ACTIVE HEALTHY KIDS ZIMBABWE

2022 Report Card

The 2022 Zimbabwe Report Card on the physical activity and nutritional status for children and adolescents

ACTIVE HEALTHY KIDS GLOBAL ALLIANCE

The 2022 Zimbabwe Report Card on the Physical Activity for Children and Youth

The 2022 Zimbabwe Report Card is available online at www.activehealthykidszimbabwe.com

Acknowledgments

Active Healthy Kids Zimbabwe's Report Card Working Group would like to express our most sincere gratitude to all the children, adolescents, and their families who graciously took photos that are incorporated in this Report Card. We thank the National University of Science and Technology, the University of Zimbabwe, Bindura University of Science Education, and the Ministry of Primary and Secondary Education for their members who took their time to participate in the development of this Report Card. We are indebted to our data custodians, graduate students, and all other stakeholders who helped collect data that informed this Report Card.

Citation details:

Manyanga T, Munambah NE, Makaza D, Mahachi CB, Mlalazi TF, Makoni P, Khumalo B, Rutsate SH, Mandaza D, Mukaro M, Mavingire C and Matsungo TM for Active Healthy Kids Zimbabwe. (2022) The 2022 Zimbabwe report card on the physical activity and nutritional status for children and adolescents. Active Healthy Kids Zimbabwe (AHKZ), Harare, Zimbabwe

Contents

Introduction

The World Health Organization (WHO) estimates that non-communicable diseases (NCDs) kill approximately 41 million people, accounting for 71% of all global deaths [1]. Nearly 85% of the NCD-related deaths occur in low-to-middle income countries such as Zimbabwe [1]. Lifestyle behaviours such as, physical inactivity, sedentary behaviours and the consumption of energy dense diets [2], are known major risk factors for childhood obesity, cardiovascular disease, diabetes and certain cancers [1,3,4]. Research evidence showing that physical inactivity and sedentary behaviours [5,6,7], the consumption of energy-dense diets [8] among children and adolescents are increasing globally, and the concurrent rise in childhood obesity [5] is concerning. A study about adolescent leisure time, physical activity, sedentary behaviours, and substance abuse in eight African countries that included Zimbabwe, reported that only 14, 2% of the adolescents engaged in sufficient physical activity [9]. Evidence from surveys conducted in 105 countries; show that over 80% of 13-15-year-olds do not meet the WHO recommendations of 60 minutes of moderate to vigorous physical activity per day [6]. Children and adolescents in Zimbabwe are not immune to this physical inactivity epidemic, as demonstrated by the 2016 and 2018 Zimbabwe Report Cards [10,11], which showed that overall physical activity and sedentary behaviours among children were lower and higher (respectively) than desired.

The World Health Organization (WHO) estimates that non-communicable diseases (NCDs) kill approximately 41 million people, accounting for 71% of all global deaths [1]. Nearly 85% of the NCD-related deaths occur in low-to-middle income countries such as Zimbabwe [1].

Lifestyle behaviours such as, physical inactivity, sedentary behaviours and the consumption of energy dense diets [2], are known major risk factors for childhood obesity, cardiovascular disease, diabetes and certain cancers [1,3,4]. Research evidence showing that physical inactivity and sedentary behaviours [5,6,7], the consumption of energy-dense diets [8] among children and adolescents are increasing globally, and the concurrent rise in childhood obesity [5] is concerning. A study about adolescent leisure time, physical activity, sedentary behaviours, and substance abuse in eight African countries that included Zimbabwe, reported that only 14, 2% of the adolescents engaged in sufficient physical activity [9]. Evidence from surveys conducted in 105 countries; show that over 80% of 13-15-year-olds do not meet the WHO recommendations of 60 minutes of moderate to vigorous physical activity per day [6]. Children and adolescents in Zimbabwe are not immune to this physical inactivity epidemic, as demonstrated by the 2016 and 2018 Zimbabwe Report Cards [10,11], which showed that overall physical activity and sedentary behaviours among children were lower and higher (respectively) than desired.

In addition to physical activity, nutritional status is also a key indicator of health for children and adolescents. According to the multisectoral food and nutrition security strategy for Zimbabwe (2021-2025) [12], poor nutrition and physical inactivity, increases the likelihood of non-communicable diseases such as cancer, diabetes and cardiovascular diseases in later life. Furthermore, poor nutrition affects the performance of children in school and their general physical activity levels [13,14]. In Zimbabwe, obesity among children and adolescents now coexists with undernutrition creating a double burden of malnutrition [15], and both have implications for participation in physical activity. This demonstrates the presence of multiple burdens of malnutrition among school-aged children in Zimbabwe and calls for evidence-based interventions. In the Zimbabwean context, malnutrition is worsened by severe droughts and the negative effects of recent socio-economic crises. Therefore, systematic nutrition surveillance systems are required in schools to establish the determinants of and monitor levels for children and adolescents.

