

# Indonesian Version of the Physical Activity Scale: Development and Validation for Individuals with Physical Disabilities

Erick Burhaein<sup>1,\*</sup>, Diajeng Tyas Pinru Phytanza<sup>2</sup>, Elya Marfu'atun<sup>2</sup>, Muhammad Sigit Antoni<sup>3</sup>,  
Sugeng Purwanto<sup>3</sup>, Yosi Malatta Madsu<sup>4</sup>

<sup>1</sup>Department of Sports Education, Faculty of Teacher Training and Education,  
Universitas Ma'arif Nahdlatul Ulama Kebumen, Indonesia

<sup>2</sup>Department of Special Education, Faculty of Education and Psychology, Universitas Negeri Yogyakarta, Indonesia

<sup>3</sup>Department of Sports Education, Faculty of Sports and Health Sciences, Universitas Negeri Yogyakarta, Indonesia

<sup>4</sup>Department of Informatics Engineering, Faculty of Engineering, Universitas Widyatama, Indonesia

Received April 14, 2025; Revised December 29, 2025; Accepted January 20, 2026

## Cite This Paper in the Following Citation Styles

(a): [1] Erick Burhaein, Diajeng Tyas Pinru Phytanza, Elya Marfu'atun, Muhammad Sigit Antoni, Sugeng Purwanto, Yosi Malatta Madsu, "Indonesian Version of the Physical Activity Scale: Development and Validation for Individuals with Physical Disabilities," *International Journal of Human Movement and Sports Sciences*, Vol. 14, No. 1, pp. 204 - 212, 2026. DOI: 10.13189/saj.2026.140120.

(b): Erick Burhaein, Diajeng Tyas Pinru Phytanza, Elya Marfu'atun, Muhammad Sigit Antoni, Sugeng Purwanto, Yosi Malatta Madsu (2026). *Indonesian Version of the Physical Activity Scale: Development and Validation for Individuals with Physical Disabilities*. *International Journal of Human Movement and Sports Sciences*, 14(1), 204 - 212. DOI: 10.13189/saj.2026.140120.

Copyright©2026 by authors, all rights reserved. Authors agree that this article remains permanently open access under the terms of the Creative Commons Attribution License 4.0 International License

**Abstract** This study aimed to design and validate a physical activity participation measurement tool for individuals with physical disabilities in Indonesia. This study was motivated by the limited number of measurement tools that are culturally and linguistically appropriate for Indonesia, despite the globally recognized importance of physical activity for the physical and mental health of people with disabilities. The methods used included adaptation of the "Physical Activity Scale for Individuals with Physical Disabilities" instrument into Indonesian language and culture, and validation through the Delphi method involving nine experts in the fields of psychometrics, sport psychology, and disability sport. Data analysis was conducted using the content validity ratio, which resulted in an average value of 0.880, signifying excellent content validity. The results showed that the developed scale has strong validity to measure physical activity participation in people with physical disabilities. This study concludes that it is important to adapt international measurement tools to suit local contexts. The contribution of this study provides a basis for the development of more inclusive and evidence-based

physical activity programs in Indonesia, as well as supporting better health and welfare policies for people with disabilities. Further research is expected to explore factors that influence sports participation in a broader context, such as access to sports facilities and social support.

**Keywords** Physical Activity, People with Physical Disabilities, Instrument Validation, PASIPD Scale, Cultural Adaptation

---

## 1. Introduction

Engaging in regular physical activity (PA) is essential for improving health and quality of life, as well as preventing diseases such as diabetes, hypertension, and heart disease. According to the World Health Organization (WHO), regular exercise can reduce the risk of premature death by 20-30% for people who exercise lightly to moderately for 150 minutes per week [1]. However, despite

the benefits, many groups, especially people with physical disabilities (PD), face great difficulties in engaging in physical activity.

About 16% of the world's population experiences some form of disability, and about 2-4% live with severe disabilities that limit their physical abilities [2]. People with disabilities often face difficulties in accessing disability-friendly sports facilities and inclusive physical activity programs [3]. This limits their opportunities to participate in physical activities that are important for health. International studies have shown that without adequate access, people with disabilities tend to have lower levels of participation in physical activity. This in turn increases their risk of chronic diseases and reduces their quality of life [4].

