

Results from South Africa's 2018 Report Card on Physical Activity for Children and Youth

Catherine E. Draper, Simone A. Tomaz, Susan H. Bassett, Cora Burnett, Candice J. Christie, Colleen Cozett, Monique de Milander, Soezin Krog, Andries Monyeki, Niri Naidoo, Rowena Naidoo, Alessandra Prioreshi, Cheryl Walter, Estelle Watson, and Estelle V. Lambert

Introduction

The 2018 Report Card for South Africa (SA) (Figure 1) presents the latest available evidence relating to physical activity (PA) of SA school-aged children since the 2016 Report Card. The absence of nationally representative data remains a challenge for the compilation of the 2018 grades. However, the findings from regional studies are still highly informative, and continue to provide a platform for advocacy in SA regarding the health and PA of SA children and adolescents.

Methods

A systematic review was conducted using PubMed, Africa Journals Online, and Africa Wide (EBSCOhost). Search dates were from 01/01/2016-12/03/2018, and articles reporting on specified indicators related to SA children between the ages of 5-18 years were included for review. Government documents meeting the inclusion criteria were also included in the review. Papers included in the 2016 Report Card were excluded from the 2018 review. No grey literature was identified that could be included in the 2018 Report Card. Articles were reviewed by members of the scientific advisory group for the SA 2018 Report Card, who all represent academic institutions in SA. A summary of the grades for the specified indicators, including a rationale for each grade are provided in Table 1.

Results and Discussion

It is evident that additional research relating to all the grades listed above would be beneficial, especially for those which remain inconclusive. It is also clear that issues of social justice play a key role in certain indicators, most notably organised sports participation, active transportation, and community and environment. In addition, there remains a gap between policy and implementation. The grade for 'school' has been downgraded to a

D- (from a D in 2016) in order to bring this to the attention of relevant stakeholders. Sixty-one percent of parents reported being uncomfortable with their child walking to school, but are not necessarily in a position to afford safer alternatives for transportation.⁷ To address this, some initiatives to improve the safety of active transport have been trialled in certain regions, including a small number local community initiatives. However, there are

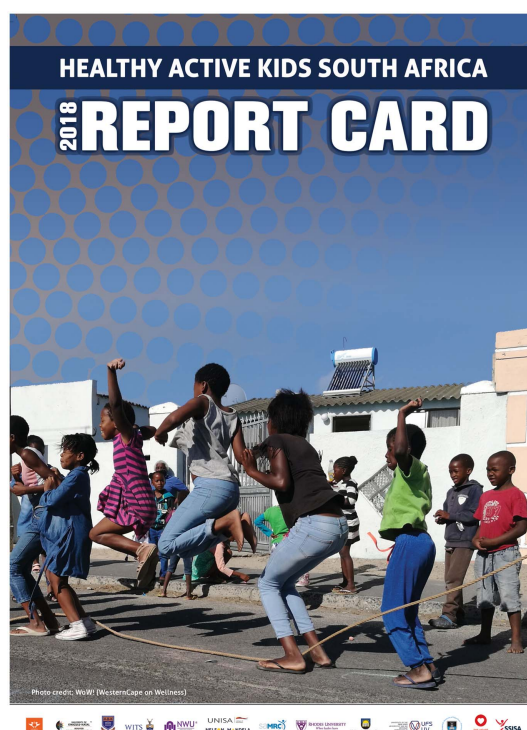


Figure 1 — South Africa's 2018 Report Card cover.

