

A Bibliometric Examination of Leisure-Time Activities Tailored for Adults with Disabilities

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ABSTRACT

Leisure activity promote the functioning and well-being of adults with disabilities. This study objective was to methodically mapping the latest scientific research findings concerning leisure-time activities specifically designed for adults with disabilities. The study employed bibliometric analysis, a well-regarded method in academic literature known for its ability to thoroughly examine the scientific advancements within a particular subject area. To accomplish this, we gathered scholarly articles published up to December 2022 from the comprehensive Scopus database. Leveraging the robust analytical tool VOSviewer, we conducted a detailed co-citation analysis to identify the most frequently occurring keywords and the countries with the highest research productivity in the expansive field of leisure-time activities for adults with disabilities. The result revealed that the U.S is the most productive country, followed by European countries and Australia. In addition, disability, physical activity, exercise, rehabilitation, and multiple sclerosis are the main research topics of the field. The results of this research contribute to help researchers and provide input for stakeholders to gain a general understanding of the development of the leisure activity programmed for adults with disabilities.

Keywords: *Adults with disabilities, leisure-time, physical activity, bibliometric*



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PENDAHULUAN

Physical inactivity presents a formidable global health challenge, and one demographic group that bears a disproportionate burden is adults with disabilities. According to the 2018 Indonesia Basic Health Research (Risikesdas), approximately 22% of adults in the country live with some form of disability, and a striking 1.58% of them rely entirely on the assistance of others for their daily activities (Apsari & Raharjo, 2021; Jaleha et al., 2023). Beyond Indonesia's borders, the intersection of age, disability, and physical health reveals a concerning trend. Research consistently demonstrates a positive correlation between advancing age and declining physical health, often culminating in limitations on daily activities .

Physical inactivity is an enduring global health crisis with implications far beyond the individual level. The World Health Organization (WHO) has taken note, recognizing the pivotal role of physical exercise in its global disability action plan. This plan is dedicated to enhancing the health, functioning, and overall well-being of individuals with disabilities worldwide. Emphasizing the comprehensive nature of this effort, previous studies recommends physical activity programs that encompass not only improvements in physical health but also advancements in physical functioning, mental well-being, and the overall quality of life for people with disabilities(Dairo et al., 2016; McCausland et al., 2021).

While everyone can benefit from manifesting in their leisure time, but adults with disabilities are less likely to engage in leisure activity than their nondisabled peers (Badia et al., 2011). In terms of physical leisure activity, almost 50% adult with disabilities are not physically active (Hassett et al., 2021), the functional independence, development of additional disease or disability(Schoufour et al., 2013), and reduced quality of life(Voermans et al., 2022). Physical and/or cognitive limitations are the cause of inactive lives. The principal barriers they face in pursuit of leisure activities predominantly revolve around limited access to suitable opportunities.

Leisure activity described as enjoyable activity during spare time, is a facet of everyday living that is associated to optimal ageing outcomes, such as higher quality of life, better physical health and higher cognitive functioning in adults in the general population. Recent studies increase attention to the role of leisure time activity (LTA) as a protective factor for a variety of health outcomes as well as for successful aging (Labbé et al., 2019). Increased research attention seems warranted specifically on in-home leisure activity.

Leisure activity promoting optimal ageing in adulthood. Leisure activity are freely selected, personally motivated behaviours that are rewarding and enjoyable (Zawadzki et al., 2015; Sun, 2021). It also considered as a strong predictor of well-being, satisfies and enhances some basic needs related to safety, health, economic, sensory, and/or stimulation needs (Lubowiecki-Vikuk et al., 2021). Leisure engagement positively affected the person's self-worth, self-esteem, skill development, and satisfaction in life (Chen et al., 2016; J. Kim et al., 2021). However, in many cases the participation in leisure activities for people with disabilities still remains very low compared to people without disabilities (Pagán, 2015). Compared to adult without disabilities, inactivity is more prevalent among adults with any disabilities. Little attention has been directed to what adults with severe disabilities do with their leisure time, especially while at home (Wilson et al., 2006).

People with disabilities encounter some barriers to leisure activities include expenses, insufficient resources, mobility challenges, and attitude in the community (Melbøe & Ytterhus, 2017). Whereas, the importance of participation in leisure activities has been acknowledge by the United Nations through the UN Convention which highlight that people with disabilities should be able to participate in cultural life, recreation, leisure, and sport on the same terms as others. This article assesses the research contribution on the theme of leisure-time activity for adults with disabilities.

More precisely, the study is built on preceding literature and bibliometric tool has been used. The research questions that are the main focus to be answered in this study include: 1) How has the literature of the activity of leisure-time for adults with disabilities developed until 2022? 2) What are the most salient countries? 3) What are the important topics in the literature?.

