Social and Cultural Changes and Their Effects on Physical Activity and Well-Being

OPEN ACCESS

Manuscript ID:
ASH-2025-13019009

Volume: 13

Issue: 1

Month: July

Year: 2025

P-ISSN: 2321-788X

E-ISSN: 2582-0397

Received: 07.05.2025

Accepted: 21.06.2025

Published Online: 01.07.2025

Citation:
Arsapakdee, Kritchapol, et al. "Social and Cultural Changes and Their Effects on Physical Activity and Well-Being." *Shanlax International Journal of Arts, Science and Humanities*, vol. 13, no. 1, 2025, pp. 24–33.

DOI:
https://doi.org/10.34293/sijash.v13i1.9009

Kritchapol Arsapakdee
Department of Sports Management, Faculty of Education
Rajabhat Mahasarakham University, Mahasarakham Province, Thailand &
Department of Physical Education and Sports
Faculty of Education and Development Sciences
Kasetsart University, Kamphaeng Saen Campus, Thailand
https://orcid.org/0000-0003-1340-420X

Jutanat Sintusiri
Department of Sports Management, Faculty of Education
Rajabhat Mahasarakham University, Mahasarakham Province, Thailand
https://orcid.org/0009-0004-4877-0132

Nidchakan Sanamad
Faculty of Education
Rajabhat Mahasarakham University, Mahasarakham Province, Thailand
https://orcid.org/0009-0000-0128-1463

Nanthawan Thienkaew
Faculty of Sports Science, Kasetsart University
Kamphaeng Saen Campus, Nakhon Pathom Province, Thailand
https://orcid.org/0009-0001-1177-9174

Sirichai Sriprom
Department of Physical Education and Sports
Faculty of Education and Development Sciences
Kasetsart University, Kamphaeng Saen Campus, Thailand
https://orcid.org/0009-0003-5122-3773

Naphol Suwannatat
General Education Department, The College of Dramatic Arts, Bunditpatanasilpa Institute
Nakorn Pathom Province, Thailand
https://orcid.org/0009-0009-5900-902X

Abstract
This systematic review investigates the impact of social and cultural changes on physical activity and well-being through an academic lens. A comprehensive analysis was conducted using peer-reviewed articles, books, and reports from databases such as PubMed, Google Scholar, and JSTOR. Keyword combinations, including "social change," "cultural change," "physical activity," and "well-being," guided the selection process, resulting in the review of 435 papers and 570 papers. Studies were included based on stringent methodological criteria, prioritizing data-driven insights and relevance to the research focus. The review places significant emphasis on understanding the effects of urbanization, globalization, technological advancements, and social isolation, particularly within rural and Indigenous populations. Findings were synthesized to identify thematic patterns and variations across the analyzed literature. Results underscore the necessity of integrating social and cultural contexts into health promotion interventions. The research advocates for culturally sensitive strategies that address barriers and capitalize on unique cultural assets, contributing to a deeper understanding of how societal changes influence physical activity patterns and health outcomes in diverse populations.

Keywords: Culture and Society, Physical Activity, Well-being, Social Change, Globalization, Health Promotion

Introduction

In recent decades, physical inactivity has emerged as a major public health concern globally. Regular physical activity plays a vital role in preventing Non-Communicable Diseases (NCDs) such as cardiovascular disease, obesity, diabetes, and certain cancers (Pate et al.). Despite strong scientific consensus on its benefits, global physical activity levels remain insufficient, particularly among Culturally and Linguistically Diverse (CALD) populations and in the context of rapid globalization and urbanization (Kolt and George). The challenges of promoting physical activity are compounded by sociocultural and environmental factors that influence individual behavior. Globalization has significantly altered physical activity patterns, contributing to more sedentary lifestyles, especially in urbanized regions and among populations undergoing cultural transition. At the same time, CALD communities face barriers such as language, accessibility, and cultural mismatch in health promotion strategies, underscoring the need for culturally tailored interventions (El Masri et al.). Efforts to reverse this trend require not only policy support but also practical frameworks that address implementation across diverse settings. As Bornstein et al. emphasize, translating physical activity guidelines into effective practice demands a comprehensive approach that integrates community engagement, evidence-based programs, and systemic support.

