

Review Article

A Review on Assessment on Knowledge, Attitude and Practice on Mobile Addiction Leading to Psychological Problems Among College Going Students

Mohammad Yachin Minhaz; Mahendra Kumar R; Kanav Khera*; Venkateswara Rao Jallepalli; Navneet Khurana
School of Pharmaceutical Sciences, Lovely Professional University, India

*Corresponding author: Kanav Khera

School of Pharmaceutical Sciences, Lovely Professional University, India
Email: kanav.27241@lpu.co.in

Received: April 15, 2024

Accepted: May 20, 2024

Published: May 27, 2024

Introduction

Mobile addiction is generally defined as a persistent and infrequent infatuation of using mobile phones repeatedly or compulsively [1]. In an authoritarian manner, this device performs duties as an imparting instrument for communication and has coherent consistently unified on its own into day to day lives of common people [2]. To make sure without any interruption good health and to make necessary by maintaining this process through different aspects such as social, mental and certain economic factors. This balance crucially impacts a person's behaviour, measuring the disadvantages and advantages in such a way that encourages a person's growth through his whole life. Different studies have recommended that people undergo satisfaction when their day to day lives are affected on a gradual basis. Researchers and scientists all over the world are going through different surveys undoubtedly connected with contentment. In attribute, the well-being of an individual psychologically at first implicated absenteeism of certain negative characteristics like depression, anxiety and anger but gradually over a period of time it has changed through a broader margin [3]. As expected, mobile phones show a double nature with both negative and positive results. Without any doubt it increases the method of communication, their effect expands to com-

Abstract

Background: This study reaches inside an important field by assessing mobile phone addiction among college going students. **Methods:** It is supervised as a review study, in which comprehensive study has been done through an extensive literature review by going across several published articles. An all-inclusive questionnaire with different components directing knowledge, attitude and practice each comprising 10 questions evaluated on a 6-point Likert scale was used through a vigorous procedure. IBM SPSS version 16 software was appealed and was accounted by examining all the responses which was collected through the KAP questionnaire. **Results:** The results that were gained through this study displayed different percentages across various age groups, speculating various outlooks and way of behaving regarding mobile addiction among the students going to college. **Conclusion:** This perceptive study converts notable values to understand the knowledge, attitudes, and practice associated to mobile addiction in this body count, sharing views on fine distinction and different discernments pervasive in this field.

Keywords: Knowledge; Attitude; Practice; Mobile addiction; Psychological problems; College students

munication, economic, social and other aspects of daily life. Generally, these devices supply an upper hand and happiness to people in different outlines, their disadvantages can usually have an important result which usually depends on certain set of circumstances and the extent of using the devices over a period of time [4]. The rapid increase of these behaviours has led to important disadvantages through certain stages of life. Smartphone addiction also called mobile addiction, is marked by compulsive and intemperate usage of mobile devices be it electronic, digital and is frequent among people, among those in general who are above at the age of 18. Within a span of time there is a certain resemblance with the addiction of the internet, the monotonous and to lengthen use of a phone or a mobile lead to different problems on an average basis in day to day lives of an individual [5]. Unquestionably, there are a handful of manifestations connected with imprudent mobile use or possible addiction due to smartphones. These features involve mopping up or contemplation during the process of using a phone, encountering a misplacement of holding hands cooperation due to excess use of phones, getting connected with the phone in a very dangerous or cordially unsuitable set of circumstances, and using it in societies or in irregular places.

Apprehension which arises from poor network range coverage may also be a reason, along with intermittent tenderness of certain disorders like depression. Supplementarily, there are certain indications of mobile phone addiction might manifest on a constant rate about the phone's battery life, an uninterrupted inclination to improve newly discovered representations, and a feeling of separation from others due to excess phone use.

