



AHKGA Webinar #2 - How to Integrate Equity into Grades

Chair: Dr. Salomé Aubert
Date: April 14th, 2021, 12 pm – 1 pm GMT

THIS SESSION IS BEING RECORDED



Agenda

- Welcome & Introductions
- Background
- Specific populations of interest
- AHKGA Global Matrix 4.0 context & limitations
- Propositions & open discussion
- Wrap-up

Background

Journal of Physical Activity and Health, 2018, 15(Suppl 2), S251-S273
<https://doi.org/10.1123/jpah.2018-0472>
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Global Matrix 3.0 Physical Activity Report Card Grades for Children and Youth: Results and Analysis From 49 Countries

“The disparities and inequities across gender, socioeconomic status, or urban versus rural dwelling were mentioned in only a handful of Report Card articles; thus, they were not analyzed or discussed in this study.”



Background





International Journal of
*Environmental Research
and Public Health*



Article

Profiles of Active Transportation among Children and Adolescents in the Global Matrix 3.0 Initiative: A 49-Country Comparison

Silvia A. González ^{1,2,*} , Salomé Aubert ¹, Joel D. Barnes ¹ , Richard Larouche ^{1,3} and Mark S. Tremblay ^{1,2}

“Among the countries that assigned a grade for active transportation, 83% (n = 39) did not provide details of the prevalence stratified by sex.”



Background

Journal of Physical Activity and Health, 2018, 15(Suppl 2), S274-S283
<https://doi.org/10.1123/jpah.2018-0370>
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Indicators of Physical Activity Among Children and Youth in 9 Countries With Low to Medium Human Development Indices: A Global Matrix 3.0 Paper

Taru Manyanga, Joel D. Barnes, Chalchisa Abdeta, Ade F. Adeniyi, Jasmin Bhawra, Catherine E. Draper, Tarun R. Katapally, Asaduzzaman Khan, Estelle Lambert, Daga Makaza, Vida K. Nyawornota, Reginald Ocansey, Narayan Subedi, Riaz Uddin, Dawn Tladi, and Mark S. Tremblay

“A study among American adults found that state-level income inequality was associated with increased risk of sedentary behavior. Whether or not these findings are generalizable to other countries with low to medium HDIs requires further investigation.”



Background

Journal of Physical Activity and Health, 2019, 16, 679-697
<https://doi.org/10.1123/jpah.2019-0244>
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ORIGINAL RESEARCH

The International Impact of the Active Healthy Kids Global Alliance Physical Activity Report Cards for Children and Youth

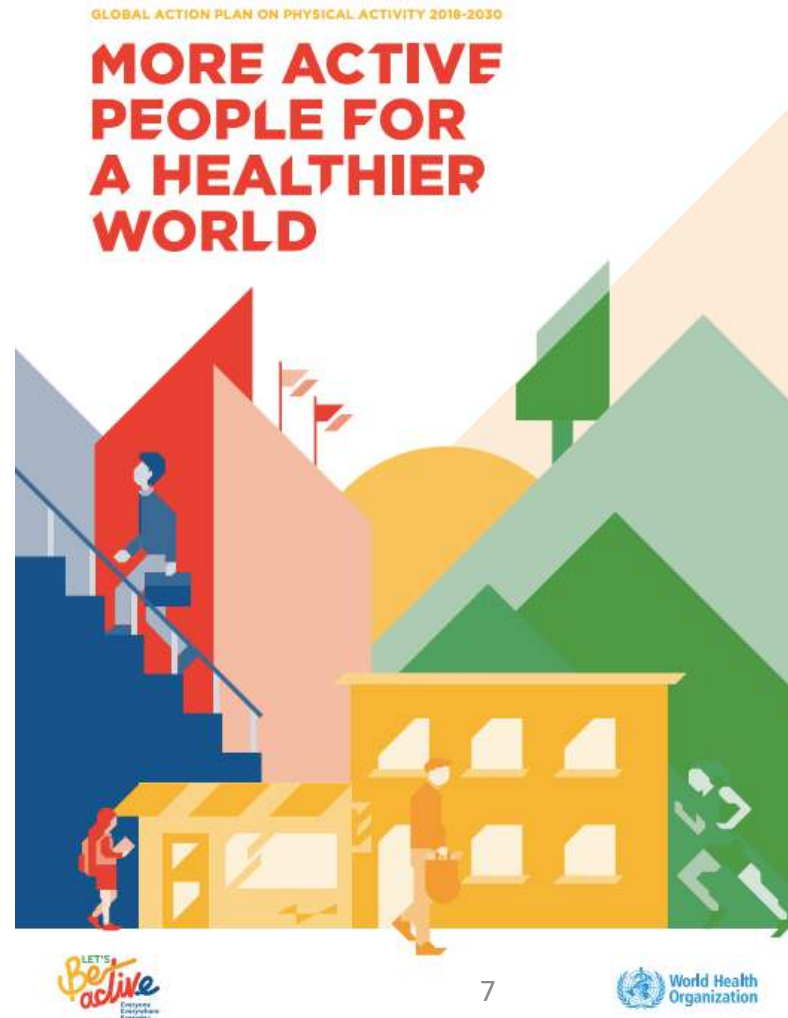
Salomé Aubert, Joel D. Barnes, Megan L. Forse, Evan Turner, Silvia A. González, Jakub Kalinowski,
Peter T. Katzmarzyk, Eun-Young Lee, Reginald Ocansey, John J. Reilly, Natasha Schranz,
Leigh M. Vanderloo, and Mark S. Tremblay