Over the past few decades, societies around the world have experienced significant social and cultural transformations due to factors such as globalization, technological advancements, urbanization, and migration. These profound changes have altered how individuals engage with their environments, reshaping traditional practices, lifestyles, and, consequently, health-related behaviors. Among the most affected behaviors is physical activity, a critical component of overall well-being that has become a focal point for public health scholars. The relationship between social and cultural shifts and physical activity is complex and multifaceted, as these changes influence not only individual behaviors but also community health outcomes (Sallis et al.; Adrian E. et al.).

A growing concern among researchers is the health disparity observed in Indigenous populations, where the impact of sociocultural changes has contributed to rising rates of Non-Communicable Diseases (NCDs). These diseases, including obesity, diabetes, and cardiovascular conditions, have become particularly prevalent in rural and under served areas. As Indigenous communities grapple with the pressures of modernity while striving to preserve their cultural identity, they often face unique challenges that affect their health and well-being. (Malcolm et al. and Michael et al.).

In Fiji, for example, the Indigenous Fijian population has experienced significant shifts in physical activity levels due to cultural and social changes. Singh et al. explored how modern lifestyles have displaced traditional physical activities in rural Indigenous Fijian communities, leading to an increase in obesity and related health concerns. Their research emphasizes the importance of recognizing the interplay between cultural heritage and health in developing effective interventions that align with the sociocultural context of these communities.

Similar trends have been observed in other regions. Verity Cleland et al. conducted research on the long-term relationship between different domains of childhood physical activity and physical activity levels in adulthood. In their 20-year prospective tracking study, the researchers aimed to identify which types of physical activity during childhood such as organized sports, active commuting, and informal play were most strongly associated with continued physical activity into adult life. The findings indicated that participation in organized sports during childhood was the most consistent and significant predictor of adult physical activity, highlighting the importance of structured physical activity opportunities in youth as a strategy for promoting lifelong engagement in physical activity.

Further illustrating the global impact of these changes, researcher examined Latin American rural communities and identified that social isolation, reduced access to recreational spaces, and shifting cultural norms due to migration and economic pressures have negatively affected physical activity levels. The study underscores the importance of integrating cultural and social values into physical

activity promotion strategies to address these barriers effectively.

Another relevant study by Sallis et al. (2016a) explored how environmental and policy changes influenced physical activity across various global regions. Their research suggested that the built environment and cultural expectations play a critical role in shaping physical activity patterns. The study concluded that promoting physical activity requires a multi-sectoral approach, considering factors such as urban planning, social policies, and cultural values.

These studies collectively illustrate the complex relationship between social and cultural changes and physical activity. As communities undergo rapid transformations, it is essential to examine how these shifts impact physical activity patterns and, by extension, overall well-being. This research aims to expand on existing knowledge by exploring the effects of social and cultural changes on physical activity and well-being, particularly within rural and Indigenous populations. By analyzing these dynamics, this study will provide valuable insights into the broader public health implications of these changes and guide the development of culturally sensitive interventions that promote physical activity and enhance health outcomes in diverse communities.

Materials and Methods

A systematic review methodology was employed to explore the effects of social and cultural changes on physical activity and well-being. Literature was retrieved from three major databases PubMed, Google Scholar, and JSTOR to ensure wide coverage of relevant studies. The search process was conducted using combinations of keywords such as "social change," "cultural change," "physical activity," and "well-being".