Indicators of health, which include, but are not limited to poor nutritional status, physical inactivity and sedentary behaviours among children and adolescents may be more impactful in countries such as Zimbabwe, that are experiencing rapid urbanization [16], the double burden of malnutrition [17], a shift from active to motorized transportation [18], and transitions from traditional/native, to more energy dense 'western' diets [19,20]. These challenges are compounded by the accompanying behavioral shift from traditionally active to more industrialized and sedentary lifestyles (also known as physical activity transition) [21]. At present, there are limited reliable prevalence estimates on levels of key physical activity indicators [10,11], as well as a lack of accurate assessments of the nutritional status of children and adolescents in Zimbabwe. Lack of such data or information mean that the evidence needed to inform the development of effective strategies to combat these public health challenges, and the capacity to appropriately assess and evaluate future interventions, are limited. The 2022 Report Card builds on the insights from the 2016 and 2018 Zimbabwe Report Cards and is a comprehensive assessment of nutritional status and physical activity levels of children and adolescents in Zimbabwe. The Report Card borrows from similar initiatives in Canada and elsewhere in Africa [22, 23]. The development and authorship of this report card was partly inspired by the commitment made by various stakeholders after the successful launch of the first and second report cards, and results from the first, second and third Global Summits on the Physical Activity of children and Active Health Kids Global Alliance (www.activehealthykids.org), a global network of researchers and stakeholders with interests in the promotion of healthy and active lifestyles for children and adolescents.

Active Healthy Kids Zimbabwe Report Card Team

Dr. Taru Manyanga: University of Northern British Columbia, Division of Medical Sciences

Dr. Nyaradzai E Munambah: The University of Zimbabwe, College of Health Sciences, Department of Rehabilitation

Dr. Daga Makaza: National University of Science and Technology, Faculty of Applied Sciences, Department of Sports Science and Coaching

Ms. Carol Mahachi: The University of Zimbabwe, Faculty of Medicine and Health Sciences, Department of Biomedical Sciences.

Mr. Tholumusa F Mlalazi: Buckinghamshire University Technical College, Core Curriculum Department

Mr. Dzikamayi Mandaza: Ministry of Primary and Secondary Education, Curriculum Development and Technical Services

Ms. Caroline Mavingire: Bindura University of Science Education, Faculty of Science and Engineering, Department of Sport Science

Ms. Matilda Mukaro: Bindura University of Science Education, Faculty of Science and Engineering, Department of Sport Science

Dr. Paul Makoni: National University of Science and Technology, Research and Internationalisation Office

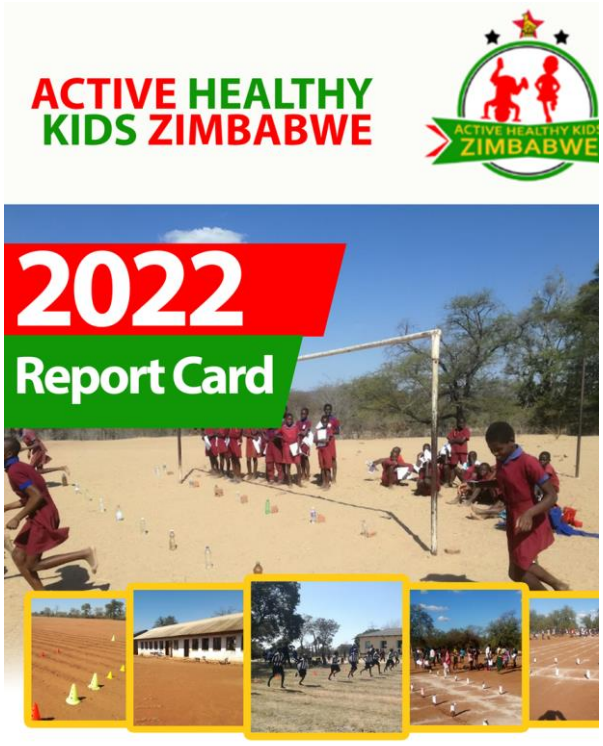
Dr. Bhekuzulu Khumalo: Malawi University of Science and Technology, Academy of Medical Sciences, Department of Sports Sciences

Mrs. Sipho H Rutsate: National University of Science and Technology, Faculty of Applied Sciences, Department of Sports Science and Coaching

Dr. Tonderayi M Matsungo: The University of Zimbabwe, Faculty of Science, Department of Nutrition, Dietetics and Food Sciences.

What is the report card?

The Report Card is a comprehensive summary of best available and current evidence regarding key indicators of physical activity such as participation in Overall Physical Activity, Organized Sports and Physical Activity, Active Play, Nutritional Status, Physical Fitness, School environment, Family and Peers, Community and Environment, Government Policy etc. among children and adolescents.



The 2022 Zimbabwe Report Card on the

The Report Card was first developed in 2005 by the then Active Healthy Kids Canada, which is now known as ParticipACTION (www.participactionreportcard.com) to translate research knowledge into practice [22]. Over the past 10 years, it has been used as an "annual state of the nation" on how Canada is doing as a nation in encouraging physical activity opportunities for children and adolescents [22]. In addition, the Report Card describes benefits and outcomes of regular physical activity for children [22]. Furthermore, the report card also identifies areas needing improvement, research and policy gaps and drives social action for behavior change regarding physical activity among children and adolescents [23]. The Report Card has now been exported and adapted for local/specific contexts in other jurisdictions including six African countries. In 2022,

fifty-seven (57) countries and jurisdictions including Zimbabwe, prepared their own country-specific Report Cards, and will participate in Active Healthy Kids Global Alliance's 3rd Global Summit (described in detail below) on the Physical Activity of children from around the world.

