

Results From the First Para Report Card on Physical Activity for Children and Adolescents With Disabilities in the Philippines

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A comprehensive evaluation of physical activity (PA) engagement and policy implementation among Filipino children and adolescents with disabilities is vital in the promotion of an active healthy lifestyle. This is the first Para Report Card of the Philippines that presents the available evidence on the 10 commonly used PA indicators. Published and gray literature were searched for country-specific evidence on PA behaviors, physical fitness, and sources of influence. Stakeholders representing relevant national institutions, special education schools, and advocacy groups also provided input on the grades. Only Organized Sport and Government indicators had sufficient data to be graded F and B, respectively. The rest of the indicators were graded as incomplete due to the limited availability of nationally representative data. Findings of the Philippines 2022 Para Report Card on PA highlight the need to strengthen the documentation and evaluation of these indicators among Filipino children and adolescents with disabilities.

Keywords: lower-middle-income country, active lifestyle, sedentary behavior, health promotion, pediatric

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The promotion of an active lifestyle among children and adolescents with disabilities (CAWD) is recognized to improve physiological, psychosocial, and cognitive functions; facilitate participation and inclusion; and reduce the risk of developing secondary, chronic health conditions (Murphy & Carbone, 2008). At present, there is limited evidence synthesizing nationally representative data on the indicators of physical activity (PA) and sedentary behaviors among CAWD in the Philippines. The latest available national data estimated the population of the Philippines to be around 109 million, where approximately 37 million (34%) are children and adolescents (Philippine Statistics Authority [PSA], 2022, July 15). Moreover, a census report from PSA in 2010 (Philippine Statistics Authority, 2013, January 10) identified approximately 1.4 million Filipinos living with disabilities, who are individuals with limited capacity to perform activities due to an impairment. From this report, approximately 280,000 (20%) of Filipinos with disabilities are aged 5–19 years (Philippine Statistics Authority, 2013, January 10). Hence, a comprehensive evaluation of the status of PA engagement and PA-related policy implementation among CAWD is vital in the creation of inclusive actions promoting an active healthy lifestyle in the Philippines.

The Philippines participated in the Active Healthy Kids Global Alliance Global Matrix 4.0 for the first time through the Active Healthy Kids Philippines to contribute to local and global efforts in promoting PA among Filipino children with and without disabilities. The Active Healthy Kids Philippines is composed of two subgroups of Filipino PA experts across disciplines. One group focused on the general population of children and adolescents. Another subgroup consisted of physical therapists who worked on the Para Report Card for Filipino CAWD.

This manuscript aims to summarize the first Para Report Card of the Philippines on the status of PA engagement among Filipino CAWD. This paper presents the best and latest available country-specific evidence on CAWD in relation to the 10 PA indicators outlined in the Global Matrix 4.0. Results from the 2022 Para Report Card provides baseline information for monitoring and improving PA practice and research on CAWD in the Philippines.

Methods

Following the methodology of the Global Matrix 4.0 project (Ng et al., 2023), a review of the literature and a series of stakeholder consultations were conducted to determine country-specific evidence on 10 indicators. These indicators were comprised of five PA behaviors (i.e., Overall Physical Activity, Organized Sport and Physical Activity, Active Play, Active Transportation, Sedentary Behaviors), one person-specific characteristic (i.e., Physical Fitness), and four sources of influence (i.e., Family and Peers, School, Community and Environment, and Government).

Combined keyword search using “physical activity,” “child,” “disability,” “Philippines,” keywords reflecting the 10 PA indicators, and their related terms was conducted in PubMed. As this was the first time PA data were harmonized and converted into grades, all relevant data from inception to October 2021 were considered. Gray literature search was also performed to identify national-level data from local and global surveys, policies, news media as well as various national

and local government agencies. The agencies included the Department of Budget and Management, Department of Education, Department of Health, PSA, and the Senate and Congress of the Philippines among others. The search was limited to documents in Filipino and English. All levels of scientific research evidence and types of disabilities were considered.

Individual and group online consultations with 69 stakeholders representing relevant national institutions, nongovernmental organizations, special education schools, and advocacy groups were also conducted between November 2021 and January 2022. The stakeholders provided input on the proposed grades across indicators and suggested other potential sources of information as available. The results of the stakeholder consultations were used to corroborate the findings from the literature review.