In Indonesia, around 21 million people, or 8.56% of the total population, have physical disabilities. This group often faces similar challenges in participating in sports activities. Such barriers include a lack of disability-friendly sports facilities and limited programs specifically designed to meet their needs [5].

Every human being has the right to happiness and equal opportunities for development, including through healthy and liberating sports activities. Although the state has enacted Law No. 8 of 2016 on Persons with Disabilities as an important step towards equality, there are still many challenges that have yet to be overcome. The implementation of this policy has not been fully effective, so many individuals with disabilities still find it difficult to access truly inclusive sports facilities and services. This shows that social justice for persons with disabilities has not been fully realized in everyday practice.

Engaging people with disabilities in physical activity (PA) has great benefits, not only for maintaining physical health but also for supporting mental health. Studies show that PA can help improve mobility, support mental well-being [6], and reduce the risk of depression in individuals with physical disabilities [7].

Unfortunately, in Indonesia there is no specific measurement tool designed to identify the level of participation of people with disabilities in PA. This is one of the main challenges in designing programs that are appropriate to their needs.

This gap highlights the need to develop measurement tools that are appropriate to the Indonesian context. Several international measurement tools, such as the Physical Activity Scale for Individuals with Physical Disabilities (PASIPD), have indeed been developed and validated in various countries [8]. However, they have not been adapted to the Indonesian language or culture. Without local validation, these measurement tools have the potential to produce inaccurate or irrelevant data, which in turn can hinder the process of evaluating the needs and participation levels of people with physical disabilities in PA programs [9].

Physical activity not only reflects body movement, but also describes the way of life and cultural values that grow

within a society. The types of physical activities in PASIPD are not always relevant in Indonesia due to differences in cultural backgrounds and social conditions. Therefore, it is important to improve and develop physical activity items, as well as revalidate them to determine their quality as appropriate measurement tools. With continuous development and adjustment, it is hoped that this physical activity measurement tool can truly represent the cultural diversity and social conditions of Indonesian society in an authentic manner.

Therefore, the development and validation of a physical activity scale specifically designed for people with physical disabilities in Indonesia is a very important step [9], [10]. This scale will serve as a crucial tool to understand their needs and evaluate participation in physical activity. In addition, the data generated can form the basis for the development of more effective inclusive policies and programs. With a validated measurement tool in place, policymakers, healthcare providers, and non-profit organizations can design more tailored programs, as well as assess the success of existing programs.

Based on the context described, this study aims to develop and validate a specific physical activity (PA) scale for people with physical disabilities in Indonesia. This study will use an adaptation approach of an existing international scale, with a validation process that considers language and cultural aspects to ensure relevance and accuracy in its use. It is hoped that the results of this study can significantly contribute to the development of an inclusive and evidence-based PA program, while supporting the improvement of quality of life for people with physical disabilities in Indonesia.

## 2. Methods

### 2.1. Participants

A total of nine Indonesian experts with relevant expertise and experience, both at national and international levels, have evaluated the instrument (n=9). The composition included: 1 psychometrician (professor with more than 15 years of experience); 2 sport psychologists (doctorate with more than 5 years of experience); 2 experts in disability sport (with more than 5 years of experience); and 4 practitioners (disability sport coaches with more than 5 years of experience).

### 2.2. Procedures

This study adopted the Delphi method, which is often used in the development of psychometric instruments. This approach allows experts to provide input that contributes to the content validity and reliability of the measure [11]. The instrument was designed based on an earlier version of the measurement tool, the PASIPD [8]. The results of the

instrument that had been translated into Indonesian were evaluated by experts through a Delphi approach.

### 2.3. Data Analysis

Each assessment from the experts was analyzed using the Content Validity Ratio (CVR) formula, designed by Lawshe (1975). This method was used to evaluate the content validity of each assessment provided.

$$\text{CVR} = (N_e - N/2)/(N/2)$$

$N_e$  = the number of validators stating as essential (1 point)  
 $N$  = response total

The minimum value for an item to be declared valid depends on the number of expert validators involved. Based on CVR guidelines [12], an item requires a minimum CVR value of 0.78 when rated by nine validators (see Table 1).

