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Psychoeducational intervention models in physical activity programs for health: a systematic literature review

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Abstract

This systematic literature review examines psychoeducational intervention models integrated into physical activity programs and their relevance to health-related outcomes. The review synthesizes evidence from multidisciplinary studies addressing psychological, behavioral, and physical dimensions of health across diverse populations. Findings indicate that psychoeducational components, including health education, self-efficacy enhancement, motivational support, and reflective practices, strengthen the effectiveness of physical activity interventions by promoting sustained behavioral change and psychological well-being. These models demonstrate consistent benefits in improving mental health indicators, adherence to physical activity, and overall quality of life in both clinical and non-clinical settings. The review also highlights the importance of program structure, participant engagement, and contextual adaptation in determining intervention success. Furthermore, the growing integration of digital health technologies expands opportunities for scalable and personalized psychoeducational delivery within physical activity programs. Psychoeducational intervention models offer a comprehensive framework for advancing health promotion strategies in the field of physical activity and sports health. Future development should prioritize holistic, evidence-based, and context-sensitive approaches to maximize long-term health outcomes.

Keywords: psychoeducation, physical activity, health promotion, behavioral intervention, sports health.

INTRODUCTION

Physical activity represents a fundamental element in health promotion efforts encompassing physical, psychological, and social dimensions, with empirical evidence demonstrating its contribution to the prevention of non-communicable diseases and the improvement of quality of life among adult and adolescent populations (Guerra et al., 2021; Hale et al., 2021; Li et al., 2024). Various physical activity interventions have been developed within the context of health promotion; however, their effectiveness is strongly influenced by supportive approaches that foster engagement, motivation, and sustained individual participation (Guerra et al., 2021). Systematic studies indicate that programs focusing solely on physical components often encounter challenges in maintaining long-term behavioral change (Nair & Otaki, 2021). This condition highlights the importance of integrating educational and psychological components into the design of health-oriented physical activity programs.

Psychoeducational approaches have demonstrated a significant role across a range of health interventions by providing knowledge, cognitive skills, and self-regulation strategies that support individual adaptation to health-related demands (Barlati et al., 2024; Galvez-Sanchez & Montoro, 2023). In the context of mental health disorders and chronic illnesses, psychoeducation has been shown to enhance self-efficacy, adherence to interventions, and

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improvements in psychosocial functioning (Barlati et al., 2024; Ouyang et al., 2023). Similar findings have been reported among populations with complex health conditions such as fibromyalgia and autoimmune diseases, emphasizing the importance of individual understanding of bodily conditions and health management strategies (Galvez-Sanchez & Montoro, 2023; Parodis et al., 2023). These findings indicate that psychoeducation holds broad potential for adaptation within health-oriented physical activity programs.

Among adolescent and young adult populations, physical activity designed with psychosocial approaches has been reported to yield positive effects on mental health, emotional balance, and coping capacities related to academic and social pressures (Hale et al., 2021; Nair & Otaki, 2021; Li et al., 2024). Literature reviews emphasize that interventions incorporating reflective learning and psychological support enhance the meaningfulness of participation in physical activity and strengthen individual commitment to active lifestyles (Berti et al., 2023). Active participant engagement in intervention processes has also been identified as a key factor in the success of school- and community-based programs (Berti et al., 2023). These findings suggest that intervention models integrating physical activity and psychoeducation are highly relevant within the field of sport and health sciences.

Advancements in health technology have contributed to the emergence of digitally delivered psychoeducational intervention models that support both physical activity and mental health outcomes (Elkefi et al., 2023; Di Lorito et al., 2022). Systematic reviews indicate that digital approaches expand access to health education, enhance user engagement, and support continuous monitoring of health behaviors across diverse age groups (Elkefi et al., 2023). Among older adults and individuals with cognitive impairments, digitally based psychoeducational interventions have also demonstrated positive contributions to quality of life and adaptive functioning (Di Lorito et al., 2022). These findings illustrate the flexibility of psychoeducational intervention models and their capacity to be integrated into various forms of physical activity programs.

