

Minority Populations' Access to Alternative Forms of Physical Activity: A Systematic Literature Review (SLR)

Kadi Ali, Anagnostou Garyfallos

Frederick University, Limassol, Cyprus

Email: st030403@stud.frederick.ac.cy, pre.ag@frederick.ac.cy

How to cite this paper: Ali, K., & Garyfallos, A. (2026). Minority Populations' Access to Alternative Forms of Physical Activity: A Systematic Literature Review (SLR). *Advances in Physical Education*, 16, 33-51. <https://doi.org/10.4236/ape.2026.163003>

Received: January 13, 2026

Accepted: June 26, 2026

Published: June 29, 2026

Copyright © 2026 by author(s) and Scientific Research Publishing Inc.

This work is licensed under the Creative Commons Attribution International License (CC BY 4.0).

<http://creativecommons.org/licenses/by/4.0/>



Open Access

Abstract

This study aims to systematically synthesize the primary literature on barriers, facilitators and participation patterns among minority and immigrant populations in physical activity, with particular attention to alternative forms of physical activity. Particular emphasis is placed on the structural dimension of access and the role that different contexts and ways of organizing physical activity play in shaping inequalities of participation. **Methodology:** A Systematic Literature Review was conducted in accordance with the PRISMA 2020 guidelines. The search was conducted in international scientific databases and included exclusively primary, open-access studies of quantitative, qualitative or mixed methodology. Nine studies that met the pre-specified inclusion criteria and focused on minority or immigrant populations were included in the final sample. **Results:** Thematic synthesis of findings revealed that participation in physical activity is influenced by multi-level barriers, including practical constraints such as time and cost, sociocultural factors such as language, cultural perceptions and structural characteristics of the exercise settings themselves. Social support, flexibility and perceived benefits for physical and mental health were identified as key facilitating factors. At the same time, organised forms of physical activity appear to be associated with increased structural exclusion, compared to commercial or self-organised activities. **Conclusions:** The findings suggest that the field remains under-researched, with a limited number of primary studies, insufficient geographical coverage and a limited focus on alternative or non-formal forms of physical activity. Further empirical, multi-level and culturally sensitive research approaches are needed to understand and address inequalities in access to physical activity.

Keywords

Systematic Review, Physical Activity, Minority Populations, Migrants,

1. Introduction

Physical activity is one of the most important modifiable factors for promoting physical and mental health, with extensive documentation of its contribution to reducing mortality and morbidity from chronic non-communicable diseases, as well as improving mental well-being and quality of life (World Health Organization, 2020). Despite international recognition of these benefits, physical activity levels remain inadequate across a large portion of the global population, with inequalities in participation constituting a persistent public health challenge (Guthold et al., 2018; World Health Organization, 2024).

The literature demonstrates that low physical activity participation is not evenly distributed, but is influenced by social determinants of health, such as income, educational attainment, gender, ethnicity and migration background (Bauman et al., 2012; Sawyer et al., 2024). In particular, minority and socially vulnerable populations, including ethnic and religious minorities, migrants, refugees and people of low socioeconomic status, systematically exhibit lower levels of physical activity compared to the general population, which contributes to the perpetuation of health and social inequalities (Salvy et al., 2012; World Health Organization, 2018).

These inequalities are not solely attributable to individual attitudes or motivations, but are linked to a complex network of structural, socioeconomic, cultural and institutional factors. Among the main barriers that have emerged are the high cost of participating in organized activities, the lack of accessible and safe exercise spaces, time constraints due to work and family obligations, as well as cultural and linguistic incompatibilities that make it difficult to be informed and to join available physical activity programs (Wolch et al., 2014; Sawyer et al., 2024; Batalha et al., 2025). In this context, in recent years there has been increasing research interest in the so-called alternative forms of physical activity, which are differentiated from traditional, institutionalized and competitive sports. In addition to the documented benefits of physical activity, these forms are often characterized by greater flexibility, lower participation requirements, and the ability to adapt to different social and cultural contexts, which makes them potentially more accessible to populations excluded from mainstream sport structures (Bailey et al., 2009). In this review, the term “alternative forms of physical activity” is used not with a descriptive or aesthetic content, but as a functional analytical category. It refers to forms and contexts of physical activity that deviate from traditional, institutionalized and competitive sports, mainly in terms of the way they are organized, the level of institutional standardization and the conditions of access. In this light, the term “alternative” does not refer exclusively to specific types of activity, but to the way in which they are organized and experi-

enced by participants, especially in relation to issues of access and social inclusion.

Despite the growing interest, the literature examining the access of minority populations to alternative forms of physical activity remains fragmented. The available studies vary significantly in terms of definitions, population characteristics, methodological approaches and the outcomes examined, while there is limited geographical coverage, with an emphasis mainly on Northern Europe and North America.

The lack of systematic reviews that comprehensively examine the role of alternative forms of physical activity as mechanisms for improving access and reducing inequalities necessitates a methodical and synthetic approach to the field. In this light, the present study aims to conduct a Systematic Review of the Literature on the access of minority populations to alternative forms of physical activity. Following the PRISMA guidelines, the review seeks to map the available research data, highlight the main barriers and facilitators of participation, as well as identify the main theoretical, methodological and geographical gaps in the literature, contributing to the theoretical understanding of the field and the design of evidence-based policy and practical interventions.

2. Theoretical Framework

This systematic review interprets the findings of the literature through a combined theoretical framework that draws from different approaches in public health and social sciences. The choice of this approach reflects the need to understand physical activity not exclusively as an individual behavior, but as a socially, culturally and institutionally mediated practice. In this context, access to and participation in physical activity are examined as a result of the interaction of multiple factors operating at different levels of social life.

