Physical Activity Para Report Card for Children and Adolescents With Disabilities in Lithuania

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Despite the recognized benefits of physical activity (PA) for children and adolescents with disabilities (CAWD), collective information on this is lacking in Lithuania. The purpose of this study was to investigate the current “state of the nation” PA levels of CAWD, based on the 10 indicators from the Active Healthy Kids Global Alliance Global Matrix 4.0 methodology. Scientific articles, practical reports, and published theses related to the 10 indicators from the Global Matrix 4.0 on CAWD age 6–19 years were reviewed, and data were converted to grades from A to F. (A) Strengths, Weaknesses, Opportunities, and Threats analysis was carried out to interpret the grades by four experts. Data on organized sport participation (F), school (D), community & environment (D), and government (C) were available. Data on other indicators are largely missing yet are needed for policymakers and researchers to be aware of the current state of PA among CAWD.

Keywords: special-education needs, AHKGA Global Matrix, sport participation, policy, community and environment

At present, children and adolescents with disabilities (CAWD) in Lithuania can attend different school settings according to their special education needs
From 2024, all CAWD will be able to attend a school assigned or chosen by their place of residence (The Seimas of Republic of Lithuania, 2022). This means that an inclusive education environment must be created in schools, and every physical education (PE) teacher will need to be able to organize inclusive physical activities (PA). According to the European Agency for Special Needs and Inclusive Education, there are 19% of primary (6–11 years), 9% of lower upper secondary (12–15 years), and 2% of upper secondary (16–19 years) students with special education needs who are in Lithuanian mainstream education (Lenart et al., 2018). Furthermore, in Lithuania, 89% of CAWD participate in general PE, yet schools are not in a suitable environment for PE due to the lack of accessibility and facilities (Official Statistics Portal, 2021; Selickaite, 2019).

Moreover, there is a lack of data regarding participation of CAWD in PE classes and informal PA (Gardziulevičienė, 2021).

Lithuania has a high prevalence of physical inactivity among children and adolescents, and rates of PA are one of the lowest globally (Emeljanovas et al., 2019; Sukys et al., 2019). Although more than 33% of Lithuanian adolescents in a nationally representative study took part in 60 min of PA a day for at least 5 days/week, this decreases with age (from 45% among 11-year-olds to 26% among 19-year-olds; López-Sánchez et al., 2018). According to the first PA Report Card in 2018, Lithuanian children have lower than satisfactory levels in organized PA, active transportation, community and built environments, government strategies, and investments (Emeljanovas et al., 2019; Sukys et al., 2019). As in many countries, these national surveys do not report separately according to disability, leaving a knowledge gap on rates of PA among CAWD (Martin Ginis et al., 2021). Since 2019, many nongovernmental organizations in Lithuania have started developing projects with the focus on improving PA and sports for CAWD, although it is not clear what the overall effects of these projects were. To gain a better understanding of the scientific evidence of PA of CAWD, it is important to provide regular national monitoring and comprehensive analysis of the scientific evidence.

Using available data with the views from experts in the field of PA and sports for CAWD, as well as using a Strengths, Weaknesses, Opportunities, and Threats (SWOT) analysis, the purpose of this study was to report on the current “state of the nation” regarding PA levels of CAWD.

**Methods**

The development of the Lithuanian PA Para Report Card for CAWD adhered to the harmonized process of 14 countries or regions who produced PA Para Report Card grades for this population. The process is explained in more detail in the overview paper of this special issue (Ng et al., in press). The analysis in this study used scientific articles in Lithuanian and foreign journals, national scientific and practical reports, and published master’s and doctoral theses between 2016 and 2021 with data related to the 10 PA indicators from the Active Healthy Kids Global Alliance (Overall PA, Organized Sport, Active Play, Active Transportation, and Sedentary Behaviors, Physical Fitness, Family & Peers, School, Community & Environment, and Government) on CAWD aged 6- to 19-year-olds.
The data were extracted from the studies as reported percentages, mapped against benchmarks, and converted into grades (A–F), or INC for incomplete data, as highlighted in the Global Matrix 4.0 methodology (Aubert et al., 2022). A grade of A indicated that a large majority (87%–93%) of CAWD met this criterion. The other grades according to the percentage who met the criteria were as follows: B = well over half of CAWD (67%–73%), C = about half of children and young people (47%–53%), D = less than half but some CAWD (27%–33%), F = very few CAWD (<20%), and INC = insufficient or inadequate information to assign a grade. In addition, the quality of evidence, sample size, and representativeness were discussed.