Draper and Prioreshi are with the MRC/Wits Developmental Pathways for Health Research Unit, and Watson is with the Centre for Exercise Science and Sports Medicine, both at the University of the Witwatersrand, Johannesburg, South Africa. Tomaz and Lambert are with the Division of Exercise Science and Sports Medicine, University of Cape Town, Cape Town, South Africa. Bassett and Cozett are with the Department of Sport, Recreation and Exercise Science at the University of the Western Cape, Cape Town, South Africa. Burnett is with the Department of Sport and Movement Studies at the University of Johannesburg, Johannesburg, South Africa. Christie is with the Department of Human Kinetics and Ergonomics at Rhodes University, Grahamstown, South Africa. de Milander is with the Department of Exercise and Sports Sciences at the University of the Free State, Bloemfontein, South Africa. Soezin Krog is with the Department of Early Childhood Education at the University of South Africa, Pretoria, South Africa. Monyeki is with the Physical Activity, Sport and Recreation Research Focus Area at North-West University, Potchefstroom, South Africa. Naidoo N is with the Department of Health and Rehabilitation Sciences, University of Cape Town, Cape Town, South Africa. Naidoo R is with the Department of Biokinetics, Exercise and Leisure Sciences at the University of KwaZulu-Natal, Durban, South Africa. Walter is with the Department of Human Movement Science at Nelson Mandela University, Port Elizabeth, South Africa. Draper (catherine.draper@wits.ac.za) is corresponding author.

Table 1 Grades and rationales for South Africa's 2018 Report Card

Indicator	Grade	Rationale
Overall Physical Activity	C	There is no new evidence suggesting that overall PA levels are improving (or deteriorating), therefore the grade of C remains. A study that objectively measured PA (ISCOLE, 9-11 years old, across income settings), and one other study using self-report, indicated that between 48% - 51.7% are meeting the 1 hour of moderate- and vigorous-intensity PA (MVPA) per day recommendation. ^{1,2} In these studies, mean daily MVPA ranged between 56.6±23.4 – 64.9±25.5 minutes. Other studies that used self-report measures reported much higher levels of compliance: 69% in 8-14 year olds, ³ and that children and adolescents were “moderately active”. ^{3,4} Salvini et al reported similar findings with 8-12 year old children achieving 60 minutes of MVPA on an average of 3.5 days per week. ⁵
Organised Sport Participation	D	There are no apparent changes in levels of participation, and there is no evidence of new interventions/strategies/policies to improve participation. The grade therefore remains a D.
Active Play	INC	Active play does appear to be taking place despite some challenges (including safety, captured under the community/environment indicator). We still do not have a concrete tool to measure active play, therefore the grade remains inconclusive.
Active Transportation	C	There is no evidence to suggest that active transportation has improved (grade remains a C), and a high percentage of children and adolescents walk to school, but not necessarily by choice. According to the 2013 General Household Survey, 63% of school-aged children walk to school. ⁶ Many (81%) children and adolescents (6-15 years old) in low-income settings walk to school without adult supervision, and safety remains a concern, e.g. crossing roads and risk of injury. ^{7,8}
Sedentary Behaviours	INC	There is no evidence to suggest that screen time use is decreasing, and it may in fact be getting worse. Data from ISCOLE indicates that 9-11 year old SA children are spending an average of 3.3 hours using screens per day, with only 34% of children meeting the screen time guideline of <2 hours per day. ^{1,2} However, this data is not nationally representative, and given the overall lack of data reporting sedentary behaviours, the grade changes to INC.
Physical fitness	INC	There is a paucity of data reporting on national levels of fitness and overweight/obesity in children and adolescents, so the grade has been changed to INC. The most recent data (unpublished) reporting on BMI in 8-11-year-old children indicate that overweight and obesity are persistent problems, particularly in girls.
Family and Peers	C-	There is very little data on the proportion of parents or peers supporting PA, but recent evidence supports previous findings, and therefore the grade has been maintained (C-).
School	D-	There is new evidence that indicates that the proportion of children participating in school physical education is still sub-optimal. In ISCOLE, South Africa was the country (out of 12) with the greatest proportion of learners not participating in PE (32%), and children did significantly more MVPA outside of school than during school. ⁹ There seems to be no evidence of progress in the prioritisation of PE in the school curriculum / school environment.
Community and Environment	C-	In ISCOLE, children (9-11 years old) did less MVPA after school in settings with higher crime rates and greater traffic risk, more prevalent in low-income settings. ¹⁰ Concerns about safety of children prevail, and there is an apparent lack of a systematic approach to dealing with this issue.
Government	C	In the 2016 report card, the Sport and Recreation South Africa national school sport programme was cited (a core deliverable in the 2016-2017 strategic plan). This programme aimed to maximise access to sport, recreation and PA in every school in South Africa. However, compliance with this programme appears to remain poor, and there is a lack of documented evidence of policy implementation and evaluation. There is also no evidence of new PA or sport policies influencing children and adolescents.