Available nationally representative data from the aforementioned information sources were synthesized to inform the grades for the 10 PA indicators. Grades ranged from A (successful implementation in >80% of the population) to F (successful implementation in <20% of the population). A grade of INC was assigned to indicators with inadequate data. Additionally, the scoring rubric from Ward et al. (2020) was used to produce a grade for the Government indicator. Areas of assessment were the number of PA-related policies, identifiable actions, implementing agencies, reporting mechanisms, funding allocation, and plans for monitoring and evaluation. For quality assurance, the assigned grades were sent for external audit review prior to acceptance. These auditors were familiar with the grading process.

Results

Out of the 10 PA indicators, only Organized Sport and Physical Activity, and Government had sufficient data to assign the grades of F and B, respectively. The rest of the indicators were graded INC due to the limited availability of national-level data. Insights obtained from stakeholder consultations also affirmed the assigned grades for these indicators. Table 1 provides the breakdown of scores and corresponding best available, national-level data for the Government indicator.

Discussion

This paper summarizes the first Para Report Card on PA for Filipino CAWD. Overall results indicate successful evaluation of only two indicators, while assessment of the rest of the indicators was not possible due to lack of national-level data.

Physical Activity Indicators With the Grade of INC

Most PA behavioral indicators and sources of influence were graded INC due to the limited availability of nationally representative data. The lack of comprehensive data to inform the evaluation of the PA indicators underscores the need for thorough strategies in conducting research, regular census, and program evaluations. Specific implementation, monitoring, and evaluation plans that are aligned with international PA benchmarks and guidelines should also be prioritized.

Table 1 Component Scores and Corresponding Data for the Government Indicator

Area of assessment	Score	Number	Breadth	Score	Supporting data
Number and breadth of policies	0	0	0	5/10 (3 + 2)	Ten policies found, with limited scope in organized sports, sports training, physical education/fitness, and environment
	1	1-4	1-3	—	Laws that promote sports participation among CAWD
	2	5-9	4-5		<ul style="list-style-type: none"> • Palarong Pambansa Act of 2013 (National Games) • The Schools Physical Education and Sports Development Act of 1969
	3	10-14	6-7		<ul style="list-style-type: none"> • The National Academy of Sports Act • Implementing Guidelines on the Special Program in Sports
	4	15-19	8-9		<ul style="list-style-type: none"> • Magna Carta for Disabled Persons • Philippine Sports Training Center Act • National Athletes and Coaches Benefits and Incentives Act
5	20+	10+		<ul style="list-style-type: none"> • The PSC Act 	
					Law that promotes inclusion of physical education and physical fitness in primary and secondary education
					<ul style="list-style-type: none"> • The Schools Physical Education and Sports Development Act of 1969
					Laws that promote active play and active transport among CAWD
					<ul style="list-style-type: none"> • Presidential Decree No. 1216 (Defining Open Space in Residential Subdivision) • Batas Pambansa Bilang 334 or the Accessibility Law

(continued)

Table 1 (continued)

Area of assessment	Rubric	Score	Supporting data
Identified supporting actions	One point given per policy with identifiable actions	13/20	All 10 national policies embody action-oriented purposes and can be considered strategic documents with specific actions. An additional three separate programs or actions were identified for sports participation and inclusive basic education.
Identifiable accounting organizations	Score given based on proportion (%) of policies with identified responsibilities for delivery of actions	22/25	90% of policies have identified accountable organizations.
	Score Proportion		Main implementing agencies are the DepEd, PSC, and the National Council for Disability Affairs.
	0 0%		
	5 20%		
	10 40%		
	15 60%		
	20 80%		
	25 100%		
Identifiable supporting structures	Score given based on proportion (%) of policies with identified systems for reporting delivery of actions	6/15	40% of policies have specified reporting requirements and/or structure.
	Score Proportion		
	0 0%		
	3 20%		
	5 33%		
	7.5 50%		
	10 67%		
	12.5 75%		
	15 100%		

(continued)

Table 1 (continued)