First, the concept of Social Determinants of Health provides a basic theoretical framework for understanding inequalities in physical activity. According to this approach, the possibilities of participating in health-promoting behaviors, such as physical activity, are significantly influenced by broader social, economic and institutional conditions (World Health Organization, 2010; Marmot et al., 2008). Factors such as income, educational level, migration experience, working conditions, and access to safe and appropriate exercise facilities can shape unequal opportunities for participation. In this context, the lower participation of minority populations in physical activity cannot be explained solely through individual choices or motivations, but must be examined in relation to unequal structural conditions of access to resources and opportunities.

At the same time, this review draws on the Social Ecological Model, which proposes a multi-level approach to understanding health behaviors. According to this model, participation in physical activity is influenced by factors operating at different levels, such as the individual level (e.g., attitudes, motivation, health), the

interpersonal level (e.g., social support), the community level (e.g., neighborhood characteristics, available exercise spaces) and the institutional or political level (e.g. public health policies, organizational structures of sport) (McLeroy et al., 1988; Sallis et al., 2015). This approach allows for the understanding of physical activity as a phenomenon that is shaped through the interaction of individual choices and broader social structures. In addition, a cultural-contextual approach is adopted, according to which physical activity practices are not neutral or universal, but acquire different meanings and forms depending on the social and cultural contexts in which they develop. Cultural perceptions of the body, exercise, leisure time, and forms of social participation can substantially influence both motivation and opportunities to participate in physical activity (Rio & Saligan, 2023). For minority and immigrant populations, cultural differences may influence preferences for specific forms of exercise, as well as the sense of inclusion or exclusion in institutionalized physical activity contexts.

Finally, this review takes into account the theoretical approach of intersectionality, which highlights that different social identities and forms of social status can interact and create complex forms of inequality. According to this approach, individuals do not experience social inequalities through a single dimension, but through the combined effect of multiple characteristics, such as ethnicity, migration experience, gender, age or disability (Crenshaw, 1989; Bowleg, 2012). In the context of physical activity, intersectionality allows for an understanding of how multiple forms of social exclusion can combine and reinforce barriers to participation.

The combined use of the above theoretical approaches allows for the interpretation of physical activity as a socially organized practice, which is influenced by cultural, social and institutional factors. Through this multi-level theoretical perspective, the present systematic review attempts to highlight the way in which different organizational frameworks of physical activity can either limit or enhance the access of minority populations to physical activity.

3. Research Question and SPIDER Framework

To clearly define the research question, the present systematic review was based on the SPIDER framework (Sample, Phenomenon of Interest, Design, Evaluation, Research type), which is particularly recommended for reviews that include qualitative or mixed methodological approaches (Cooke et al., 2012). In contrast to the PICO framework, which is mainly used in interventional health studies, SPIDER is considered more suitable for social and behavioral research that examines experiences, perceptions and social processes.

In the context of this review, the SPIDER elements were defined as follows:

Sample (S): minority populations, including migrants, refugees and ethnic minorities.

Phenomenon of Interest (PI): access to and participation in physical activity.

Design (D): qualitative, quantitative and mixed empirical studies.

Evaluation (E): barriers, facilitators and forms of structural exclusion to participation.

Research type (R): primary empirical studies.

Based on the above, the research question of this systematic review is formulated as follows:

What barriers and facilitators affect the access and participation of minority and migrant populations in alternative forms of physical activity?

4. Methodology

4.1. Study Design and Methodological Framework

This study adopts the design of a Systematic Literature Review, with the aim of systematically and transparently synthesizing scientific knowledge regarding minority populations' access to alternative forms of physical activity. The choice of this particular methodology was deemed appropriate, as this particular research field is characterized by heterogeneity in terms of study populations, forms of physical activity and methodological approaches, which makes it difficult to draw comparable and generalizable conclusions without a systematic synthesis of existing knowledge (Petticrew & Roberts, 2006).

The methodological process of the review was designed and implemented in accordance with the PRISMA 2020 guidelines (Preferred Reporting Items for Systematic Reviews and Meta-Analyses), which are the most widely used and recognized reference framework for conducting systematic reviews in the health sciences and social sciences (Page et al., 2021). The PRISMA framework was chosen not only for reasons of formal compliance, but mainly because it enhances the transparency of the search, selection and synthesis process of studies, reducing the risk of bias and increasing the reproducibility of the results.

This systematic review is not limited to the quantitative assessment of the literature, but adopts a synthetic and interpretive approach, which allows the integration of findings from quantitative, qualitative and mixed studies. This choice is justified by the nature of the research question, as access to physical activity and the experiences of minority populations cannot be adequately captured through quantitative participation indicators alone, but also require an interpretive understanding of social, cultural and institutional factors (Snyder, 2019).

Furthermore, the review adopts a critical and interpretive perspective, focusing not only on “what” has been studied, but also on “how” it has been studied in the international literature. In this way, the systematic review seeks to highlight methodological trends, limitations and research gaps, particularly in relation to the definition of alternative forms of physical activity.

4.2. Data Sources and Search Strategy

The literature search process was designed to systematically and as comprehensively as possible cover the international scientific literature on access to and participation in physical activity by minority and socially vulnerable popula-

tions, with an emphasis on different modes of organization and contexts of exercise. For this purpose, three internationally recognized scientific databases were selected: Scopus, Web of Science Core Collection and PubMed. The selection of these databases was based on their extensive coverage in high-quality journals in the fields of public health, social sciences and physical education, as well as their frequent use in systematic reviews of a relevant subject (Bramer et al., 2017).

The search strategy was developed in a way that combined three main conceptual axes, firstly physical activity, secondly minority or socially vulnerable populations and thirdly organizational contexts and forms of exercise, including both non-formal or alternative forms and more general participation contexts, as long as they are examined in the light of accessibility and social exclusion.