Within rehabilitation and health recovery contexts, psychoeducational approaches grounded in cognitive and self-efficacy theories have been shown to enhance individuals' confidence in managing physical conditions and engaging safely in physical activity (Ouyang et al., 2023). Interventions emphasizing understanding of goals, processes, and benefits of physical activity have produced more consistent outcomes in supporting functional recovery (Ouyang et al., 2023; Parodis et al., 2023). This evidence underscores the added value of combining physical activity with psychological education in sport and health contexts as well as in disability prevention efforts. Such approaches are applicable across a wide range of physical activity based health programs.

Although numerous studies have examined physical activity and psychoeducational interventions separately, research that systematically maps psychoeducational intervention models within physical activity programs remains fragmented and insufficiently integrated (Guerra et al., 2021; Hale et al., 2021; Galvez-Sanchez & Montoro, 2023). Variations in study design, target populations, and intervention approaches present challenges for practitioners and researchers in identifying patterns, effectiveness, and practical implications of existing models (Nair & Otaki, 2021; Li et al., 2024). A comprehensive synthesis of the literature is required to clarify key characteristics, mechanisms, and health outcomes associated with psychoeducational interventions embedded in physical activity programs. This need is particularly relevant for the development of evidence-based sport and health promotion initiatives.

Based on this background, the present study conducts a systematic literature review to examine psychoeducational intervention models implemented within physical activity programs for health purposes. The review focuses on identifying intervention formats, target populations, and reported impacts on physical and psychological health outcomes (Guerra et

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al., 2021; Parodis et al., 2023). The findings are expected to contribute both theoretically and practically to the development of more holistic and sustainable sport and health programs. This review also aims to serve as a reference for researchers and practitioners in designing psychoeducationally informed physical activity interventions aligned with public health needs.

METHOD

This study employed a Systematic Literature Review (SLR) design to synthesize empirical evidence on psychoeducational intervention models implemented within physical activity programs for health. The review process followed established systematic review guidelines, including transparent identification, screening, eligibility assessment, and inclusion of relevant studies. Literature searches were conducted across major electronic databases, including Scopus, Web of Science, PubMed, and Google Scholar, using combinations of keywords related to psychoeducational interventions, physical activity programs, and health outcomes. Inclusion criteria comprised peer-reviewed articles published in English that examined psychoeducational components integrated into physical activity interventions and reported physical, psychological, or behavioral health outcomes.

Study selection involved a multi-stage screening process based on predefined criteria, beginning with title and abstract review followed by full-text assessment to ensure relevance and methodological rigor. Data extraction focused on key study characteristics, including intervention models, participant demographics, program settings, delivery modalities, and reported outcomes. The methodological quality of included studies was appraised using established critical assessment tools appropriate for systematic reviews to enhance the reliability of findings. Extracted data were analyzed using a narrative synthesis approach, allowing comparison and thematic categorization of psychoeducational intervention models across diverse contexts and populations.

RESULTS AND DISCUSSION

Characteristics and Variations of Psychoeducational Intervention Models in Physical Activity Programs

The studies reviewed indicate that psychoeducational intervention models in physical activity programs possess multidimensional characteristics that integrate health education, psychological regulation, and behavioral engagement within a structured intervention framework (Guerra et al., 2021; Bokolo et al., 2023). This approach has emerged in response to the limitations of conventional physical activity programs that predominantly emphasize exercise components without adequately addressing participants' cognitive and affective processes (Nair & Otaki, 2021; Li et al., 2024). The literature suggests that the effectiveness of such interventions is strongly influenced by their capacity to enhance participants' understanding of the goals of physical activity and its relevance to their individual health conditions (Galvez-Sanchez & Montoro, 2023; Parodis et al., 2023). These characteristics position psychoeducation as a core element in the design of long-term, health-oriented physical activity programs.

Most identified intervention models position health education as a foundational component for fostering awareness and self-efficacy before and during engagement in physical activity (Ouyang et al., 2023; Vergeld et al., 2021). This educational component encompasses knowledge of physiological benefits, risk management, and psychological strategies to address internal barriers such as anxiety, fear of injury, and mental fatigue (Wang et al., 2023; Hale et al., 2021). Among populations with chronic conditions, such approaches function as adaptive mechanisms that assist individuals in adjusting expectations and behaviors in accordance with their physical limitations (Parodis et al., 2023; Setyowibowo et al., 2022). These patterns indicate that psychoeducation serves not merely an informative role but also a transformative function in shaping individuals' relationships with physical activity.

