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Human Kinetics
BRIEF REPORT

Results From the United Arab Emirates' 2018 Report Card on Physical Activity for Children and Youth

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Introduction

Since formation in 1971, the United Arab Emirates (UAE) has experienced tremendous economic and industrial development that has improved the health, wealth, and education of the population.[1] Concomitantly, there has been a shift from a traditional physically active outdoor lifestyle to a modern urbanised, indoor, and technology-driven lifestyle.[1] Limited national surveillance from the last 10 years shows that only ~20% of UAE children accumulate the recommended amount of moderate-to-vigorous intensity physical activity[2] (MVPA; ≥60 minutes per day).[3,4] Both Emirati and expatriate adults (~89% of the UAE population)[1] have high rates of obesity, diabetes mellitus, and cardiovascular disease.[1,5,6] Hence, the low prevalence of physical activity (PA) amongst UAE children is a major concern as physical inactivity is an independent risk factor for future chronic disease. This paper presents the key findings from the UAE's 2018 Report Card on PA for Children and Youth (Figure 1).

Methods

The 2018 Report Card included 10 core PA indicators that were common to the Global Matrix 3.0: Overall Physical Activity, Organized Sport and Physical Activity, Active Play, Active Transportation, Sedentary Behaviors, Family and Peers, Physical Fitness, School, Community and Environment, and Government. Healthy Body Size was included as a separate indicator from Physical Fitness. Grades were based on the best available evidence and data sources included national surveys, peer-reviewed literature, and grey literature (eg government/nongovernment reports, online content). The evidence was primarily based on the World Health Organisation (WHO) 2016 UAE Global School-based Student Health Survey (GSHS) which used a two-stage cluster sample design in 2016 to collect self-reported PA from a representative sample of students in grades 8–12 (aged 13–17 years; N = 5,849; 80% response rate) from all seven emirates in both government (predominantly Emirati) and private schools (predominantly expatriate).[3]

Results and Discussion

Grades and rationales for each indicator are presented in Table 1. Overall PA levels remain low and sedentary behaviours remain high amongst UAE children. Only 16% of UAE children achieved the recommended amount of MVPA (ie ≥60 min/d)[2] and this has fallen from 20% in 2005.[3,4] Expatriate children and boys had higher levels of PA compared to Emirati children and girls, respectively; however, PA levels declined from early to late adolescence in all groups. Less than half of children achieved the screen time recommendations[8] (ie ≤2 h/d) and this declined with age, especially amongst girls.[3,7] Only 25% of children participated in physical education classes on ≥3 d/wk (~150 min/wk) despite governmental mandates for a minimum number of lessons per week. Overall, only 41% (M 32%; F 51%) of adolescents aged 13–17 years achieved the WHO's BMI-for-age reference standard for a healthy body size.[3] Only four of the 10 indicators were assigned a grade and this highlights the research gaps in the UAE, particularly a lack of objectively-assessed PA estimates for free-living PA and sport participation in both children and their parents.

Figure 1 — UAE 2018 Report Card cover.

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Table 1 Grades and Rationales for the UAE's 2018 Report Card

Indicator	Grade	Rationale
Overall Physical Activity	F	In 2016, only 16% (M 21%; F 11%) of UAE school-children met the global PA recommendations for health (ie at least 60 minutes of daily MVPA) and this declined from ages 13–15 years (total 17%; M 22%; F 12%) to ages 16–17 years (total 14%; M 19%; F 10%).[3] Expatriate children were more physically active (total 17%; M 22%; F 12%) compared to Emirati children (total 14%; M 18%; F 10%) across age groups and gender.[3] On average, the proportion of children achieving the recommended PA guidelines has declined by 2.0% every 5 years since 2005 and 2010.[3]
Organized Sport and Physical Activity	INC	There was insufficient current, representative, or high-quality data to grade this indicator.
Active Play	INC	There was insufficient current, representative, or high-quality data to grade this indicator.
Active Transportation	INC	There was no current data available to grade this indicator. Estimates from the 2005 (19%) and 2010 (21%) WHO UAE GSHS showed that only one fifth of secondary school children reported walking or cycling to school once a week.[3] The 2016 WHO UAE GSHS questionnaire assessed active transport but the data was not publicly available.[3]
Sedentary Behaviors	C-	In 2016, 40% (M 49%; F 32%) of UAE adolescents aged 13–17 years met the screen time recommendations[7] (≤2 h/d) and this declined from ages 13–15 years (total 45%; M 52%; F 37%) to ages 16–17 years (total 34%; M 43%; F 25%).[3] A greater proportion of Emirati children met the screen time recommendation (total 43%; M 55%; F 34%) compared to expatriate children (total 38%; M 45%; F 31%) across age groups and gender.[3]In the academic year 2012–2013, 42% of secondary school children (aged 12–16 years; N = 1022; 69% response rate) in Dubai met the screen time recommendation[8] (Emirati 41%; expatriate 50%).[7]
Physical Fitness	INC	There was no current or historical data available to grade this indicator.
Family and Peers	INC	There was no current, representative, or high-quality data to grade this indicator.
School	D-	In 2016, 26% (M 30%; F 23%) of adolescents aged 13–17 years reported participating in physical education class on three or more days (~150 minutes per week) each week and this declined from ages 13–15 years (total 27%; M 30%; F 24%) to ages 16–17 years (total 25%; M 29%; F 21%).[3] A greater proportion of Emirati children achieved this benchmark (total 32%; M 34%; F 31%) compared to expatriate children (total 23%; M 28%; F 17%) across age groups and gender.[3]
Community and Environment	INC	There was no nationally representative data for children living in all seven emirates to grade this indicator.
Government	B+	The UAE Government has invested significant funds and resources into developing and implementing policies, strategies, services, and facilities that will increase PA across the entire population. Examples related to the youth population include the Abu Dhabi Department of Health's Eat Right Get Active program[9] and the UAE Ministry of Education's Physical Health and Education Assessment Guide Grades 1–12.[10] Since 2010, physical education lessons have become mandatory in all schools from kindergarten to grade 12 of secondary school. However, each emirate has mandated a slightly different number of lessons per week ranging from two (≈ 120 minutes/week) to three or more (≥150 minutes/week) in both public and private schools.[4] The UAE Leadership has invested in recreational facilities such as parks, sports clubs, and walking/cycling paths across the UAE.

Abbreviations: F, Females; GSHS, Global School-Based Student Health Survey; INC, Incomplete Data; M, Males; MVPA, Moderate-to-Vigorous Physical Activity; PA, Physical Activity; WHO, World Health Organisation.

Conclusion

The majority of UAE children are not achieving the daily recommendations for PA or screen time. Findings highlight the dire need for action-based research that can lead to evidence-informed public health strategies that have the capacity to increase PA for children, adolescents, and adults. Sustained nationwide school- and community-based culturally-appropriate interventions are required to improve PA at a population level. Further development of active transport networks, walkable environments, and active spaces may help to increase PA across the entire UAE population.

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