Target audience for the 2022 Zimbabwe report card

This report is targeted towards a wide audience, including those with interest in active healthy living among children and adolescents in Zimbabwe. Specifically, the report card is geared towards:

- General public
- Parents, children and adolescents
- Teachers, college/university instructors/lecturers and students
- Policy makers and senior civil servants in relevant government ministries
- United Nations, civil society and non-governmental organizations (NGOs)
- Corporations or private sector partners with interest in promoting active healthy living
- Researchers and academics, Zimbabwe Scaling Up Nutrition Research and Academia Platform (SUNRAP)
- Local and international collaborating partners

The indicators and grading criteria

The 2022 Zimbabwe Report Card assigns letter grades 'A+ to F' or 'incomplete' to eleven key indicators of physical activity and nutritional status among children and adolescents in Zimbabwe. Nutritional Status (not included in the 10 common indicators for Global Matrix 4.0), is included in the present Report Card due to its contextual importance to Zimbabwe. As were the cases for the 2016 and 2018 report cards, only a handful of studies were available for use in developing the 2022 Report Card due to limited information and research evidence. The 11 indicators included in the present Report Card are for: overall physical activity, organized sport and physical activity, active play, active transportation, sedentary behaviours, physical fitness, nutritional status, school environment, family and peers, community and environment, and governmental policies, strategies and investments. A grading rubric (**Table 1**) and standard benchmarks (**Table 2**) originally developed for the Canadian Report Card, and now adopted by other countries and jurisdictions including all 57 that are participating in the Global Matrix 4.0 were used to determine the letter grade that was assigned for each indicator based on the best available research data and information. Published and unpublished research articles conducted from 2015 onwards, policy documents and materials from non-governmental organizations were used to inform the assignment of grades. Collectively, the graded indicators provide a summary of how Zimbabwe is doing to promote physical activity participation, reduce sedentary time, and the consumption of healthy diets among children and adolescents. The letter grades (A+ to F) are deliberately intended to resemble an actual learner's school report card (**Table 3**) and hopefully make it easier for all readers to understand or interpret it.

Active Healthy Kids Global Alliance

Active Healthy Kids Global Alliance (www.activehealthykids.org) “is a network of researchers, health professionals and stakeholders who are working together to advance physical activity in children and adolescents from around the world” [24]. It was established in 2014, following the success of the world’s first Global Summit on the physical activity of children held in Toronto, Canada [23]. At the summit, 15 countries presented Report Cards which were developed using harmonized procedures, awarding letter grades to key indicators of physical activity among children and adolescents. Using harmonized procedures allowed for the grades to be compiled into a global matrix of nine (9) common indicators of physical activity [22]. Due mostly to the success of the first summit, the number of countries participating has steadily increased and the Report Card has since been replicated in many countries around the world. At the time of drafting this document, the Active Healthy Kids Global Alliance is in the final stages of organizing a fourth summit dubbed “Global Matrix 4.0” in collaboration with ISPAH and will be held in Abu Dhabi United Arab Emirates in 2022. The fact that the number of countries that participated in the first summit grew from 15 to 38 for the second summit in Bangkok, Thailand, in 2016, to 49 in Adelaide, Australia and will be even more in Abu Dhabi confirms the great success of Active Healthy Kids Global Alliance in powering the movement to get kids moving. Specifically, 57 countries and jurisdictions including Zimbabwe, will present grades on 10 common indicators from their countries’ Report Cards, and these will be compiled into the fourth global matrix of key indicators of physical activity of school-aged-children and adolescents aged between 5 and 17 years from around the world.

Importance of physical activity for children and adolescents in Zimbabwe

Being physically active (habitual active play, planned exercise, chores, playing sports etc.) is an essential part of a healthy childhood. Moreover, establishing healthy active behaviours early in childhood lays the foundation for a healthy and active adulthood [25]. Physical activity helps children and adolescents to grow, do well in school, thrive, feel good and be overall happy. Regular structured and unstructured physical activity in childhood and adolescence improves strength and endurance, helps build healthy bones and muscles, helps to manage weight, reduces anxiety/stress and increases self-esteem [1]. Furthermore, physical inactivity and sedentary behaviours are known independent risk factors for chronic non-communicable diseases such as high blood pressure, Type 2 diabetes mellitus and heart disease [3]. The World Health Organization (WHO) recommends that for health benefits, children and adolescents aged 5-17 should accumulate an average of at least 60 minutes of moderate-to-vigorous-intensity physical activity per day [1]. Simply put, regular participation in physical activity among children and adolescents can minimize the risks of non-communicable disease. This may be helpful in many ways including, but not limited to reducing costs to the health care system, improving health related quality of life, potentially increasing lifespans etc. Specifically, regular participation in moderate-to-vigorous-intensity physical activity (MVPA) can have a direct and positive impact on:

- Physical health **(increased physical fitness (both cardiorespiratory fitness and muscular strength), reduced adiposity, favourable cardiovascular and metabolic disease risk profiles, and enhanced bone health)) [1].**

- **Mental health and wellbeing** (reduced symptoms of anxiety and depression [26,27], and increased self-reported happiness) [28].

- **Academic achievement** (improved attention/concentration, improved standardized test scores, and better classroom conduct) [29,30].

- **Brain health and development** (more active brains [31], better cognitive development in early (0-5years) childhood)) [32].