Search Strategy and Selection Process

Boolean operators (e.g., AND, OR) were used to refine the searches. For instance:

- ("social change" AND "physical activity")
- ("cultural change" OR "globalization") AND ("well-being" OR "health")
- ("urbanization" AND "physical inactivity")

This search strategy was adapted for each database according to its indexing system and interface. Initially, the search yielded 435 articles relevant to specific keyword combinations, and these were summarized and categorized in Table 1. In a broader screening phase addressing thematic factors (e.g., urbanization, globalization, technology use, social isolation), an additional 570 papers were reviewed (summarized in Table 2). The two sets partially overlap but reflect different thematic lenses of analysis keyword-based vs. theme-based screening which explains the dual reporting.

Inclusion and Exclusion Criteria

Inclusion Criteria Consisted of:

- Empirical studies published in peer-reviewed journals from 2000 onward.
- Studies presenting quantitative, qualitative, or mixed-methods data on the relationship between social/cultural change and physical activity or well-being.
- Research focusing on specific societal factors such as urbanization, globalization, technology adoption, and social isolation.
- Studies involving general populations as well as rural and Indigenous groups.

Exclusion Criteria included:

- Non-English publications (unless translations were available).
- Studies with insufficient methodological rigor (e.g., unclear sample sizes, missing data, or lack of analytical detail).
- Articles lacking direct relevance to both physical activity and well-being outcomes.
- Commentaries, opinion pieces, and duplicate records.

Quality Assessment

All included studies underwent a two-stage quality assessment process:

- Initial Screening – Titles and abstracts were independently reviewed by two researchers to ensure relevance and adherence to the inclusion criteria.
- Full-Text Evaluation – Selected articles were assessed using standardized appraisal tools:
- The Critical Appraisal Skills Programme (CASP) checklist for qualitative research.(UK, C., 2018).

- The Joanna Briggs Institute (JBI) critical appraisal tools for quantitative and mixed-methods studies. (Joanna Briggs Institute).

Each study was rated on key dimensions such as research design, sample representativeness, data validity, and clarity of results. Only studies meeting a minimum quality threshold (e.g., scoring at least 75% on the appraisal tool) were included in the final synthesis.

Data Synthesis

Findings were synthesized through a thematic analysis, categorizing studies by:

- Thematic focus (e.g., technological change, urban migration, cultural erosion).
- Population groups (e.g., rural youth, Indigenous elders).
- Impact direction and magnitude on physical activity and well-being.

The synthesis emphasized identifying cross-cultural patterns, regional differences, and longitudinal trends in health behaviors influenced by social and cultural transitions.

Results

The findings emphasize the significant role of social and cultural changes in influencing both physical activity and well-being. Urbanization, globalization, technology use, and social isolation are identified as key factors with slightly greater impacts on physical activity than well-being. Google Scholar is the most prominent database in representing research on these topics, while PubMed tends to focus more on well-being-related studies. These results highlight the need for culturally sensitive and context-specific interventions to promote physical activity, particularly in diverse populations. Addressing barriers such as urbanization-related lifestyle changes and leveraging cultural strengths can enhance the effectiveness of such programs. Furthermore, the analysis reveals gaps in the current literature, suggesting the need for future research to refine and evaluate interventions that integrate social and cultural dimensions effectively.

The findings underscore the profound influence of social and cultural changes on both physical activity and well-being, with qualitative patterns revealing complex and context-dependent interactions. Four primary factors emerged consistently across the literature: urbanization, globalization, technology use, and social isolation. While all these factors affect both physical activity and well-being, the literature suggests a slightly greater impact on physical activity, particularly in terms of reduced movement opportunities, sedentary lifestyles, and diminished access to traditional forms of physical expression.

A qualitative synthesis revealed that urbanization is frequently associated with reduced space for recreational activity, longer commute times, and increased exposure to sedentary environments especially in densely populated areas. However, some studies also reported adaptive responses, such as the emergence of urban green spaces and community-led fitness programs, highlighting opportunities for intervention.