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Variations in intervention models are also evident across implementation settings, including educational institutions, community environments, healthcare services, and technology-based platforms (Berti et al., 2023; Di Lorito et al., 2022; Tossaint-Schoenmakers et al., 2021). In school and university contexts, psychoeducational interventions are frequently combined with participatory approaches to enhance student engagement in physical activity and reflective learning processes (Guo et al., 2023; Schiff & Supriady, 2023). Such approaches have been shown to strengthen intrinsic motivation and foster a sense of ownership over physical activity as part of daily routines (Papadopoulos et al., 2022; Vasilopoulos et al., 2023). This diversity of settings reflects the flexibility of psychoeducational models in supporting health-related objectives across different contexts.

Digital-based intervention models have become increasingly prominent in the literature in response to the growing demand for accessibility and personalized health programs (Elkefi et al., 2023; Singleton et al., 2022). These digital interventions enable continuous delivery of psychoeducational content, monitoring of physical activity, and provision of tailored psychological feedback (Maechling et al., 2023; Bakır et al., 2023). Studies involving populations with cognitive impairments, cancer, and early-stage psychiatric disorders indicate that technological integration enhances engagement and continuity of participation in physical activity programs (Di Lorito et al., 2022; Elkefi et al., 2023). These characteristics expand the scope of psychoeducational intervention models beyond traditional face-to-face approaches.

Differences in target populations also influence the structure and content of psychoeducational interventions within physical activity programs (Hale et al., 2021; Li et al., 2024). Among children and adolescents, interventions tend to emphasize emotional regulation, academic stress management, and the promotion of positive experiences related to physical activity (Jagiello et al., 2025; Papadopoulos et al., 2022). In contrast, interventions targeting adults and older adults primarily focus on health condition management, quality of life enhancement, and the prevention of physical and cognitive decline (Sella et al., 2023; Wiegelmann et al., 2021). These variations underscore the importance of tailoring psychoeducational models to developmental stages and specific health needs.

The application of psychological theories constitutes a key characteristic in the development of effective psychoeducational intervention models (Ouyang et al., 2023; Rabelo et al., 2021). Theories of self-efficacy, self-regulation, and social learning are frequently employed to explain behavioral change mechanisms resulting from the integration of physical activity and psychoeducation (Vergeld et al., 2021; Wang et al., 2023). Interventions grounded in clear theoretical frameworks demonstrate more consistent outcomes in enhancing adherence and long-term engagement in physical activity (Bokolo et al., 2023; Cann et al., 2024). This highlights the practical value of conceptually robust intervention designs in health-related contexts.

Table 1. Characteristics of Psychoeducational Intervention Models in Physical Activity Programs

Key Characteristics	Model Description	Primary Sources
Educational focus	Health education, risk management, and self-regulation	Guerra et al. (2021); Galvez-Sanchez & Montoro (2023)
Psychological approach	Self-efficacy, coping strategies, emotional regulation	Ouyang et al. (2023); Vergeld et al. (2021)
Implementation setting	Schools, communities, healthcare, digital platforms	Berti et al. (2023); Di Lorito et al. (2022)
Intervention media	Face-to-face, digital applications, eHealth	Elkefi et al. (2023); Singleton et al. (2022)
Target population	Children, adolescents, adults, older adults	Hale et al. (2021); Sella et al. (2023)

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The synthesis presented in the table illustrates that psychoeducational intervention models exhibit complex and adaptive structures aligned with diverse health needs. This diversity enables the development of more inclusive and responsive physical activity programs (Guo et al., 2023; Tossaint-Schoenmakers et al., 2021). The literature further indicates that integrating psychoeducational components enhances program quality by strengthening participant understanding and engagement (Cann et al., 2024; Muir et al., 2023). These findings reinforce the role of psychoeducation as a strategic element in the development of physical activity–based health interventions.

