Results From Finland’s 2022 Para Report Card on Physical Activity for Children and Adolescents With Disabilities

P. Asunta,1 K. Kämppi,1 K. Ng,2,3,4 A. Saari,5 and T. Tammelin1

1Jamk University of Applied Sciences, LIKES, Jyväskylä, Finland; 2Physical Activity for Health Research Cluster, Department of Physical Education and Sport Sciences, University of Limerick, Limerick, Ireland; 3School of Educational Sciences and Psychology, University of Eastern Finland, Joensuu, Finland; 4Faculty of Education, University of Turku, Rauma, Finland; 5The Finnish Paralympic Committee, Helsinki, Finland

Finland’s 2022 Para Report Card on Physical Activity for Children and Adolescents With Disabilities includes a summary of results and grades for 10 physical activity indicators and highlights how these grades are interpreted by stakeholders. The disability classification was based on the UNICEF/Washington Group on Disability Statistics measure, Generalized Anxiety Disorder (GAD7) measure, or education status. Data between 2017 and 2021 were reviewed by 24 physical activity specialists using benchmarks adapted for data on disabilities from the Active Healthy Kids Global Alliance. The grades were assigned as follows: Overall Physical Activity, C+; Organized Sport, C; Active Play, D; Active Transportation, B; Family and Peers, C+; School, B; Community and Environment, C−; Government, A−; sedentary behavior and physical fitness were graded as incomplete. Stakeholder focus-group discussions highlighted the need for multidisciplinary cooperation and increasing competence of specialists working with children to promote a physically active lifestyle for all children.

Keywords: functional difficulties, disability, impairment, surveillance, youth

The Convention on the Rights of the Child (60/1991), the United Nations Convention on the Rights of Persons with Disabilities (CRPD, 27/2016), and the Finnish Non-Discrimination Act (1325/2014; “Nondiscrimination Act,” 2014) require that children and adolescents with disabilities (CAWD) be considered equals in all services offered by Finnish society. The inclusive school system is an ongoing process wherein the number of special schools is decreasing, and CAWD have the choice to attend general or special schools (Official Statistics of Finland, 2021b). Consequently, two thirds of those pupils who receive special support study
 entirely in mainstream education groups. The other third of students attend one of the 60 special schools, which represent 2.8% of the schools in Finland (Official Statistics of Finland 2021a, 2021b).

Adolescent physical activity (PA) surveillance data in Finland have been available for over two decades (see Ng et al., 2016); however, information on CAWD has only been available in recent years. Finland’s 2018 Physical Activity Report Card included a chapter on data for CAWD, although the data were not converted into a grade format (Tammelin et al., 2018). In addition to the Global Matrix 4.0 process concerning school-aged children (7–15 years old in Finland), Finland’s 2022 Report Card presents results and assigned grades for CAWD in four categories: under 7 years old (preschool), 7–12 years old (primary education), 13–15 years old (lower secondary), and 16–18 years old (upper secondary level) as well as gender and foreign background. More details of the results can be found in Finland’s Report Card 2022 (Kämppi et al., 2022).

The aim of this paper is to summarize the results and grades of Finland’s Para Report Card 2022 on PA for CAWD (7–15 years). Furthermore, this report highlights how Para Report Card benchmarks were interpreted by stakeholders involved in providing adapted physical activity (APA).

Methods

Finland’s 2022 Para Report Card was prepared by a working group that consisted of 24 specialists in research, policy, or practices related to PA. National disability data reports and national data sources with disability variables between 2017 and 2021 were reviewed by this working group. The main data sources are described in Table 1. Grades were assigned to 10 indicators based on the Para Report Card benchmarks to the following grading scheme: A (≥80%), B (60%–79%), C (40%–59%), D (20%–39%), or F (<20%; Ng et al., in press). There were slight differences in the benchmarks for two indicators. The active transport indicator included only CAWD who lived within 5 km from school. School-age children had free transport to school if they lived more than 5 km from school. The active play indicator was based on unorganized PA in the children’s free time nearly every day. There were no data on children who engaged in unstructured/unorganized Active Play at any intensity for more than 2 hr a day (see Supplementary Table S1 [available online]). The grades were then submitted for external audit as with other Para Report Card (Ng et al., in press).