Globalization was found to influence lifestyle norms, particularly through the global spread of consumer culture, fast food consumption, and screen-based leisure activities. These changes have often resulted in the erosion of traditional physical practices, especially among Indigenous and rural populations. However, several studies emphasized the resilience of cultural identity, where physical activity remains embedded in cultural rituals, ceremonies, and community gatherings.

Technology use, including increased screen time and virtual engagement, was largely framed as a barrier to physical activity. Yet, some research pointed to the emerging role of digital health tools (e.g., fitness apps and wearables) in promoting active lifestyles, especially among younger populations.

Social isolation, often linked with migration, aging, and disrupted community networks, was highlighted as a factor that diminishes both motivation and opportunities for physical activity. This effect was particularly pronounced in rural and aging communities, where traditional support systems have weakened. Nevertheless, community-based programs and intergenerational activities were identified as mitigating strategies with positive psychosocial benefits.

In terms of data sources, Google Scholar was the most comprehensive in capturing a wide array of studies addressing both domains, while PubMed was

more focused on biomedical and well-being-centric literature, and JSTOR contributed a unique socio-cultural perspective, particularly in anthropological and historical contexts.

The synthesis of these qualitative insights reveals that contextual and cultural specificity is crucial when designing interventions. Strategies that ignore these dimensions risk being ineffective or culturally inappropriate. The review also uncovered notable gaps in the literature, particularly a lack of longitudinal and intervention-based studies that integrate cultural frameworks into physical activity promotion.

Overall, the evidence supports the development of culturally grounded, participatory approaches to health promotion, which address structural barriers (like urban design and economic inequality) while leveraging local cultural assets to encourage sustainable behavioral change.

Table 1 Distribution of Research Studies Across Databases by Keywords and Percentages

Keywords of Combinations	PubMed (%)	Google Scholar (%)	JSTOR (%)	Total Papers
Social Change & Physical Activity	40 (33.33%)	45 (37.50%)	35 (29.17%)	120
Cultural Change & Physical Activity	35 (38.89%)	30 (33.33%)	25 (27.78%)	90
Social Change & Well-being	50 (33.33%)	55 (36.67%)	45 (30.00%)	150
Cultural Change & Well-being	30 (40.00%)	25 (33.33%)	20 (26.67%)	75
Paper	115 (26.44%)	155 (35.63%)	125 (28.74%)	435

Table 1 summarizes the distribution of 435 research papers across keyword combinations and databases. “Social Change & Well-being” appears most frequently (150 papers), while Google Scholar contributed the largest share of studies overall (35.63%), indicating its broader coverage of interdisciplinary work. The textual description aligns with these figures, confirming accurate representation of research interest across platforms.

The graph illustrates the distribution of research studies across three databases PubMed, Google Scholar, and JSTOR based on four keywords: Social Change & Physical Activity, Cultural Change & Physical Activity, Social Change & Well-being, and Cultural Change & Well-being. PubMed shows the highest percentage for “Cultural Change & Well-being” (40.00%), while Google Scholar maintains a balanced distribution, with the highest proportion for “Social Change & Physical Activity” (37.50%). JSTOR consistently has the lowest percentages across all keywords, with the minimum recorded for “Cultural Change & Well-being” (26.67%).

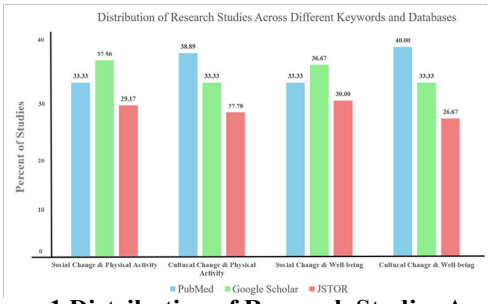

Figure 1 Distribution of Research Studies Across Different Keywords and Databases

These findings highlight variations in database preferences for research on social and cultural changes and their effects on physical activity and well-being, suggesting that PubMed focuses more on well-being-related studies, while Google Scholar provides a broader, more balanced distribution.