Psychoeducational intervention models in physical activity programs demonstrate consistent patterns in integrating education, psychological support, and physical activity into a unified intervention framework (Guerra et al., 2021; Bokolo et al., 2023). This approach reflects a paradigm shift from exercise-centered interventions toward more holistic and sustainable health models (Parodis et al., 2023; Li et al., 2024). The success of these models underscores the importance of designing interventions that consider cognitive, emotional, and social dimensions of participants (Wiegelmann et al., 2021; Cann et al., 2024). This synthesis provides a conceptual foundation for understanding the mechanisms and implications of psychoeducational interventions in the context of health-oriented physical activity.

Mechanisms of Impact of Psychoeducational Interventions on Health Outcomes in Physical Activity Programs

Psychoeducational interventions in physical activity programs operate through multidimensional mechanisms involving cognitive, affective, and behavioral processes that jointly produce sustainable health outcomes (Ouyang et al., 2023; Bokolo et al., 2023). The literature indicates that enhanced knowledge and understanding of physical activity serve as an entry point for the development of positive attitudes and psychological readiness to actively engage in health programs (Guerra et al., 2021; Nair & Otaki, 2021). These mechanisms strengthen the relationship between perceived benefits of physical activity and individuals' willingness to maintain long-term active behaviors (Li et al., 2024; Wang et al., 2023). Such cognitive processes provide a more stable foundation for behavioral change compared to interventions relying solely on physical instruction.

Self-efficacy emerges as a central mechanism explaining the positive impact of psychoeducational interventions on both physical and mental health outcomes (Ouyang et al., 2023; Vergeld et al., 2021). Programs that explicitly cultivate individuals' confidence in managing physical activity demonstrate improved exercise adherence and reduced psychological barriers, such as fear of pain or injury (Vergeld et al., 2021; Parodis et al., 2023). Among populations with chronic conditions or in post-rehabilitation phases, enhanced self-efficacy contributes directly to functional recovery and improved quality of life (Ouyang et al., 2023; Setyowibowo et al., 2022). These findings highlight psychological change as a critical mediator linking physical activity to health outcomes.

Emotional regulation and stress management also constitute significant pathways through which psychoeducational interventions exert their effects (Hale et al., 2021; Jagiello et al., 2025). Physical activity combined with psychological education enables individuals to recognize emotional responses to academic, occupational, or health-related stressors and to develop adaptive coping strategies (Nair & Otaki, 2021; Li et al., 2024). Studies involving adolescents and university students demonstrate reductions in anxiety symptoms and improvements in subjective well-being when interventions emphasize emotional awareness and reflective practice (Hale et al., 2021; Papadopoulos et al., 2022). This mechanism reinforces the role of physical activity as a promotive strategy for mental health.

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Health outcomes associated with psychoeducational interventions extend beyond improvements in physical fitness to encompass broader behavioral changes (Guerra et al., 2021; Vasilopoulos et al., 2023). Educational components accompanying physical activity encourage individuals to adopt consistently active lifestyles, including increased daily movement and reduced sedentary behavior (Li et al., 2024; Wang et al., 2023). Among children and adolescents, these behavioral changes are associated with enhanced cognitive functioning and academic performance through neuropsychological mechanisms influenced by regular physical activity (Vasilopoulos et al., 2023; Muir et al., 2023). These behavioral pathways expand the scope of intervention impact beyond traditional fitness outcomes.

In the domain of mental health, reported outcomes include reductions in depressive symptoms, anxiety, and emotional exhaustion across diverse populations (Barlati et al., 2024; Wang et al., 2023). Psychoeducational interventions integrated into physical activity programs provide structured opportunities for adaptive processing of psychological experiences, particularly among individuals with a history of mental health conditions or trauma (Rabelo et al., 2021; Wang et al., 2023). Systematic studies involving populations with schizophrenia, bipolar disorder, and chronic pain indicate that combining physical activity with psychological support leads to improvements in social functioning and emotional stability (Barlati et al., 2024; Vergeld et al., 2021). These mechanisms underscore the contribution of psychoeducational interventions to dimensions of mental health often overlooked in conventional exercise programs.

