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## Research Article

### Physical Activity Engagement Across Human Life Cycles: A Scoping Review

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## ABSTRACT

Physical activities bring health benefits essential to an individual's overall well-being. Engagement in physical activities may vary across different ages, gender, and the capability of an individual to participate. Despite the many potential benefits, the uptake of the level of physical activities among individuals is quite low and risk may occur that depends on the environment they are in. To elucidate these benefits and factors of physical activity engagement of individuals, this study aimed to classify all the scope of the evidence that pertains to participation in physical activities. The literature research, conducted in 2022, employed the databases Education Resources Information Center (ERIC), PubMed, ScienceDirect, and the search engine Google Scholar. Twenty-nine studies mentioning the engagement of individuals in physical activities were tagged from 4 databases. Findings equivalent to the article and participants were summarized quantifiably, while information implying the engagement in physical activities was organized using thematic analysis. Results distinguished that level of engagement in physical activities may vary in age, gender, and capabilities. These also identified risks that may occur in too much participation in activities or not even participating. Most importantly, physical activities were beneficial to an individual's physiological, personal, and psychosocial aspects. Understanding the engagement and establishment of community-based activities with the characteristics of inclusivity that will increase the level of engagement and participation of every individual may be functional to increase the promotion of physical activities regardless of their age, gender, and capabilities to perform.

**Keywords:** Benefits, Level of engagement, Physical activity, Risk, Scoping review

## Introduction

In sports, the positive effects are achieved essentially through physical activities that lead

to bringing more health benefits, particularly in psychosocial and personal development. Sports can also lessen the consumption of

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alcohol. However, one may experience some of its disadvantages such as injuries, risk of failure, burnout, and eating disorders. Over the past year, the role of sports in people has become more significant to the improvement of public health. Physical activities and exercises can alleviate or prevent a person's mental health problems. Therefore, sports can attain a higher level if it considers factors such as the role of an individual, the community, and human growth and development (Malm et al., 2019). In global mortality, physical inactivity is the leading cause of the increased risk of death with an estimated 20% to 30% compared with those physically active. Developing sustainable and extensive interventions to increase physical activity (PA) in the community needs to be developed and implemented at different levels to promote positive changes and ameliorate global health into the depletion of cardiovascular diseases (Fletcher et al., 2018). In performing physical activities, being pressured, being assessed, and the lack of support is the reason to make them feel demotivated.

The United Nations Educational Scientific and Cultural Organization (UNESCO) general conference on the twenty-first day of November 1978 in Paris embraced the International Charter of Physical Education and Sport. This Charter states the utilization of physical education and sport as a radical practice for all and one of the most essential elements in the educational system (Dizon & Tolentino, 2022; UNESCO, 1978). The development of physical education and sport at the service of human progress, and urging government competence, non-governmental organizations, educators, families, and individuals themselves to put it into practice were the goal of this charter. Furthermore, the urges for the advancement of research and interchange of corroboration and details about physical education and sport. In addition, it is affirmed that regardless of an individual's tradition and/or practice in physical education and sport, age and he/she is handicapped, it is their fundamental right and freedom as part of the society.

Meanwhile, the perceptions of sport-based gender norms explored (Xu. et al., 2021) in China that men tend to label sports as significantly more masculine than women, and

gender typing in this field is often, especially in identifying the abilities and the amount of value they put in a physical activity that makes gender stereotypes visible. The awareness of gender role beliefs and the wide range of knowledge in school about gender equality provides a clear understanding to reduce the division in participating in physical activities (Xu et al., 2021; Cárcamo et al., 2021). Thus, gender typicality was way more positively significant for girls. From masculinity to femininity, women are more motivated to participate in yoga which satisfies their mind-body integration and stress management. While males are more likely to be motivated to competitive participation (Cagas et al., 2022). On the contrary, both males and females were experiencing weight stigma related to their motivation to exercise, leading them to become overweight and obese (Sattler et al., 2018). Discomfort, discrimination, and internal conflicts have higher rates for women than men, affecting their engagement in physical activities and sports and are associated with their poor mental health (Prati et al., 2019; Walton et al., 2021). While financial difficulty and social media abuse were suggested by meta-regression that are uniquely associated with the symptom in men's mental health (Walton et al., 2021).