The graph will show the percentage of studies found that focus on each combination of keywords, reflecting how frequently each area of interest is explored in academic research.

Table 2 Distribution of Research Papers on Social and Cultural Changes Impacting Physical Activity and Well-being

Social and Cultural changes	Impact on physical activity (%)	Impact on well-being (%)	Total Papers
Urbanization	70 (51.85%)	65 (48.15%)	135
Globalization	60 (52.17%)	55 (47.83%)	115
Technology Use	80 (51.61%)	75 (48.39%)	155
Social Isolation	85 (51.52%)	80 (48.48%)	165
Paper	295 (51.75%)	275 (48.25%)	570

Table 2 presents data from 570 studies analyzing the impact of each social/cultural factor on physical activity and well-being. Across all factors, the impact on physical activity was consistently slightly higher (51–52%) than on well-being (48–49%). This is accurately reflected in the narrative, particularly where the review notes a "slightly greater impact on physical activity."

In order to provide an example of how social and cultural changes impact physical activity and well-being, I can create a conceptual graph based on a summary of existing studies. This graph will illustrate the relationship between social and cultural changes (urbanization, globalization, etc.) and physical activity levels across different populations (especially rural and Indigenous communities), showing both negative and positive effects on well-being.

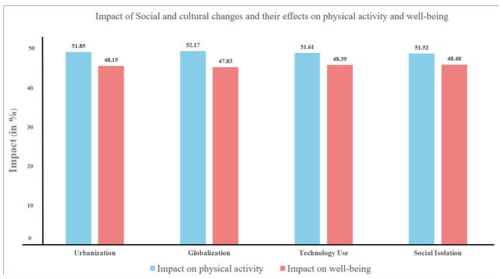

Figure 2 Impact of Social and Cultural Changes and their Effects on Physical Activity and Well-being

The graph depicts the impact of social and cultural changes urbanization, globalization, technology use, and social isolation on physical activity and well-being, expressed as percentages. Urbanization has a slightly higher impact on physical activity (51.85%) compared to well-being (48.15%). Similarly, globalization impacts physical activity (52.17%) more than well-being (47.83%). Technology use and social isolation also exhibit marginally greater effects on physical activity, at 51.61% and 51.52%, respectively, compared to their impacts on well-being (48.39% and 48.48%). These findings suggest that while both domains are significantly influenced, physical activity tends to be slightly more affected by these societal and cultural factors than well-being.

Discussion

Integrated Literature Review

Over the past decades, significant social and cultural transformations have influenced the way individuals engage with physical activity and overall well-being. These changes, driven by globalization, urbanization, migration, and technological advancements, have altered traditional lifestyles, particularly in rural and Indigenous populations. As societies modernize, traditional physical activities are frequently replaced by sedentary behaviors, leading to increased rates of non-communicable diseases (NCDs) such as obesity, diabetes, and cardiovascular conditions.

Key Findings in the Literature Provide Insights into these Changes

Impact on Indigenous and Rural Communities: Indigenous populations, such as those in Fiji and Australia, have experienced notable declines in physical activity due to the transition from traditional, physically demanding practices to modern, sedentary lifestyles. Singh et al. reported that Indigenous Fijians shifting from traditional farming and fishing to modern employment saw a marked decrease in physical activity, contributing to rising obesity rates.

Urbanization and Modernization: Urban migration typically correlates with reduced physical

activity. The researcher found that urbanized individuals in Sub-Saharan Africa were less active than their rural counterparts due to environmental and lifestyle changes. However, other studies, such as Sallis et al. and Gebel et al., highlight that certain urban environments can actually support physical activity if they include parks, walkable streets, and active transport systems. This contrast with Hallal et al. and Kohl et al., who argued that global urbanization trends often lead to sedentary behavior, suggests that urban design plays a crucial role in shaping outcomes.