Digital technologies further enhance the mechanisms of impact of psychoeducational interventions by enabling continuous content delivery, progress monitoring, and personalized psychological feedback (Elkefi et al., 2023; Tossaint-Schoenmakers et al., 2021). App-based and online interventions support sustained behavioral change through consistent cognitive and emotional reinforcement during physical activity engagement (Singleton et al., 2022; Maechling et al., 2023). Among older adults and individuals with cognitive impairments, such digital approaches contribute to the maintenance of adaptive functioning and social engagement (Di Lorito et al., 2022; Yu et al., 2023). These digital mechanisms broaden the reach and durability of psychoeducational intervention effects.

The following table summarizes the mechanisms of impact and associated health outcomes identified in psychoeducational physical activity interventions:

Table 2. Mechanisms of Impact and Health Outcomes of Psychoeducational Interventions

Key Mechanisms	Health Outcomes	Primary Sources
Enhanced self-efficacy	Exercise adherence, functional recovery	Ouyang et al. (2023); Vergeld et al. (2021)
Emotional regulation	Reduced stress, anxiety, depression	Hale et al. (2021); Wang et al. (2023)
Behavioral change	Active lifestyle, reduced sedentary behavior	Guerra et al. (2021); Li et al. (2024)
Digital support	Sustained engagement, improved quality of life	Elkefi et al. (2023); Di Lorito et al. (2022)
Cognitive functioning	Improved attention and academic performance	Vasilopoulos et al. (2023); Muir et al. (2023)

The synthesis indicates that the impacts of psychoeducational interventions are mediated by interconnected psychological and behavioral mechanisms. The interaction between enhanced knowledge, self-efficacy, and emotional regulation produces more stable health outcomes than single-component interventions (Bokolo et al., 2023; Cann et al., 2024). Evidence further suggests that optimal health outcomes are achieved when these mechanisms are coherently integrated into the design of physical activity programs (Parodis et al., 2023;

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Guo et al., 2023). These findings reinforce the importance of holistic approaches in the development of psychoeducational interventions for health promotion.

The mechanisms of impact underlying psychoeducational interventions reveal coherent pathways linking physical activity to both physical and mental health outcomes (Guerra et al., 2021; Li et al., 2024). The integration of psychological education within physical activity programs strengthens the internalization of healthy behaviors and enhances resilience against health-related challenges (Wiegelmann et al., 2021; Cann et al., 2024). The consistency of findings across age groups, health conditions, and implementation settings underscores the robustness and applicability of psychoeducational interventions in promoting sustainable health outcomes.

Practical Implications and Future Directions for the Development of Psychoeducational Intervention Models Based on Physical Activity

Findings from the literature indicate that integrating psychoeducational components into physical activity programs has significant practical implications for the development of sports and public health services. Programs designed with this approach not only focus on improving physical capacity but also address psychological readiness, intrinsic motivation, and the sustainability of active behaviors among participants (Guerra et al., 2021; Li et al., 2024). In practice, such interventions can be adapted across various settings, including schools, communities, fitness facilities, and primary healthcare services (Hale et al., 2021; Berti et al., 2023). This flexibility makes psychoeducational models particularly relevant for application across diverse age groups and social contexts.

Another important practical implication concerns the role of professionals in designing and implementing multidisciplinary interventions. Coaches, health educators, counselors, and healthcare practitioners are required to possess foundational knowledge of behavioral psychology in order to deliver health messages effectively and empathetically (Nair & Otaki, 2021; Barlati et al., 2024). Cross-sector collaboration enables the development of physical activity programs that are not only medically safe but also responsive to participants' psychosocial needs (Parodis et al., 2023). Such an approach enhances service quality and increases the likelihood of successful intervention outcomes.

From a program design perspective, the literature emphasizes the importance of structured, progressive, and needs-based intervention models. Effective programs typically combine educational sessions, structured physical activity, reflective practices, and regular evaluation to maintain participant engagement (Galvez-Sanchez & Montoro, 2023; Ouyang et al., 2023). Participatory approaches, in which individuals are actively involved in goal setting and progress monitoring, have been shown to strengthen ownership and long-term commitment to the program (Berti et al., 2023; Li et al., 2024). These findings underscore that intervention success depends not only on activity intensity but also on the quality of program design.