The formulation of the search terms was carried out following a preliminary investigation of the literature, aiming to identify the most frequently used terms and synonyms in relevant studies. For each conceptual axis, multiple terms and combinations of keywords were used, which were connected with Boolean operators (AND/OR), in order to maximize the sensitivity of the search without sacrificing specificity (Bramer et al., 2018). The search was conducted on the titles, abstracts and keywords of the publications, in accordance with the usual practices for conducting systematic reviews.

("physical activity" OR exercise OR sport)

AND

("minority groups" OR "ethnic minorities" OR migrants OR refugees)

AND

("community-based activity" OR "outdoor activities" OR "social inclusion")

The search string was adapted as necessary to meet the indexing requirements of each database.

Indicatively, the search terms included words such as physical activity, exercise, sport, organizational forms, community-based activity, outdoor activities, as well as terms referring to minority and socially vulnerable populations, such as minority groups, ethnic minorities, migrants, refugees, socially disadvantaged populations and social inclusion. The final combinations were adapted to the specificities of each database, in accordance with appropriate practices for conducting systematic reviews (Higgins et al., 2022). The search process was completed in March 2025.

The search was limited to articles published during the period 2015-2025, in order to ensure a focus on contemporary social, cultural and institutional conditions that influence access to physical activity. In addition, a language restriction was applied to articles published in English, a practice that is recognized as common in systematic reviews, although it is considered a potential limitation of the study (Siddaway et al., 2019). After the initial extraction of results from the databases, duplicate records were checked and removed before the study selection process.

Finally, to identify additional relevant studies, a supplementary check of the bibliographic lists of articles that met the inclusion criteria was applied. This practice was deemed necessary, as it has been shown to reveal important studies that are not identified through the initial search in the databases (Greenhalgh & Peacock, 2005).

The application of the above criteria led to a limited number of included studies, which reflects both the rigor of the methodological approach and the limited extent of available primary research in this specific thematic area.

4.3. Inclusion and Exclusion Criteria

The inclusion and exclusion criteria of this systematic review were determined in advance and in direct relation to the research subject and objectives of the study. Their prior formulation is considered crucial for ensuring methodological rigor, limiting selection bias and enhancing the transparency of the review process (Higgins et al., 2022; Page et al., 2021). Finally, the inclusion criteria were formulated taking into account the logic of the SPIDER framework (Sample, Phenomenon of Interest, Design, Evaluation, Research type).

4.4. Inclusion Criteria

Studies that cumulatively met the following criteria were included in the review:

- Study type: Primary quantitative, qualitative or mixed studies. The inclusion of different methodological approaches was deemed appropriate, as it allows for a multifaceted depiction of both the participation patterns and lived experiences of minority populations (Snyder, 2019).
- Population: Studies that focused on minority or socially vulnerable populations, regardless of age, including children, adolescents and adults. These groups included ethnic or religious minorities, immigrants, refugees and other individuals or groups experiencing social exclusion.
- Phenomenon of interest: Studies that examined participation, access or experiences of participation in physical activity in different organizational contexts, including non-formal, self-organized or alternative forms of exercise, as well as more general forms of physical activity, as long as they were analyzed in the light of accessibility and structural inequalities.
- Outcomes: Studies that provided data on barriers or facilitators of access, levels of participation, attitudes towards physical activity, or social and psychosocial outcomes, such as social participation and inclusion.
- Language and type of publication: Articles published in English in peer-reviewed scientific journals.
- Time range: Studies published during the period 2015-2025.

4.5. Exclusion Criteria

Accordingly, studies that met one or more of the following criteria were excluded:

- Research that focused exclusively on traditional, organized or competitive

sports, without reference to alternative or unconventional forms of physical activity.

- Clinical or laboratory exercise interventions with a purely therapeutic or restorative nature, which were not linked to issues of social access or inclusion.
- Articles without full text available or with an insufficient description of the methodology, which did not allow a reliable assessment of the findings.
- Non-scientific publications, such as policy reports, theses, conference proceedings without referees or opinion publications.

The clear delineation of inclusion and exclusion criteria contributed to a coherent and focused selection of studies, ensuring that the final sample substantially responds to the research question of the review and the principles of systematic methodology (Page et al., 2021; Higgins et al., 2022).

4.6. Study Selection Process

Study selection was carried out in successive stages, in accordance with the PRISMA 2020 guidelines (Page et al., 2021). Initially, all search results were pooled and checked for duplicates. Subsequently, the titles and abstracts of the articles were examined for their relevance to the subject of the review.

Articles deemed potentially eligible were subjected to full-text review, where they were checked for compliance with the predefined inclusion criteria, with emphasis on the primary nature of the studies, population characteristics, and clear reference to alternative forms of physical activity. Systematic or other reviews were excluded at this stage.

The screening of titles, abstracts and full-text articles was conducted by the author. All studies were assessed against the predefined inclusion and exclusion criteria. In cases of uncertainty regarding study eligibility, articles were re-examined before a final inclusion decision was made. This procedure was followed to ensure consistency and transparency throughout the review process.

The overall process of searching and selecting studies, as well as the reasons for exclusion at each stage, are presented in the PRISMA flowchart, which follows.

4.7. Data Synthesis

Data were synthesized using thematic synthesis, following the approach proposed by Thomas and Harden (2008). Initially, key findings were extracted from each included study. The extracted data were then coded and grouped into descriptive themes according to recurring patterns and concepts. Subsequently, broader analytical themes were developed by comparing findings across qualitative, quantitative and mixed-methods studies. This process enabled the identification of common barriers, facilitators and patterns of participation in physical activity among minority populations (Figure 1).