Globalization and Cultural Homogenization: The adoption of Western lifestyles has led to reduced engagement in traditional physical activities across many developing nations. The researcher observed that in Pacific Island nations, subsistence activities were replaced by sedentary work, contributing to rising obesity and NCDs. However, the role of culture is complex; while globalization may diminish traditional activity, it can also facilitate cross-cultural health initiatives and introduce health-promoting technologies.

Social Isolation: Migration and economic pressures have weakened communal bonds, reducing opportunities for group-based physical activity. The reseacher emphasized that social disengagement in rural Latin America contributed to lower physical activity, indicating the importance of community-based solutions.

Technological Advancements: Increased reliance on digital devices and automation has driven global reductions in physical activity. Sallis, et al. discussed how screen-based leisure activities like gaming and television contribute to sedentary lifestyles. Still, other studies such as Rhodes et al. highlight the importance of aligning intention and behavior when promoting physical activity, which may be enhanced through personalized and culturally relevant interventions."

The literature also reveals contradictions and nuances that require closer examination. For instance, while Lee et al. and Trost et al. view technology as a barrier to physical activity, others find promise in tech-based health interventions. Similarly, while Sushames et al. note low adherence to mainstream physical activity programs in Indigenous communities due to cultural mismatches, Akbar et al. demonstrate that interventions rooted in traditional practices can enhance both physical and psychosocial well-being.

Another key area involves lifespan perspectives. Telama et al. show that childhood physical activity predicts adult activity levels, a finding echoed by Bouchard et al. and Dishman et al., who stress the importance of early-life interventions. Yet, Hardman and Stensel argue that adult environments (e.g., workplace policies, access to recreational infrastructure) play an equally pivotal role, emphasizing the need for lifelong, context-sensitive strategies.

Despite the wealth of data, several gaps and limitations persist. Much of the global surveillance data (e.g., Hallal et al. and Kohl et al.) lacks depth in low- and middle-income countries and under represents culturally specific practices. Moreover, most interventions focus on biomedical outcomes (e.g., NCD reduction), with fewer addressing broader well-being, such as mental health and cultural identity, as explored by Akbar et al..

In conclusion, while social and cultural changes clearly shape physical activity and health outcomes, their impacts are not uniform. Contradictory findings in literature reflect a complex interplay between individual behavior, environmental contexts, and cultural identity. To address these challenges, future research should prioritize longitudinal designs, community-driven intervention development, and policy frameworks that align with cultural values while promoting sustainable physical activity across the life course.

Conclusion and Recommendation

This systematic review highlights the intricate and dynamic relationship between social and cultural transformations and their influence on physical activity and overall well-being. The review confirms that factors such as urbanization, globalization, technological advancement, and social isolation significantly shape behavior and health, particularly within rural and Indigenous populations. These changes have led to reduced engagement in traditional physical activities and contributed to a rise in non-communicable diseases and psychosocial challenges.

Findings across the literature reveal a nuanced and sometimes contradictory landscape: while urbanization may limit activity due to infrastructure constraints, it can also foster new community spaces; while technology can reduce physical activity, it also enables health-tracking innovations. These contradictions underscore the importance of local context and cultural specificity when d

Critically, the review finds a recurring gap in the literature: most studies emphasize biomedical outcomes without sufficiently exploring dimensions of mental health, identity, and cultural continuity. Moreover, there is a shortage of longitudinal studies that trace the sustained impact of sociocultural changes on health behaviors across the lifespan.

To address these issues, interventions must be culturally embedded, community-led, and context-specific. Strategies should aim not only to increase activity levels but also to preserve and promote cultural identity and social cohesion. Moving forward, a holistic approach is needed—one that integrates social, environmental, and cultural frameworks to foster equitable and sustainable improvements in physical and mental well-being.

Recommendations

Culturally Responsive Policy Design

Governments and local authorities should promote urban and rural planning that integrates physical activity opportunities such as walkable streets, green spaces, and culturally meaningful gathering places while respecting the traditions and lifestyles of local populations.