**Table 1.** The Score Interpretation of CVR

Total validators	Minimum Score*
8	0.75
9	0.78

Source: Lawshe Theory [12]

### 3. Results

The results of this study are in the form of CVR calculation analysis. Table 2 displays the CVR results for each item in the Indonesian adaptation of the PASIPD instrument. The findings reflect the validity ratings given to each item.

**Table 2.** Content Validity Ratios for Indonesian Version of PASIPD

Items	$N_e^*$	CVR**	Interpretation
1.	9	1	
2.	8	0.778	
3.	9	1	
4.	8	0.778	
5.	8	0.778	
6.	9	1	
7.	9	1	
8.	8	0.778	
9.	8	0.778	
10.	9	1	
11.	9	1	
12.	8	0.778	
13.	8	0.778	
Average		0.880	valid

\*The number of validators stating as essential; \*\*Score

The average instrument validity for the items in the Indonesian version of the PASIPD was 0.880. This result indicates that the items have a high level of accuracy in measuring the physical activity variable. In addition, this value also exceeds the minimum validity standard set by the CVR guidelines, which is 0.78 for nine validators.

### 4. Discussions

The results of this study show that the PA scale designed for individuals with disabilities proves to be reliable and accurate. The validation process using the CVR method resulted in an average score of 0.880, which is higher than the minimum threshold of 0.78. This proves that the instrument can measure physical activity well and capture important relevant aspects. This strong validity suggests that the tool is very useful for research and practical applications, particularly in Indonesia.

The novelty of this instrument lies in its adaptation process to the Indonesian cultural and linguistic context, which makes it more relevant for use in the local environment. The PASIPD instrument, which has been internationally validated, has indeed been widely used in various global studies [8]. However, its use in Indonesia has been limited in the past due to language differences, interpretation of meanings, and social nuances that do not fully match the local context.

This study addresses these challenges by conducting a thorough adaptation, including translation that pays attention to the accuracy of meaning, as well as content adjustments to reflect the needs and characteristics of the Indonesian people. Thus, the instrument not only measures physical activity precisely, but also considers the cultural values and unique experiences of people with disabilities in Indonesia. This effort successfully bridges the gap, ensuring a more accurate, reliable, and relevant measurement tool to support research and practice in Indonesia.

Previous research has highlighted the importance of conducting instrument validation by considering the local cultural context. Rimmer et al. [13] suggest that while standardized measurement tools can be widely used, their application without proper cultural adaptation can lead to misinterpretation in data collection. This can lead to inaccurate conclusions, which in turn reduces the effectiveness of physical activity programs, especially for people with disabilities, as the instruments may not fully reflect the specific realities and needs of the target group across different cultures.

This research addresses this challenge by adapting the PASIPD instrument to fit the local Indonesian culture and context. This adaptation involves not only translating words or terms, but also considering the social and cultural meanings that exist in Indonesian society. For example, elements in the instrument relating to perceptions of

physical activity or social interaction may need to be adjusted to be more relevant to the experiences and views of people with disabilities in Indonesia. As such, the Indonesian version of the PASIPD instrument may provide more accurate and locally appropriate results, increasing its effectiveness in supporting physical activity programs designed for this group in Indonesia.

In addition, this study also fills a gap that is rarely explored, namely the measurement of physical activity among populations with disabilities in developing countries. The World Health Organization [1] emphasizes the importance of inclusive health policies at the global level, particularly in resource-limited settings, to ensure people with disabilities have equal access to health services and opportunities for healthy living. However, in many developing countries, research on physical activity among people with disabilities is limited.

The instrument developed in this study offers a practical solution to measure physical activity levels in this population, which is often overlooked in health research. By providing an appropriate tool to evaluate physical activity, this instrument has the potential to facilitate the promotion of healthier lifestyles among people with disabilities [14]. In addition, this instrument can support the development of more effective evidence-based health policies, by identifying specific needs and measuring the impact of health programs aimed at this marginalized group, especially in countries with limited resources.