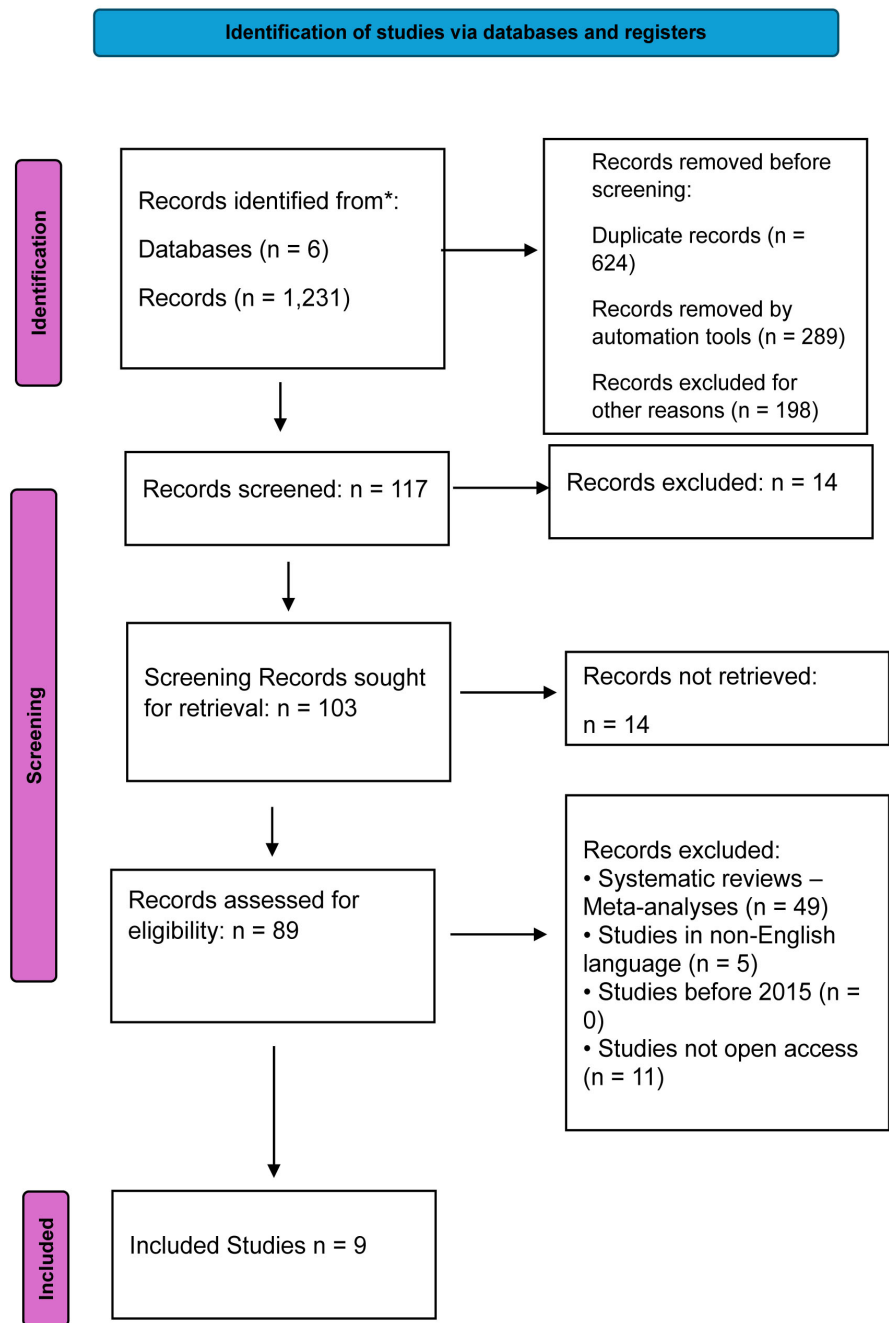


Figure 1. PRISMA 2020 flow diagram of study selection.

5. Study Quality Assessment

The quality of the included studies was assessed using the Mixed Methods Appraisal Tool (MMAT), which is specifically designed for the systematic assessment of qualitative, quantitative and mixed research approaches (Hong et al., 2018). The MMAT tool allows for the application of a single assessment framework to heterogeneous research designs, making it particularly suitable for systematic reviews that include different types of methodology.

The assessment was carried out based on the tool's key criteria, which include

clarity of the research question, appropriateness of the research design, data collection process and consistency between data and interpretation of findings. This process aimed to assess the methodological quality of the studies and identify potential sources of bias.

The results of the evaluation were not used as a criterion for excluding studies, but were used for the interpretation of the findings and the critical evaluation of the available literature (**Table 1**).

Table 1. Quality appraisal of included studies (MMAT).

Study	Clear Research Question	Appropriate Methodology	Adequate Data Collection	Clear Data Analysis	Coherence of Findings	Overall Quality
You et al. (2021)	•	•	•	•	•	High
Deshmukh et al. (2025)	•	•	•	•	•	High
Alamilla et al. (2025)	•	•	•	•	•	High
Schmidt et al. (2025)	•	•	•	•	•	High
Omojor-Oche et al. (2025)		•	•	•	•	Moderate
Southby et al. (2025)		•	•	•		Moderate
Hartley et al. (2017)	•	•	•	•		Moderate
Dukic et al. (2017)		•	•	•	•	Moderate
Spaaij (2015)	•	•	•	•	•	High

6. Results

The quality assessment revealed that five studies satisfied the majority of the MMAT methodological criteria and were classified as high quality. Four studies were rated as moderate quality, mainly due to limitations in sample size and insufficient detail regarding data collection and analytical procedures (**Table 2**).

From the nine primary studies included in this systematic review, it becomes visible that the participation of minority and immigrant populations in physical activity is shaped by a multilevel set of factors, in which individual, social and structural barriers interact dynamically. Despite the differences in research frameworks and methodological approaches, recurring patterns emerge that allow for the formulation of synthetic conclusions.

Table 2. Characteristics of the included studies.

