



ISSN Print: 2664-7281
ISSN Online: 2664-729X
Impact Factor: RJIF 8
IJSEPE 2023; 5(2): 108-110
www.sportsjournals.net
Received: 02-09-2023
Accepted: 05-10-2023

Dr. Haridas Kuloor
Assistant Director,
Department of Physical
Education, Mangalore
University, Karnataka, India

Assessment of smart phone usages and sleeping pattern among post-graduation students

Dr. Haridas Kuloor

DOI: <https://doi.org/10.33545/26647281.2023.v5.i2b.60>

Abstract

The purpose of the study was to understand the smart phone usage by students and its influence on their sleeping pattern among students studying in university campus. Study tried to know the frequently used features of smart phone by the students. 320 students studying in post-graduation courses from Mangalore University campus are involved in this survey. The age of the subjects ranged between 18-26 years. Self developed questionnaire to assess the smart phone usage and Pittsburg sleeping quality index (PSQI) were administered to the students. Study concludes that maximum number of students uses smart phones frequently and who use more than four hours were disturbed their sleep pattern. Findings from this study will help the institutions to better understand and control smart phone addiction behavior of the students.

Keywords: Smart phone, sleep, university, post graduate

Introduction

Smart phones available with multimedia features, it will assist the students to drive their learning process and dreams effectively ^[1]. Smart phones provides right learning materials depending on their situations. Students and other academicians can access the learning materials at any time anywhere by using smart phones ^[2].

Educational institutions provide internet facilities for the students in some campus with aim to advancing students learning experience and performance. Students can connect their smart phones to the network and gain limitless access to the internet to download the learning materials ^[3]. It helps to obtain their study materials, to communicate with lectures and other students, to join online programs, submit assignments and many more.

Although, Most smart phone and recreational applications are addictive to the users. Especially for students at lower level and higher level it is addictive and in turn it affects on academic performance ^[1]. Addiction to smart phones prove that it affects on students academic performance.

Sleep is a basic necessity of human being and sleep constitute one third of the hours in his daily life. Sleep is essential to the body and mind to keep healthy and to develop. Sufficient hours sleep is must for the individual to get proper relaxation to the mind and body. Increased frequently usage of internet or mobile phones threatens healthy sleep. Over use or Addiction in smart phone usage can change the sleeping time and shorten the sleeping period ^[4].

High frequency of mobile phone use at baseline was a risk factor for reporting sleep disturbances and symptoms of depression in users ^[5]. In other studies, it has been determined that mobile phone use is associated with all sleep variables. Mobile phones are widely used by the students at university level. This study was conducted to understand the mobile usage by the students at the post graduate level and their sleeping pattern.

Methods

A random sampling technique was used in selecting participants across the Mangalore University campus and 320 students studying in post graduation courses were participated in this study. Self prepared questionnaires used to investigate the smart phone usage and PSQI (Pittsburg sleeping quality index) questionnaire were used to understand the sleeping pattern of the subjects.

Corresponding Author:
Dr. Haridas Kuloor
Assistant Director,
Department of Physical
Education, Mangalore
University, Karnataka, India

Smart phone usage evaluated by asking question regarding spending time on use of smart phone, frequently using features, social medias, duration of daily usage and more.

assess the smart phone usage by the postgraduate students of the Mangalore university campus and their sleeping pattern. Following figure says the usage of different features by the students in smart phone.

