Sports Participation

Background

The summary below presents the research evidence on sports participation in the Arab World.

The Teaching & Learning Toolkit focuses on impact on outcomes for learners; it presents an estimate of the average impact of sports participation on learning progress, based on the synthesis of a large number of quantitative studies from around the world.

This page offers a summary and analysis of individual studies on sports participation in the Arab world. In contrast to the Toolkit it includes studies which do not estimate impact, but instead investigate the implementation of interventions and how they are perceived by school leaders, teachers and students using a range of research methods. This information is valuable for school leaders and teachers interested in finding out more about particular examples of sports participation interventions that have been delivered in the Arab world.

Summary of the research in the Arab World

Sports participation interventions engage students in sports as means to increasing educational engagement and achievement. Sometimes sporting activity combined with study skills is used to improve ICT, mathematics learning, or literacy. The overall impact of sports participation on academic achievement tends to be positive but low (about two additional months' progress). However, evidence from the Arab world did not find a direct link between physical activity and academic outcomes but it rather suggests that participating in sports and physical activity is likely to have wider health and social benefits.

In a longitudinal study conducted in Algeria, Bekhechi and Khiat (2019) showed that the regular practice of physical activities and sports seemed to have a very positive impact on the academic performance and cognitive functioning of

elementary students. An experimental group of 55 students that practice out-of-school sports, at a rate of 3 times a week and a reference group of 55 students that don't practice out of school sports, were followed during the period of 15 months. Results showed that students in the experimental group had higher concentration level and their overall academic performance improved.
Many studies on the other hand showed that students in the Arab world are not frequently engaged in sports in and outside school. For instance, in Jordan, a sample of student adolescents aged between 11 and 15 years (n=1166) drawn from five public and two private schools revealed that 34.5% of the adolescents practiced exercise outside school hours once a week or less frequently (Nassar et al., 2018). Gender comparisons revealed that girls practiced exercise less frequently than boys. While the insufficient physical activity can be explained by the lack of facilities to exercise outside schools, the limited physical activity of girls could be a cultural issue. Nassar et al. (2018) explained that playing of sports by girls is not as culturally acceptable as their male counterparts. Girls have more family responsibilities and do not have as much time to participate in sports as boys. Moreover, boys' willingness to be strong to satisfy their masculine body image and to protect themselves could be another reason that motivates boys to be physically more active.

Findings of the study above were in agreement with El Hamdouchi et al. (2017) who while exploring the amount of physical activity for 100 children aged between 8-14 years old in Morocco found that 21% of these children were overweight and that girls in general were less active than boys. Not only schools allocated 60 minutes per week of physical education, it was also noted that these schools were poorly equipped and included only football fields and playgrounds. Also, in the neighborhood surrounding the school, there aren't any free/low cost facilities (such as recreation centers, clubs) and there is a lack of outdoor playgrounds, cycle facilities, and inaccessible sidewalks around the school. Furthermore, in a quantitative study conducted in Oman, 384 female secondary students perceived limited accessibility and facilities as main barriers to Physical Education (PE) (Sulaimi et al., 2018). Hence, finding of these two studies suggest the need to design school environmental changes to include facilities (such as gyms in the schools or close to the school environment) in order to promote physical activity in school children (El Hamdouchi et al., 2017; Sulaimi et al., 2018).

Additionally, Zerouki, Benour and Zerouki (2018) discovered that students' participation in sport in and outside of school hours is associated with their physical and general self-perception. As such, frequency of sports' activity and physical education for 229 middle and secondary students from 10 selected Algerian schools was determined to be linked with their attitudes and behaviors. Being involved in physical activity for more than one hour improved students' physical and psychological well-being and increased their self-confidence. As such, authors of this study recommend schools to increase the frequency of physical education per week. In the same context, Zerf (2018) suggested for Algerian schools to integrate active breaks through role-playing games in order to increase the physical activity and improve middle school students' well-being.
In another study in Algeria, Zitouni, Daho, and Bloufa (2018) examined the scope of the presence of reasoning skills according to Bloom's taxonomy in the competency indicators included in the physical education and sports curriculum of a secondary school. He found that the curriculum contains most of the reasoning skills, however, it does not expand students' ability to analyze nor it develops middle school students' cognitive skills. This may be because the curriculum designers have given great importance to the motor domain, because they think the sporting activities practiced by students in course of physical education and sport require more emphasis on skill of application, in comparison with other cognitive thinking skills of Bloom's taxonomy. That is why this study suggests for curriculum designers to consider students' cognitive and analytical skills when re-designing the curriculum of sports and PE in order to strengthen creative thinking ability and problem-solving skills among students.