These manifestations conjointly culminate possible measure of troublesome use of the phones [6]. Completely, phones have become important irrespective of age, changing the lives of many people. Especially for college going students, continuous use of phones has noteworthy affected the verbal communication of the individual. In general, few might manage their phones depending upon the necessity of the phone, a substantial percentage of them use their phones interminably. An expeditious advancement of automation has seriously changed the economic and social topography of the individuals [7,8]. Completely, there has been an augmentation and ubiquitous use of smartphones which is fetching an important slice of daily life procedure, challenging more resources and time. This congruous dependence on mobile devices has been connected to the disclosure of psychological concern in general including all the factors grouped commonly known as "nomophobia" which makes reference to anxiety or fear connected along with or without connection through mobile phones [9].

Methodology

In the whole process, there has been a rigorous review study of 32 published articles on addiction of mobiles which was supervised, and the topics were investigated precisely. Among these 32 articles, 6 articles regarding knowledge, attitude and practice were chosen for review. The procedure inculcated operating with the SAS-SV scale procedure, along with a 6-point Likert scale having 10 questions on knowledge, attitude and practice. These questions altogether pointed to catch various opinions from the participants. The discoveries were arranged into a uniform tabular format, highlighting different components and similarities with each other which was based on the method of the research study design, having analysis of the data and the design of the study, and comparability between purpose of treatment and finalization/maintenance rates in addition with confabulation on problems which arose from the studies that were conducted.

Study Setting and Design

1. The first study passed over for 6 months as a cross sectional observational based study which was done between July to November 2017. It was accomplished at the institution of Yenepoya which is located in Mangalore inside Dakshina Kannada district in the state of Karnataka. The institution of Yenepoya consists of a number of colleges counting Yenepoya physiotherapy college, Yenepoya dental college, Yenepoya college of nursing, and Yenepoya Pharmacy college. There were a total number of 328 students from the same Yenepoya university and its component colleges were unmethodically proceeded towards after the classes when the students were free. The students were provided with consent forms and questionnaires [10,11].

2. In the second study a total number of 214 students were chosen from two institutions and businesses from Gyeonggi-do and Seoul from South Korea. Nevertheless, out of 214 there were only 197 students filling up the questionnaires and were considered eligible leaving the rest 17. The total num-

ber of females were 133 and males were 64 between the age group of 18 to 53, (SD = 5.96, M = 26.06), the objectives and the methods were carefully explained to the participants after that the participants signed the informed consent form and it was approved by the Institutional Review Board of St. Mary's Hospital of Seoul [12,13].

3. In the third study which was conducted from April to June 2016, a cross sectional study was done which involved 230 UG students working at Hamadan University of Medical Sciences in western part of Iran, Hamadan. Out of 300 survey forms only 230 completed the forms. Voluntarily many participants completed the informed consent forms and were selected through a selection process which was random by nature. By reassuring the privacy and confidentiality of the study the students were briefed on the basis of the objectives of the study. An all-inclusive questionnaire congregated certain demographic details which included gender, age, level of education, the type of the mobile phone, patterns and durations of usage, time spent daily and the reasons of using the phone. The questionnaire was directed to evaluate the knowledge, attitude and practice of people related to health [14,15].

4. The fourth study was conducted on December 2018, which was associated with suitable representatives among all the students from the faculty of medicine of Belgrade University. The students who were studying medicine were taken as the center of attention through possible impact by using smartphones for both medical and educational situations possibly influencing the results of the patients and the performance of the students. The software Epi Info 7 version (7.2.4.0) was used for sample size calculation (approximately a population of 523 medical students were taken who were studying in the third year; and the prevalence that was forecasted was nearabout 29.8% [24]; the margin of error was taken to be 5%; and the effect of the design was something like that a sample size of 199 was necessary for the study. But out of 523 only 323 students filled the questionnaire. Additionally for assessment the responsibility of the survey test retest of the Serbian version of the questionnaire for the same was taken in which 77 students were chosen on a random purpose especially for the fact that they completed the survey were encouraged for completing the same within 1 week [16,17].