Area of assessment	Rubric	Score	Supporting data
Identified funding	Score given based on proportion (%) of policies with identified funding sources	16/20	80% of policies have funding sources.
	Score		
	Proportion		
	0	0%	
	2	10%	
	5	25%	
Monitoring and evaluation plans	Score given based on proportion (%) of policies with identified monitoring and evaluation systems	5/10	Only the National Games, DepEd Special Program in Sports, law on incentivizing athletes and coaches, PSC Act, and the Accessibility Law (50% of policies) were found to have monitoring and evaluation systems.
	Score		
	Proportion		
	0	0%	
	1	10%	
	2.5	25%	
5	50%		
7.5	75%		
10	100%		

Note. Scoring rubric adapted from Ward, M.R., & Tyler, R. (2020). The AHK-Wales Report Card 2018: Policy measures—Is it possible to ‘score’ qualitative data? *Health Promotion International*, 36(4), 1151–1159, by permission of Oxford University Press. Scoring (according to Ward et al., 2020): For number and breadth of policies, a maximum of 10 points is given based on the number (0 points [0 policies] to 5 points = [20+ policies]) and breadth (0 points [0 sectors] to 5 points = [10+ sectors]). For identified supporting actions, a maximum of 20 points is given, with 1 point being scored per policy with identifiable actions. For remaining items, a score is given based on the percentage of identified policies that exhibit the criteria. CAWD = children and adolescents with disabilities; DepEd = Department of Education; PSC = Philippine Sports Commission.

Furthermore, collaboration with families, healthcare professionals, schools, communities, and the government are warranted to ensure that all relevant stakeholders are knowledgeable of the benchmarks and engage in the evaluation of the PA indicators.

For some indicators such as Active Play, Active Transportation and Sedentary Behavior, several studies (Gonzalez & Grimmer, 2009; Pengpid & Peltzer, 2019; Tudor-Locke et al., 2003) were identified that explored these behaviors among Filipino children. However, none explicitly stated the inclusion of CAWD. The current state of evidence specific to CAWD demonstrates the disparity in the extent of research, programs, and evaluation strategies undertaken between children and adolescents with and without disabilities. The results of this Para Report Card provide a snapshot of the state of evidence on the PA indicators which future programs and studies can build upon.

Organized Sport and Physical Activity: F

Organized Sport and Physical Activity was the only behavioral indicator that was successfully graded based on available nationally representative data. In 2015, it was reported that there were about 850 children with special needs who participated in the *Palarong Pambansa* (National Games; Department of Education, 2015a) whereas in 2017, the Philippine contingent had 12 athletes who competed in five sports during the Asian Youth Para Games (Malanum, 2017). The participation of Filipino CAWD in national sporting events such as *Palarong Pambansa* is mandated by law through the Palarong Pambansa Act of 2013 (Congress of the Philippines, 2012). Although the grade for this indicator reflects successful implementation in only a few CAWD, this baseline data affirms the potential impact of policies that support sports participation at the grassroots level. Meanwhile, other organizations and agencies such as the Philippine Paralympic Committee, Special Olympics Philippines, and the Department of Education also promote organized sport participation in their respective programs. However, no consolidated national-level data that are in line with the benchmarks exist.

Government: B

The breakdown of scores from the Government indicator represents the availability of relevant policies, supporting actions, accountable agencies, reporting mechanisms, provision for funding, and plans for monitoring and evaluating PA programs and strategies (Ward et al., 2020). Despite the existence of such policies and other related actions or systems, it is also evident that reporting, monitoring, and evaluation need further improvement as shown by the low component scores. The impact of limited reporting, monitoring, and evaluation of these programs and policies is reflected on the insufficient national-level data available for the following indicators with INC grade: Overall Physical Activity, Active Play, Active Transportation, Sedentary Behaviors, Physical Fitness, Family and Peers, School, Community and Environment. Meanwhile, the dominance of sports participation-focused policies (Congress of the Philippines, 1969, 1991b, 2012, 2018; Department of Education, 2015b) aligns with the availability of data to assign a grade for the Organized Sport and Physical Activity behavior indicator. It

also implies that Filipino CAWD who actively participate in sports programs and sporting events could be the ones largely benefiting from existing policies and support systems. The current scenario calls for developing and strengthening programs and policies that promote other PA behaviors (e.g., incidental, structured exercise, leisure) in various settings such as at home and in the community.