Importance of nutrition and healthy eating for children and adolescents in Zimbabwe

Like the benefits of adequate physical activity, good nutrition and healthy eating is important for child growth and development as well as long term health. It enables children to learn well in school, with boundless energy to allow them to engage in physical activity. Without proper nutrition, children are prone to obesity, underweight, stunting and may fail to thrive. Therefore, consuming a healthy diet reduces the risk of malnutrition in all its forms. Poor nutrition can also affect children's sleep patterns, social development, and their ability to focus and understand what's expected of them. Addressing nutritional status among children may lead to considerable economic and social benefits as it reduces morbidity and mortality, as well resource savings in health, and enhances productivity. The WHO's Strategy on Diet, Physical Activity and Health [33] outlines the following benefits for promoting healthy nutrition in childhood:

- Strengthening the learning potential and well-being of children and adolescents.
- Contributing to decreasing the risk of today's leading health problems in children and adolescents (including obesity, cardiovascular diseases, cancer and eating disorders).
- Healthy nutrition in early life enables healthy adulthood and ageing.
- Promoting optimum nutrition in girls (preconception nutrition) helps to break the cross-generational cycle of malnutrition and poverty

In summary, balanced nutritious diets and active lifestyles complement each other to promote optimal health. The importance of creating supportive school environments and policies that promote healthy eating among learners cannot be over emphasized. Key to this strategy is the Home-Grown School Feeding Programme (HGSFP) which provides nutritious meals for learners in poor resource settings. In addition, physical education should be complemented with nutrition education targeting learners, teachers and the community at large. This approach is hinged on the social ecological model and WHO's social determinants of health concept.

Indicators

Overall physical activity (C+)

Data from a graduate thesis (pedometer-measured) [34], 1 published [35], and two unpublished studies (self-reported data) [36,37] informed grade assignment for this indicator. The graduate thesis (Dlamini, 2020) was a cross-sectional study using pedometers to measure daily step count of a convenient sample of 12-19-year-old high school learners. Additionally, the Global Physical Activity Questionnaire was also used to collect self-reported PA, sedentary time data as well. Overall, 46% of the participants accumulated ≥ 9000 steps/day [34]. Data from the published cross-sectional study of self-reported PA among 8-16-year-olds [35] showed that 63% of the participants reported engaging in moderate or vigorous PA (≥600 MET minutes) per week. Preliminary results from a recent unpublished cross-sectional e-survey adults who were 18 years or older, [37] showed that 61% of the participants proxy-reported that children and adolescents in Zimbabwe spend an average of 60 minutes/day in MVPA. Cross-sectional and unpublished data from 2015 [36], which included over 4000 school children (8-16 years old) from all provinces in Zimbabwe, showed that 59% of the 8-16-year-olds reported attaining 60 minutes of MVPA on at least 4 days per week. We used an unweighted average of the four studies to assign a **C+** for this indicator.

Research gaps

- There is limited and mostly self-reported research data to accurately report on levels of physical activity among Zimbabwean children and adolescents.
- The current data are based on studies of less than robust design with samples that are not representative of most Zimbabwean children and adolescents.
- There are inconsistencies in the amount of time recommended to be spent by children and adolescents engaging in moderate to vigorous physical activity per day.

Recommendations

- There is need for more robust, device-measured research data (e.g., pedometers or accelerometers).
- There is need for stronger design studies with nationally representative samples.
- Research should also focus on understanding physical activity levels of children and adolescents of wider age groups and abilities.
- It is also important to understand the variation in physical activity levels based on different characteristics (e.g., district/province of residence, gender etc.).

- Parents, teachers and others should encourage or provide opportunities for preschoolers, children and adolescents to participate in physical activity.
- Policy and decision makers need to prioritize physical activity among children and adolescents, to promote lifelong active healthy behaviours and minimize the risks associated with long-term inactivity. There is a need to establish green spaces in urban centres for children and adolescents to play, and a commitment of financial resources creating an enabling environment for girls/females to participate more in organized sport and other physical activities.

Organized sport and physical activity (B-)

Two unpublished studies [36,37] and a graduate thesis [34] provided data to inform the grading of this indicator. Data from a cross-sectional e-survey of adults who were 18 years or older, [37] showed that 73% reported that children and adolescents in Zimbabwe, engage in organized sport and physical activity. Makaza and others (2015) reported that 67% of 8-16-year-olds self-reported participating in organized sport while data from a graduate thesis [34] indicated that 58% of 12-19-year-olds participated in organized sport of moderate-intensity. Using the average of the 3 studies, we assigned a **B-** for this indicator (without weighting for sample size).

Research gaps

- There is limited data mostly from children in urban areas to accurately evaluate the levels and types of organized sport participation around the country.
- The impact of COVID-19 restrictions on participation in Organized Sport has not been examined.
- We do not have data on the type of sports nor the dose (i.e., duration, frequency, intensity) of participation.

Recommendations

- There is a need for research to document the different types of organized sports available to children and adolescents and then assess/evaluate how many children are participating and for how long each day.
- The government needs to ensure that the mandatory physical education policies are actually implemented equally for boys and girls and structured to include sporting activities.
- There is need for creating and funding safe community sports facilities and exposing children and adolescents in rural areas to diverse sporting activities not just soccer, netball and volleyball.

Active play (C+)

Two unpublished [36,37] and one published study [35] as well as expert opinion, informed the grade assignment for this indicator. Matsungo et al [37] found that 75% of adults in Zimbabwe, proxy-reported that children and adolescents engage in sufficient active play (at least 2 hours of outdoor time each day). Data from a cross-sectional study by Makaza et al, in 2015 [36], showed that 35% of 8-16-year-olds reported that they engaged in outdoor after school time for 2 or more hours per day. Meanwhile, Rukuni et al, 2021 [35] reported that 56% of 8-16-year-olds engaged in ≥2hrs of daily outdoor time. Given the unweighted average of the data from these three studies and expert opinion, this indicator was assigned a grade of **C+**.

Research gaps

- There is need to evaluate the impact of COVID-19 restrictions on active play, and harness whatever advantage discerned therefrom.
- Data are needed to explore why few children are playing outside and evaluate the reason prevalence between boys and girls.
- There is no research evidence on the correlates of active play among children and adolescents in Zimbabwe.