5. The fifth study was directed between the months of September 2020 to January 2021, it was an observational intervention/cross-sectional study that took place in the state of Hyderabad India, among students who were pursuing MBBS. As maintained by the research [12] done by Nikhita et al. around 50% of the participants were expected to amplify in the whole process of smartphone addiction, to settle a sample size of 384 students with margin of error which was taken to be 5%; and the initial target was 95% confidence limit range taken for the study. Considering for those people who were non-registrants at the last final sample size was taken to be 500 for the whole study. Supplementarily an initial screening was done in which 20 students were debarred from the study. A self-conducted questionnaire assessed the usage patterns and mobile phone habits and for content validity repeated amendments were performed. The google forms that were made were the means of entry to an anonymous questionnaire that was semi-structured and before the participants were involved a deep briefing was done for the same [18,19].

6. In the sixth study pertinent information was taken and for this process cross sectional methodology was taken for pur-

pose. In the middle of February and March 2020 circulation for self-made survey form was done for the same study [20,21].

KAP Structure Methodologies and Construction

1. The first study included a survey along with a consent form which was distributed among the students. The sample size included all those people who signed the informed consent form willingly and completed the questionnaire for study purpose. Supplementarily the study procedure also got approval from the ethical board and was approved by the institutional ethics committee of the institution for conduction of the study. The study area, gender and age were some of the factors which were considered while designing the form for the study that was carried out. Regarding the use of the smartphone a brief examination was carried out. There were certain questions surrounding the pattern of matter that participants use a phone or not (Yes/No), whether it was a smartphone (Yes/No), smartphone use total time duration which was classified as 1] < 1h 2] between 1-3 h 3] 4-6 h 4] 7-9 h or more than 9 h, calling and texting was the chief motive of the smartphone 1] social media networking 2] entertainment purpose 3] watching news 4] playing games 5] homework and pursuing research studies 6] all the options mentioned above whether at night the participants who woke up did they check their phone [Yes/No] and if they left their phone somewhat in a different place, did it cause any sort of stress [Yes/No]. The level to which addiction of smartphone was seen were assessed through the implementation of SAS-SV (Smartphone Addiction Scale – Short Version). The scale was shortened to a certain limit, which was evolved by the scientist Kwon et al., in which factors like concurrent validity and internal consistency were analyzed. It comprised of 10 items which were self-described on a 6-point Likert scale which was self-working. The respective scale evaluates different fields like the level of tolerance, excess use, relationships occurring in the digital area, withdrawal factors. It has confirmed vigorous dependability and justifiability while successfully measuring the level of smartphone addiction. For completion of the process the total procedure requires about 5 – 10 minutes. After getting recommended by Kwon. et.al a disconnection value of 31 for the males and 33 for the females was made use of during the whole study. The total data that was collected during the whole process went through examination with the help of Microsoft Excel and the 22nd version of Statistical Package for Social Sciences [SPSS].

2. The second study included an initial SAS software which was obtained through alteration of the K scale design measuring 40 items all together planned for evaluating the fact that how much the young individuals were getting affected. In modifying this to calculate the addiction of smartphone instead of “smartphone” the term “internet” was coined. At a later date there was elimination of two items from the scale and modification of one item was available to suit superior for use of smartphone. The alteration procedure was associated with the removal of two items which were regarded as unsuitable for those who were adults and modification of one item for better arrangement with smartphone usage by the adults. Nearabout 10 new questions were added and were brought in to apprehend the ubiquitous qualities of mobile phones. These adaptations experienced careful examination by 6 professionals who were comprehensive in mobile phone addiction: there were 2 psychiatrists, 2 psychologists and 2 counselling psychologists. The scale was amended which consisted of 48 objects classified into 7 clear cut branches describing different features of mobile