Authors (Year)	Country	Population	Methodology	Type of Physical Activity/Context	Organisational Context Category	Key Findings
You et al. (2021)	Australia	64 older adults (Chinese and Caucasian, ≥60 years)	Qualitative (interviews, thematic analysis)	General physical activity (community-based)	Non-organised/self-organised	Health limitations, cost and language barriers; social support identified as a facilitator
Deshmukh et al. (2025)	United Kingdom	15 adults of South Asian origin	Qualitative (semi-structured interviews)	Exercise and physical activity	Non-organised/mixed	Lack of time and knowledge; social support played a significant facilitating role
Alamilla et al. (2025)	United States	29 adults from minority groups	Mixed methods	Recreational physical activity	Commercial/organised	Cost and time were identified as barriers; access to facilities acted as a facilitator
Schmidt et al. (2025)	Denmark	Migrants and descendants of migrants (~163,000)	Quantitative (survey)	Organised and self-organised activities	Mixed (organised and self-organised)	Lower participation rates in organised forms of physical activity
Omojor-Oche et al. (2025)	United Kingdom	20 children aged 8 - 11 years from ethnic minority backgrounds	Qualitative (interviews)	Organised and free-play activities	Mixed	Cultural and family-related constraints influenced participation
Southby et al. (2025)	United Kingdom	Individuals with visual impairment from minority groups	Qualitative	Sport and physical activity	Organised	The intersection of disability and ethnicity intensified participation barriers
Hartley et al. (2017)	Australia	29 asylum seekers	Qualitative (semi-structured interviews)	General physical activity and recreational exercise	Non-organised	Physical activity functioned as a coping mechanism for stress; barriers included financial hardship, uncertainty regarding legal status and limited access to facilities

Continued

Dukic et al. (2017)	Australia	Asylum seekers participating in a community football team	Qualitative (interviews and ethnographic observation)	Football within a community team	Organised/ community-based	Sport promoted social integration and a sense of belonging, while also reproducing experiences of social exclusion
Spaaij (2015)	Australia	Young refugees	Qualitative (interviews and ethnographic approach)	Community sport	Organised/ community-based	Community sport contributed to the development of social networks and a sense of inclusion, although it did not fully eliminate social inequalities

7. Barriers to Participation

The critical synthesis of the nine primary studies demonstrates that the barriers to participation of minority and immigrant populations in physical activity are not unidimensional, but are constituted through the combined effect of practical, sociocultural and structural factors. Although practical barriers, such as lack of time and financial costs, are systematically reported in different research contexts (Alamilla et al., 2025; Deshmukh et al., 2025), findings show that their intensity varies significantly depending on the social and cultural background of the participants.

In qualitative studies, practical barriers often seem to function as an expression of deeper social inequalities. For example, lack of time is not simply linked to individual choices, but to precarious working conditions, multiple family obligations and limited control over daily time, especially for migrants and people of lower socioeconomic status (Deshmukh et al., 2025). Correspondingly, financial costs do not only concern subscriptions or equipment, but also indirect costs, such as transportation or childcare, which are often overlooked in quantitative assessments (Alamilla et al., 2025).

In addition to practical barriers, studies highlight cultural and linguistic barriers that limit access to existing physical activity structures. Participants from ethnic minorities describe experiences of non-inclusion, feelings of exclusion, and difficulty understanding information about available exercise programs, especially when these are not culturally appropriate (You et al., 2021). These barriers do not simply act as isolated factors, but affect individuals' overall attitudes towards physical activity, reducing its perceived accessibility and acceptability.

Furthermore, a critical synthesis of the findings suggests that institutionalized forms of exercise may reinforce exclusion rather than reduce it. The lower participation of immigrants and immigrant descendants in organized sports structures,

as documented in the large quantitative study by Schmidt et al. (2025) in Denmark, suggests that existing structures do not adequately respond to the needs and experiences of these populations. Qualitative data from other studies support this interpretation, showing that issues such as lack of cultural sensitivity, limited flexibility and the absence of inclusive practices discourage participation.

At the same time, some studies show that even when opportunities to participate in physical activity are provided, access is influenced by wider social and institutional conditions. For example, in a study with asylum seekers in Australia, physical activity is described as an important mechanism for managing stress and enhancing mental well-being, but participation is limited by financial difficulties, uncertainty about legal status and limited access to appropriate facilities (Hartley et al., 2017).

Finally, the cross-cutting dimension of barriers is of particular importance. Studies examining populations with multiple identities, such as ethnicity combined with disability or age, demonstrate that barriers to participation do not simply add up, but interact, creating more complex and reinforced forms of exclusion (Southby et al., 2025; Omojor-Oche et al., 2025). At the same time, research in community sport contexts shows that, although sport can enhance a sense of belonging and social inclusion, experiences of exclusion may persist even within such structures (Dukic et al., 2017).

These findings can be interpreted in the light of theories of social inequalities in health, according to which participation in health promotion practices is not solely the result of individual choices, but is shaped by unequal structural conditions of access to resources, time and social support. The practical barriers reported in the studies, such as limited time and financial costs, reflect deeper forms of structural exclusion, which systematically limit the ability of minority populations to participate in physical activity.

8. Facilitating Factors and the Role of Social Support

A critical synthesis of the findings shows that, although barriers to participation dominate the literature, the included studies highlight certain stable facilitating factors that can function compensatorily, under specific conditions. A central role in many of the studies is played by social support, which is reported as a key mechanism for enhancing participation in physical activity (You et al., 2021; Alamilla et al., 2025; Deshmukh et al., 2025).