The development process of the Para Report Card for CAWD involved cooperation between the researchers’ team and experts from backgrounds related to CAWD and PA. The most recent data from studies (articles, national scientific and practical reports, and published master’s and doctoral theses) were used throughout the grading process. Due to the exploratory nature of this study, the selection of the experts was based on professionals with an academic background in adapted PA and practical knowledge in the field of PA of CAWD at club, school, community, and national levels. A convenience sample of four experts (leader of a disability club, national wheelchair basketball team coach, physical fitness coach of CAWD, and member of the Lithuanian Sports Federation for the Disabled) were invited to discuss the data and grades. All the data of the 2022 Para Report Card for CAWD and indicators’ grades were presented to the experts. The experts met to discuss the grades during the Strengths (positive characteristics and advantages of the Para Record Card), Weaknesses (negative characteristics and disadvantages of the Para Record Card), Opportunities (factors, a situation that can benefit, enhance, or improve the Para Record Card), and Threats (factors, situations that can hinder the Para Report Card; SWOT) analysis process (Hill & Westbrook, 1997; Skinner et al., 2012). The experts were familiarized with each SWOT component, and they analyzed them across each grade of the Para Record Card. During the meeting, all experts presented their interpretations to each other in a triangulation process. It allowed each of the four experts to present their findings and come to an agreement for each statement of SWOT analysis (see Table 1).

Results

There were sufficient data that aligned to the benchmarks used in this Para Report Card for four indicators: Organized Sport Participation (grade = F), School (grade = D), Community & Environment (grade = D), and Government (grade = C). Overall PA, Active Play, Active Transportation, Sedentary Behavior, Physical Fitness, and Family & Peers indicators were graded as INC due to insufficient data (Jociutė & Beržanskystė, 2016; Kuktelionyte & Skucas, 2014; Minkevicius et al., 2005; Strazdienė at al., 2017; Žaltauskė & Petraukienė, 2016). More details of the grades against the benchmarks can be found in Supplementary Table S1 (available online).

The Lithuanian Ministry of Social Security and Labor (2020) reported that 616 CAWD participated in projects or programs for their integration through PE and sports, 431 (which is approximately 70%) of which participated in sports clubs for the disabled twice a week and in competitions at least several times per year, and
330 (which is approximately 54%) CAWD participated in nonpermanent sports activities, for example, the Olympic Day. These numbers equate to approximately 13% of CAWD who participated in organized sport activities. With this evidence combined, the Organized Sport indicator was assigned a Grade F.

The reports and studies on the School indicator demonstrate a fragmented picture of inclusion in PE. For example, 89% of CAWD participated in PE classes (Official Statistics Portal, 2021), yet there is still a major need for support in adaptations to the environments (Selickaitė, 2019). It should be noted that only about 10% of secondary schools meet accessibility guidelines for wheelchair users, and only 0.3% of schools are fully accessible for the blind in Lithuania; hence, Grade D was assigned for the School indicator.

The survey of leaders from 45 sports clubs showed that despite the possibility for CAWD to practice sports, few clubs created opportunities for CAWD to participate in sports club activities (Mikalauskas et al., 2019). At the local level, there are 84 public sports education centers, but only 359 CAWD (which is approximately 2% of all participants) have participated in organized PA in these centers (Official Statistics Portal, 2021). With these findings, the Community & Environment indicator was assigned a Grade D.

The Government indicator was assigned a Grade C, because there are many legal acts to support PA and CAWD. At the national level, the Ministry of Education, Science and Sport is solely responsible for general and inclusive education and implementation guidelines of PA for CAWD. The Department for the Affairs of the Disabled implements different social programs and projects including PA and sports for CAWD. The Law on Sports, Law on Social Services, Law on Equal Treatment, the Convention on the Rights of Persons with Disabilities (ratified by Lithuanian Parliament, May 27, 2010), and Law on the Social Integration of the

Table 1  SWOT Matrix for 2021 Report Card on PA for CAWD

<table>
<thead>
<tr>
<th>Strengths</th>
<th>Weaknesses</th>
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<tbody>
<tr>
<td>Legal framework for CAWD inclusion and PA</td>
<td>Society awareness in the field of CAWD and PA</td>
</tr>
<tr>
<td>Positive attitude of policymakers</td>
<td>Insufficient research funding in the field</td>
</tr>
<tr>
<td>National and International Adapted Physical Activity Study program at Lithuanian Sports University</td>
<td>Accessibility of services and lack of competent professionals in the field of PA for CAWD</td>
</tr>
<tr>
<td></td>
<td>Development of a strategy for including CAWD in PA</td>
</tr>
<tr>
<td></td>
<td>Segregated PA and sport for CAWD</td>
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</tbody>
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<table>
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<tr>
<th>Opportunities</th>
<th>Threats</th>
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</thead>
<tbody>
<tr>
<td>The ability and possibility for changes</td>
<td>Partial implementation of laws and lack of control</td>
</tr>
<tr>
<td>Development of PA for CAWD</td>
<td>Slow change of stereotypical attitudes toward CAWD</td>
</tr>
<tr>
<td>The potential of scientists to promote PA for CAWD</td>
<td>The predominance of the medical model of disability</td>
</tr>
<tr>
<td>Education of the society and change in attitudes</td>
<td></td>
</tr>
</tbody>
</table>

*Note. CAWD = children and adolescents with disabilities; PA = physical activity; SWOT = Strengths, Weaknesses, Opportunities, and Threats.*
Disabled state that everyone is equally entitled to participate in sports and PA at all levels and chosen roles. In 2006, the Lithuanian Ministry of Social Security and Labor implemented a sports integration project “Integration of the Disabled People through PE and Sport.” The project’s goal was to include CAWD in PA together with individuals without disabilities. In 2020, €580,584.38 was allocated from the state for the implementation of projects for the social integration of the CAWD through PE and sports. However, there are no data about financial support in educational settings.