The results of this study are in line with the findings of Rimmer and Rowland [15], which show that physical activity not only contributes to improved physical health, but also plays an important role in improving mental well-being for people with disabilities. The validated scale in this study provides a reliable measure to assess the impact of physical activity on multiple dimensions of well-being, both physical and mental. This is critical for designing future intervention strategies aimed at improving physical and mental health outcomes in people with disabilities [16]. Having a valid and standardized measurement tool in place will support the development of more effective and evidence-based programs to improve the quality of life of people with disabilities.

In addition to its cultural relevance, the high content validity of the instrument across items demonstrates its comprehensiveness in covering important dimensions of physical activity. The instrument covers not only structured exercise, but also unstructured physical activity, which is crucial for assessing the overall level of physical engagement of people with disabilities. By covering both aspects, the scale provides a more holistic understanding of physical activity patterns, which is an approach that is increasingly recommended in recent disability sport literature [4]. This approach allows for a more complete picture of how people with disabilities participate in physical activity, both organized and spontaneous, which

can facilitate the development of more effective and needs-based interventions.

The implementation of this scale has great potential to support policy development in Indonesia. Given the ongoing efforts in Indonesia to improve services for people with disabilities, as stipulated in Law No. 8/2016, this validated instrument can provide critical data to formulate more inclusive policies and programs [17]. The data obtained from this instrument will provide accurate information on the physical activity levels of people with disabilities, which can be used to assess the effectiveness of various interventions. This will ensure that policies and programs developed truly meet the needs of people with disabilities, in accordance with the principle of inclusion prioritized in national health policy.

The results of this study make a significant contribution to the growing body of research on disability, physical activity, and health in general. By providing a validated measurement tool specific to the Indonesian context, this study offers a strong foundation for future studies that will explore how different factors influence the physical activity levels of people with disabilities in Indonesia. For example, factors such as access to sports facilities will influence the extent to which individuals with disabilities can participate in structured or unstructured physical activities [18]. Social support, such as the support of family, friends, or community, also plays an important role in encouraging their participation. In addition, individual motivations - such as the desire to live a healthy life or feel more socially engaged - can influence how active a person is in physical activity.

This research provides an opportunity to explore how these factors interact, and how they can be used to design more effective, evidence-based policies or programs to increase physical activity among people with disabilities in Indonesia.

In conclusion, the development and validation of this physical activity scale is a significant step forward in disability sport research in Indonesia. A key innovation of this study was the cultural adaptation that ensured that the scale accurately reflects the needs and experiences of local people with disabilities. With a sensitive approach to the Indonesian social and cultural context, the scale is a relevant and effective tool for measuring physical activity levels among people with disabilities in Indonesia.

Future research could build on and extend this study to explore the broader impact of physical activity on the health and well-being of people with disabilities. This opens opportunities to better understand how various factors - such as physical activity patterns, accessibility, and social support - play a role in improving their quality of life. Therefore, this tool is not only useful for researchers but also invaluable for practitioners working on designing more inclusive and evidence-based interventions for people with disabilities in Indonesia.

## 5. Conclusions

### 5.1. Conclusion

In conclusion, the results of this study provide a clear picture of the success of developing valid and meaningful instruments for people with physical disabilities in Indonesia. The conclusion of this study confirms that the physical activity scale developed and validated for people with physical disabilities in Indonesia has very strong content validity, with an average CVR value of 0.880. This finding fulfills the need for a linguistically and culturally relevant instrument to measure participation in physical activity among people with physical disabilities. As such, the instrument is expected to make a significant contribution to research, and programs focused on improving the quality of life of people with disabilities.

However, this study has limitations, mainly related to the limited number of participants, which involved only nine experts. In addition, the scope of testing that only focused on content validity was also a limitation. Therefore, this research opens opportunities for further studies that could include empirical validation and field reliability testing of the instrument, which would ensure its reliability and usefulness in a wider and more diverse context.

### 5.2. Implication

The implications of this study provide a strong foundation for developing more inclusive physical activity programs for people with physical disabilities in Indonesia. The validated instrument also provides more accurate data that can be used by policy makers and practitioners to design more targeted and evidence-based programs. With a culturally relevant measurement tool in place, this research helps to ensure that policies developed meet the specific needs of people with disabilities.

### 5.3. Contribution

The contribution of this study also paves the way for future research, especially in exploring other factors that influence physical activity participation, such as access to sports facilities, social support, and individual motivation. These factors are potentially key determinants in the success of physical activity programs, and further research could provide deeper insights into how these factors interact with each other.