Social support is not limited to simple encouragement, but includes companionship during participation, a sense of safety and an enhanced sense of “belonging”. Particularly in minority populations, where physical activity is often experienced as a socially and culturally charged practice, the existence of supportive social networks seems to reduce the feeling of alienation and increase the perceived accessibility of exercise (You et al., 2021). Similar findings are reported in studies examining participants with a migrant or refugee background, where participation in community physical activity activities can function as a space for social

interaction and enhancement of psychosocial well-being (Hartley et al., 2017).

At the same time, studies highlight the importance of perceived benefits for physical and mental health as a key motivation for participation. Participants report that improving physical fitness, mental well-being and daily functioning serve as a key reason for starting or maintaining physical activity, particularly in older age groups (You et al., 2021; Alamilla et al., 2025). However, the synthesis of findings suggests that these motivations are not sufficient on their own when structural and social barriers remain strong.

Of particular interest is the emergence of flexibility and autonomy as facilitating factors, especially in non-formal or self-organized forms of physical activity. The lower participation of minority populations in organized sports structures, combined with the relative smoothing of differences in commercial or self-organized forms of exercise, suggests that the ability to adapt to personal time, cultural needs and individual preferences can function as a critical facilitator of participation (Schmidt et al., 2025).

In addition, some studies highlight the role of community sports initiatives as spaces for enhancing social inclusion and developing social networks. In such contexts, participation in group activities, such as community sports, can contribute to strengthening the sense of “belonging” and creating supportive social relationships (Dukic et al., 2017).

However, a critical reading of the studies shows that facilitators are often viewed from an individual-centered perspective, focusing mainly on the motivation and attitudes of participants, without sufficiently examining the structural conditions that enable or limit their activation. For example, social support and flexibility can only function as meaningful facilitators when accompanied by accessible infrastructure, affordable options, and culturally sensitive physical activity programs (Deshmukh et al., 2025; Alamilla et al., 2025). Finally, the synthesis of findings suggests that facilitators are not evenly distributed, but are influenced by cross-cutting factors, such as age, ethnicity, and disability. The study by Southby et al. (2025) shows that, in people with vision loss from ethnically diverse backgrounds, even factors that are considered to be eminently facilitative, such as social support, can be weakened when not accompanied by appropriate adaptations and inclusive practices. Overall, the findings highlight that social support and flexibility can function as important facilitators of participation only when embedded in broader supportive social and institutional frameworks, which ensure accessible infrastructure, affordable options and culturally sensitive forms of physical activity.

9. Forms of Participation and Structural Exclusion

A large-scale quantitative study from Denmark provides a particular contribution to the synthesis of findings, showing that immigrants and descendants of immigrants participate significantly less in organized forms of physical activity, such as sports clubs, compared to the general population (Schmidt et al., 2025). In contrast, differences are smaller in commercial or self-organized forms of exercise,

suggesting that the flexibility and lower institutional standardization of the latter may work favorably for the participation of minority groups.

Combined with the qualitative findings of other studies, this element reinforces the interpretation that institutionalized sports structures may reproduce forms of structural exclusion, as they often do not sufficiently take into account the cultural, social and practical needs of minority populations (You et al., 2021; Deshmukh et al., 2025). Factors such as a lack of cultural sensitivity, limited flexibility in terms of time and mode of participation, as well as the informal social norms governing sports clubs seem to act as deterrents for groups that do not identify with the dominant participation model.

The synthesis of the findings suggests that inequalities in physical activity participation do not stem exclusively from individual choices or motivations, but are closely linked to the way the exercise structures themselves are organized and operated, highlighting the importance of the structural dimension in the analysis of access to physical activity.

The differentiation of participation patterns between organized and non-formal forms of physical activity reinforces the view of exercise as a socially and institutionally organized practice. The findings indicate that dominant sport structures may incorporate informal exclusionary mechanisms that limit the participation of minority populations even when there are no explicit restrictions or direct discrimination.

10. Conclusion

The present systematic review, which was based on the synthesis of nine primary studies, highlighted that the access and participation of minority and immigrant populations in physical activity is shaped by a complex and multi-level network of factors, in which practical, socio-cultural and structural elements interact. Although physical activity is widely recognized as a key factor in promoting health, findings demonstrate that opportunities for participation are not distributed equally, especially for populations that deviate from the dominant social and cultural model.

The synthesis of primary studies shows that barriers to participation are not limited to the individual level, but are closely linked to broader social inequalities and the way physical activity structures themselves are organized. Factors such as lack of time and financial costs gain particular weight when combined with cultural incompatibilities, language barriers and a sense of non-inclusion in institutionalized exercise contexts. The emergence of these multi-level barriers highlights the need to overcome individual-centered interpretations of low participation in physical activity.

At the same time, the review demonstrated that facilitating factors of participation, such as social support, flexibility and perceived benefits for physical and mental health, can only function reinforcingly when supported by appropriate structural and institutional conditions. The findings suggest that non-formal, commercial or

self-organized forms of physical activity may offer greater accessibility to minority populations compared to traditional organized structures, which often reproduce forms of structural exclusion.

Beyond the synthetic depiction of empirical findings, the present review contributes theoretically to the international literature, highlighting physical activity not as a neutral individual practice, but as a socially and institutionally mediated field. By analyzing different organizational contexts of exercise, the study shifts the discussion from individual interpretations of low participation to a structural and sociologically informed understanding of inequalities in physical activity.

The relatively limited number of primary studies included in the review does not reflect a lack of research interest, but rather highlights the structural gap in empirical research in this field. Despite an extensive literature search, few studies cumulatively met the inclusion criteria, suggesting that issues of access to and participation in physical activity by minority populations remain under-researched, particularly when examined in light of organizational contexts and structural inequalities.

The review also highlighted important research gaps, such as the limited geographical coverage of the available studies, the methodological imbalance in favor of small-scale qualitative approaches and the lack of integration of cross-cutting analyses. The absence of data from different social, cultural and institutional contexts limits the generalizability of the findings and makes it difficult to link them to public health policy design.