The use of digital technology also presents significant practical implications for the future development of intervention models. Digital platforms facilitate flexible delivery of psychoeducational content, personalized physical activity programs, and real-time monitoring of psychological and physical conditions (Elkefi et al., 2023; Di Lorito et al., 2022). Such technological integration supports continuity of care, particularly for populations with limited access to in-person services (Nair & Otaki, 2021). When implemented strategically, digital tools can enhance the efficiency of interventions without compromising the quality of psychological support.

Future development of intervention models must also account for the specific characteristics of target populations. The literature emphasizes that adolescents, adults, older adults, and individuals with particular health conditions require differentiated psychoeducational approaches within physical activity programs (Hale et al., 2021; Di Lorito

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et al., 2022). Tailoring interventions to age, health status, and social context increases their relevance and effectiveness (Parodis et al., 2023; Galvez-Sanchez & Montoro, 2023). This adaptive approach represents a critical direction for evidence-based intervention development.

From a policy and institutional perspective, these findings provide empirical support for strengthening health promotion and disease prevention initiatives through physical activity–based psychoeducational programs. Integrating such interventions into public health policies can enhance the effectiveness of national and local strategies aimed at promoting active and healthy lifestyles (Guerra et al., 2021; Li et al., 2024). Institutional support through regulation, funding, and workforce development—is essential to ensure the sustainability and scalability of these intervention models (Parodis et al., 2023). This highlights the importance of aligning intervention design with broader health system frameworks.

Future development of psychoeducational intervention models should move toward more holistic and integrative approaches. Effective models are expected to connect physical, psychological, social, and digital dimensions within a coherent intervention framework (Elkefi et al., 2023; Barlati et al., 2024). Strengthening theoretical foundations and empirical evidence will be crucial to ensuring the validity and long-term relevance of these models (Ouyang et al., 2023). Such directions open opportunities for innovative, responsive, and sustainable interventions in the fields of physical activity and public health.

CONCLUSION

This systematic review shows that psychoeducational intervention models integrated into physical activity programs contribute significantly to improving physical and psychological health outcomes in various populations. Interventions that combine psychological education, motivation enhancement, self-efficacy development, and structured physical activity have been shown to promote more sustainable behavioral change than approaches that focus solely on physical aspects. Cross-study findings confirm that the success of interventions is greatly influenced by program design quality, participant engagement, and the suitability of the approach to individual characteristics and social contexts.

Future intervention model development should emphasize holistic, adaptive, and evidence-based approaches, including the use of digital technology to expand program reach and effectiveness. The integration of multidisciplinary collaboration and institutional support is a critical factor in ensuring sustainable implementation in various sports health and public health settings. Thus, physical activity-based psychoeducational interventions have strategic potential as a relevant promotive and preventive approach in addressing current global health challenges.

REFERENCES

Baccassino, F., & Pinnelli, S. (2023, January). Giftedness and gifted education: A systematic literature review. In *Frontiers in Education* (Vol. 7, p. 1073007). Frontiers Media SA. https://doi.org/10.3389/feduc.2022.1073007

Bakır, Ç. N., Abbas, S. O., Sever, E., Özcan Morey, A., Aslan Genç, H., & Mutluer, T. (2023). Use of augmented reality in mental health-related conditions: A systematic review. *Digital health*, *9*, 20552076231203649. https://doi.org/10.1177/20552076231203649

Barlati, S., Nibbio, G., & Vita, A. (2024). Evidence-based psychosocial interventions in schizophrenia: a critical review. *Current Opinion in Psychiatry*, *37*(3), 131-139. https://doi.org/10.1097/YCO.0000000000000925

Berti, S., Grazia, V., & Molinari, L. (2023). Active student participation in whole-school interventions in secondary school. A systematic literature review. *Educational Psychology Review*, *35*(2), 52. https://doi.org/10.1007/s10648-023-09773-x

Bokolo, N. P., Van Niekerk, R. L., Mathews, V., & Leach, L. (2023). A Systematic Review Protocol for the Effectiveness of Psycho-Educational Intervention Programmes in Addressing the Psychological Risk Factors Associated with Non-Communicable Diseases among

ISSN 0216-4493 (print), ISSN 2597-6109 (online)

Adolescents. *International Journal of Environmental Research and Public Health*, *20*(15), 6467. https://doi.org/10.3390/ijerph20156467.