issues around scalability and sustainability. Furthermore, as technology (especially smart phones and mobile data) becomes more accessible and affordable, screen time may need to become the target of behavioural interventions and best-practice guidelines for children and youth. The findings in this report warrant action and evaluation by the SA government, who should be leading the implementation of systematic strategies, and partnering with researchers and other stakeholders to ensure that policies benefitting the health and well-being of children and adolescents are translated into action.

Conclusion

The findings of the 2018 Report Card for SA indicate that our country is making insufficient progress with regards to the promotion of PA opportunities that are safe and accessible for the greatest number of children and adolescents in SA. There is a need for national surveillance initiatives to provide more accurate data on the indicators included in the Report Card.

References

- Roman-Viñas B, Chaput JP, Katzmarzyk PT, et al. Proportion of children meeting recommendations for 24-hour movement guidelines and associations with adiposity in a 12-country study. *Int J Behav Nutr Phys Act.* 2016;13:123. doi:10.1186/s12966-016-0449-8
- Sampasa-Kanyinga H, Standage M, Tremblay MS, et al. Associations between meeting combinations of 24-h movement guidelines and health-related quality of life in children from 12 countries. *Public Health.* 2017;153:16–24. doi:10.1016/j.puhe.2017.07.010
- van Biljon A, McKune AJ, DuBose KD, Kolanisi U, Semple SJ. Physical activity levels in urban-based South African learners: a cross-sectional study of 7 348 participants. *S Afr Med J.* 2018;108(2): 126–31. doi:10.7196/SAMJ.2018.v108i2.12766
- van Niekerk LL, Toit du D, Pienaar AE. The correlation between motor proficiency and physical activity in Senior Phase learners in the Potchefstroom area. *Health SA Gesondheid.* 2016;21:e212–e215. doi:10.4102/hsag.v21i0.990

5. Salvini M. Physical activity and health-related quality of life among schoolchildren from disadvantaged neighbourhoods in Port Elizabeth, South Africa. *Qual Life Res.* 2017;27(1):205–216. doi:10.1007/s11136-017-1707-1
6. Statistics South Africa. *General Household Survey 2013*. Pretoria, South Africa: Statistics South Africa. 2015. www.statssa.gov.za/publications/P0318/P03182013.pdf. Accessed June 11, 2018.
7. Simons A, Koekemoer K, Van Niekerk A, Govender R. Parental supervision and discomfort with children walking to school in low-income communities in Cape Town, South Africa. *Traffic Inj Prev.* 2018;19(4):391–398. doi:10.1080/15389588.2017.1420904
8. Koekemoer K, Van Gesselleen M, Van Niekerk A, Govender R, Van As AB. Child pedestrian safety knowledge, behaviour and road injury in Cape Town, South Africa. *Acc Anal Prev.* 2017;99:202–209. doi:10.1016/j.aap.2016.11.020
9. Silva DAS, Chaput JP, Katzmarzyk PT, et al. Physical education classes, physical activity, and sedentary behavior in children. *Med Sci Sports Exerc.* 2018;50(5):995–1004. doi:10.1249/MSS.0000000000001524
10. Uys M, Broyles ST, Draper C, et al. Perceived and objective neighborhood support for outside of school physical activity in South African children. *BMC Public Health.* 2016;16:462. doi:10.1186/s12889-016-2860-0