Overall, the findings of this systematic review support the idea that promoting physical activity in minority populations requires multi-level and culturally sensitive approaches, which will not be limited exclusively to changing individual behaviors, but will take into account the social and institutional conditions that shape the possibilities for participation. Addressing inequalities in physical activity thus emerges as a matter not only of individual behavior, but also of social planning and policy.

Future research should focus on larger-scale primary studies, incorporate interdisciplinary approaches, and systematically examine the role of alternative and non-formal forms of physical activity as potential mechanisms for enhancing access and social inclusion.

Conflicts of Interest

The authors declare no conflicts of interest regarding the publication of this paper.

References

- Alamilla, R. A., Kaushal, N., Bigatti, S. M., & Keith, N. R. (2025). Comparing Barriers and Facilitators to Physical Activity among Underrepresented Minorities: Preliminary Outcomes from a Mixed-Methods Study. *International Journal of Environmental Research and Public Health*, 22, Article No. 234. <https://doi.org/10.3390/ijerph22020234>
- Bailey, R., Armour, K., Kirk, D., Jess, M., Pickup, I., Sandford, R. et al. (2009). The Educational Benefits Claimed for Physical Education and School Sport: An Academic Review.

- Research Papers in Education*, 24, 1-27. <https://doi.org/10.1080/02671520701809817>
- Batalha, A. P. D. B., Marcal, I. R., Main, E., & Ghisi, G. L. d. M. (2025). Barriers to Physical Activity in Women from Ethnic Minority Groups: A Systematic Review. *BMC Women's Health*, 25, Article No. 330. <https://doi.org/10.1186/s12905-025-03877-y>
- Bauman, A. E., Reis, R. S., Sallis, J. F., Wells, J. C., Loos, R. J., & Martin, B. W. (2012). Correlates of Physical Activity: Why Are Some People Physically Active and Others Not? *The Lancet*, 380, 258-271. [https://doi.org/10.1016/s0140-6736\(12\)60735-1](https://doi.org/10.1016/s0140-6736(12)60735-1)
- Bowleg, L. (2012). The Problem with the Phrase *Women and Minorities*: Intersectionality—An Important Theoretical Framework for Public Health. *American Journal of Public Health*, 102, 1267-1273. <https://doi.org/10.2105/ajph.2012.300750>
- Bramer, W. M., De Jonge, G. B., Rethlefsen, M. L., Mast, F., & Kleijnen, J. (2018). A Systematic Approach to Searching: An Efficient and Complete Method to Develop Literature Searches. *Journal of the Medical Library Association*, 106, 531-541. <https://doi.org/10.5195/jmla.2018.283>
- Bramer, W. M., Rethlefsen, M. L., Kleijnen, J., & Franco, O. H. (2017). Optimal Database Combinations for Literature Searches in Systematic Reviews: A Prospective Exploratory Study. *Systematic Reviews*, 6, Article No. 245. <https://doi.org/10.1186/s13643-017-0644-y>
- Cooke, A., Smith, D., & Booth, A. (2012). Beyond PICO: The SPIDER Tool for Qualitative Evidence Synthesis. *Qualitative Health Research*, 22, 1435-1443. <https://doi.org/10.1177/1049732312452938>
- Crenshaw, K. (1989). Demarginalizing the Intersection of Race and Sex: A Black Feminist Critique of Antidiscrimination Doctrine, Feminist Theory and Antiracist Politics. *University of Chicago Legal Forum*, 1989, 139-167.
- Deshmukh, A., Kumar, K., & Quinlan, J. (2025). Exploring Barriers, Motivators and Facilitators for Physical Activity and Exercise in a UK South Asian Community: A Qualitative Study. *BMJ Open*, 15, e097268. <https://doi.org/10.1136/bmjopen-2024-097268>
- Dukic, D., McDonald, B., & Spaaij, R. (2017). Being Able to Play: Experiences of Social Inclusion and Exclusion within a Football Team of People Seeking Asylum. *Social Inclusion*, 5, 101-110. <https://doi.org/10.17645/si.v5i2.892>
- Greenhalgh, T., & Peacock, R. (2005). Effectiveness and Efficiency of Search Methods in Systematic Reviews of Complex Evidence: Audit of Primary Sources. *BMJ*, 331, 1064-1065. <https://doi.org/10.1136/bmj.38636.593461.68>
- Guthold, R., Stevens, G. A., Riley, L. M., & Bull, F. C. (2018). Worldwide Trends in Insufficient Physical Activity from 2001 to 2016: A Pooled Analysis of 358 Population-Based Surveys with 1.9 Million Participants. *The Lancet Global Health*, 6, e1077-e1086. [https://doi.org/10.1016/s2214-109x\(18\)30357-7](https://doi.org/10.1016/s2214-109x(18)30357-7)
- Hartley, L., Fleay, C., & Tye, M. E. (2017). Exploring Physical Activity Engagement and Barriers for Asylum Seekers in Australia Coping with Prolonged Uncertainty and No Right to Work. *Health & Social Care in the Community*, 25, 1190-1198. <https://doi.org/10.1111/hsc.12419>
- Higgins, J. P. T., Thomas, J., Chandler, J., Cumpston, M., Li, T., Page, M. J., & Welch, V. A. (2022). *Cochrane Handbook for Systematic Reviews of Interventions* (2nd ed.). Wiley.
- Hong, Q. N., Fàbregues, S., Bartlett, G., Boardman, F., Cargo, M., Dagenais, P. et al. (2018). The Mixed Methods Appraisal Tool (MMAT) Version 2018 for Information Professionals and Researchers. *Education for Information*, 34, 285-291. <https://doi.org/10.3233/efi-180221>
- Marmot, M., Friel, S., Bell, R., Houweling, T. A., & Taylor, S. (2008). Closing the Gap in a