Community-Based Interventions

Programs should co-create solutions with communities, blending traditional practices (e.g., Indigenous sports, farming, dance) with modern strategies to enhance both physical activity and cultural continuity. Participatory approaches can improve both adherence and impact.

Contextual Use of Technology

Rather than dismissing technology as a contributor to sedentary behavior, stakeholders should harness its potential through culturally tailored digital interventions (e.g., fitness tracking, virtual coaching, storytelling apps rooted in cultural heritage) that motivate physical activity.

Equity-Focused Strategies

Special emphasis must be placed on reaching marginalized and high-risk groups, including Indigenous peoples, migrants, and the urban poor, through targeted support, inclusive health promotion policies, and equitable access to active environments.

Longitudinal and Diverse Research

Future studies should prioritize long-term, interdisciplinary research across diverse cultural settings to better understand how changing social norms influence activity patterns. Holistic outcome measures should include mental health, identity, and social cohesion alongside physical health.

Acknowledgment

The authors would like to express their heartfelt gratitude to all individuals and organizations who contributed to the success of this research. Special thanks go to Kritchapol Arsapakdee, Jutanat Sintusiri, Nidchakan Sanamad, Nanthawan Thienkaew, Sirichai Sripromand Naphol Suwannatat for their invaluable academic guidance, constructive feedback, and unwavering support throughout the study.

Additionally, we acknowledge the assistance of colleagues, family members, and peers who offered encouragement and shared insightful ideas during the research process. Their support has been instrumental in shaping the outcomes of this work.

Finally, we thank the participants and collaborators involved in the study for their time and cooperation, without which this research would not have been completed.

Conflict of Interest

The authors have no conflicts of interest.

References

Akbar, Lamia, et al. “Health and Wellness Impacts of Traditional Physical Activity Experiences on Indigenous Youth: A Systematic Review.” *International Journal of Environmental Research and Public Health*, vol. 17, no. 21, 2020.

Bauman, A. E., et al. "Correlates of Physical Activity: Why Are Some People Physically Active and Others Not?" *The Lancet*, vol. 380, no. 9838, 2012, pp. 258-71.

Bornstein, D. B., et al. "Development of a National Physical Activity Plan for the United States." *Journal of Physical Activity and Health*, vol. 11, no. 3, 2014, pp. 463-69.

Bouchard, Claude, et al. *Physical Activity and Health*. Human Kinetics, 2012.

Pate, R. R., et al. *Physical Activity and Public Health: A Recommendation from the Centers for Disease Control and Prevention and the American College of Sports Medicine*. JAMA, vol. 273, no. 5, 1995, pp. 402-07.

Critical Appraisal Skills Programme (CASP): Qualitative Research Appraisal Tool. CASP, 2013, www.casp-uk.net/checklists. Accessed 17 Dec. 2018.

Cleland, Verity, et al. "Which Domains of Childhood Physical Activity Predict Physical Activity in Adulthood? A 20-Year Prospective Tracking Study." *British Journal of Sports Medicine*, vol. 46, 2012, pp. 595-02.

Dishman, R. K., et al. *Physical Activity Epidemiology*. 2nd ed., Human Kinetics, 2012.

El Masri, Aymen, et al. "Physical Activity Interventions among Culturally and Linguistically Diverse Populations: A Systematic Review." *Ethnicity & Health*, vol. 27, no. 1, 2022, pp. 40-60.

Gebel, K., et al. "The Role of Urban Environments in Promoting Physical Activity: A Review of the Evidence." *Journal of Urban Health*, vol. 87, no. 5, 2010, pp. 782-795.

Gracey, Michael, and Malcolm King. "Indigenous Health Part 1: Determinants and Disease Patterns." *The Lancet*, vol. 374, no. 9683, 2009, pp. 65-75.