METODE

Research Design

In this study, bibliometric analysis approach was used. As known as a statistical method to analyse academic literature, this method aims to investigate the interrelationships among journal citations, authors, nations and summarizes the current state of the art of an existing or emerging research topic.

Data Collection

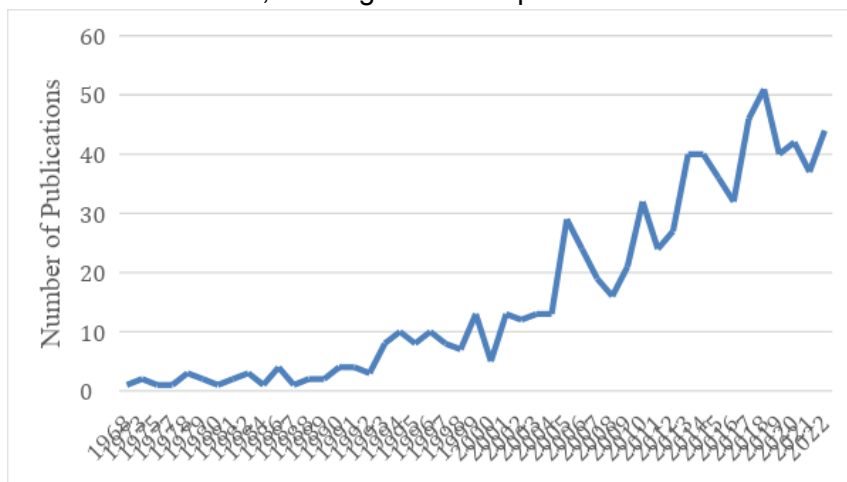
To determine these articles, the concepts used is the field of pedagogical intervention for adults with disabilities. The keywords used to classify the articles published in the Scopus database. The focus of bibliometric analysis is the quantitative assessment of article attributes such as publications, citations, keywords, contributors, and publishers.

Data Analysis

The visual representation and analysis related to keywords were employed with Vosviewer version 1.6.18. We meticulously examined individual documents corresponding to each keyword. Among the 119 keywords under consideration, we focused our attention on the four keywords associated with the highest number of articles within each main title. It offers a versatile toolkit for visualization, encompassing network visualization, overlay, and density visualization. We exclusively utilized network visualization because it enabled us to cluster data, highlighting co-occurrences of words, co-authorship patterns, and the geographical origins of the research. The resulting analysis is presented popularity and similarity of studies within the dataset.

HASIL DAN PEMBAHASAN

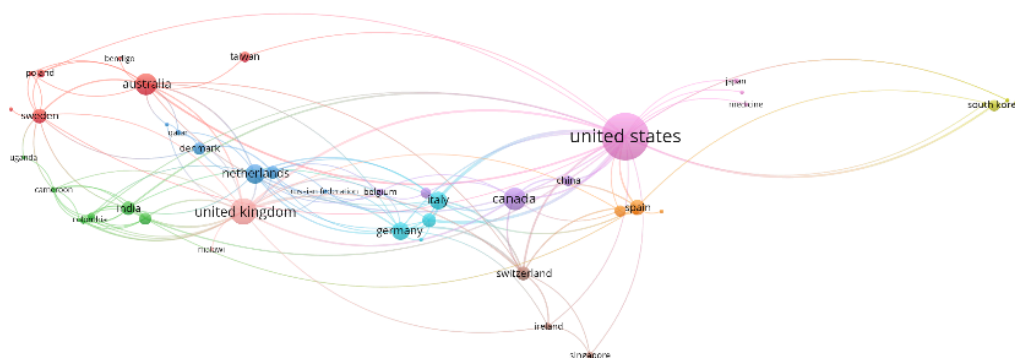
The number of publications addressing leisure-time activities tailored for adults with disabilities, as presented in this section, reveals a substantial volume of research publications. This section initiates by elucidating the trajectory of research publications dedicated to leisure-time activities for individuals with disabilities, providing insights into the answer to our initial research question. Picture 1 graphically illustrates the evolution of these publications over time, offering a visual representation of this crucial trend.



Picture 1 Publications by Year

Picture 1 provides a graphical representation of the annual publication rates spanning from 1968 to 2022, encompassing a total of 757 publications. The graph vividly illustrates the dynamic evolution of research publications in this domain over the years. Notably, there has been an irregular yet discernible increase in the number of publications over time. The highest number of publication output was observed in 2018, with a remarkable 51 articles published in that year. As of the preparation of this document in December 2022, the tally of published works stands at 44, indicating a robust and sustained upward trajectory in research output. This trend underscores the growing scholarly attention of the academic in emerging needs of leisure-time activities for adults with disabilities.