Future research is expected to test the instrument on larger and more diverse populations, to ensure its reliability across different contexts. In addition, future research could also expand the scope of the analysis to assess the impact of physical activity on the quality of life and mental health of people with other disabilities, such as people with visual impairment and mental health.

## Declaration of Conflicting Interests

All authors in this study declare that they have no conflict of interest that could affect the results or interpretation of this study. Thus, this research was conducted with high integrity, without any pressure or interest that could affect the validity and objectivity of the data obtained.

## Funding

We would like to thank Directorate of Research and Innovation Funding RIIM *Kompetisi* Batch 4<sup>th</sup> by BRIN & LPDP, Indonesia as the funder of this research. This research grant is supported through contract number: 150/IV/KS/11/2023. This financial support is very meaningful for the smoothness and success of this research.

## Ethics Statement

This research has passed the ethical clearance test in the field of social humanities research. The ethics commission for the social humanities sector of BRIN, Indonesia stated that the research had met the existing requirements and conditions, supported by the ethics clearance letter Number: 769/KE.01/SK/12/2023. Furthermore, the publication of this paper is one part of the research stages of the approved whole research.

## Acknowledgments

We would like to thank Directorate of Research and Innovation Funding BRIN and LPDP, Indonesia as the funder of this research. Our thanks also go to Universitas Negeri Yogyakarta, Universitas Ma'arif Nahdlatul Ulama Kebumen, and Universitas Widyatama for providing support and permission to conduct this research. In addition, we also express our sincere appreciation to the participants, both directly and indirectly involved, in this study. Your support and contributions are invaluable to the success of this research.

## Author Contributions

First author: Responsible for problem formulation, methodology, data collection, data analysis, discussion, and article writing. Second author: Involved in methodology, data collection, data analysis, discussion, and article writing. Third author: Contributed to methodology, data analysis, and discussion. Fourth, fifth, and sixth authors: All contributed to methodology, data analysis, and discussion. The fifth author's contribution is the same as the fourth author.

## Appendix

### SCALE OF THE PHYSICAL ACTIVITY FOR PEOPLE WITH PHYSICAL DISABILITIES

#### Indonesian Version "PASIPD" (In Bahasa)

##### Petunjuk :

Bacalah setiap pertanyaan yang ada di bawah ini. Setiap pertanyaan memiliki pilihan jawaban a - d. Pilih 1 jawaban atau tuliskan jawaban yang sesuai dengan kondisi Anda.

<p>1. Selama 7 hari terakhir, seberapa sering Anda melakukan aktivitas statis (tidak berpindah), seperti membaca, menonton TV, bermain games, atau membuat prakarya (merajut, meronce, menganyam)?</p> <p>a. Tidak pernah b. Jarang (1-2 hari) c. Kadang-kadang (3-4 hari) d. Sering (5-7 hari)</p> <p>Aktivitas apa saja yang dilakukan? Jika dirata-rata, berapa jam dalam sehari Anda melakukan aktivitas tersebut:</p> <p>a. Kurang dari 1 jam b. 1 - kurang dari 2 jam c. 2-4 jam d. Lebih dari 4 jam</p>
<p>2. Selama 7 hari terakhir, seberapa sering Anda beraktivitas di luar rumah, seperti berjalan maupun menggunakan alat bantu jalan (selain untuk keperluan berolahraga)? Contohnya, berangkat ke sekolah atau tempat kerja, belanja, atau keperluan lainnya.</p> <p>a. Tidak pernah b. Jarang (1-2 hari) c. Kadang-kadang (3-4 hari) d. Sering (5-7 hari)</p> <p>Jika dirata-rata, berapa jam dalam sehari Anda melakukan aktivitas tersebut:</p> <p>a. Kurang dari 1 jam b. 1 - kurang dari 2 jam c. 2-4 jam d. Lebih dari 4 jam</p>
<p>3. Selama 7 hari terakhir, seberapa sering Anda melakukan olahraga intensitas ringan atau aktivitas rekreasi, seperti memancing, bermain biliard dan catur, melakukan terapi okupasi, atau menggunakan kruk (alat bantu jalan)?</p> <p>a. Tidak pernah b. Jarang (1-2 hari) c. Kadang-kadang (3-4 hari) d. Sering (5-7 hari)</p> <p>Jika dirata-rata, berapa jam dalam sehari Anda melakukan aktivitas tersebut:</p> <p>a. Kurang dari 1 jam b. 1 - kurang dari 2 jam c. 2-4 jam d. Lebih dari 4 jam</p>
<p>4. Selama 7 hari terakhir, seberapa sering Anda melakukan olahraga intensitas sedang dan aktivitas rekreasi, seperti bermain tenis ganda dan softball/softball, senam, atau jalan-jalan menggunakan kursi roda?</p> <p>a. Tidak pernah b. Jarang (1-2 hari) c. Kadang-kadang (3-4 hari) d. Sering (5-7 hari)</p> <p>Jika dirata-rata, berapa jam dalam sehari Anda melakukan aktivitas tersebut:</p> <p>a. Kurang dari 1 jam b. 1 - kurang dari 2 jam</p>