From the data sources (see Table 1), disability classification was carried out in two ways: based on the UNICEF/Washington Group on Disability Statistics recommendations (2016) or on education status. Disabilities were classified and reported according to how children and adolescents or their guardians reported a lot of difficulty or could not perform some area of functional ability, as follows: physiological difficulties, cognitive difficulties, social difficulties, or psychological difficulties. Furthermore, individuals who reported moderate or severe anxiety based on the Generalized Anxiety Disorder (GAD7) measure (Löwe et al., 2008) were classed as having disabilities. Surveys of pupils studying in special educational settings (special schools and classes) were also included in the results.
<table>
<thead>
<tr>
<th>Data source</th>
<th>Year, method</th>
<th>Participants, age</th>
<th>Respondents</th>
<th>N (%) for all and children and adolescents with disabilities (CAWD)</th>
</tr>
</thead>
</table>
| SHP study<sup>a</sup> | 2021 survey | Grades 8–9 (14–15 years) | Self-report | All: 91,560 (coverage 75%)
CAWD: moderate or severe anxiety 17,085 (19%); physical or cognitive disability 23,873 (26%); social disability 20,922 (23%) |
| 2019 survey | Grades 4–5 (10–11 years) | Parent proxy | All: 34,596 (coverage 30%)
CAWD: physical or cognitive disability 1,052 (3%); social disability 2,379 (7%) |
| SECS study<sup>b</sup> | 2018 survey | 7–18 years, special education settings | Self-report or with the help of their teacher or assistant | 889 (in 2019, 3,500 pupils were studying in special school) |
| F-SPA study<sup>c</sup> | 2018 survey | 11, 13, and 15 years | Self-report | All: 3,736
CAWD: physical or cognitive disability 277 (7%); social disability 248 (7%) |
| SYPLA<sup>d</sup> | 2018 interview/survey 2018 separate CAWD sample | 6–29 years 7–17 years with a disability | Self-report or with the help of their guardian or assistant | All: 1,447
In interview 10%, in survey 20% report a disability or long-term illness
CAWD (N = 162)
physical disability 22%; difficulties in self-care 25%; cognitive disability 48%; social disability 48% |
| TEA 2020<sup>e</sup> | 2020 Data collection | Municipalities in continental Finland | Professionals responsible for physical activity promotion in municipalities | 286 (97% of municipalities) |
| TEA 2019<sup>f</sup> | 2019 Data collection | Schools | Headmasters of schools in collaboration with a student welfare group | 2,057 (91% of all schools) |

Note. <sup>a</sup>School Health Promotion Study, National Institute for Health and Welfare.<sup>b</sup>Special Education Classes or Schools Study.<sup>c</sup>Finnish School-Aged Physical Activity Study, University of Jyväskylä.<sup>d</sup>Study of young people’s leisure activities, The Finnish Youth Research Society & Network.<sup>e</sup>Physical activity in municipal operations—TEA, National Institute for Health and Welfare.<sup>f</sup>Promotion of well-being and health in basic education—TEA, National Institute for Health and Welfare.
The Methodology for Stakeholder Data Gathering

Focus group discussions were held to gather information on the stakeholders’ perspectives and to bring out the voices of people with disabilities. The interview guides were semistructured with questions based on the results of the Para Report Card indicators. At the start of the focus group discussions, the moderator presented a slide show with results for each indicator for CAWD as well as the grade for all children. The moderator then asked the participants to discuss the grades according to strengths, weaknesses, opportunities, and threats (see Hutzler et al., in press).

Convenience sampling method was used. Recognized professionals and experts working in the APA field in Finland and in the most central organizations were invited to take part in the focus group discussions. A total of 10 participants, of whom seven were specialists in APA, took part in two focus group discussions. The participants represented national or municipal officials, para-athletes, a guardian and adolescent with disability, and a board member for the human rights organization of persons with disabilities in Finland. Both sessions were audio recorded, and the focus groups lasted 63 min and 109 min, respectively. The total length of verbatim transcripts was 41 pages (Times New Roman, font size 12, 1.5 space). Transcript excerpts were coded and grouped based on a strengths, weaknesses, opportunities, and threats (SWOT) framework by two researchers and were subsequently translated into English. The stakeholder-identified SWOT themes were then aligned to levels of an adapted ecological model (McLeroy et al., 1988). An ecological approach focuses on both population-level (governmental and community) and individual-level (child and family) determinants of PA and health promotion.

Results

The grades assigned for Finland’s Para Report Card 2022 are summarized in Table 2 with additional comments from the stakeholders. The results, including data gaps and constraints, can be found in Supplementary Table S1 (available online). The grades were assigned to 10 indicators, of which two were graded as incomplete. Indicators’ grades ranged from the weakest, active play (D), to the highest, government (A−).

It should be noted that recent accelerometer-measured data were not available for CAWD. From the self-reported results, the overall PA level was C+ and lower if a child or adolescent reported difficulties in several areas of functional limitation (Ng et al., 2019). The proportion of children who engaged in at least 60 min of moderate-to-vigorous physical activity per day on at least 4 days a week was 64% for 11- to 15-year-olds with physical or cognitive disabilities (S. Kokko, unpublished manuscript), 54% for 11- to 15-year-olds within special education (Pikkupeura et al., 2020), 59% for 14- to 15-year-olds with physical or cognitive disabilities, 56% for 14- to 15-year-olds with social disabilities, and 59% for 14- to 15-year-olds with moderate or severe anxiety (T. Ståhl, unpublished manuscript).