Recommendations

- There is need to encourage the conduct of research studies focusing on examining different aspects of before or after school active play.
- Evaluation neighbourhood safety and encourage parental support for active play among children and adolescents.
- Promotion of after school programming that may encourage children to play in the safe and secure school environment.
- Strategies to encourage more habitual out-of-school play should include deliberate efforts and messaging to remind parents and children that play is not only an important part of childhood, but that it also has health benefits.
- There is need for a reliable and valid instrument to accurately measure active play among children and adolescents.
- Establishing safe community parks/greenspaces in urban centres, creating an environment that allows for equal opportunities for independent mobility between boys and girls as well as incorporating active play into the school curriculum as part of mandatory physical education.

Active transportation (B)

Data from 2 unpublished studies [36,37] and 1 graduate thesis [34] informed the grade for this indicator. Matsungo et al, 2021 [37] found that 52% of adults in Zimbabwe proxy-reported that children and adolescents in Zimbabwe use active transport while a 2015 pre-covid cross-sectional study by Makaza et al [36] found that 84% of 8-16-year-olds reported using active transport to and from school on most days. Findings from a graduate thesis [34] indicated that 69% of 12-19-year-olds reported using active transport on most days to and from school. We used an unweighted average of these three studies, to assign a **B** to this indicator.

Research gaps

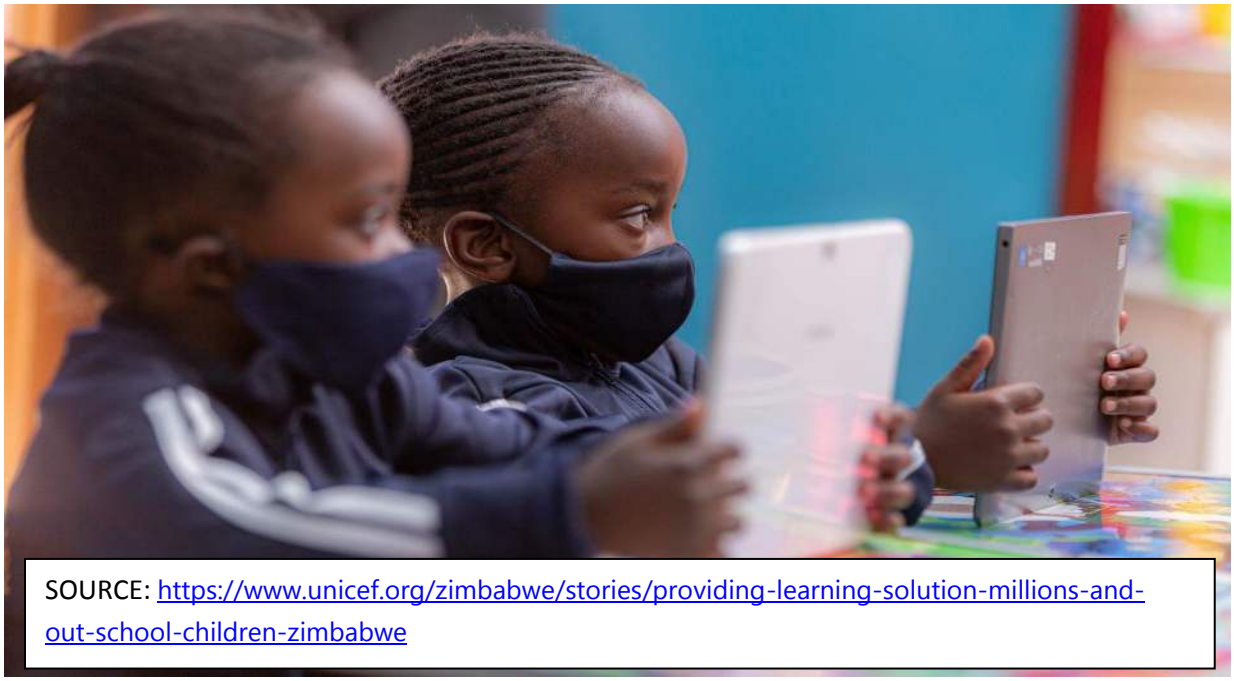
- There is no research evidence for transportation of preschoolers in rural areas.
- There is no data reporting the time it takes and distance to and from school.
- There are no research data on the correlates of active transportation.
- There is no data on associations between active transportation and fitness or motor skill competence.

Recommendations

- There is need for research among preschoolers in rural areas; examining correlates of active transportation; and assessing the time and distance it takes to and from schools.
- There is need for more current data beyond school active travel.
- Public health messages to highlight the benefits of active transportation and reduce the prestige/status symbol associated with motorized transportation.
- Policies that encourage and provide safe and walkable neighborhoods and bike lanes etc.

Sedentary behaviours (C)

Data from two unpublished studies [36,37] informed the grade assignment for this indicator. According to Makaza et al, 2015 [36], approximately 75% of children and adolescents aged 8-16-years old spend the recommended ≤ 2 hours per day engaged in recreational screen time. Meanwhile, a recent national e-survey by Matsungo and others in 2021 [37] indicate that only 31% believe that children and adolescents in Zimbabwe spend the recommended ≤ 2 hours on recreational screen time. We assigned a **C** based on the average of these data and expert opinion.