<p>c. 2-4 jam</p> <p>d. Lebih dari 4 jam</p>
<p>5. Selama 7 hari terakhir, seberapa sering Anda melakukan olahraga intensitas berat dan aktivitas rekreasi, seperti jogging, senam aerobic, atau bersepeda?</p> <p>a. Tidak pernah</p> <p>b. Jarang (1-2 hari)</p> <p>c. Kadang-kadang (3-4 hari)</p> <p>d. Sering (5-7 hari)</p> <p>Jika dirata-rata, berapa jam dalam sehari Anda melakukan aktivitas tersebut:</p> <p>a. Kurang dari 1 jam</p> <p>b. 1 - kurang dari 2 jam</p> <p>c. 2-4 jam</p> <p>d. Lebih dari 4 jam</p>
<p>6. Selama 7 hari terakhir, seberapa sering Anda berolahraga untuk melatih kekuatan otot dan daya tahan, seperti angkat beban?</p> <p>a. Tidak pernah</p> <p>b. Jarang (1-2 hari)</p> <p>c. Kadang-kadang (3-4 hari)</p> <p>d. Sering (5-7 hari)</p> <p>Jika dirata-rata, berapa jam dalam sehari Anda melakukan aktivitas tersebut:</p> <p>a. Kurang dari 1 jam</p> <p>b. 1 - kurang dari 2 jam</p> <p>c. 2-4 jam</p> <p>d. Lebih dari 4 jam</p>
<p>7. Selama 7 hari terakhir, seberapa sering Anda melakukan pekerjaan rumah yang ringan, seperti membersihkan debu, menyapu lantai, dan mencuci piring?</p> <p>a. Tidak pernah</p> <p>b. Jarang (1-2 hari)</p> <p>c. Kadang-kadang (3-4 hari)</p> <p>d. Sering (5-7 hari)</p> <p>Jika dirata-rata, berapa jam dalam sehari Anda melakukan aktivitas tersebut:</p> <p>a. Kurang dari 1 jam</p> <p>b. 1 - kurang dari 2 jam</p> <p>c. 2-4 jam</p> <p>d. Lebih dari 4 jam</p>
<p>8. Selama 7 hari terakhir, seberapa sering Anda melakukan pekerjaan rumah yang berat, seperti mengepel lantai dan membersihkan kaca atau dinding?</p> <p>a. Tidak pernah</p> <p>b. Jarang (1-2 hari)</p> <p>c. Kadang-kadang (3-4 hari)</p> <p>d. Sering (5-7 hari)</p> <p>Jika dirata-rata, berapa jam dalam sehari Anda melakukan aktivitas tersebut:</p> <p>a. Kurang dari 1 jam</p> <p>b. 1 - kurang dari 2 jam</p> <p>c. 2-4 jam</p> <p>d. Lebih dari 4 jam</p>
<p>9. Selama 7 hari terakhir, seberapa sering Anda melakukan pekerjaan perbaikan rumah seperti pertukangan, pengecatan, pemolesan ulang perabot, kelistrikan, dll?</p> <p>a. Tidak pernah</p> <p>b. Jarang (1-2 hari)</p> <p>c. Kadang-kadang (3-4 hari)</p> <p>d. Sering (5-7 hari)</p> <p>Jika dirata-rata, berapa jam dalam sehari Anda melakukan aktivitas tersebut:</p>