Participation in organized sport and PA ranged between 36% and 71% depending on age and disability (Kämppi et al., 2022). Approximately every third CAWD engaged in unorganized PA in their free time nearly every day. However, unorganized PA was less common than organized PA among children with reported disabilities (Hakanen et al., 2019). Active transportation is common in
Finland. CAWD who lived within 5 km of school, 77% of 11-year-olds, 78% of 13-year-olds, and 65% of 15-year-olds, commuted actively to school either on foot or by bike (S. Kokko, unpublished manuscript).

There were no data available on recreational screen time or sedentary time, and the indicator of sedentary behavior was assigned as incomplete. The Move! monitoring system for physical functional capacity is a national measurement and feedback system intended for pupils in Grades 5 and 8 in Finland. It can be carried out in an adapted manner for pupils with long-term or permanent impairment or disabilities (Asunta & Lindeman, 2021). However, no information on the level of physical fitness was available for CAWD. Thus, the physical fitness indicator was graded as incomplete.

**Interpretations Through SWOT**

The themes were discussed and grouped according to strengths, weaknesses, opportunities, and threats (see Supplementary Table S2 [available online]). Moreover, the cross-cutting thematic areas that emerged from the SWOT discussion were

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Grade</th>
<th>Opinions of stakeholders</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall Physical Activity</td>
<td>C+</td>
<td>There was general agreement for this grade.</td>
</tr>
<tr>
<td>Organized Sport and Physical Activity</td>
<td>C</td>
<td>There was general agreement for this grade.</td>
</tr>
<tr>
<td>Active Play</td>
<td>D</td>
<td>The benchmark did not account for children with severe disabilities who rely upon organized transport to and from school.</td>
</tr>
<tr>
<td>Active Transportation</td>
<td>B</td>
<td></td>
</tr>
<tr>
<td>Sedentary Behavior</td>
<td>INC</td>
<td>Stakeholders stated that many CAWD spend a lot of time on screen (for which data exist). Unfortunately, there are no data of recreational screen time.</td>
</tr>
<tr>
<td>Physical Fitness</td>
<td>INC</td>
<td>This indicator was not discussed because no data exist.</td>
</tr>
<tr>
<td>Family and Peers</td>
<td>C+</td>
<td>There was general agreement for this grade.</td>
</tr>
<tr>
<td>School</td>
<td>B</td>
<td>There was general agreement for this grade.</td>
</tr>
<tr>
<td>Community and The Built Environment</td>
<td>C−</td>
<td>Data in the general report card were rated as B−, but stakeholders believed it was incorrect to grade so highly and agreed that it was, at most, C and suggested finding additional data. Additional data were found and supported the grade C−.</td>
</tr>
<tr>
<td>Government Strategies and Investments</td>
<td>A−</td>
<td>There was general agreement for this grade</td>
</tr>
</tbody>
</table>

Finland. CAWD who lived within 5 km of school, 77% of 11-year-olds, 78% of 13-year-olds, and 65% of 15-year-olds, commuted actively to school either on foot or by bike (S. Kokko, unpublished manuscript).

There were no data available on recreational screen time or sedentary time, and the indicator of sedentary behavior was assigned as incomplete. The Move! monitoring system for physical functional capacity is a national measurement and feedback system intended for pupils in Grades 5 and 8 in Finland. It can be carried out in an adapted manner for pupils with long-term or permanent impairment or disabilities (Asunta & Lindeman, 2021). However, no information on the level of physical fitness was available for CAWD. Thus, the physical fitness indicator was graded as incomplete.
interpreted at three levels: child and family; communities, services, and built environment; and government-level policy (see Figure 1). Through an ecological model, these three levels represent nested factors with behavior inside the environment, that is, within policies. Therefore, when promoting PA, it is important to look at the issues that arise at each level. At both the child and family levels, PA was seen as polarized. Some CAWD engaged in PA according to recommendations, but unfortunately, there were a lot of those who engaged in very little PA. Compared with their peers with no disabilities, CAWD were more influenced by their guardians’ attitudes and support for PA and organized sports. Some guardians may be more involved in finding organized sport opportunities, transportation, and giving personal assistance, whereas, in turn, overprotective guardians can be seen as one of the threats. In addition, accessibility, friends, and lack of adaptive sports equipment can increase the polarization. Arguably, the municipality officials stated that more detailed PA monitoring of the CAWD should be carried out in municipalities to facilitate the promotion of PA according to the needs of the target groups. It is not equitable if all children and young people are treated as one group.