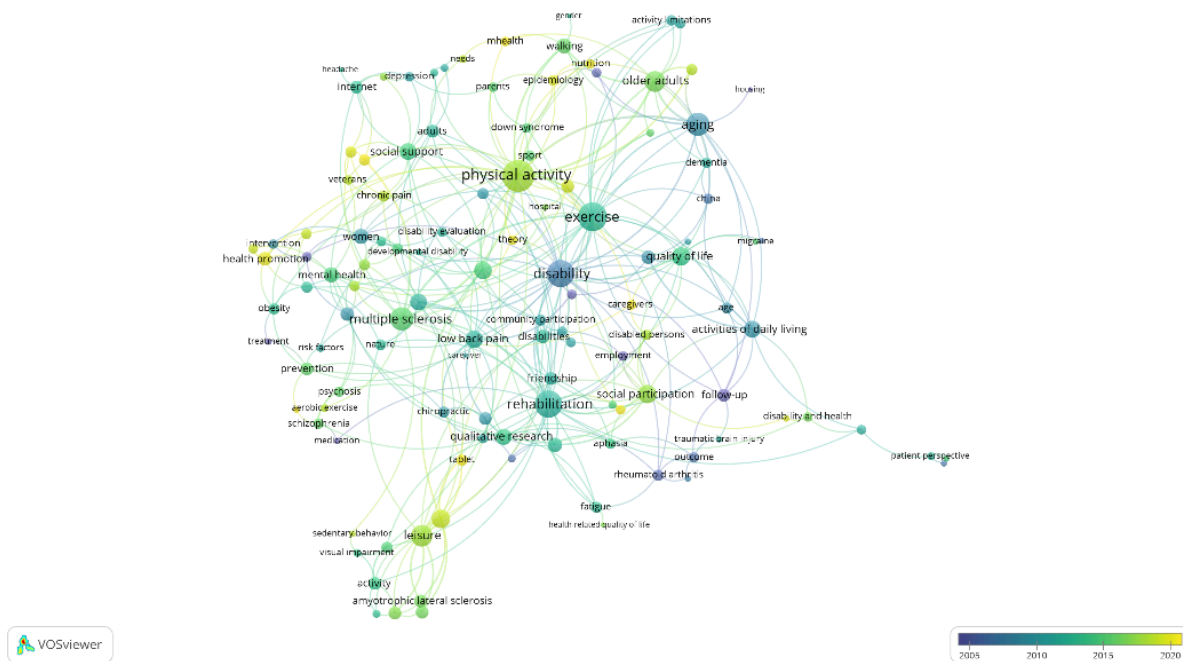
Picture 2 describes country wise analysis of the research work carried out in the area of leisure activities for adults with disabilities. Co-authorship analysis can help to identify the trends and nature of research collaborations in the study area and find out the presence of research groups in terms of collaborations. Picture 2, the co-authorship analysis reveals the existence of ten distinct research clusters, collectively comprising 49 research items. From the picture, it can be realized that the greatest academic contribution is made by the United States. The involvement of developed economic countries still insignificant. More research work on these topics is reported by the continents of Australia, Europe, and North America.



Picture 2 Documents Co-Authored by Countries

The co-occurrences of the keyword were also illustrated through a network visualization. Pic.3 show the keywords co-occurrence network maps in separate time stages. The keyword “disability”, “physical activity”, “exercise”, “rehabilitation”, and multiple sclerosis” appears on the top of the list which highlight the significant deployment of this activity in leisure time for adults with disabilities. Co-occurrence analysis was performed on author keywords that appeared more than twice, that results 412 in total with 351 links and divided into 13 clusters.

participation and employment consider as important activity in filling the leisure-time program for adults with disabilities. Next cluster (pale blue) comprised of 4 items, with focus on the quality of life of people with disabilities. The thirteenth cluster (light yellow) consist of 3 items focused on the rehabilitation theme for adults with disabilities.



Picture 4 Overlay Visualization of co-occurrences based on the keywords

Pic. 4 shows an overlay visualization of VOSviewer resulted from the keyword co-occurrence analysis, thus presenting the changing trends in the research area. The clusters, in this visualization, were created by recording the average year in which the keywords appear. Light green and yellow nodes represented the keywords used in the articles that published recently. Purple and dark green nodes indicated the vice versa. The analysis showed a rising trend in the keyword occurrences, related to the physical activity of the adult with disabilities population.