Results and Discussion: The purpose of the study was to

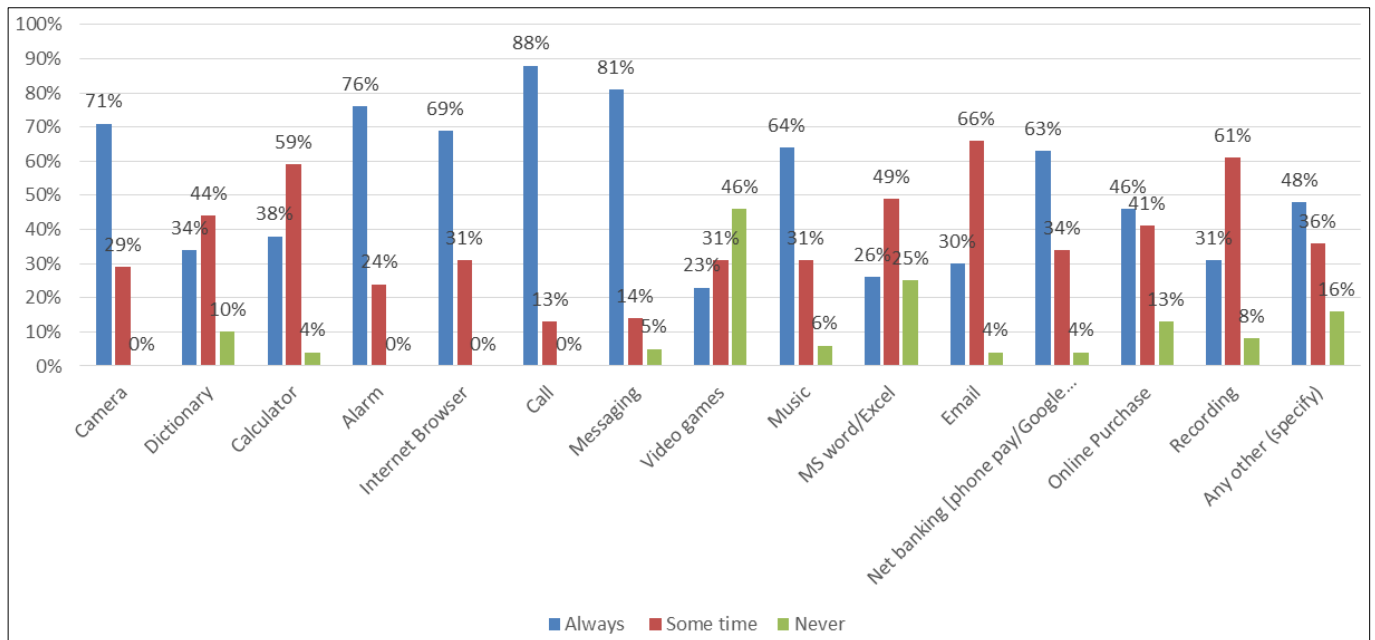


Fig 1: Usage of smart phone features by the students

According to this diagram, all the students are using their smart phones for communicate with others through call and messaging, internet browsing, camera for recording and photography the smart phone is used by the students frequently.

Internet browsing for learning materials, to listen music, net-banking, online purchasing the smart phones are more used by the students. It is observed in the above chart that the smart phones are less utilized for playing video games by the post graduate students.

Table 1: Smart phone usage duration in a day by the Post Graduate students

Smart phone usage sessions	Morning	Afternoon	Evening	Night	All Time
	4%	6.25%	11.25%	53%	25.5%
Smart phone using duration per day	0-1hour	1-2hours	3hours	4hours	Above 5 hours
	1.88%	6.25%	21.25%	35%	35.62%

The table no. 1 indicates that most of the students engage themselves in smart phone at night. 53% of the students are using smart phone at night time. And 25.5% students agreed that they are using their smart phones all the times in a day. And it is observed that at morning (4%) less number of students are using smart phones. 6.25% and 11.25% students are using smart phones afternoon and evening respectively. It can assume that Morning and evening the

students are engaged in their academic works. It also observed in table no. 1 that, more number of students engage with smart phones above 5 hours per day. 35.62% students agreed that they are using smart phones for above 5 hours in a day. 35% students using smart phones for around 4 hours in a day. Usage includes for communicating, academic works, recording and other features of the smart phone.