Much of the literature on the factors that drive people to do physical activities are intrinsic motivation, extrinsic motivation, and body-related factors. The level of physical activity and sports participation from adolescence to adulthood has declined throughout the years (Thomas et al., 2019; Sylvester et al., 2020). It is proposed that interventions in promoting different characteristics of physical activity (PA) should focus on recreational activities, wherein the students can do it on their own that improve the perceived competence in engaging in different activities after all the existing dissimilarity in sexes (Xu et al., 2021; Cárcamo et al., 2021; Thomas et al., 2019; Sylvester et al., 2020). Contrarily, accepting the value of a healthy physical lifestyle is well-established in the present (Wintle et al., 2022). The engagement of boys and girls was likely different from each other when it came to participation in a sports club, outdoor play, and extracurricular activities, which also received more social

support than girls. Social environment correlates as a prerequisite of a child for physical activity (Button et al., 2020; Reimers et al., 2019). A person's psychological needs, experiences, enjoyment, and autonomous motivation were the intentions of persistently exercising (Mungcal et al., 2021; Rodrigues et al., 2020; Warburton et al., 2020).

Traditional games are pride in one country's culture, and the participation of Indigenous youth cultivates more of its traditional values. It can increase sports participation by fostering cultural pride, fostering interactions with Elders, fostering a connection to the land, establishing character traits, and laying the groundwork for movement (Dubnewick et al., 2018). While, in a multicultural region, the separateness of cultures of workers in Singapore brings togetherness in participating in recreational physical activities and sports that generate a sense of belonging (Aquino et al., 2020) that contradicts the level of physical activity of multi-ethnic young men which have notable disparities in the characteristics of physical activity (PA) among participants from different countries who live in Saudi Arabia (AlTamimi et al., 2022). Meanwhile, social classes are significantly different in participation in organized sports (Andersen & Bakken, 2018), and the level of engagement was particularly identified in youth from higher and lower social classes.

Bullying repeatedly occurs in many places such as dressing rooms, after/during training and while traveling, and camps for athletes (Banjac et al., 2020). These aggressions in sports potentially influence the psychological aspect of an individual, especially in sports that demand contact participation. Particularly in African culture wherein the locals from there, especially girls, experienced hair harassment through physical touch and verbal comments regarding their hair that put pressure on them that it should be straight or non-sweaty (O'Brien-Richardson, 2019). Punishment is also significant to sports participation; the aggression of coaches develops a negative effect on their athletes that creates a gap between their worth as a player, enjoyment, and their relationship and interest in engaging in other aspects of physical activities (Battaglia et al.,

2020). Victims of bullying have reduced enjoyment, self-esteem, isolation from their teammates, and other negative emotions detrimental to sports and academic performance (Jewett et al., 2020). As such, men are usually bullies because of their aggressiveness, yet they're also victims. Nevertheless, people who have been bullied in the past also apply the same negative behavior to others in water sports activities (Vveinhardt et al., 2020).

In the sports environment, according to the study of Clark and Kosciw (2022) that LGBTQIA+ youth were reluctant to participate in any activities related to sports. In addition, from this study, it seems that having a lower likelihood of sports participation was associated with being non-binary and transgender. The discriminatory attitude of people was affecting individuals' self-esteem in participating in sports and physical activities. The persistence of barriers denies them to meaningfully connect to others amidst their differences, their acceptance in society, and as well as the support that will ensue through participation in the activities. The Philippines has also the same situation as other countries facing and this kind of discrimination that others turn into harassing people that are homosexual or individuals who belong to the LGBTQIA+ community (Reloj, 2021; Decangchon, 2019). Many of the lesbian and gay participants who took part in the study of Reloj (2021) receive equal treatment from the faculty and staff members of the school, and it promotes safe spaces for them. However, other students experienced the typical problem that most of them are facing until now such as peer rejection, homophobic remarks, and parental rejection which made most of them skip school and join groups that offered support as their coping mechanism and coming-out process.