A cross-sectional study conducted in four randomly selected elementary schools in Qatar showed that 183 elementary school children (86 boys and 97 girls) ages 6–12 years do not reach the recommended school-based MVPA (moderate-to-vigorous physical activity) of 30 minutes or more per day (Zimmo et al., 2017). Girls aged 9 were less active than boys of the same age. That is why it was necessary for researchers to address the lack of physical activity during school hours among elementary schoolchildren in Qatar. For instance, Al-Sager, Al-Maadeed, and AlJa'am (2017) investigated the use of technology as means to promote regular physical activity and healthy diet for elementary school students in Qatar. Findings

of their study identified that the use of multimedia-based interactive game, that was developed with the assistance of a nutritionist and special education instructors, targeted children's obesity disease, malnutritional habits and sedentary lifestyle. This game helped students realize the importance of having daily healthy breakfast and regular physical exercise to their performance at school. Despite its promising benefits, Al-Sager et al. (2017) discussed that this digital game needs more assessments to perform an analytical study about its efficacy.

On the other hand, the use of electronic games had a negative relationship with health (r = .20), social relationships (r = -.42), and physical activity (r = -.49) among 90 male students aged 16–18 years selected randomly from 30 high-schools in Saudi Arabia (Alshehri & Mohamed, 2019). Data was collected during one school semester through an online survey designed by the authors and contained 60 items. Results showed that a correlation that can be derived from the low levels of physical activity and the increase in the body mass rate in the sample. To this end, authors recommend schools to allocate more time for physical activities and to provide support and encouragement for physical activities. The daily time spent on screen was proven to be correlated with the prevalence of physical inactivity and bad lifestyle habits of secondary students aged 14-19 years in Morocco (El Achhab et al., 2018). These two were most common among females than males. Also, in Saudi Arabia, the prevalence of obesity and related chronic illnesses among female children and adolescents of less than 20 years old was a result of inadequate physical activity (Bajamal et al., 2017). Similarly, in Qatar, elementary school children, especially girls, were engaged in inadequate MVPA (Moderate to Vigorous Physical Activity) during the school day (Zimmo et al., 2020). Due to this alarming finding these studies recommend schools to enhance physical activity opportunities during physical education and recess, and encourage students to be involved with a minimum of 60 minutes of moderate to vigorous physical activity per day.

Summary paragraph:

There remains a limited amount of studies in the Arab world that seek to link the implementation of after school or extra-curricular sports with academic outcomes. Most of the existing studies explored health outcomes associated with the prevalence of physical inactivity. Studies in Algeria, however, found some evidence that students who practiced out-of-school sports, at a rate of 3 times a week had higher concentration level, and their physical and general self-perception increased. Studies have also suggested that when designing curricula, more could be done to include creative thinking and problem solving within Physical Education classes.

Evidence in Jordan, Saudi Arabia, Morocco, Qatar, Oman, and Algeria identify an association of students obesity and health problems with the insufficient practice of exercise. Girls were found to be less active and have bad lifestyle habits more than boys. While few studies linked this issue to the use of screen, others explained that playing of sports by girls is not as culturally acceptable as their male counterparts and that girls have more family responsibilities and do not have as much time to participate in sports as boys.

It would be interesting for future research to conduct experimental studies to examine the use of sports participation as an intervention to improve students' academic outcomes and determine the most influential component of physical activity and sport on school results. Longitudinal studies are also needed to explore the causal relationships between variables such as family income, family education level, gender, standard of living, quality of life, and time spent playing.