Cann, R., Sinnema, C., Rodway, J., & Daly, A. J. (2024). What do we know about interventions to improve educator wellbeing? A systematic literature review. *Journal of Educational Change*, *25*(2), 231-270. https://doi.org/10.1007/s10833-023-09490-w.

Di Lorito, C., Bosco, A., Rai, H., Craven, M., McNally, D., Todd, C., ... & Harwood, R. H. (2022). A systematic literature review and meta-analysis on digital health interventions for people living with dementia and Mild Cognitive Impairment. *International journal of geriatric psychiatry*, *37*(6). https://doi.org/10.1002/gps.5730.

Elkefi, S., Trapani, D., & Ryan, S. (2023). The role of digital health in supporting cancer patients' mental health and psychological well-being for a better quality of life: A systematic literature review. *International Journal of Medical Informatics*, *176*, 105065. https://doi.org/10.1016/j.ijmedinf.2023.105065

Galvez-Sanchez, C. M., & Montoro, C. I. (2023). Psychoeducation for fibromyalgia syndrome: a systematic review of emotional, clinical and functional related-outcomes. *Behavioral Sciences*, *13*(5), 415. https://doi.org/10.3390/bs13050415.

Guerra, P. H., Soares, H. F., Mafra, A. B., Czarnobai, I., Cruz, G. A., Weber, W. V., ... & Ribeiro, E. H. C. (2021). Educational interventions for physical activity among Brazilian adults: systematic review. *Revista de saude publica*, *55*, 110.

Guo, Q., Samsudin, S., Yang, X., Gao, J., Ramlan, M. A., Abdullah, B., & Farizan, N. H. (2023). Relationship between perceived teacher support and student engagement in physical education: A systematic review. *Sustainability*, *15*(7), 6039. https://doi.org/10.3390/su15076039.

Hale, G. E., Colquhoun, L., Lancastle, D., Lewis, N., & Tyson, P. J. (2021). Physical activity interventions for the mental health and well-being of adolescents–a systematic review. *Child and adolescent mental health*, *26*(4), 357-368. https://doi.org/10.1111/camh.12485.

Jagiello, T., Belcher, J., Neelakandan, A., Boyd, K., & Wuthrich, V. M. (2025). Academic stress interventions in high schools: A systematic literature review. *Child Psychiatry & Human Development*, *56*(6), 1836-1869. https://doi.org/10.1007/s10578-024-01667-5.

Li, Z., Li, J., Kong, J., Li, Z., Wang, R., & Jiang, F. (2024). Adolescent mental health interventions: a narrative review of the positive effects of physical activity and implementation strategies. *Frontiers in psychology*, *15*, 1433698. https://doi.org/10.3389/fpsyg.2024.1433698.

Maechling, C., Yrondi, A., & Cambon, A. (2023). Mobile health in the specific management of first-episode psychosis: a systematic literature review. *Frontiers in Psychiatry*, *14*, 1137644. https://doi.org/10.3389/fpsyt.2023.1137644

Muir, R. A., Howard, S. J., & Kervin, L. (2023). Interventions and approaches targeting early self-regulation or executive functioning in preschools: A systematic review. *Educational Psychology Review*, *35*(1), 27. https://doi.org/10.1007/s10648-023-09740-6.

Nair, B., & Otaki, F. (2021). Promoting university students' mental health: A systematic literature review introducing the 4m-model of individual-level interventions. *Frontiers in Public Health*, *9*, 699030. https://doi.org/10.3389/fpubh.2021.699030

Ouyang, R. G., Long, Y., Zhang, J. Q., & Cao, Z. (2023). Interventions for improving self-efficacy in patients after stroke based on self-efficacy-related principles of Bandura's cognition theory: a systematic review and meta-analysis. *Topics in stroke rehabilitation*, *30*(8), 820-832. https://doi.org/10.1080/10749357.2023.2172832.