SOURCE: https://www.unicef.org/zimbabwe/stories/providing-learning-solution-millions-and-out-school-children-zimbabwe

Research gaps

- There are no objectively measured data on sedentary times
- There are very limited data on sedentary behaviours of all child age groups

Recommendations

- There is need for objectively measured sedentary times for children and adolescents
- There is need for messages to reinforce and encourage that more children spend less time in sedentary behaviours.
- Promote the 'sit less and move more' messaging in schools and promote active breaks in the classroom
- Increasing opportunities for active play, and sports

Physical Fitness (Incomplete)

Similar to 2018, unavailability of data precluded us from having confidence to accurately assign a grade for this indicator, thus, an incomplete grade was assigned.

Research gaps

- There are no data using simple and standard measures such as shuttle run test for cardiorespiratory fitness
- There are no mechanisms for systematic surveillance of physical fitness

Recommendations

- Advocate for systematic surveillance of physical fitness using standard and internationally recognized measures
- Obtain data from representative samples

Nutritional Status (B+)

Although not one of the common indicators included for the Global Matrix 4.0, nutritional status remains an important indicator for Zimbabwe. This indicator was informed by data from the Demographic and Health Survey [38], two published cross-sectional studies [39,40] as well as a recent unpublished cross-sectional study [41]. Data from the nationally representative Demographic and Health Survey [38] showed close to one third (27%) of Zimbabwean children under the age of five were stunted while 6% were overweight. Muderedzwa and Matsungo [39] found evidence of the double burden of malnutrition and reported that more girls (2.5%) than boys (1.4%) were stunted. Data from a more recent unpublished cross-sectional survey involving children and adolescents from across Zimbabwe [41] showed that 9% and 91% of 9-17-year-old learners were categorized to be of short or not short stature. In the same study [41], 7% were classified as thin, 80% normal weight, 9% overweight and 4% were obese. Based on the totality of these data and expert opinion, this indicator was assigned a **B+**.

Research gaps

- There is lack of nationally representative data about the nutritional status of children and adolescents,
- Evidence on the efficacy and/or effectiveness of food and nutrition related policies and programmes on nutritional status of school age children and adolescents is limited,
- There is a lack of research data on the impact of nutrition on physical activity interventions in Zimbabwe.

Recommendations

- There is need for nationally representative data about the nutritional status of children that are older than 5 years and for the adolescents in Zimbabwe.
- Research documenting the nutritional status and how it is related to physical activity among children and adolescents is needed to better inform policy and future grade assignment for this indicator.
- Studies that evaluate the impact of interventions such as the home-grown school feeding programme (HGSFP) on nutritional outcomes of learners are required

School environment (C)

According to the Government of Zimbabwe (2015) Syllabi [42], early childhood-grade 2 are allocated 5 x 20-minute sessions of physical education (PE) per week; Grades 3-7: have 10 x 30-minute sessions of PE per week; Form 1-4 have 8 x 35-minute sessions of PE per week. Form 5-6: are allocated at least 10 x 40-minute sessions of PE per week [43-45]. The Ministry of Primary and Secondary Education curricula in Zimbabwe mandates the instruction and examination of PE from elementary to high school. Also, there are dedicated time slots (as is the case with other subjects) throughout the week at all levels of primary and secondary education. In addition, PE is taught and examined as a separate subject at all Institutions of higher education where schoolteachers are trained. However, although the syllabus mandates the teaching of PE, it is difficult to evaluate the proportion of schools where the time slots are adhered to and the activities being implemented during those sessions. Based on the totality of this information, consensus from expert opinion, and the fact that although there are strong PE policies, we could not easily verify their implementation, we assigned a **C** for this indicator.

Research gaps

- There are no research data documenting the types and serviceability of school infrastructure which encourages PE.
- The proposed systematic surveillance and enforcement mechanisms for adherence to the PE syllabi as well as examination structures are yet to be evaluated.
- There are no consolidated data on the PE teachers to student ratios per school, or formal assessments of the school environments to ensure compliance with adequate PE

Recommendations

- Collect and monitor data on implementation of physical activity policies
- Government has to empower schools to promote physical activity without fear of undue interference
- Recognizing and highlighting schools that excel at prioritizing physical activity programs.

SOURCE: https://al-fanarmedia.org/2022/01/covid-19-school-closures/

Family and Peers (Incomplete)

Matsungo et al [37] showing that 45% agree/strongly agree that families or peers support children and adolescents to participate in PA. Due to inconclusive evidence (only 1 study) with preliminary findings and lack of consensus by the team, an incomplete grade was assigned for this indicator.

Research gaps

- There is lack of data about what and how peers and families influence children's physical activity.
- There is a lack of research data on the percentages of parents who are active with their children encourage/facilitate opportunities for their children to be physically active.

Recommendations

- Research using a standard, reliable and valid instrument, documenting, those and what influences children and adolescents, and how much they do so, is needed to better inform future grade assignment for this indicator.
- Promote opportunities for families to support their children's physical activity by improving the overall livelihoods where parents aren't struggling to make ends meet
- Creating community centres where both adults and children can have activities at the same time
- Recognizing and highlighting families that demonstrate significant support for their children's physical activity participation.

Community and Environment (C-)

Data from a cross-sectional e-survey [37] showed that 46% of adults believed that their community and environment was supportive and is safe for children and adolescents to participate in PA. There is also some evidence of infrastructure resuscitation, including a draft policy document, adopted by the government of Zimbabwe in 2016 that prioritizes community recreational activities and spaces in some neighborhoods [46]. Combinations of this document, results from the single study and expert opinion informed the **C-** grade assigned to this indicator.

Research gaps

- There are no data to estimate the numbers, serviceability conditions, location and distribution of recreational facilities, public parks and other infrastructure.
- There are no policies or systematic municipal or community procedures to deal with the state of disrepair to ensure safety for most of the public spaces.
- There are no data to accurately estimate the numbers of children and adolescents who would want to access these spaces and the reasons they may not have used the existing ones.