Sources of influence such as special education institutions and regular schools offering special education programs in the country may be assumed to abide by the existing national guidelines and mandated physical education curriculum (Department of Education, 2013, 2016). However, the extent to which these policies and guidelines are effectively implemented cannot be determined given limited available data or accessible reports. Similarly, although it is expected that local government units or communities adhere to the mandate of serving persons with disabilities as promulgated by existing laws (Congress of the Philippines, 1991a, 1991b, 2009), information on the extent of policy uptake and implementation is lacking. This situation contributes to the lack of national-level data to allow for the assessment of these indicators and points to a gap in policy surveillance and documentation of outcomes among Filipino CAWD. Aligned with the participatory approach (Haldane et al., 2019), collaboration with these sources and settings of influence also needs to be strengthened and sustained for a better uptake of policies on the ground.

Two other policies were found after the finalization of the report grades, specifically on active transportation during the pandemic (Department of the Interior and Local Government, 2020) and the prevention of noncommunicable diseases (Department of Health, 2011). Although these policies were not specific to Filipino CAWD, they can be considered in the next PA Para Report Card for this population. It is recommended that an expanded search be conducted to include transportation and disease prevention as part of a comprehensive evaluation of PA-related policy implementation in the country.

Limitations

The benchmarks used for grading the indicators were generally presented as percentages of children and adolescents who adhered to indicator-specific standards. While national data on disability population have been reported from PSA in 2010 (Philippine Statistics Authority, 2013, January 10), these data were not specific to the benchmarks evaluated. There has also been no update on disability-specific data in the past 10 years (Philippine Statistics Authority, 2022, July 15). Thus, it is not possible to provide the proportion of Filipino CAWD who engaged in these PA behaviors. Furthermore, as benchmarks were mostly the same as those used for the general population, the nuances of PA engagement among CAWD were limitedly captured. It seems worthwhile to tailor these benchmarks for use in assessing the behavioral indicators of CAWD in future endeavors.

Conclusion

Based on the first Philippine Para Report Card, it is deemed that less than 20% of Filipino CAWD participate in Organized Sport and Physical Activity. The

Government data suggest leadership and commitment in promoting Organized Sport and Physical Activity, Physical Fitness, School, Active Play, and Active Transportation in this population, although the extent of policy uptake, implementation, and evaluation is poorly documented as evidenced by most indicators with INC grades. Findings of this Para Report Card highlight the need to strengthen the documentation, implementation, and evaluation of these PA indicators among Filipino CAWD.

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References

- Congress of the Philippines. (1969). *Republic act no. 5708: An act providing for the promotion and financing of an integrated physical education and sports development program for the schools in the Philippines*. <https://issuances-library.senate.gov.ph/legislative%20Bissuances/Republic%20Act%20No.%205708>
- Congress of the Philippines. (1991a). *Republic act No. 7160: An act providing for a local government code*. <https://www.officialgazette.gov.ph/1991/10/10/republic-act-no-7160/>
- Congress of the Philippines. (1991b). *Republic act no. 7277: An act providing for the rehabilitation, self-development and self-reliance of disabled person and their integration into the mainstream of society and for other purposes*. <https://www.ncda.gov.ph/disability-laws/republic-acts/republic-act-7277/>
- Congress of the Philippines. (2009). *Republic act no. 10070: Establishing institutional mechanism to ensure the implementation of programs and services for persons with disabilities in every province, city and municipality, amending Republic Act No. 7277, otherwise known as The Magna Carta For Disabled Persons, as amended, and for other purposes*. <https://www.officialgazette.gov.ph/1991/10/10/republic-act-no-7160/>
- Congress of the Philippines. (2012). *Republic act no. 10588: An act institutionalizing the conduct of the Palarong Pambansa and appropriating funds therefor*. <https://www.officialgazette.gov.ph/2013/05/27/republic-act-no-10588/>
- Congress of the Philippines. (2018). *Republic act no. 11214: An act establishing a sports complex known as the "Philippine Sports Training Center," and providing funds for the acquisition of property, the construction of facilities, and the administration, maintenance, and management of the center*. https://legacy.senate.gov.ph/republic_acts/ra%2011214.pdf
- Department of Education. (2013). *DepEd Order No. 43, s. 2013: Implementing Rules and Regulations (IRR) of Republic Act No. 10533 otherwise known as the Enhanced Basic Education Act of 2013*. <https://www.officialgazette.gov.ph/2013/09/04/irr-republic-act-no-10533/>
- Department of Education. (2015a). *850 special games athletes set to compete in Palaro 2015. Official Gazette of the Republic of the Philippines*. <https://www.officialgazette.gov.ph/2015/04/10/850-special-games-athletes-set-to-compete-in-palaro-2015/>
- Department of Education. (2015b). *DepEd memorandum order no. 25, s. 2015: Implementing guidelines on the Special Program in Sports (SPS)*. <https://www.deped.gov.ph/2015/06/23/do-25-s-2015-implementing-guidelines-on-the-special-program-in-sports-sps/>