Table 2: Addiction to smart phone and sleeping delay by the post graduation students

Students feel addiction to Smart phone	Always	Sometime	Never
	41.35%	36.25%	22.50%
Sleeping delay due to Smart phone using	38.75%	50%	11.25%

Table no. 2 shows that most of the post graduate students feel they are addicted to smart phones. It indicates that students uses smart phones regularly for their academic work, communication, online purchase, download necessary documents etc. 41.35% students of post graduate students feel addiction towards smart phone. 38.75% students are going to sleep at late night regularly. They opinioned that smart phone usage causes for sleeping delaying. It can

assume that these students are go to the bed at late night and they sleep for less hours. Similar studies done by many investigators and they identified that the frequently using smart phones affects sleeping pattern. Students who slept next to their mobile phone and increased mobile phone usage time results inadequate sleep period (Duygu Akcay, 2018) [4]. In a study Mortazavi *et al.* (2011) [9] revealed a significant relationship

between the sleeping problems and the amount of time used mobile phones. Thomee *et al.* (2011) ^[5] found prevalence sleep impairment higher in adolescent people who use mobile phone frequently. Similar results found the studies done by Bruni *et al.*, 2015 ^[10], Mohammadbeigi *et al.* 2016 ^[11].

Overuse of smart phone cause physical and psychological health problems. Some studies have evaluated the relationship between smart phone usage and depression, anxiety and sleep disturbances. Hwang *et al.* (2012) ^[6], Lemola *et al.* (2014) ^[8], Canan *et al.* (2013) ^[7] resulted an association between internet addiction and impaired sleep. They identified that smart phone use associated with later bed times and sleep disturbances.

Conclusion

Students use the smart phone frequently for their academic purpose, communication and many more purpose. Most of the students use their smart phone more than four hours per day. Commonly students use smart phones at late night and it affects their sleeping patterns.

Reference

1. Kibona L, Mgaya G. Smartphones' effects on academic performance of higher learning students. A case of Ruaha Catholic University – Iringa, Tanzania. *Journal of Multidisciplinary Engineering Science and Technology (JMEST)*. 2015;2(4):777-784.
2. Jung HJ. Ubiquitous learning: Determinants impacting learners' satisfaction and performance with smartphones. *Language Learning & Technology*. 2014;18(3):97-119.
3. Chukwuere JE, Mbukanma I, Enwereji PC. The financial and academic implications of using smartphones among students: A quantitative study. *Journal of Economics and Economic Education Research (JEEER)*. 2017;18(1):5.
4. Duygu Akcay. The effect of mobile phone usage on sleep quality in adolescents, the *Journal of Neurobehavioral Sciences*. 2018;5:13-17.
5. Thomee *et al.* Mobile phone use and stress, sleep disturbances and symptoms of depression among young adults- a prospective cohort study, *BMC public health*; c2011. <https://doi.org/10.1186/1471-2458-11-66>
6. Hwang KH, *et al.* Smart phone over use and upper extremity pain, anxiety, depression and interpersonal relationships among college students, the *journal of korea contents association*. 2012;12(10):365-375.
7. Canan F, *et al.* Internet addiction and sleep disturbance symptoms among Turkish high school students, sleep and biological rhythms. 2013;11(3):210-213.
8. Lemola, *et al.* Adolescents electronic media use at night, sleep disturbance and depressive symptoms in the smartphone age, *journal of youth and adolescence*; c2014. p. 1-14.
9. Mortazavi SJ, Vegari D, Ho A, Zmistowski B, Parvizi J. Two-stage exchange arthroplasty for infected total knee arthroplasty: predictors of failure. *Clinical Orthopaedics and Related Research*®. 2011 Nov;469:3049-54.
10. Bruni O, Sette S, Fontanesi L, Baiocco R, Laghi F, Baumgartner E. Technology use and sleep quality in preadolescence and adolescence. *Journal of clinical sleep medicine*. 2015 Dec 15;11(12):1433-41.

11. Mohammadbeigi A, Absari R, Valizadeh F, Saadati M, Sharifimoghadam S, Ahmadi A, *et al.* Sleep quality in medical students; the impact of over-use of mobile cellphone and social networks. *Journal of research in health sciences*. 2016;16(1):46.