities. Cultural attitudes and societal norms surrounding physical activity and health also presented barriers to successful implementation. Varying cultural perceptions of physical activity and dietary habits across countries necessitated culturally sensitive approaches tailored to individual regions (Ferry & Westerlund, 2023). Many schools reported a shortage of trained health educators and physical education teachers, leading to a reduced focus on health-related topics (McMullen, Kallio & Tammelin, 2022).

Furthermore, time constraints and competing priorities within the curriculum were identified as significant challenges, with schools struggling to allocate sufficient time for health education and physical activity promotion (Banville et al., 2020).

Despite these challenges, some schools demonstrated innovative approaches to overcome barriers. Collaborative efforts with community organizations and local stakeholders were successful in leveraging additional resources and support for health promotion activities (Wendt et al., 2023).

The findings underscore the need for policymakers and educators to address these challenges collectively. By prioritizing funding, providing professional development opportunities, and fostering a culture of health within schools, European educational institutions can enhance the successful implementation of health education and fitness promotion programs, ultimately contributing to the well-being of their students.

Conclusions

The narrative review of health education and fitness promotion in European schools provides valuable insights into the state of these initiatives, their impact, challenges, and potential strategies for improvement. The findings underscore the importance of promoting physical activity and healthy lifestyle behaviors among students to foster a generation of physically active and healthier individuals.

Health education programs in European schools have demonstrated positive outcomes in enhancing students' knowledge of health-related topics and promoting healthier dietary choices. Implementing comprehensive health education that integrates both theoretical knowledge and practical experiences is crucial in engaging students and fostering a deeper understanding of health concepts. Furthermore, the positive long-term impact of health education programs highlights the potential for shaping lifelong healthy behaviors among European students.

Physical education (PE) plays a crucial role in promoting physical activity and overall well-being among students. Well-structured PE classes that emphasize skill development, teamwork, and inclusivity have shown positive effects on students' physical fitness and attitude towards exercise. Teachers' involvement and support are instrumental in delivering effective PE classes and encouraging students to remain physically active.

The integration of nutritional education in European schools has demonstrated positive effects on students' dietary knowledge and eating behaviors. Hands-on approaches and practical experiences, such as cooking workshops and school gardens, have been particularly effective in promoting healthier food choices. Collaboration between schools and families has enhanced the impact of nutritional education, creating a consistent and conducive environment for healthy eating habits.

Fitness promotion strategies, including extracurricular activities, sports clubs, and technology-based initiatives, have successfully encouraged students to engage in regular physical activity. Emphasizing student autonomy and choice in physical activities has been effective in sustaining students' interest and participation. Additionally, school-community partnerships have expanded the range of physical activities available to students, enhancing fitness promotion efforts.

Challenges and barriers in implementing health education and fitness promotion programs were identified, including financial constraints, limited resources, cultural attitudes, and time limitations. Addressing these challenges requires collaborative efforts from policymakers, educators, and stakeholders. Prioritizing funding, providing professional development opportunities, and embracing cultural diversity are essential in overcoming barriers and enhancing the effectiveness of health education and fitness promotion programs.

In conclusion, this narrative review highlights the significance of health education and fitness promotion in European schools. The findings emphasize the importance of implementing evidence-based strategies and cultivating supportive environments to promote physical activity and healthy behaviors among students.

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