- Department of Education. (2016). *K to 12 basic education curriculum. Curricular framework: Physical education*. <https://www.deped.gov.ph/wp-content/uploads/2019/01/PE-CG.pdf>
- Department of Health. (2011). *National policy on strengthening the prevention and control of chronic lifestyle-related non-communicable diseases* [Administrative Order No. 2011-0003]. <https://extranet.who.int/nutrition/gina/en/node/23762>
- Department of the Interior and Local Government. (2020). *Guidelines for the establishment of a network of cycling lanes and walking paths to support people's mobility* [Memorandum Circular No. 2020-100]. https://dilg.gov.ph/PDF_File/issuances/memo_circulars/dilg-memocircular-2020717_135380307e.pdf
- Gonzalez, C.B., & Grimmer, K. (2009). Physical activity pattern of prepubescent Filipino school children during school days. *Journal of School Health*, 79(7), 304–311. <https://doi.org/10.1111/j.1746-1561.2009.00414.x>
- Haldane, V., Chuah, F.L., Srivastava, A., Singh, S.R., Koh, G.C., Seng, C.K., & Legido-Quigley, H. (2019). Community participation in health services development, implementation, and evaluation: A systematic review of empowerment, health, community, and process outcomes. *PLoS One*, 14(5), Article 0216112. <https://doi.org/10.1371/journal.pone.0216112>
- Malanum, J. (2017). 12 PHL athletes compete in Asian Youth Para Games in Dubai. *Philippine News Agency*. <https://www.pna.gov.ph/articles/1018426>
- Murphy, N.A., Carbone, P.S., & Council on Children With Disabilities. (2008). Promoting the participation of children with disabilities in sports, recreation, and physical activities. *Pediatrics*, 121(5), 1057–1061. <https://doi.org/10.1542/peds.2008-0566>
- Ng, K., Sit, C., Arbour-Nicitopoulos, K., Aubert, S., Stanish, H., Hutzler, Y., Santos Silva, D.A., Kang, M.-G., López-Gil, J.F., Lee, E.-Y., Asunta, P., Pozeriene, J., Urbański, P.K., Aguilar-Farias, N., & Reilly, J.J. (2023). Global Matrix of Para Report Cards on physical activity of children and adolescents with disabilities. *Adapted Physical Activity Quarterly*. Advance online publication. <https://doi.org/10.1123/apaq.2022-0111>
- Pengpid, S., & Peltzer, K. (2019). Leisure-time sedentary behavior is associated with psychological distress and substance use among school-going adolescents in five Southeast Asian countries: A cross-sectional study. *International Journal of Environmental Research and Public Health*, 16(12), Article 2091. <https://doi.org/10.3390/ijerph16122091>
- Philippine Statistics Authority. (2013). *Persons with disability in the Philippines (results from the 2010 census)*. <https://psa.gov.ph/content/persons-disability-philippines-results-2010-census>
- Philippine Statistics Authority. (2022). *National quickstat*. <https://psa.gov.ph/statistics/quickstat/national-quickstat/all/>
- Tudor-Locke, C., Ainsworth, B.E., Adair, L.S., & Popkin, B.M. (2003). Objective physical activity of Filipino youth stratified for commuting mode to school. *Medicine & Science in Sports & Exercise*, 35(3), 465–471. <https://doi.org/10.1249/01.MSS.0000053701.30307.A6>
- Ward, M.R., Tyler, R., Edwards, L.C., Miller, M.C., Williams, S., & Stratton, G. (2020). The AHK-Wales report card 2018: Policy measures—Is it possible to “score” qualitative data? *Health Promotion International*, 36(4), 1151–1159. <https://doi.org/10.1093/heapro/daaa118>