addiction: disturbance in daily lives; disturbance in modification, expected things positively, manifestations from abolition, computer network relationships that were aligned excess use of phone and the level of tolerance. Rating was done on 1-6 in the respective scale. Remarkably this scale revealed vigorous internal stability from the inside indicated by Cronbach alpha coefficient of 0.97. The numerical examination was by using the branches within the bounds of SAS regulated carefully through elemental examination engaging oblimin rotation and maximum factor likelihood analysis. The skew value range (-0.253 – 1.899) and kurtosis value range (-1.261 – 3.351) were computed while evaluating the parametric distribution for the study. Both the scales hack down inside suitable restrictions for the theory which is under deliberation. The oblimin rotation was direct and was selected because of expected correlation among the sections. The methodology alleviated the scrutiny of possible connections surrounded by the recognizable components. The element bundles below the value of 0.4 were ignored during careful examining, cantering for those values only that manifested a bold connection with the elements. Supplementarily, the overall subscales and the internal consistency of both the scales were assessed. The evaluation probably measures certain values like the Cronbach alpha to measure the dependability and the constituent components of the internal coherence of the study. In evaluating the simultaneous rationality of the Smartphone Addiction Scale also called SAS, an incomplete analysis of correlation was carried out. The interpretation pointed to discover the fact that certainly if the scale authentically celebrate the vigour of the addiction caused by smartphone. To attain this the respective examination was under jurisdiction for fluctuating education while relationships which were under scrutinization adjoining a lot of subscales of K, Y and SAS scales. This procedure permits the segregation of the effect of the level of education when connections were evaluated in the middle of addiction scales that were taken for measurement. In estimating the simultaneous viability of the subscales inside the Smartphone Addiction Scale (SAS) a limited correlation analysis was carried out. This inspection is associated with management of education level variable while inspecting the connection among VAS and SAS subscales scores ascribed to 6 clear cut characteristics. Subscales went under construction by collection of certain pertinent components recognized as noteworthy elements among a factor analysis which was performed before time. This procedure made the verification easy of subscale of parallel viability by gauging their links with the score of the Visual Analog Scale although ruminating the impact of degree of education as a grasping variable.

3. The third study included the elaboration procedure for the questionnaire of Knowledge, Attitude and Practice started by assembling an extensive catalogue of questions. These queries were put together anchored on an assessment cooperatively of national and international education combined with awareness and discoveries from qualified people in propagated health. This procedure developed a questionnaire with 60 units intended towards evaluating freshman’s knowledge, attitude and practice relevant to threats related to health connected with use of the mobile phone, illustrating on scientific writings with discussions from certain specialists. The measuring factor of knowledge in the questionnaire clearly involves perception of a person of mobile related problems affecting health. It consists of 20 objects, each contributing 2 feasible options: ‘No’ and ‘Yes. The outcome 1 was given to those people responding to ‘yes’ whilst outcome 0 was given to those responding

to 'no'. The progressive result scaled from 0 - 20 where higher results designated an extra sizeable comprehensive bottom. These outcomes were additionally classified into 3 groups: 0-7 was considered poor, 7-14 was considered average and 14-20 was considered good contributing comprehensible assortment of extent of knowledge grounded on basis of the accomplished scores. The measuring factor of attitude in the questionnaire pivots on viewpoints of participant regarding the dangers related to health linked with mobile phones. This segment was composed of 20 objects each evaluated on a range with strong match varying from 5 – 1:5 towards 'strongly agree', agree – 4, neutral – 3, disagree – 2, strongly disagree – 1. The entire results for the Attitude designator might reaches from 20 to 100 where inflated outcomes stipulated an additional constructive/commendatory point of view in the direction of theme situation. Similar to the Knowledge guideline, the outcomes of Attitude were grouped into 3: 20-46 for poor, 46 – 66 for average, 66 – 100 for good. This classification provided a method to elucidate and categorize participants viewpoint grounded on their progressive outcomes inside the Attitude part of the Questionnaire. The part which was related to practice in the KAP questionnaire converged on participant's conduct and measures dealing with the prohibition related to health dangers connected with mobile phone usage, as well as their mobile phone choosing standards. This part consisted of 20 items which was to be reciprocated on the basis of a Likert scale aligning from 0 – 4, never - 0, seldom - 1, usually – 2, often – 3, always – 4. As a result, the progressive result for the Practice part might reach with a lower limit of 0 to a higher limit of 60, casting back the prevalence with which intriguing in response towards health implementation interconnected to mobile phone choice and operation. The outcomes confining the Practice part were farther bracketed into 3: 0-26 for poor, 26-52 for average, 52-80 for good. These grouping issued a method to explicate and rank participants application grounded on their stockpile base inside the questionnaire which was related to the practice part. The assessment process of these questionnaires concerned some strides for affirmation in the Persian language counting chiefly on substantiate theme, regulated through skillful judgements. Appraisal of Content Validity Index along with Content Validity Ratio a specialist committee consisting of 12 people were chosen. Construct validity and analysis of factor were working as a fragment of this assessment. A composed questionnaire was put together to escort the committee in demonstrating their discernments for prerequisites of various artefacts of the questionnaire. The interlocutors gave rose to grouping of every item as Useful but not essential, essential and not necessary. For every inquiry computation of Content Validity Ratio was done to gauge the portion of resource people countersigned a unit which was termed to be 'Essential'. For CVR the connote outcome was procured from these computations. Supplementarily the CVI was also computed for the determination of the concurrence amid the authorities on the pertinence of the things. Inspection of these particulars was managed using the software 21st version of SPSS with arithmetical importance placed at p less than 0.05 warranting a meticulous assessment procedure for content validity of the selected questionnaire and selection of the things.