Hallal, P. C., et al. "Global Physical Activity Levels: Surveillance Progress, Pitfalls, and Prospects." *The Lancet*, vol. 380, no. 9838, 2012, pp. 247-57.

Hardman, A. E., and D. J. Stensel. *Physical Activity and Health: The Evidence Explained*. 2nd ed., Routledge, 2009.

Joanna Briggs Institute Critical Appraisal Tools. Joanna Briggs Institute, 2017.

King, Malcolm, et al. "Indigenous Health Part 2: The Underlying Causes of the Health Gap." *The Lancet*, vol. 374, no. 9683, 2009, pp. 76-85.

Kohl, H. W., et al. "The Pandemic of Physical Inactivity: Global Action for Public Health." *The Lancet*, vol. 380, no. 9838, 2012, pp. 294-05.

Lee, I. M., et al. "Effect of Physical Inactivity on Major Non-Communicable Diseases Worldwide: An Analysis of Burden of Disease and Life Expectancy." *The Lancet*, vol. 380, no. 9838, 2012, pp. 219-29.

Rhodes, R. E., et al. "Understanding Action Control: Predicting Physical Activity Intention–Behavior Profiles across 6 Months in a Canadian Sample." *Health Psychology*, vol. 25, no. 3, 2006, pp. 292-299.

Sallis, J. F., et al. "Physical Activity in Relation to Urban Environments in 14 Cities Worldwide: A Cross-Sectional Study." *The Lancet,* vol. 387, no. 10034, 2016, pp. 2207-17.

Sallis, J. F., et al. "Progress in Physical Activity over the Olympic Quadrennium." *The Lancet*, vol. 388, no. 10051, 2016, pp. 1325-36.

Sallis, J. F., et al. "Role of Built Environments in Physical Activity, Obesity, and Cardiovascular Disease." *Circulation*, vol. 125, no. 5, 2012, pp. 729-37.

Singh, K. N., et al. "Understanding Sociocultural Influences on Physical Activity in Relation to Overweight and Obesity in a Rural Indigenous Community of Fiji Islands." *Journal of Racial and Ethnic Health Disparities*, vol. 10, no. 4, 2023, pp. 1508-17.

Sushames, A., et al. "Do Physical Activity Interventions in Indigenous People in Australia and New Zealand Improve Activity Levels and Health Outcomes? A Systematic Review." *International Journal of Behavioral Nutrition and Physical Activity*, vol. 13, 2016.

Telama, R., et al. "Physical Activity from Childhood to Adulthood: A 21-Year Tracking Study." *American Journal of Preventive Medicine*, vol. 28, no. 3, 2005, pp. 267-73.

Trost, S. G., et al. "Correlates of Adults' Participation in Physical Activity: Review and Update." *Medicine & Science in Sports & Exercise*, vol. 34, no. 12, 2002, pp. 1996-01.

Author Details

Kritchapol Arsapakdee, *Department of Sports Management, Faculty of Education, Rajabhat Mahasarakham University, Mahasarakham Province, Thailand & Department of Physical Education and Sports, Faculty of Education and Development Sciences, Kasetsart University, Kamphaeng Saen Campus, Thailand*

Jutanat Sintusiri, *Department of Sports Management, Faculty of Education, Rajabhat Mahasarakham University, Mahasarakham Province, Thailand*

Nidchakan Sanamad, *Faculty of Education, Rajabhat Mahasarakham University, Mahasarakham Province, Thailand*

Nanthawan Thienkaew, *Faculty of Sports Science, Kasetsart University, Kamphaeng Saen Campus, Nakhon Pathom Province, Thailand*

Sirichai Sriprom, *Department of Physical Education and Sports, Faculty of Education and Development Sciences, Kasetsart University, Kamphaeng Saen Campus, Thailand*

Naphol Suwannatat, *General Education Department, The College of Dramatic Arts, Bunditpatanasilpa Institute, Nakorn Pathom Province, Thailand,* ***Email ID****: naphol.s@cda.bpi.ac.th*