Discussion

The Para Report Cards

This is the first comprehensive assessment of PA behaviors, settings, and sources of influence for PA of CAWD in Lithuania. This is the first Lithuanian Report for Children and Youth, and despite a search for data in the past 10 years, fewer indicators were graded compared to the results from the 2018 Lithuanian Report for Children and Youth (Emeljanovas et al., 2019). There were four indicators where grades were assigned—Organized Sport (F), School (D), Community & Environment (D), and Government (C). Data on other indicators were lacking (INC). The low grades and lack of data demonstrate the problems concerning the participation in PA among CAWD as well as a lack of monitoring in Lithuania.

There were emerging sources of data not included in the final grading due to the lack of alignment with the Para Report Card benchmarks or low sample sizes. For example, 8.3% of CAWD (aged from 12- to 16-year-olds from two schools) participated in regular active sports after school (Andriukevičiūtė, 2013). There were small-scale case studies on Active Play that involved convenience samples of preschool-aged children with various impairments (Celiesiene et al., 2019) and data on how active breaks were organized for children with intellectual disabilities (Sakalauskaite, 2021). Studies on Physical Fitness were also scarce, as a study in 2014 involved 30 adolescents from special schools. There were two studies on CAWD’s participation in leisure PA or PA in unstructured settings at school (Celiesiene et al., 2019; Sakalauskaite, 2021), but they were not included in any Para Report Card indicator.

From parent reports, some parents considered child rehabilitation as part of the frequency of PA (Januleviciene, 2017). Rehabilitation activities were supported by parents and may have been included in the Family & Peers indicator, but it could also be part of the Overall PA indicator. These types of data were not included in the Para Report Card, and clearer explanations for future report card benchmarks are needed because active therapy sessions are specific among CAWD (Hutzler et al., 2023).

SWOT Analysis

From the SWOT analysis, the experts maintained that the inclusion of CAWD in Lithuania was implemented by the law, but the medical model of disability was still
rooted in society. The experts added that parents of CAWD did not participate in PA with their children, and this must be encouraged. Parents need to be educated on how to participate in the activities associated with rehabilitation, and more information about PA possibilities for their children is needed. Sports and PA for CAWD in Lithuania have been organized mainly in segregated settings as noted from the evidence in the organized sport indicator.

Judging from the statements in Lithuanian laws on inclusion and guidelines for PA, there is no developed national strategy for inclusion in PA. Thus, it was expected that data for six indicators were lacking. Without information to base grades for these indicators, it was difficult to define the current situation concerning PA for CAWD. Among CAWD in Lithuania, continuous monitoring is needed. When reporting relevant data, there are opportunities to embrace changes in attitudes in the society, accessibility of various services, and developing services in PA for CAWD.

The following couple of years is important to capture information in the PA domain through research. Researchers must take advantage of these opportunities and disseminate findings to governmental bodies in efforts to promote PA for CAWD. Currently, the risk of full inclusion in these settings is that inadequate knowledge and competencies may lead to lack of quality experiences in PA participation in school and the community, leading to a downward spiral of inclusive participation. University degree programs provide training to new and existing professionals in adapted PA that are best to build such competencies.

Study Limitations

There are several surveillance gaps in Lithuania and these may not reflect the reality of PA behavior and its sources of influence. Data on Overall PA, Active Play, Active Transportation, Sedentary Behavior, Physical Fitness, and Family & Peers are lacking. For some of the indicators, the grade was based on statistical data and questionnaire cross-sectional survey studies using self-report measures, whereby reporting biases may have been present. Some data were inconsistent, and it was challenging to determine a grade. The results from the SWOT analyses may have been limited to the pool of four experts, and a Delphi study with more stakeholders may be something to pursue in the future.

Despite the aforementioned limitations, the Lithuanian Para Report Card for CAWD provides the first comprehensive analysis of the available PA data and identifies the main data gaps and problems particular to Lithuania.

Conclusions

Participation in organized sports, schools, and community activities of CAWD in Lithuania is very low, and overall PA is unknown. There is a potential possibility for PA participation in educational and community settings, but the support for CAWD and their parents is lacking. Lithuanian laws define the guidelines of PA for CAWD, but there is no developed national strategy for the implementation of these guidelines. A lack of evidence for six indicators demonstrates large research gaps on PA and sport participation in this group.
References