*“Future Directions for the AHKGA Report Card and Global
Matrices:*

*(4) Following the example of The Netherlands Report
Card+ initiative, the AHKGA aims to include the evaluation
of the physical activity indicator for children and youth
with a disability or chronic disease.”*



Background



WHO Global Action Plan on Physical activity 2018-2030

- Strategic action: to enhance data systems and capabilities at national levels to support regular population surveillance of physical activity
- Emphasised the importance of understanding and addressing social inequalities in physical activity participation across the life spectrum



Background

Summary:

- Identified surveillance and research gaps
- Need for understanding the degrees of inequalities children and adolescents are facing to engage in healthy levels of active behaviours across various geographical, economical, environmental, and cultural contexts
- The Global Matrix and Report Card initiatives have the potential to contribute to address these needs internationally

Specific populations of interest

- Girls vs boys
- Results stratified across socio economical categories
- Urban versus rural dwelling
- Children and adolescents with special needs or chronic conditions
- Children not attending school
- Ethnic minorities
- Any suggestion?

AHKGA Global Matrix 4.0

context & limitations

- AHKGA recognized the importance of assessing equity in the Global Matrix indicators
- This webinar discussion is about what will happen after the Global Matrix 4.0
- Feasibility is limited by
 - Availability and variability of data across participating countries
 - Amount of time and resources required to develop harmonised and adaptable methodologies
 - Amount of time and resources required to perform global analysis
 - Amount of time and resources required to publish, disseminate, and communicate this potentially large amount of new data/findings

AHKGA Global Matrix 4.0 context & limitations

- The launch event of the Global Matrix 4.0 and the associated publications will need to be **limited to the main national and international physical activity grades** and comparisons
- AHKGA priority is to obtain comparable grades for each indicators, ideally in line with what was done in GM 1.0, 2.0, 3.0 but individual countries can do more in this area
- If enough Global Matrix participating countries adopt a similar approach to include equity in their grades, this will be the opportunity to test and evaluate it; and AHKGA is open to lead the development of specific publications and/or presentations/symposiums presenting international comparisons and integrated findings



Disparities and inequities sections

2020 ParticipACTION Report Card on Physical Activity for Children and Youth

Contributing Factors and Disparities

Younger children are generally more active than older children, with 52% of 5- to 10-year-olds taking at least 12,000 steps daily (a threshold that approximates 60 minutes of MVPA) compared to 26% of 15- to 19-year-olds (2014-16 CANPLAY, CFLRI).⁴⁶ Furthermore, data show that more boys (49%) than girls (32%) take at least 12,000 steps daily (2014-16 CANPLAY, CFLRI).⁴⁶ More recent data confirm these disparities: boys engage in more physical activity than girls, and younger children (5-11 years) engage in more physical activity than older children (12-17 years) (see Figure 2 and Table 1) (2016-17 CHMS, Statistics Canada).^{Custom analysis} Socio-economic status disparities also continue to exist: children and youth of parents with a university education are more likely to take at least 12,000 steps daily compared to their counterparts with parents who have completed high school or a college education. Additionally, a greater proportion of children and youth in higher-income households (\geq \$60,000 per year) meet this threshold compared to children and youth in lower-income households (\$20,000-\$29,999 per year) (2014-16 CANPLAY, CFLRI).⁴⁶ International data confirm an association between socio-economic status and physical activity.^{58,59} Other research shows that children who do not meet the physical activity guidelines (\geq 60 minutes of daily MVPA) also have a high body mass index, have an electronic device in the bedroom (e.g., television) and engage in high levels of sedentary time.^{60,61}

Contributing Factors and Disparities

Survey data on approximately 450 children (9-11 years) from the United Kingdom showed that boys, children from lower socio-economic status families and children who spent less than two hours on their computer on a school day had higher odds of spending more than one hour outside after school compared to girls, children from high socio-economic status families and children who spent more than two hours on their computer.⁸⁷ In terms of Canadian data, there are several age- and gender-related disparities in active play:

- ▶ On average, boys in grades 6 to 8 and 9 to 10 report playing outdoors for 19 minutes per day and 15 minutes per day, respectively (2018 HBSC, PHAC).^{Custom analysis}
- ▶ On average, girls in grades 6 to 8 and 9 to 10 report playing outdoors for 15 minutes per day and 10 minutes per day, respectively (2018 HBSC, PHAC).^{Custom analysis}
- ▶ On average, boys in grades 6 to 8 and 9 to 10 report engaging in leisure-time exercise for 14 minutes per day and 15 minutes per day, respectively (2018 HBSC, PHAC).^{Custom analysis}
- ▶ On average, girls in grades 6 to 8 and 9 to 10 report engaging in leisure-time exercise for 11 minutes per day and 12 minutes per day, respectively (2018 HBSC, PHAC).^{Custom analysis}