Along these lines, a person's disability is not a definition of themselves. It's their right to participate in such matters regardless of their disabilities and to encourage them to engage in meaningful opportunities in physical activities and sports (Leo & Mourton, 2020). In addition, the full participation of a person with disabilities relies on the action plans of the policymakers on what programs they should implement, together with the commitment of the parents to

their child to encourage them to be engaged in any physical activity or sport (Demirci, 2019; Ginis et al., 2021; Wright et al., 2019). Accordingly, 80% of the approximately 1.5 billion individuals living with a physical, mental, sensory, or intellectual handicap reside in low- and middle-income nations (Ginis et al., 2021). According to the research of Demirci (2019), these children and young people with impairments have more restricted schedules, worse fitness levels, and greater levels of obesity than those without disabilities. Simultaneously, despite the benefits of engaging in regular physical activity, it still shows that compared to their peers, children and young people with disabilities are significantly less active (Pierce & Maher, 2020). Likewise, Pierce and Maher (2020) claimed that even though it shows that access to and use of outdoor spaces have a positive impact on physical activity, yet facilities of schools could be barriers to fully performing the activities if it has limited access to the children (Pierce & Maher, 2020; Tolentino et al., 2022).

Subsequently, a scoping review will give an overview of the experiences of the individuals in participating in physical activities that provides a more comprehensive understanding of factors that affect their engagement, because this research design allows a methodology in assessing the eligible evidence (Peterson. et al., 2017) and it enables a broader conceptual extent of literature (Arksey & O'Malley, 2005). A scoping review could also comprehensively identify the factors that may or may not contribute to the implications of involving PA and sports. It also provides an appropriate and timely form of knowledge synthesis that helps to map key concepts specific to physical activity and sport to body image, identify the types and sources of evidence, and define gaps in research (Arksey & O'Malley, 2005). To give a more comprehensive understanding and to provide in-depth coverage of the evidence concerning engagement in physical activities, a scoping review is well-timed. The research question that framed this scoping review was to give breadth availability of literature on physical activity engagement across life cycles.

## Objective of the Study

The study aimed to provide an overview by mapping the evidence that is available in the physical engagement across human life cycles. It examined and explored all available literature in the databases, including the primary objective that sets the search process.

The following statements were the outline in reviewing the literature:

1. Discerned level of engagement among individuals who take part in physical activities.
2. Perceived the benefits of participating in physical activities.
3. Determine the risks that can occur in participating or abstinence from movement activities.

## Methods

The researchers employed a scoping approach to review the published literature and examined the breadth and depth of the existing studies, the area, and the nature of the conducted research. Further, they analyzed, summarized, and promulgated the research findings. A scoping review would give an overview of the physical activity engagement across the life cycles that provides a more comprehensive understanding of factors that occur to the target study participants because this research design allows a methodology for assessing the eligible evidence (Peterson et al., 2017).

### **Stage 1: Identifying the research question**

In the first stage of this review of identifying the research question, this study was guided by the 'PCC' (Population/Participants, Concept, and Context) mnemonic, which was adopted by the researchers from the recommendation of the Joanna Briggs Institute (Peters et al., 2015) by the reviewers who will conduct a scoping study to formulate the review question.

### **Stage 2: Identify the relevant studies**

In collecting all possible articles for the review, the researchers used several databases that were included in the search process. This study ran a search strategy in the following four (4) databases: ERIC, Google Scholar, PubMed, and ScienceDirect which were published on April 30, 2019, to April 30, 2022, to ensure that

all the articles would be collected were updated. After the study ran the searches in each database, the researchers exported all the results to EndNote 20 software, a citation management tool that is free to download which helped to easily manage all the references.

### **Stage 3: Identify the relevant studies**

The researchers recorded all the potential studies in three stages using the PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) Flow Diagram for a scoping review. In the first stage, a pre-screening of the materials was involved by recording the numbers of results from each database and other sources before the scoping review commences its screening. In the second stage, the reviewers scanned the titles and abstracts and kept the records of the studies that mentioned experiences, engagement, sports participation, physical activity, exercise, females, males, gay, lesbians, and other key terms that are relevant in the review question such as weightlifting, aerobic exercise, Zumba, basketball, physical education, queer, transgender, kids, teens, young adults, elders, etc. Lastly, a full-text screening of the studies ensured that the whole study matched the inclusion criteria. Recorded data retained the studies that were relevant and valuable in the review, and non-relevant studies were excluded from the scope.