Recommendations

- Research is required to provide accurate estimates of available infrastructures, their location and distribution, serviceable conditions, number of children and adolescents accessing and using them, and what policies and procedures exist for upkeep and maintenance.

Government strategies and investments (D)

Although 41% of respondents to an e-survey believed there is strong government support for PA among children and adolescents, implementation of policies is still lacking. Through the Ministry of Health & Child Care; Ministry of Youth, Sport, Arts and Recreation; and Ministry of Primary and Secondary Education, the Government of Zimbabwe has developed and now begun implementing policies that are meant to increase physical activity among children and adolescents [47,48]. All three ministries have promulgated 5-year strategic plans, with some evidence of allocation of funding to implement the policies. Combinations of expert opinion and the data available led us to award a D on this grade.

Research gaps

- There is no evidence of stakeholder (business and NGOs) engagement for their support in making child physical activity a priority
- There is little evidence of resource allocation for the national policies or robust inter-ministerial collaboration.

Recommendations

- Systematic surveillance and enforcement mechanisms are needed to ensure that physical activity is prioritized among children.
- There should be efforts to implement the inter-ministerial collaboration which is mandated by the draft national policy.
- There is need for direct financial and human resources allocation for promoting physical activity, sports and recreation.
- There is need for ongoing engagement and collaboration between government, the corporate sector and not-for-profit organizations.

The Impact of COVID-19

SOURCE: http://www.xinhuanet.com/english/2020-09/16/c_139370863.htm

As has been observed and consistently documented in recent systematic reviews [49-51], public health measures that were implemented to curb the spread of COVID-19, including lengthy lockdowns, school shutdowns or closures of public parks etc., may have impacted physical activity behaviours and consequently the corresponding Report Card grades. A 2020 article by Matsungo & Chopera [52], showed that the COVID-19 lockdowns that were introduced to curb the pandemic contributed to reductions in physical activity among adults in Zimbabwe. The 2022 Report Card grades for Active Transportation, Organized Sport and Physical Activity, Sedentary Behaviours declined, while Active Play improved compared to 2018. The majority of children and adolescents in Zimbabwe use active transportation to and from school and most organized sporting activities in low-middle-income countries occurs in the school setting [53], therefore lengthy school shutdowns, especially early in the COVID-19 pandemic may have negatively impacted these behaviours. Interestingly, preliminary findings from a recent national e-survey [37] seems to show that the COVID-19 lockdowns, which restricted children and adolescents to being mostly at home on school days, may have given these children and adolescents plenty of opportunities to engage in active outdoor play, thus, the improvement in the related grade in the 2022 Zimbabwe Report Card.

Conclusions

The results of the 2022 Zimbabwe Report Card show that there is a lack of and demands the need for reliable research evidence on key indicators of physical activity and the nutritional status of children and adolescents in Zimbabwe. However, evidence from the limited data gathered for this Report Card demonstrate that although most children and adolescents in Zimbabwe use active transport (e.g., walking or cycling), engaged in organized sports, and not spending too much time in sedentary behaviours; have relatively healthy nutritional status, their levels of physical activity are generally lower than desired. Furthermore, rates of under and over nutrition are concerning. Due to lack of opportunities, safe areas, programs, and investments, as well poor diets, children in Zimbabwe may be at risk of becoming increasingly physically inactive, more sedentary, with unhealthy nutritional status, thereby putting them at a higher risk for non-communicable diseases early in their adulthood. Overall, the results suggest a need for robust research, strong advocacy, monitoring and stakeholder engagement, as well as implementing policies that prioritize healthy active living among children and adolescents in Zimbabwe.

Lessons from the 2016, 2018 and 2022 Zimbabwe Report Cards

Table 3 presents the grades from 2016, 2018, and 2022 and makes comparisons with regards to the grades for individual indicators and any progress made. While the grade for Overall Physical Activity remained unchanged across the 3 Report Cards, those for other four behavioural indicators (Organized Sport and Physical Activity participation, Active Play, Active Transportation, Sedentary Behaviours) did change between 2018 and 2022. Grades for Organized Sport and Physical Activity participation, Active Transportation, Sedentary Behaviours declined and the grade for Active Play improved. These changes may have been related to the impact of the public health restrictions imposed to curb the COVID-19 pandemic. This is more likely because the four behavioural indicators contribute to Overall Physical Activity. The improvement in the grade for Active Play against the decline in the other three indicators all related to the COVID-19 restrictions may help to explain why the grade for Overall Physical Activity did not change. The most unfortunate reality if that despite having done these report cards since 2016, we still, in 2022, relied on mostly unpublished data. Nonetheless, our participation in the Global Matrices 2.0 and 3.0 put Zimbabwe on an international platform. Furthermore, participation in 2022 and the official launches of our Report Card in-country has been a highlight for the movement to get our kids and adolescents active. Last but not least, involving institutions of higher learning and other stakeholders is important to move the child physical activity agenda forward.