<p>a. Kurang dari 1 jam</p> <p>b. 1 - kurang dari 2 jam</p> <p>c. 2-4 jam</p> <p>d. Lebih dari 4 jam</p>
<p>10. Selama 7 hari terakhir, seberapa sering Anda melakukan pekerjaan rumah di luar ruangan (perawatan kebun) seperti memotong rumput, merapikan dedaunan, memangkas ranting pohon atau semak-semak, dll?</p> <p>a. Tidak pernah</p> <p>b. Jarang (1-2 hari)</p> <p>c. Kadang-kadang (3-4 hari)</p> <p>d. Sering (5-7 hari)</p> <p>Jika dirata-rata, berapa jam dalam sehari Anda melakukan aktivitas tersebut:</p> <p>a. Kurang dari 1 jam</p> <p>b. 1 - kurang dari 2 jam</p> <p>c. 2-4 jam</p> <p>d. Lebih dari 4 jam</p>
<p>11. Selama 7 hari terakhir, seberapa sering Anda melakukan aktivitas berkebun, seperti menanam pohon, mencangkul, dan lain sebagainya?</p> <p>a. Tidak pernah</p> <p>b. Jarang (1-2 hari)</p> <p>c. Kadang-kadang (3-4 hari)</p> <p>d. Sering (5-7 hari)</p> <p>Jika dirata-rata, berapa jam dalam sehari Anda melakukan aktivitas tersebut:</p> <p>a. Kurang dari 1 jam</p> <p>b. 1 - kurang dari 2 jam</p> <p>c. 2-4 jam</p> <p>d. Lebih dari 4 jam</p>
<p>12. Selama 7 hari terakhir, seberapa sering Anda merawat orang lain, seperti anak kecil, pasangan suami-istri, atau orang dewasa lainnya?</p> <p>a. Tidak pernah</p> <p>b. Jarang (1-2 hari)</p> <p>c. Kadang-kadang (3-4 hari)</p> <p>d. Sering (5-7 hari)</p> <p>Jika dirata-rata, berapa jam dalam sehari Anda melakukan aktivitas tersebut:</p> <p>a. Kurang dari 1 jam</p> <p>b. 1 - kurang dari 2 jam</p> <p>c. 2-4 jam</p> <p>d. Lebih dari 4 jam</p>
<p>13. Selama 7 hari terakhir, seberapa sering Anda melakukan pekerjaan yang menghasilkan uang maupun sukarela? (selain pekerjaan yang sebagian besar dilakukan dengan duduk, seperti kerja kantor, kerja dengan komputer, setir mobil atau bus?)</p> <p>a. Tidak pernah</p> <p>b. Jarang (1-2 hari)</p> <p>c. Kadang-kadang (3-4 hari)</p> <p>d. Sering (5-7 hari)</p> <p>Jika dirata-rata, berapa jam dalam sehari Anda melakukan aktivitas tersebut:</p> <p>a. Kurang dari 1 jam</p> <p>b. 1 - kurang dari 4 jam</p> <p>c. 5-8 jam</p> <p>d. Lebih dari 8 jam</p>