Papadopoulos, N., Mantilla, A., Bussey, K., Emonson, C., Olive, L., McGillivray, J., ... & Rinehart, N. (2022). Understanding the benefits of brief classroom-based physical activity interventions on primary school-aged children's enjoyment and subjective wellbeing: A systematic review. *Journal of School Health*, *92*(9), 916-932. https://doi.org/10.1111/josh.13196.

Parodis, I., Gomez, A., Tsoi, A., Chow, J. W., Pezzella, D., Girard, C., ... & Boström, C. (2023). Systematic literature review informing the EULAR recommendations for the non-pharmacological management of systemic lupus erythematosus and systemic sclerosis. *RMD open*, *9*(3), e003297.

Rabelo, J. L., Cruz, B. F., Ferreira, J. D. R., de Mattos Viana, B., & Barbosa, I. G. (2021). Psychoeducation in bipolar disorder: A systematic review. *World journal of psychiatry*, *11*(12), 1407. https://doi.org/10.5498/wjp.v11.i12.1407

ISSN 0216-4493 (print), ISSN 2597-6109 (online)

Schiff, N. T., & Supriady, A. (2023). Sports education model (SEM) on students' motivation and physical activity in classroom: A literature review. *Jurnal SPORTIF: Jurnal Penelitian Pembelajaran*, *9*(1), 40-58. https://doi.org/10.29407/js_unpgri.v9i1.19067.

Sella, E., Toffalini, E., Canini, L., & Borella, E. (2023). Non-pharmacological interventions targeting sleep quality in older adults: a systematic review and meta-analysis. *Aging & Mental Health*, *27*(5), 847-861. https://doi.org/10.1080/13607863.2022.2056879.

Setyowibowo, H., Yudiana, W., Hunfeld, J. A., Iskandarsyah, A., Passchier, J., Arzomand, H., ... & Sijbrandij, M. (2022). Psychoeducation for breast cancer: A systematic review and meta-analysis. *The Breast*, *62*, 36-51. https://doi.org/10.1016/j.breast.2022.01.005.

Singleton, A. C., Raeside, R., Hyun, K. K., Partridge, S. R., Di Tanna, G. L., Hafiz, N., ... & Redfern, J. (2022). Electronic health interventions for patients with breast cancer: systematic review and meta-analyses. *Journal of Clinical Oncology*, *40*(20), 2257-2270. https://ascopubs.org/doi/10.1200/JCO.21.01171.

Tossaint-Schoenmakers, R., Versluis, A., Chavannes, N., Talboom-Kamp, E., & Kasteleyn, M. (2021). The challenge of integrating eHealth into health care: systematic literature review of the Donabedian model of structure, process, and outcome. *Journal of medical Internet research*, *23*(5), e27180. https://doi.org/10.2196/27180

Vasilopoulos, F., Jeffrey, H., Wu, Y., & Dumontheil, I. (2023). Multi-level meta-analysis of physical activity interventions during childhood: Effects of physical activity on cognition and academic achievement. *Educational Psychology Review*, *35*(2), 59. https://doi.org/10.1007/s10648-023-09760-2

Vergeld, V., Martin Ginis, K. A., & Jenks, A. D. (2021). Psychological interventions for reducing fear avoidance beliefs among people with chronic back pain. *Rehabilitation psychology*, *66*(4), 386.

Wang, Z., Jiang, B., Wang, X., Li, Z., Wang, D., Xue, H., & Wang, D. (2023). Relationship between physical activity and individual mental health after traumatic events: a systematic review. *European journal of psychotraumatology*, *14*(2), 2205667. https://doi.org/10.1080/20008066.2023.2205667.

Wiegelmann, H., Speller, S., Verhaert, L. M., Schirra-Weirich, L., & Wolf-Ostermann, K. (2021). Psychosocial interventions to support the mental health of informal caregivers of persons living with dementia–a systematic literature review. *BMC geriatrics*, *21*(1), 94. https://doi.org/10.1186/s12877-021-02020-4.

Yu, Y., Xiao, L., Ullah, S., Meyer, C., Wang, J., Pot, A. M., & He, J. J. (2023). The effectiveness of internet-based psychoeducation programs for caregivers of people living with dementia: a systematic review and meta-analysis. *Aging & Mental Health*, *27*(10), 1895-1911. https://doi.org/10.1080/13607863.2023.2190082.

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