Next steps

This third Report Card continues to provide important syntheses of data intended to build on the momentum, interest and conversations related to physical activity and nutritional status among children and adolescents in Zimbabwe, generated at, and after the successful launch of the first and second Zimbabwe Report Cards in 2016 and 2018. It builds a strong case for research and policy initiatives that will promote physical activity among children. Specifically, this document provides evidence supporting the need for:

- The continued need to establish Active Health Kids Zimbabwe, an independent not-for-profit organization whose role will be to advocate for policies and research that will promote healthy active living among children and adolescents in Zimbabwe.
- Cultivating and establishing enduring links and relationships between Active Healthy Kids Zimbabwe and local or international partners.
- Firm commitment to biennial development and authorship of the Report Card and ongoing participation in the Active Healthy Kids Global Alliance's global matrix.
- Devoting time, financial and human resources to research and advocacy work promoting healthy active lifestyles among children and adolescents in Zimbabwe.
- Prioritizing areas identified in this document as needing urgent attention and which can be addressed with few resources.

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Tables

Table 1. Grading Rubric: Global Matrix 4.0 with Interval variables	
Grade	**Interpretation**
A+	94% - 100%
A	We are succeeding with a large majority of children and youth (87% - 93%)
A-	80% - 86%
B+	74% - 79%
B	We are succeeding with well over half of children and youth (67% - 73%)
B-	60% - 66%
C+	54% - 59%
C	We are succeeding with about half of children and youth (47% - 53%)
C-	40% - 46
D+	34% - 39%
D	We are succeeding with less than half but some children and youth (27% - 33%)
D-	20% - 26%
F	We are succeeding with very few children and youth (<20%)
INC	Incomplete - insufficient or inadequate information to assign a grade

Table 2. Indicators and benchmarks used for grade assignment: Global Matrix 4.0	
Indicator	**Benchmark**
Overall Physical Activity	% of children and youth who meet the Global Recommendations on Physical Activity for Health, which recommends that children and youth accumulate at least 60 minutes of moderate- to vigorous-intensity physical activity per day on average. Or percentage of children and youth meeting the guidelines on at least 4 days a week (when an average cannot be estimated).
Organized Sport and Physical Activity	% of children and youth who participate in organized sport and/or physical activity programs.
Active Play	% of children and youth who engage in unstructured/unorganized active play at any intensity for more than 2hours a day. % of children and youth who report being outdoors for more than 2 hours a day.
Active Transportation	% of children and youth who use active transportation to get to and from places (e.g., school, park, mall, friend's house).
Sedentary Behaviors	% of children and youth who meet the Canadian Sedentary Behavior Guidelines (5- to 17-year-olds: no more than two hours of recreational screen time per day). Note: The Guidelines currently provide a time limit recommendation for screen-related pursuits, but not for non-screen-related pursuits.
Physical Fitness	Average percentile achieved on certain physical fitness indicators based on the normative values published by Tomkinson et al.

Family and Peers	% of family members (e.g., parents, guardians) who facilitate physical activity and sport opportunities for their children (e.g., volunteering, coaching, driving, paying for membership fees and equipment). % of parents who meet the Global Recommendations on Physical Activity for Health, which recommends that adults accumulate at least 150 minutes of moderate-intensity aerobic physical activity throughout the week or do at least 75 minutes of vigorous-intensity aerobic physical activity throughout the week or an equivalent combination of moderate- and vigorous-intensity activity. % of family members (e.g., parents, guardians) who are physically active with their kids. % of children and youth with friends and peers who encourage and support them to be physically active. % of children and youth who encourage and support their friends and peers to be physically active.
School	% of schools with active school policies (e.g., daily PE, daily physical activity, recess, "everyone plays" approach, bike racks at school, traffic calming on school property, outdoor time). % of schools where the majority (≥ 80%) of students are taught by a PE specialist. % of schools where the majority (≥ 80%) of students are offered the mandated amount of PE (for the given state/territory/region/country). % of schools that offer physical activity opportunities (excluding PE) to the majority (> 80%) of their students. % of parents who report their children and youth have access to physical activity opportunities at school in addition to PE classes. % of schools with students who have regular access to facilities and equipment that support physical activity (e.g., gymnasium, outdoor playgrounds, sporting fields, multi-purpose space for physical activity, equipment in good condition).
Community and Environment	% of children or parents who perceive their community/ municipality is doing a good job of promoting physical activity (e.g., variety, location, cost, quality). % of communities/municipalities that report they have policies promoting physical activity. % of communities/municipalities that report they have the infrastructure (e.g., sidewalks, trails, paths, bike lanes) specifically geared toward promoting physical activity. % of children or parents who report having facilities, programs, parks and playgrounds available to them in their community. % of children or parents who report living in a safe neighborhood where they can be physically active. % of children or parents who report having well-maintained facilities, parks and playgrounds in their community that are safe to use.
Government	Evidence of leadership and commitment in providing physical activity opportunities for all children and youth. Allocated funds and resources for the implementation of physical activity promotion strategies and initiatives for all children and youth. Demonstrated progress through the key stages of public policy making (i.e., policy agenda, policy formation, policy implementation, policy evaluation and decisions about the future).

Table 3: Grades for the 2016, 2018, AND 2022 Zimbabwe Report Cards

Indicator	Year(s)		
	2016	2018	2022
Overall Physical Activity	C+	C+	C+
Organized Sport and Physical Activity	B	B	B-
Active Play	D+	D+	C+
Active Transportation	A-	A-	B
Sedentary Behaviours	B	B	C
Nutritional Status	Not graded	B	B+
Physical Fitness	Not graded	Incomplete	Incomplete
Family and Peers	Incomplete	Incomplete	Incomplete
School	D	C	C
Community and Environment	F	D	C-
Government Strategies and investments	D	C-	D

Note: The grade for each indicator is based on the percentage of children and adolescents meeting a defined benchmark; INC = Insufficient or no available data to inform the grading of that indicator; 2016 = Global Matrix 2; 2018 = Global Matrix 3; 2022 = Global Matrix 4