References

Al-Sager, M. O., Al-Maadeed, N., & AlJa'am, J. M. (2017, September). A Game-based Technology Solution to Incite Children to Take Daily Breakfast with Healthy Food. In *2017 International Conference on Computer and Applications (ICCA)* (pp. 330-335). IEEE.

Alshehri, A. G., & Mohamed, A. M. A. S. (2019). The Relationship Between Electronic Gaming and Health, Social Relationships, and Physical Activity Among Males in Saudi Arabia. *American journal of men's health*, *13*(4), 1557988319873512.

Bajamal, E., Robbins, L. B., Ling, J., Smith, B., Pfeiffer, K. A., & Sharma, D. (2017). Physical activity among female adolescents in Jeddah, Saudi Arabia: A health promotion model-based path analysis. *Nursing research*, *66*(6), 473-482.

Bekhechi, A. K., & Khiat, B. (2019). Impact of regular physical activity and sports on school performance among girls and boys aged between 6 and 10 years. *Retos: nuevas tendencias en educación física, deporte y recreación*, (36), 398-402.

El Achhab, Y., Marfa, A., Echarbaoui, I., Chater, R., El-Haidani, A., & Filali-Zegzouti, Y. (2018). Physical inactivity, sedentary behaviors and dietary habits among Moroccan adolescents in secondary school. *Science & Sports*, *33*(1), 58-62.

El Hamdouchi, A., Baddou, I., El Harchaoui, I., Benjeddou, K., El Menchawy, I., Saeid, N., ... & Aguenaou, H. (2017, January). Physical activity levels and physical environmental factors associated with sedentary behavior in Moroccan schoolchildren. In Annals of Nutrition and Metabolism (Vol. 71, pp. 800-801). ALLSCHWILERSTRASSE 10, CH-4009 BASEL, SWITZERLAND: KARGER.

Nassar, O., Shaheen, A. M., Jarrah, S. S., Norton, M. E., Khalaf, I. A., & Mohammad Hamdan, K. (2018). Jordanian adolescents' health behaviour and school climate. *Journal of Research in Nursing*, *23*(1), 58-73.

Sulaimi, M. R. A., Abedalaziz, N., Kamaruzaman, S., & Balushi, R. A. (2018). Physical Education in Omani Secondary Schools: Perceived Participation Barriers Among Female Students. *Advanced Science Letters*, *24*(7), 5269-5274.

Zerf, M. (2018). Breaks in primary schools and their influence on maintaining and promoting physical fitness and wellness at the level of middle schools. *Timisoara Physical Education and Rehabilitation Journal*, *11*(21), 7-12.

Zerouki, D. S., Benour, M., & Zerouki, Y. S. (2018). Effects of the Level of Involvements in sports and Physical Education on General and Physical self-conception and the Relationship between them at Adolescent Pupils. *Revue Académique des Études Sociales et Humaines*, (19), 146A-158A.

Zimmo, L., Almudahka, F., Ibrahim, I., Al-kuwari, M. G., & Farooq, A. (2020). Moderate to Vigorous Physical Activity During Physical Education, Recess, and Class Time Among Elementary School Children in Qatar. *Journal of Teaching in Physical Education*, *39*(1), 1-8.

Zimmo, L., Farooq, A., Almudahka, F., Ibrahim, I., & Al-Kuwari, M. G. (2017). School-time physical activity among Arab elementary school children in Qatar. *BMC pediatrics*, *17*(1), 1-7.

Zitouni, A., Daho, A., & Bloufa, B. (2018). An Analytical Study of reasoning skills according the bloom's taxonomy included in the curriculum of physical education and sport based on competency approach in middle school in Algeria. *Sportis*, *4*(3), 527-537.

Search terms

Sports; extra-curricular; extracurricular club; school club; athletic; physical activity; exercise; recreation; leisure; gym class.

Databases searched

Academic Search Complete
ERIC (EBSCO)
Education Source
Google scholar
ProQuest Central
ProQuest Dissertations
Web of science