4. The fourth study itself carried a vented estimation having 10 queries counted on a Likert scale having 6 points [strongly disagree - 1, disagree - 2, weakly disagree – 3, weakly agree – 4, agree – 5, strongly agree – 6] is termed as SAS-SV also called Smartphone addiction Scale-Short version [17]. The complete

out-turn ranges between 10 – 60. Elevated amounts of addiction of mobiles are designated through big results in the scale. About 10 questions awning day to day life disturbance, remove relationships connections in the internet, overworked and forbearance have been included in the questionnaire. People who have a soaring outcome of 31 [specificity – 0.893, sensitivity – 0.867] for participants who were men and above the value of 33 [specificity - 0.886, sensitivity - 0.875] for participants who were women both classified as dependent on mobile phones [17]. Depending upon the validity in the process the things underwent selection taken from SAS [6]. Between SAS-SV and SAS there was a correlation factor of 0.96. Moreover, the people who participated gave anthropological particulars like age, gender, homes, place of dwelling, stratum place, grades and habitual use of the mobile phone were congregated utilizing a unique outlined questionnaire. The queries on mobile phone use practices preferred the participants evaluate the total time duration they squandered while using cell phones every single day.

5. The fifth study had an emanating partially organized; an undesignated questionnaire was partaking with the students through Google Forms created online. The participants were described the causes for managing the research and informed consent form was taken from the participants. No distinctive recognizable details were composed. Medical U.G. students whose age were more than 18 who were ready to take part in the contemplate that were encompassed. People who didn't have any consent were kept out of the process. There were in total of 38 questions which were included in the questionnaire counting from SAS-SV also termed as Smartphone Addiction Scale Short Version [13]. The scale used in the process uses 10 items on a questionnaire that was vented and forged by a team belonging to Kwon et al. for evaluation of mobile phone addiction. It incorporates various questions on time-worn of mobile phones, upshot of use of phones on attentiveness, healthiness, association of daily life. The impact of phones on the particular framework were appraised by the people who took part in the process in the Likert scale accompanied by choices fluctuating from 1 – strongly disagree to 6 – strongly agree. Results more than 34 barbs stipulates elevated chances of dependence of mobile phones. Shrouding of the questionnaire included contemporary particulars like gender, stage of life, and total study duration in the school of medicine. Manifested fluctuating factors comprised were certain viewpoints in the direction of use of the mobile phone and consciousness concerning habituation towards mobile and related apprehension. Inquiries connected regarding outcome of phones on fitness, siesta and good health along with effects of widespread of the coronavirus on usage of cell phones have been laid down further. When the questionnaire was terminating fitness of good physical condition along with transmission concerning the bad consequences of abrading smartphone use and the methods for restriction obsessional deportment was taken into account.