### **Stage 4: Charting the data**

In charting the essential data, the researchers extracted the evidence from the study and the characteristics of the participants. The researchers reconciled further discussions during the charting data with an agreement on what possible data from the collected studies were eligible to be included in the review and in ensuring the eligibility of the papers, included papers were validated by an expert and additional readings in the full-text screening were performed. The researchers included the qualitative content of all the possible physical activity engagement across life cycles. In extracting the relevant statements, this review adopted an approach from the study of Cagas et al. (2020), which was recommended to them by Noyes et al. (2018). The researchers not only

recorded the results but clipped all data from the abstract, methods, and discussion section that relevant data were cited. This review used a tool that has been used in the study of Cagas et al. (2020), in which all the extracted data were transmuted in the qualitative analysis software called NVivo which helped the researchers to collect, organize, analyze, and visualize the data of the papers that were included in the study.

### **Stage 5: Collating, Summarizing, and Reporting the Results**

The data that were collected that matched the review's inclusion criteria were coded into a table. The researchers summarized the data through descriptive analysis and reported frequency counts. In summarizing the findings on physical activity engagement across life cycles, the researchers followed the thematic synthesis steps indicated in the study of Braun and Clarke (2006). Following the study of Braun and Clarke (2006), the researchers comprehensively screened each line to understand the depth of the study, and by using the latest version of NVivo, every important information relevant to the research questions was coded. To ensure that the meaning and content of the extracted data are feasibly comparable to the original statement of the study, it was inputted semantically by the researchers following the study of Braun and Clarke (2006).

## **Result and Discussion**

### **Retrieval of Potential Records**

The progression of the scoping review screening steps is shown in Figure 1. The search captured 7,526 records that may be relevant were found during the search. This was reduced to 6,617 after 909 duplicates were removed. Out of 6,617 records considered for the title and abstract screening, 6,439 records were excluded, and 178 papers remained to be examined for inclusion. In the screening of one and seventy-eight ( $n = 178$ ) papers, with the exclusion of one and forty-nine ( $n = 149$ ) studies, the scoping review contained 29 articles that were determined to provide pertinent material.

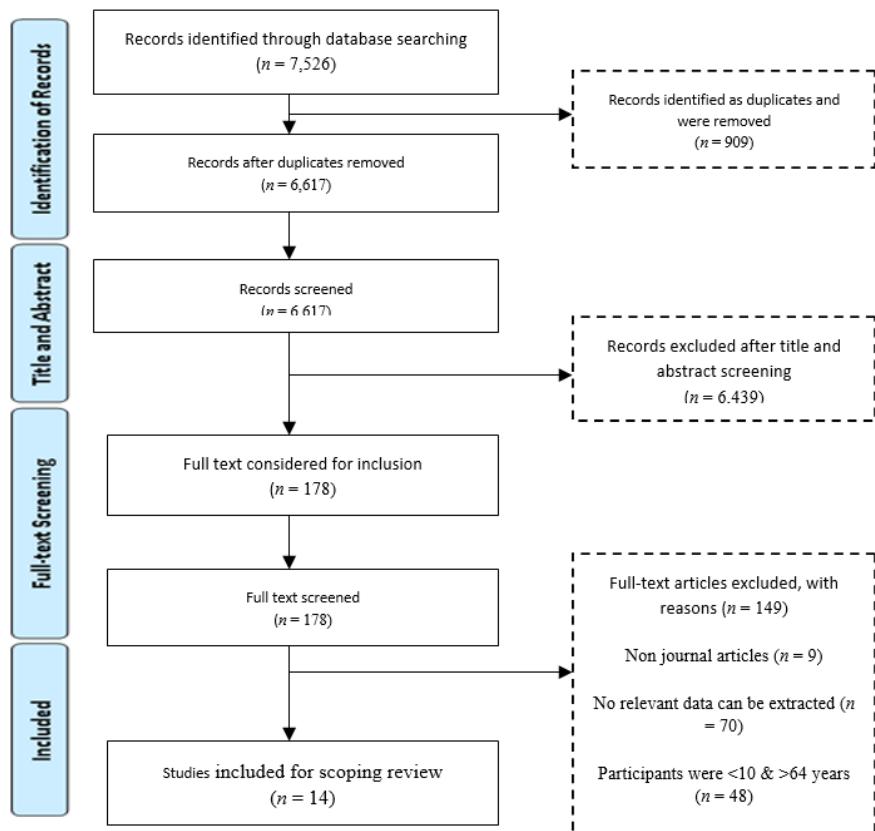


Figure 1. PRISMA-ScR flow diagram of the first search and screening process

The elements that could be seen in engaging oneself in physical activities were identified in this review and subsequent to the research objectives were organized into three major themes: (1) level of engagement, (2) benefits of physical activity and sports, and (3) risk that can occur in the field of physical activity.