---

## REFERENCES

- [1] WHO, "Physical activity." Accessed: Dec. 26, 2025. [Online]. Available: <https://www.who.int/news-room/fact-sheets/detail/physical-activity>
- [2] WHO, "Health Topics: Disability." Accessed: Dec. 26, 2025. [Online]. Available: [https://www.who.int/health-topics/disability#tab=tab\\_1](https://www.who.int/health-topics/disability#tab=tab_1)
- [3] E. Burhaein, R. Zuhdi, D. T. P. Phytanza, and Y. F. Irawan, "Learning model in adapted physical education based on online: the bibliography analysis in publication 2018 – 2023," *Retos*, vol. 61, pp. 466–478, Oct. 2024, doi: 10.47197/retos.v61.108322.
- [4] J. H. Rimmer and A. C. Marques, "Physical activity for people with disabilities," *The Lancet*, vol. 380, no. 9838, pp. 193–195, Jul. 2012, doi: 10.1016/S0140-6736(12)61028-9.
- [5] M. Fitri *et al.*, "Accessibility of Inclusive Sports Facilities for Training and Competition in Indonesia and Malaysia," *Sustainability*, vol. 14, no. 21, p. 14083, Oct. 2022, doi: 10.3390/su142114083.
- [6] R. Dewi, I. Verawati, A. Sukamton, H. Hakim, E. Burhaein, and C. C. V. Lourenço, "The Impact of Basic Motion Activities on Social Interaction in Elementary School Students," *International Journal of Human Movement and Sports Sciences*, vol. 11, no. 1, pp. 143–151, Feb. 2023, doi: 10.13189/saj.2023.110117.
- [7] P. J. Smith and R. M. Merwin, "The Role of Exercise in Management of Mental Health Disorders: An Integrative Review," *Annu Rev Med*, vol. 72, no. 1, pp. 45–62, Jan. 2021, doi: 10.1146/annurev-med-060619-022943.
- [8] R. A. Washburn, W. Zhu, E. McAuley, M. Frogley, and S. F. Figoni, "The physical activity scale for individuals with physical disabilities: Development and evaluation," *Arch Phys Med Rehabil*, vol. 83, no. 2, pp. 193–200, Feb. 2002, doi: 10.1053/apmr.2002.27467.
- [9] R. J. van den Berg-Emons *et al.*, "Validation of the Physical Activity Scale for Individuals With Physical Disabilities," *Arch Phys Med Rehabil*, vol. 92, no. 6, pp. 923–928, Jun. 2011, doi: 10.1016/j.apmr.2010.12.006.
- [10] C. C. V. Lourenço, E. Burhaein, D. T. P. Phytanza, and E. Coelho, "Satisfaction with The Life and Self-Esteem of Portuguese Disabilities Elite Athletes of Boccia and Adapted Athletics," *International Journal of Disabilities Sports and Health Sciences*, vol. 7, no. 2, pp. 269–273, Mar. 2024, doi: 10.33438/ijds.1342080.
- [11] J. Landeta, "Current validity of the Delphi method in social sciences," *Technol Forecast Soc Change*, vol. 73, no. 5, pp. 467–482, Jun. 2006, doi: 10.1016/j.techfore.2005.09.002.
- [12] C. H. Lawshe, "A quantitative approach to content validity," *Pers Psychol*, vol. 28, no. 4, pp. 563–575, Dec. 1975, doi: 10.1111/j.1744-6570.1975.tb01393.x.
- [13] J. H. Rimmer *et al.*, "Rationale and design of a Scale-Up Project Evaluating Responsiveness to Home Exercise And Lifestyle Tele-Health (SUPER-HEALTH) in people with physical/mobility disabilities: a type 1 hybrid design effectiveness trial," *BMJ Open*, vol. 9, no. 3, p. e023538, Mar. 2019, doi: 10.1136/bmjopen-2018-023538.
- [14] M. Miyahara, J. Piek, and D. Rigoli, "Physical disabilities," in *Encyclopedia of Adolescence*, Elsevier, 2024, pp. 404–416. doi: 10.1016/B978-0-323-96023-6.00045-2.
- [15] J. A. Rimmer and J. L. Rowland, "Physical activity for youth with disabilities: A critical need in an underserved population," *Dev Neurorehabil*, vol. 11, no. 2, pp. 141–148, Jan. 2008, doi: 10.1080/17518420701688649.
- [16] F. Bakhtiary, M. Noorbakhsh, P. Noorbakhsh, and H. Sepasi, "Development and Validation of a Tool for Assessing Barriers to Participation in Team Sports for Women with Physical-Mobility Disabilities," *Ann Appl Sport Sci*, vol. 8, no. 3, pp. 0–0, Oct. 2020, doi: 10.29252/aassjournal.809.
- [17] Undang-Undang Republik Indonesia, *UU RI No. 8*. 2016.
- [18] N. Heister, P. Zentel, and S. Köb, "Participation in Everyday Leisure and Its Influencing Factors for People with Intellectual Disabilities: A Scoping Review of the Empirical Findings," *Disabilities*, vol. 3, no. 2, pp. 269–294, May 2023, doi: 10.3390/disabilities3020018.