

Smartphone Addiction and Physical Activity - Time to Strike the Balance

Keni Gowski¹ and Karthick Subramanian^{2*}

¹Senior Resident, Department of Physiology, Jawaharlal Institute of Post Graduate Medical Education and Research, Puducherry, India

²Assistant Professor, Department of Psychiatry, Mahatma Gandhi Medical College and Research Institute, Sri Balaji Vidyapeeth (Deemed-to-be University), Puducherry, India

***Corresponding Author:** Karthick Subramanian, Assistant Professor, Department of Psychiatry, Mahatma Gandhi Medical College and Research Institute, Sri Balaji Vidyapeeth (Deemed-to-be University), Puducherry, India.

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Since the time of technological boom, the smartphone usage has grown up manifold globally. The use of smartphones and the utility of the applications embedded within the smartphones exhibit an intertwined growth. Whether an individual's pursuit is academic, financial, social relations, household-related, or even leisure, the search towards the resource starts and stops within the palms of the individual [1]. The usually associated physical activities and weariness related to such pursuits are almost banished. The worrisome part, which took most of us by surprise, is the replacement of physical sports with online virtual games amongst the youth of the present generation [2]. Such a replacement is worrisome as it can have deleterious effects on the body-mind functioning leading to impaired physical and mental health.

III-effects of smartphone addiction:

The addictive use of smartphones is linked with obesity, musculoskeletal problems, poor sleep, memory and concentration problems among the youth [3,4]. Excessive smartphone usage is physiologically equated with sedentary behaviours - because the work requires less than minimal physical activity with very little energy expenditure. Consequently, smartphone usage leads to impaired cardio-respiratory fitness [5], raising levels of obesity [6], higher fat mass, and a lesser muscle mass [4]. A recent review has identified key points: young population are at the greatest risk of addictive smartphone use, children born in the last two decades devote more time with smartphone, more than one-third users lose more time with smartphone than planned, and excess smartphone usage is inversely related with physical and mental health [7]. Some of the limitations of the studies, which analysed the link between physical activity and smartphone addiction, are lack of generalizability due to selection bias (studying only college students) and the inherent report bias (in revealing hours of smartphone usage).

The positive perspective

Apart from the deleterious effects on physical and mental well-being of individuals, smartphone-based applications are being widely used to monitor and track physical health status. The wide range of accessibility and availability makes the utility of smartphones in health monitoring, health promotion, physical activity monitoring and promotion more viable options in the present and for the future [8]. Few authors have even suggested that exercise and structured physical activity can be used as remedial measures to overcome smartphone addiction [9]. The positive and negative relationships between smartphone use and physical activity are depicted in figure 1.

The ever-growing technological advancement in this digital era upgrades the functionality of smartphones constantly. The users are consistently exposed to the dynamic technological flux of updates and newer versions. Thus, they are left with themselves trapped with constant feelings of "inadequacy". Such feelings are intended to enable smartphone dependency and enhance smartphone usage. Future studies should explore the risk factors (demographic and contextual) underlying smartphone addiction with a special focus on the psych-

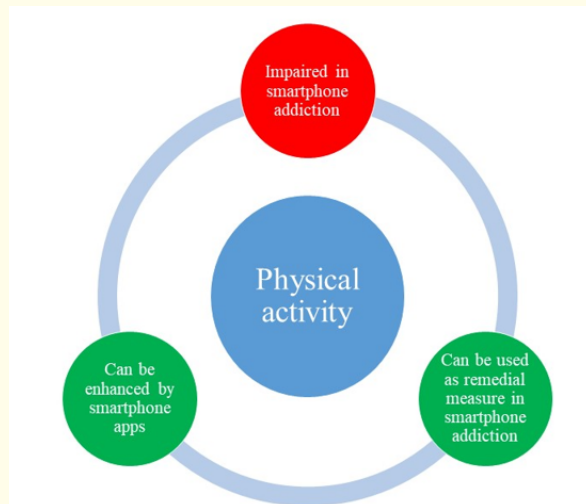


Figure 1: Positive and negative relationships between physical activity and smartphone addiction.

hological attributes, which drive the users towards excessive smartphone use. Early identification of such risk factors and enabling users with strategies to control their smartphone addiction are the need of the hour.

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Conflicts of Interest

None declared.

Bibliography

1. Madianou M. "Smartphones as Polymedia". *Journal of Computer-Mediated Communication* 19.3 (2014): 667-680.
2. Gentile DA., et al. "Internet Gaming Disorder in Children and Adolescents". *Pediatrics* 140.2 (2017): S81-S85.
3. Bell JA., et al. "Combined effect of physical activity and leisure time sitting on long-term risk of incident obesity and metabolic risk factor clustering". *Diabetologia* 57.10 (2014): 2048-2056.
4. Kim S-E., et al. "Relationship between smartphone addiction and physical activity in Chinese international students in Korea". *Journal of Behavioral Addictions* 4.3 (2015): 200-205.
5. Lepp A., et al. "The relationship between cell phone use, physical and sedentary activity, and cardiorespiratory fitness in a sample of U.S. college students". *International Journal of Behavioral Nutrition and Physical Activity* 10 (2013): 79.
6. Kautiainen S., et al. "Use of information and communication technology and prevalence of overweight and obesity among adolescents". *International Journal of Obesity* 29.8 (2005): 925-933.
7. Zagalaz-Sánchez ML., et al. "Mini Review of the Use of the Mobile Phone and Its Repercussion in the Deficit of Physical Activity". *Frontiers in Psychology* 10 (2019): 1307.

8. Bort-Roig J., *et al.* "Measuring and influencing physical activity with smartphone technology: a systematic review". *Sports Medicine* 44.5 (2014): 671-686.
9. Kim H. "Exercise rehabilitation for smartphone addiction". *Journal of Exercise Rehabilitation* 9.6 (2013): 500-505.

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