**Theme 1: Level of engagement.** This theme pertains to the differences in the level of engagement between sex, age, and capabilities of an individual. These were categorized into three (3) sub-themes: male and female, persons with disabilities, and the dissimilarity from youth to adults' participation:

**Males and females.** The differences between the level of engagement of males and females were reported across 7 studies. It was indicated that females were falling short to meet the guidelines in physical activity, and they were more problematic in experiencing barriers to physical activity, increase in school works was negatively associated with their physical activity (Burns et al., 2021), and a

steep decline in physical activity during adolescence (Lau et al., 2019), lean body mass significantly decreasing in female (Oshita & Myotsuzono, 2021). Females also tend to experience more injury compared to males (Post et al., 2020). Meanwhile, males accrued greater physical activity minutes and strength training days (Burns et al., 2021), and were more physically active (Chen et al., 2021). Contrarily, females' enjoyment in physical activity is positively associated, with motivation to participate if they have ambassadors (Burns et al., 2021), higher adoption of health prevention behaviors (Kim et al., 2020), and youth sports participation could be more important among females (Kwon et al., 2021).

**Persons with disabilities.** Despite the limitations of their capabilities, they participated in an 8 week-community activity (Anaby et al., 2020), although they knowingly faced obstacles in participation in physical activity (Stanish et al., 2019). Most of the studies (4) recorded that they were less physically active and

less willing to participate because of their deficit (Hsu et al., 2021; Kennedy et al., 2019; Qi et al., 2021; Stanish et al., 2019). However, the activities and quality of staff were important that contributed to their health and engagement in physical activities (Anaby et al., 2020; Chow et al., 2020; Hsu et al., 2021).

*Generational contrast.* The majority of youths were found to be unable to meet the physical activity guidelines, and this decreases over time (Burns et al., 2021), frequent participation in play rather than social activities (Hsu et al., 2021), and team sports participation of youths have a positive impact to them (Shepherd et al., 2021). Meanwhile, sports participation peaked in late adolescence but decreased throughout adulthood (Lau et al., 2019; Lee et al., 2022), they also do not reach the recommended level of physical activity (Atakan et al., 2019), due to physiological alterations (Easterlin et al., 2019), limits occurred during adulthood (Hsu et al., 2021), and structural constraints (Kim et al., 2020). However, the study of Hsu et al. (2021) evidently shows that both youth and adults engage in moderate to vigorous intensity aerobic activity.

**Theme 2: Benefits of physical activity.** Physical activity's benefits were categorized into three subthemes: physiological advantages, individual advantages, and psychosocial advantages.

*Physiological benefits.* In the eleven (11) studies, participants showed physiological improvements in engaging in physical activity and sports which were: improvement in body and motor functions, and motor proficiency (Anaby et al., 2020; Hsu et al., 2021; Hsu et al., 2021), physical growth (Field et al., 2019), human body's ability to adapt to physical stress, changes in body composition, and reductions in visceral adiposity tissue (Atakan et al., 2021), higher fitness level (Hsu et al., 2021), and improvements in cardiorespiratory and muscle strength (Hsu et al., 2021). It also helps to contribute positive effects on health (Atakan et al., 2021; Hanifah et al., 2022; Hsu et al., 2021, Qi et al., 2021; Yao et al., 2020), slow decline of muscle mass and strength (Oshita & Myotsuzono, 2021), and lower risks of morbidity and mortality (Huang et al., 2021).

*Personal benefits.* Participation in physical activity and sports contributes to the personal growth of an individual such as improving cognitive functions (Anaby et al., 2020), positive effects on mental health (Bélanger et al., 2019; Easterlin et al., 2019; Field et al., 2019; Hanifah et al., 2022; Shepherd et al., 2021), social esteem (Easterlin et al., 2019), and improves attitudes, emotions, and set as distractions from stressful situations (Hanifah et al., 2022).

