

## Effect of smartphone use on physical activity in school going children

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### Abstract

**Background and Purpose:** Physical activity is the important source of development in children. As the smartphone use is strongly integrates in young people behavior it interrupts day to day activity due to which the physical activity is getting decrease in young population as they are getting more attracted to smartphones. The aim of the study is to see the effect of smartphone use on the physical activity in school going children.

**Subjects:** Sample of 30 school going children is collected from the random population.

**Method:** Participants were assessed for Brockport Fitness Test for the physical activity and the small version of smartphone addiction scale was used for the smartphone addiction rating.

**Result:** The study results as smartphone addiction among the age group 11-17 years showed no significant effect on their physical activity.

**Discussion and Conclusion:** Through the results it is suggested that subjects with smartphone addiction spend time using their smartphones on social media but along with that they also have good physical fitness.

**Keywords:** physical activity, smartphone, addiction

### 1. Introduction

The world has change to electrical age globalization has brought new and dynamic changes in the world including the evolution of smartphones, computers, and other such devices. Smartphone is one of the fastest growing technologies. In this fast moving world use of smartphone is unavoidable as smartphone has become integral part of life <sup>[1]</sup>. The adoption of the mobile phone by young people has been a global phenomenon in recent years. It is now an integral part of adolescents' daily lives and is for the majority, the most popular form of electronic communication <sup>[2]</sup>. Mobile phone interrupts the day to day activity, it may be seen in the form of decreased physical activity. Young people use the smartphone in positive ways to organise and maintain their social networks. There is the conflicting priority of young people, parents and teachers in relation to the smartphone device, with teachers are more concerned about issues such as discipline in the classroom and parents worried about means of contacting their children at every point in time. Researchers have discovered that the use of smartphone in schools is problematic <sup>[3]</sup>. As the physical activity is important source of development, physical education is important part of the school curriculum. Its objective is to teach the basic sport activities, and to install the value of physical activity being an important part of their lives form childhood to old age <sup>[4]</sup>. It provides numerous benefits towards overall physical and mental health. Physical activity increases total energy expenditure. PA benefits of improvements in emotional well-being and self-esteem, opportunities to learn new social skills, improved personal development, enhanced academic performance, lower levels of anxiety and depression, increased bone mineral. The benefits of physical activity are numerous and well-known, very few adolescents are meeting physical

activity recommendations. Physical activity declines with increasing age with this decline beginning in children as they are getting more attracted to the smartphones <sup>[5]</sup>.

### 2. Methodology

The study was conducted among the school going children with age group 11-17 years. The procedure is divided in two section that is, smartphone addiction rating and physical activity test. The participants were explained about the purpose of the study. An informed consent form was taken from the parents. The small version of smartphone addiction scale was gave to the participants and the Brockport physical fitness test was used to evaluate physical fitness among school going. The test was in the form of: Pacer (20 m), BMI, Curl ups, pushups, trunk lift, sit and reach.

### 3. Results

The data was analyzed by using unpaired t test

**Table 1:** Comparison of smart phone addiction rate physical activity

	SV-SAS	Physical Activity
MEAN+-SD	0.5740+-0.1415	1.5943+-0.2199

Mean value for smart phone addiction scale and physical activity are as:

Mean+- SD: SAS- 0.5740+-0.1415 and Physical activity- 1.5943+-0.2199

T value- 21.3725

P value and statistical significance: P value is less than 0.0001 and this difference is considered to be extremely statistically significant.

**Table 2:** Coefficient of correlation

SV-SAS	Physical activity	Correlation
0.5740	1.5943	1.003

Statistically the correlation between the SV-SAS and Physical activity is not significant.

#### 4. Discussion

The present study was conducted and sampling was done from the random population. The two categories of sample were collected that is small version of Smartphone addiction scale and the Brockport fitness test. The test was performed successfully amongst the school going children of age group 11-17 which include both male and female. The comparison between the smartphone addiction and physical activity among the school going children was the main criteria of the study. Physical activity is important to health benefits and can reduce the risk of mortality. All healthy adults need moderate-intensity aerobic activity for a minimum of 30 minutes, five days a week or vigorous-intensity aerobic activity for a minimum of 20 minutes. The BPFT typically includes four to seven test items: one for aerobic functioning, one for body composition, and at least two for musculoskeletal functioning. The test items of our test include PACER, BMI, curl-up, trunk-lift, push-up and back-saver-sit and reach. The SAS-SV might provide an appropriate instrument for assessing smartphone addiction in young people, a longer duration of smartphone use, shorter time period until first smartphone use in the morning, and indicating that social networking is the most personally relevant smartphone function were positively associated with smartphone addiction. But in this study it is the physical activity which show good results among school going children.

#### 5. Conclusion

Present study conducted between the smartphone addiction and the physical activity among the age group 11-17 years show slight significant difference between the physical activity and smartphone addiction.

#### 6. References

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