Accessibility, as well as the Finnish Model for Leisure Activities (FMLA; Ministry of Education and Culture, 2022), and the dual strategy approach were themes that overlapped on all three levels. FMLA is a new initiative launched by the Ministry of Education and Culture in 2021. Its aims are to enable every child and

Figure 1 — The cross-cutting thematic areas emerged at three levels from the SWOT (strengths, weaknesses, opportunities, and threats) discussion.
young person to participate free of charge in leisure activities in connection with the school day. Nonetheless, the stakeholders expressed concerns about the actions provided in terms of competence, attitude, resources, and accessibility. If these points are not considered sufficiently in FMLA, it may maintain exclusion and can be seen a threat to increase inequality. Accessibility is still an issue, even though the situation of the built environment has improved. Since 2015, the Ministry of Education and Culture has required the inclusion of an accessibility plan in applications for state subsidies concerning the construction of sports facilities. Winter conditions offer many possibilities to be physically active; however, for CAWD who use assistive devices, such as a wheelchair, it can be challenging to get to activities or school.

A follow-up evaluation from the equal access point of view is needed. Based on the Convention of the Rights of Persons With Disabilities, Article 30.5 (CRPD, 2016), which is justified by the claim for inclusion within mainstream settings and implementing disability-specific leisure time activities (the so-called “dual strategy”), influences the extent of supply and expertise of local level sports providers in municipalities. For the families and adolescents, more opportunities may arise to choose according to one’s preferences, wishes, and choices and, thus, increase sports participation. Moreover, this is in line with Kiuppis (2018), who stated that sport is a context in which special, integrative, and inclusive structures coexist in a nonhierarchical way. There were concerns about the lack of human resources, with sufficient competences, to allow successful implementation of the dual strategy. This is a threat to organizations in situations when, for example, people are on sick leave or leave work, and replacements cannot be found in a timely manner. As such, a void is created in the PA provision for CAWD. Basic skills in APA should be included in educating those working with children and adolescents at all levels, that is, in schools, sport organizations, municipal PA groups, and FMLA. Multidisciplinary cooperation between different actors, at both the municipal and government levels, is essential due to the scarcity of potential resources in the future.

Discussion

There were disability-specific data for grading eight of the 10 indicators of Finland’s Report Card to highlight the inclusion of CAWD surveys. In Finland’s Report Card 2022, there were data for grading in nine indicators (Kämppi et al., 2022). There is a need for more information about PA behaviors among CAWD, especially physical fitness, sedentary behavior, and accelerometer-measured PA data. Although nationally comprehensive data with disability variables are available, published reports and research according to benchmarks are only available to a limited extent. The Para Report Card represents a way to translate knowledge from data to something meaningful and can be monitored over time for policymakers and various actors involved in APA, including CAWD and families. Moreover, the involvement of children in planning the activities is important to facilitate PA for children and adolescents and may help to eliminate barriers to it.

One grade does not give a complete picture of the situation of CAWD as the CAWD group is heterogeneous with different levels of functional difficulties, long-term illnesses, and disabilities. As such, a single functional difficulty or impairment may stay hidden. Consequently, the results for different disability
groups have been described in Supplementary Table S1 (available online). For instance, in the promotion of PA, there is a need to look at more detailed groups—those children and adolescents with social difficulties were least active in every age group, and boys were more active than girls. Therefore, more intersectional research in the future is needed. The Finnish government is creating good conditions for realizing the goals set in its sports and PA policy by providing resources for PA services for all children (Kämppi et al., 2022; Sit et al., 2022). The government resolution on promoting well-being, health, and safety 2030 outlines actions that will be taken in an effort to reduce inequalities in well-being and health by 2030. One of the four promotion areas is an opportunity for all to get involved (“Promotion of Wellbeing, Health and Safety 2030,” 2021).

**Study Strengths and Limitations**

Although there are comprehensive national PA studies in Finland that include the disability variable, only a few results have been published corresponding to Para Report Card benchmarks. In addition, several research gaps remain, and in particular, there was no information on physical fitness levels, sedentary behavior, or accelerometer-measured PA. For two indicators (Active Play and Active Transport), the benchmarks were slightly different. Such nuances need to be considered for cross-national comparisons, such as the Global Matrix.

**Conclusions**

Disability-specific data were available for grading eight Para Report Card indicators. The Finnish PA system is constantly changing and warrants regular monitoring as well as reporting on such findings. Furthermore, data on educating teachers, coaches, and other specialists working with children for APA and inclusive education are essential, that is, how to adapt sports, what should be considered when directing exercise to CAWD, or where to get adapted equipment. The underlying issues and individual needs of vulnerable populations must be effectively addressed to reduce the health disparity gap.

**Acknowledgments**

The authors would like to thank Jari Villberg from the University of Jyväskylä, Eetu Ervasti from the Finnish Institute for Health and Welfare, and Harto Hakonen and Tuomas Kukko from Jamk University of Applied Sciences for help with the data request and analyses. This work was supported by the Ministry of Education and Culture of Finland.

**References**