*Psychosocial benefits.* Six studies (6) improve psychosocial health (Hsu et al., 2021), quality of life (Anaby et al., 2020), social connectedness (Burns et al., 2021; Shepherd et al., 2021), promote characteristics of resiliency and improve social support (Easterlin et al., 2019), social function (Hsu et al., 2021), and attributable to social nature (Hsu et al., 2021).

**Theme 3: Risk.** This theme covers the factors that can be experienced when a person is extremely engaged in various activities or had a lower level of engagement in physical activity, and was categorized as physical injury, antecedents to injury, and compromised health.

*Physical injury.* Studies where physical injuries evidently show the majority of athletes and physically active individuals where significantly experienced strains (Arbo et al., 2020; Field et al., 2019; Lee et al., 2019; Post et al., 2020), and cause impairment in activities and prolonged pain to individuals (Lee et al., 2019).

*Antecedents to injury.* Six (6) studies identified various factors that lead to experience injury such as; psychosocial stressors (Arbo et al., 2020), training regimens, and loads or volume of activity (Arbo et al., 2020; Field et al., 2019; Shigematsu et al., Post et al., 2020), Contact nature of the activity or sport (Arbo et al., 2020; Field et al., 2019; Shigematsu et al., 2021), sports specialization (Post et al., 2020), Stressful life events (Arbo et al., 2020), and the environmental condition (Tang et al., 2019). Marcaida et al. (2022) further posited the need to explore studies on injuries especially in physical education settings.

*Compromised Health.* It is evidently shown in the included studies that having a low physical activity level or even abstinence from it may compromise health: developing poor mental health (Easterlin et al., 2019; Hsu et al., 2021; Qi et al., 2021), risk in chronic diseases (Hsu et

al., 2021; Stanish et al., 2019), and it increases the mortality risk (Easterline et al., 2019; Hsu et al., 2021; Kim et al., 2020).

## Discussion

Throughout the process of determining the themes, these major themes were congruent with the research questions. First and foremost, studies that carry context that expresses the amount of an individual participating in physical activities were labelled as theme 1 (i.e., level of engagement). Then, the second theme which is the benefits of physical activity was identified through the many studies that discussed that engaging oneself in movement activities would result in a positive development for an individual. Lastly, the risk was classified as theme 3 considering that studies that were included in the review stated that individuals' actions through physical activity could be a menace to their performance and health.

Moreover, studies show patterns that fall in different codes that frequently exhibit themes that through participating in physical activity and sports, benefits in physiological, personal, and psychosocial were the elements that could be developed in an individual. Although it obviously shows that engagement in such activities has positive effects, regardless of age, gender, or capability, it is constantly linked to experiencing negative factors that risk the overall well-being of an individual. In association, injuries, factors that could lead to injury, and having low or non-physical activity could reduce the urge and willingness to participate which will lead to a higher percentage of mortality.

Research trends that provided different outcomes for males and females when it comes to their level of activeness, regardless of their age, were continuously increasing. However, it was evident that males have a higher percentage of achieving physical fitness (Burns et al., 2021; Chen et al., 2021). Although, physical activity and sports participation were evidently beneficial to the health of all individuals (Bélanger et al., 2019; Anaby et al., 2020), findings from different studies that employ programs or interventions that tend to measure the level of physical fitness resulted that it may be influenced by age, gender, medical condition of an individual (Hsu et al., 2021; Chen et al., 2021).

Although this review did not limit the gender of the study participants, there was no study underlying the LGBTQIA+ community that has been grasped by the search. However, children to middle-aged males and females were both highly examined in most of the studies who partake in physical activities by themselves or in interventions, and few studies particularly gathered their data from males or females only (Yager & McLean, 2020; Arbo et al., 2019; Bélanger et al., 2019; Oshita & Myotsuzono, 2021).

This scoping review includes a large number of papers, most of which were quantitative in nature. Many of the studies collectively gathered data in the results from the conducted interviews, surveys, or questionnaires in a particular period.