The findings of our study have shed light on a significant and burgeoning trend in the development of diverse leisure-time activities tailored for adults with disabilities. This trend is unmistakably reflected in the substantial increase in the number of published articles spanning the past five decades. Beyond this quantitative growth, our research has uncovered a broader landscape that encompasses both productive countries within this domain and a robust global network of collaboration dedicated to shaping leisure programs that cater to the distinct needs of adults with disabilities.

Certain categories of disabilities, such as intellectual disabilities, can elevate the risk of morbidity and mortality due to chronic diseases, often exceeding those of the general adult population. Several studies also reported high rates of obesity among this population, especially women and individual with less severe intellectual disability. There are many health-related problems empirically undertake physical activity of adults with disabilities. Whereas, physical activity valued to gained health, enjoyment, social connections, and personal achievement of adults with disabilities (Wilhite et al., 2016). Other leisure activity, such as meeting family and friends is also considered as important factor to combat loneliness, followed by cultural events, and doing sports are significant contributors to reducing level of loneliness (Lubowiecki-Vikuk et al., 2021). The diversity of leisure activities and a visible schedule associated with improved

leisure participation of adults with disability (Keller & Weintraub, 2022; Van Naarden Braun et al., 2006). Such structured programs not only enhance physical health but also facilitate social inclusion and integration into society.

While certain keywords, such as "social participation," "mental health," "caregivers," and "self-management," may have relatively low citation rates, they remain highly relevant and current concerns. Incorporating these keywords into research initiatives holds the potential to offer valuable insights into the design and enhancement of leisure-activity programs tailored to the diverse needs of adults with disabilities. These keywords serve as beacons for addressing critical aspects of well-being and social integration. The evolving trends in leisure activities are pivotal in shaping more engaging and inclusive programs, ultimately promoting the social inclusion and integration of people with disabilities into society.

Individuals with disabilities often rely on rehabilitation services as a crucial means to facilitate their integration into society. These services encompass a range of interventions, from physical therapy to occupational therapy (Dairo et al., 2016), aimed at improving functional abilities and enhancing overall well-being. While rehabilitation services play a pivotal role in addressing specific health and mobility challenges, they typically focus on clinical aspects of recovery and may not fully address the broader dimensions of social integration and holistic well-being.

Leisure activities, therefore, serve as a complementary and equally essential avenue for individuals with disabilities to lead fulfilling lives. Beyond the confines of rehabilitation sessions, leisure activities offer opportunities for self-expression, social interaction, and personal growth (M. Kim et al., 2022; Lee & Heo, 2021). They bridge the gap between clinical care and everyday life, providing a platform for individuals to apply the skills acquired during rehabilitation in real-world contexts. Moreover, leisure activities are instrumental in maintaining physical functioning over the long term, allowing individuals to sustain and build upon the gains achieved through rehabilitation.

However, despite the recognized benefits of leisure activities, several barriers can impede participation for individuals with disabilities. Prior investigations have indicated that certain variables, such as not having enough time and feeling tired were barriers that would lead to the lower levels of participation in leisure activities at home, as shown in past study by Gilor et al., (2022) and Hassett et al. (2021). Recognizing these barriers, it becomes apparent that the design and implementation of leisure programs for individuals with disabilities must be sensitive to their unique circumstances and challenges (Lante et al., 2011). Inclusive leisure programs should aim to accommodate varying levels of time availability and energy levels. Additionally, they should prioritize creating environments that foster autonomy and choice, allowing individuals to participate at their own pace and comfort.

The level of participation in leisure activities can be significantly facilitated by environmental factors, including the ability to make independent decisions regarding participation. Therefore, stakeholders involved in designing and implementing leisure-activity programs for adults with disabilities must ensure that these programs are not only physically accessible but also psychologically accommodating. Creating an environment that promotes autonomy and choice is essential to fostering meaningful and sustained participation in leisure activities, ultimately contributing to the well-being and social integration of individuals with disabilities.

SIMPULAN

In summary, our study has illuminated a compelling and growing trend in the diversity of leisure-time activities designed for adults with disabilities, as evidenced by the increasing number of published articles over the past five decades. Notably, our research has not only identified productive countries in this domain but has also unveiled a striking global collaboration network dedicated to crafting leisure programs

tailored to the unique needs of adults with disabilities. The graphical maps we've generated offer a visual representation of keyword clusters, revealing nuanced trends within sub-areas of related research. From an andragogical perspective, our findings underscore the pressing need to establish structured programs and inclusive learning environments at the local level. These environments should facilitate social interaction and ensure equitable access and support, all of which are essential for enhancing the overall well-being and physical health of adults with disabilities throughout their adulthood.

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