Contributing Factors and Disparities

Previous Report Cards list several factors that are related to active transportation in children and youth (e.g., age, gender, walking distance to school, parental support).⁵ More recent research continues to confirm these factors: older children, children without siblings, households with no vehicles, and children who live closer to school are more likely to use active travel.¹⁰² New data from a national survey of students in grades 6 to 10 in Canada (2018 HBSC, PHAC)^{Custom analysis} reveal that boys continue to engage in slightly more active travel to all destinations than girls (15.0 vs. 13.3 minutes per day in grades 6 to 8 boys and girls, respectively; 15.2 vs. 13.6 minutes per day in grades 9 to 10 boys and girls, respectively).

Development of specific “subgrades”

For each indicators

- One main grade
- Potentially subgrade by gender, a subgrade for children and adolescents with special needs or chronic conditions, etc

Advantages

- Relatively easy to implement with the use of the standardised grading rubric
- INC grades will support advocacy for the improvement of the surveillance systems and inclusion/identification of these specific populations/characteristics

Development of specific “subgrades”

For each indicators

- One main grade
- A subgrade by gender, a subgrade for children and adolescents with special needs or chronic conditions, kids not attending school, etc

Limitations

- Potentially overwhelming amount of grades/subgrades to present, analyse, discuss within one Report Card publication/document
- Subgrades for each socio-economical level category
- Potentially increase the gap between HIC and LMIC in terms of available letter grades

Development of specific “subgrades”

Alternative

For the Global Matrix 4.0, a pilot trial can be tested where volunteering Report Card teams will develop subgrades for a limited number of specific populations (e.g. by gender and for children and adolescents with special needs) and the observed inequities or surveillance gaps for the other populations of interest could be discussed without grading.

Advantages & limitations

- International harmonisation and coordination will be required
- Not overwhelming the teams already challenged by the development of the “classic” Report Card format
- Allows evaluation & improvement



Development of population/ equity specific Report Cards

ORIGINAL RESEARCH ARTICLE

Front. Pediatr., 30 April 2018 | <https://doi.org/10.3389/fped.2018.00122>



2017 Dutch Report Card⁺: Results From the First Physical Activity Report Card Plus for Dutch Youth With a Chronic Disease or Disability

Marcella Burghard, **Nynke B. de Jong**, **Selina Vlieger** and **Tim Takken*** on behalf of the Dutch Report Card Research Group



Contents lists available at [ScienceDirect](https://www.sciencedirect.com)

Journal of Exercise Science & Fitness

journal homepage: www.elsevier.com/locate/jesf



Results from Hong Kong's 2019 report card on physical activity for children and youth with special educational needs

Cindy Hui-Ping Sit ^a, Jane Jie Yu ^a, Wendy Yajun Huang ^b, Martin Chi-Sang Wong ^c, Raymond Kim-Wai Sum ^a, Mark S. Tremblay ^d, Stephen Heung-Sang Wong ^{a, *}



ACTIVE HEALTHY KIDS
GLOBAL ALLIANCE

Development of population/equity specific Report Cards

Advantages

- Reduce the amount of grades/subgrades to present, analyse, discuss within one Report Card publication/document
- A delayed deadline (after the Global Matrix 4.0 launch event) could be adopted as international initiative
- Open the opportunity to develop more relevant and needed academic publications/presentations

Limitations

- Huge amount of work
- Increased amount of funding required (publications, dissemination, communication)

European Trial



Original Research

Global Matrix 3.0 physical activity report card for children and youth:
a comparison across Europe



T. Coppinger^{a,*}, K. Milton^b, E. Murtagh^c, D. Harrington^d, D. Johansen^e, J. Seghers^f,
T. Skovgaard^e, HEPA Europe Children & Youth Working Group, A. Chalkley^g

“We propose that the European countries trial any standardised approaches developed for future indicators and benchmarks used in the Global Matrix initiative to explore whether more standardised approaches are possible, at least in some parts of the world.”



European Trial

Develop a harmonised methodology to integrate equity in the grades that would be mandatory only for a specific group of the Global Matrix 4.0 participating countries, for example:

- European countries
- Very high HDI countries

Advantages & limitations

- Allows evaluation & improvement
- Increase the gap between HIC and LMIC in terms of available letter grades
- Future possible work on inequity could make useful material for research aimed at EU funding

Discussion

- Disparities and inequities sections
- Development of specific subgrades on a volunteering basis
- Development of population/equity specific Report Cards
- European / Very High HDI countries trial
- Global consistency and coordination will be required

Comments, thoughts, suggestions?

Wrap-up

- Webinar recorded
- AHKGA Board of Directors decisions based on these discussions will be circulated to everyone

Contact me if you have more thoughts and suggestions on this topic, or are interested in trying one of the proposition with your Report Card team:

salome_aubert@hotmail.fr