Promotion of physical activity to all is significantly associated with healthy development and prevention of diseases. Naturally, the impact of engagement in physical activity is important in being able to experience a quality of life (Anaby et al., 2020; Burns et al., 2021). However, the researchers identified differences in the level of engagement that addresses the age, gender, and capability of an individual.

First, male, and female physical activity showed differences when it comes to their level of participation. Numerous studies show that women endure greater difficulties than men and engage in less physical activity. For instance, in some studies, female participants reportedly problematical to encounter barriers (e.g. perceived lack of competence, lack of time, access to facilities, and dislike of highly structured activities), their level of physical activity was continuously declining during adolescence (Lau et al., 2019; Oshita & Myotsuzono, 2021).

Moreover, the researchers found out that participating in physical activities was beneficial to the health of individuals. Although there were limitations for others to fully engage themselves in physical activity (Hsu et al., 2021), many studies show that through participation, improvements in the level of physical activity can be achieved. For instance, engaging oneself in mainstream activities or programs results in an improvement in body function (Anaby et al., 2020), and is essential to physical growth and improvement of maximal fat

oxidation (Atakan et al., 2021). Moreover, the physiological benefits of participating in physical activity was a way to a healthier transition (Yao et al., 2020) that slows down the decrease and improves muscle mass and strength (Hsu et al. 2021) which lowers the risk of mortality (Huang et al., 2021). In addition, personal benefits in this field can influence and develop a person's self-esteem (Easterlin et al., 2019), and playing a part in physical activity and sports are associated with positive cognition, attitudes, and emotion that makes a person feel that they are part of something (Hanifah et al., 2022).

There were negative outcomes when engaging oneself in this field. For example, student-athletes were identified to be experiencing strain (Arbo et al., 2020), and this could cause a temporary impairment from performing activities or would result in pain that could be felt for a longer period (Lee et al., 2019). In addition, the researchers found the antecedents or factors in physical activity and sports that may cause an injury. Moreover, too many loads of activity may risk an individual, as well as having a lower physical activity level may also compromise the health of a person (Hsu et al., 2021)

## Conclusion and Recommendations

This scoping review study illuminated the important information concerning physical activity engagement across life cycles. It further offered a descriptive account of the differences between males and females, persons with disabilities, and ages when it comes to their level of engagement in physical activity and sports. Furthermore, the review showed that physical injury, together with the antecedents to it, and factors that compromise health were the negative outcomes in too much participation, low, or no engagement at all. Most importantly, this study pointed out that physical activity and sport participation was associated with positive outcomes between physiological aspects, personal interest or satisfaction, and psychosocial benefits of individuals from children to old age.

Considering this review, little is known about the engagement of physical activity across life cycles among the people of Asia.

Although the inclusion mostly covered Asian countries, results from the database search together with the screening process, gathered more papers from the United States and Canada. However, findings from several Asian countries that were included in this review discussed the participation of individuals in physical activities, and most of the research findings were on the differences in age, gender, and capabilities in activities. Thus, more research in Asian countries is required to gain a better understanding of the side of cultural engagement, considering that this is the most populous continent, as well as how socioeconomic activities affect an individual's participation in physical activities. It is important to research studies that reflect the diversity of the culture and the engagement in PA based on their socio-economic status.

## Implications

The lack of studies concerning the LGBTQIA+ community represents a gap in the scoping review. Most of the captured articles were only focused on males and females which may not manifest an equal and inclusive result, as it should be in physical activity. Researchers are encouraged to investigate further potential studies that possibly collect and emit data from the study participants who were recognized as members of the said community. This recommendation is especially important now that many researchers consider them interesting participants for their study. Researchers are encouraged to prioritize this population for future physical activity studies. In addition, researchers are invited to explore and have a better understanding of the facilitators and barriers to engagement of Filipino citizens in physical activities, considering the articles that were published during the pandemic using a systematic review of literature as it will extract more narrow information.

Practitioners can use the results of this scoping review to inform the community about how physical activity affects their life, including the differences between everyone participating in it, the benefits that they could get from it, and harmful events that they can anticipate in the future. This scoping review suggests a need for more community-based physical activity

studies, especially with those individuals who are in the lower class. Future studies should be published in physical activity and public health journals to better promote evidence-based recommendations to the specific practitioners who promote and disseminate information about physical activity to their priority populations.

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