- Generation: Health Equity through Action on the Social Determinants of Health. *The Lancet*, 372, 1661-1669. [https://doi.org/10.1016/s0140-6736\(08\)61690-6](https://doi.org/10.1016/s0140-6736(08)61690-6)
- McLeroy, K. R., Bibeau, D., Steckler, A., & Glanz, K. (1988). An Ecological Perspective on Health Promotion Programs. *Health Education Quarterly*, 15, 351-377. <https://doi.org/10.1177/109019818801500401>
- Omojor-Oche, J. E. O., Tempest, G. D., Hettinga, F., & McCulloch, N. (2025). A Qualitative Analysis of Perceived Barriers and Motivators to Physical Activity in Children from Ethnic Minority Groups and White British Children. *PLOS ONE*, 20, e0324781. <https://doi.org/10.1371/journal.pone.0324781>
- Page, M. J., McKenzie, J. E., Bossuyt, P. M., Boutron, I., Hoffmann, T. C., Mulrow, C. D. et al. (2021). The PRISMA 2020 Statement: An Updated Guideline for Reporting Systematic Reviews. *BMJ*, 372, n71. <https://doi.org/10.1136/bmj.n71>
- Petticrew, M., & Roberts, H. (2006). *Systematic Reviews in the Social Sciences: A Practical Guide*. Wiley. <https://doi.org/10.1002/9780470754887>
- Rio, C. J., & Saligan, L. N. (2023). Understanding Physical Activity from a Cultural-Contextual Lens. *Frontiers in Public Health*, 11, Article ID: 1223919. <https://doi.org/10.3389/fpubh.2023.1223919>
- Sallis, J. F., Owen, N., & Fisher, E. B. (2015). Ecological Models of Health Behavior. In K. Glanz, B. K. Rimer, & K. Viswanath (Eds.), *Health Behavior: Theory, Research, and Practice* (5th ed., pp. 43-64). Jossey-Bass.
- Salvy, S., de la Haye, K., Bowker, J. C., & Hermans, R. C. J. (2012). Influence of Peers and Friends on Children's and Adolescents' Eating and Activity Behaviors. *Physiology & Behavior*, 106, 369-378. <https://doi.org/10.1016/j.physbeh.2012.03.022>
- Sawyer, A. D. M., van Lenthe, F., Kamphuis, C., Bengoechea, E. G., Luszczynska, A., Terragni, L. et al. (2024). Hypothetical Mechanisms Driving Physical Activity Levels in Ethnic Minority Groups Living in Europe: A Systematically Identified Evidence-Based Conceptual Systems Model. *International Journal of Behavioral Nutrition and Physical Activity*, 21, Article No. 126. <https://doi.org/10.1186/s12966-024-01626-2>
- Schmidt, E. B., Elmoose-Østerlund, K., & Ibsen, B. (2025). A Survey Study of Physical Activity Participation in Different Organisational Forms among Groups of Immigrants and Descendants in Denmark. *BMC Public Health*, 25, Article No. 1314. <https://doi.org/10.1186/s12889-025-21314-5>
- Siddaway, A. P., Wood, A. M., & Hedges, L. V. (2019). How to Do a Systematic Review: A Best Practice Guide for Conducting and Reporting Narrative Reviews, Meta-Analyses, and Meta-Syntheses. *Annual Review of Psychology*, 70, 747-770. <https://doi.org/10.1146/annurev-psych-010418-102803>
- Snyder, H. (2019). Literature Review as a Research Methodology: An Overview and Guidelines. *Journal of Business Research*, 104, 333-339. <https://doi.org/10.1016/j.jbusres.2019.07.039>
- Southby, K., Bidey, T., Horsley, L., Rashid, M., Oluleye, O., Tas, C. et al. (2025). A Qualitative Study of the Barriers to and Factors Enabling Sport Participation for People with Sight Loss from Ethnically Diverse Communities in the UK. *Disabilities*, 5, Article No. 47. <https://doi.org/10.3390/disabilities5020047>
- Spaaij, R. (2015). Refugee Youth, Belonging and Community Sport. *Leisure Studies*, 34, 303-318. <https://doi.org/10.1080/02614367.2014.893006>
- Thomas, J., & Harden, A. (2008). Methods for the Thematic Synthesis of Qualitative Research in Systematic Reviews. *BMC Medical Research Methodology*, 8, Article No. 45. <https://doi.org/10.1186/1471-2288-8-45>

- Wolch, J. R., Byrne, J., & Newell, J. P. (2014). Urban Green Space, Public Health, and Environmental Justice: The Challenge of Making Cities “Just Green Enough”. *Landscape and Urban Planning*, 125, 234-244. <https://doi.org/10.1016/j.landurbplan.2014.01.017>
- World Health Organization (2010). *A Conceptual Framework for Action on the Social Determinants of Health*. World Health Organization.
- World Health Organization (2018). *Global Action Plan on Physical Activity 2018-2030: More Active People for a Healthier World*. WHO. <https://www.who.int/publications/i/item/9789241514187>
- World Health Organization (2020). *WHO Guidelines on Physical Activity and Sedentary Behaviour*. WHO. <https://www.who.int/publications/i/item/9789240015128>
- World Health Organization (2024). *Greece: Country Physical Activity Factsheet 2024*. WHO. <https://cdn.who.int/media/docs/librariesprovider2/country-profiles/physical-activity/2024-country-profiles/physical-activity-2024-gre.pdf>
- You, E., Lautenschlager, N. T., Wan, C. S., Goh, A. M. Y., Curran, E., Chong, T. W. H. et al. (2021). Ethnic Differences in Barriers and Enablers to Physical Activity among Older Adults. *Frontiers in Public Health*, 9, Article ID: 691851. <https://doi.org/10.3389/fpubh.2021.691851>