6. The sixth study included a questionnaire for the study which was self-reliant questionnaire consisting of four components. The 1st portion was carved up in 2 sub divisions. The first category comprised anthropological statistics embracing identity of the gender, senescence, scholastic year in the location of Kulliyah, academic work scheme & citizenship. The second part focused on video games attributes circumscribing category of amusement through online sports, inclining towards game mechanics, quantity of space laid out for every game conclave in the course of time, preferred working day for entertainment period, plenary, manifesto of computerized games utilized,

technique of the tournament & aggregate quantity of cash consumed on online championships. Regarding the 2nd, 3rd and 4th components it's only due to the knowledge, attitude and practice on upshot of electronic games for disorders like depression. The corresponding section wielded unidimensional scales like the Likert scale something which comprised of 5 possibilities of responses, like strongly agree, agree, neither agree nor disagree, disagree, strongly disagree. Grouping of the same scale were encrypted in reckonable principles including options like strongly disagree – 1, disagree – 2, neither agree nor disagree – 3, agree – 4, strongly agree – 5 [14]. The candidates were supposed to select 1 out of 5.

Results

1. The first study consisted of 328 people who took part in the study from all substantive colleges of respective universities, who were grasped as representatives of the study or in other words were the sample size, the proportion of male participants was 48.2% and subsequently for female participants it was 51.8% in the whole study. The average age of the selected people in the sample was in the range of 21.1 ± 3 years to be studied. The selected students were using a mobile phone. The total proportion of students were 46% utilizing mobile phones for every single day for on an average of 4-6 hours & mainly mobiles were operated for social media consorting. On the basis of certain break off values, dependency on mobile phones comprised a proportion of nearly about 36.8% in the study. Almost 50% of the male students & 25% of female students were obsessed with mobile phones.

2. The second study was bounded by the computation outcomes, the subsidiary 'disruption by mortification' was detached & 6 elements were quitted. Concurrent validity and internal consistency of the scale were substantiated with the Cronbach alpha value of 0.967. Consequential association of Y & the K scale along with division of SAS were performed for the same study. Visual Analog Scale of every component further manifested a crucial association per branch. In corporately there were certain dissimilarities which were tracked down with the value of p as 0.05 for both position and pedagogy, with SAS scores that were holding the value of 0.001 for p in the same scale for the study.

3. The third study had results showing that content validity ratio and the content validity index of the developed questionnaire were 0.915, 0.79, respectively. Cronbach alpha was used as the point of reference for the accuracy of the questionnaire enhanced to the value of 0.85. The sum total of KAP amidst the participants were 7.95 ± 2.5 , 74.78 ± 8.8 & 28.91 ± 9 independently. Corresponding towards paramount accomplishable points, the obtained outcomes of the attitude section in the questionnaire additionally existed to be more justifiable compared to the rest of the participants. Furthermore, obtained results of knowledge component was more than that of the practice component.

4. The fourth study included a Serbian category of smartphone addiction scale short version manifesting acceptable intramural steadiness in which the value of Cronbach Alpha was calculated to be 0.89 & magnificent authenticity for evaluation of results holding the value of 95% confidence interval in the range of 0.92 to 0.96 with the value of 0.94 for ICC. Constituent scanning reinforced the removal of a single constituent, that elucidated discrepancy in the scale of 51.358%. By going through a survey of confluent reasonableness additionally, the

smartphone addiction scale short version corresponded accompanied by rhythm signals of mobile phone usage. Rescinding by disconnecting utility by the scale outcomes and results, nearabout 19.5% of the total participants could be considered in as addictive, & frequently many a times disburse extra space on mobile phones & internet community interminably for business days & expedition than compared to those students who weren't addicted in the process.

5. The fifth study involves utilization of mobile phones which was done by complete participants, out of which 83.25 from the total were using for nearabout 4 hours on an average basis. When the classes were going on around 22% of them were not using mobile phones. Around 51.6% of the participants acknowledged by retaining possessions of their smartphones adjacent while slumbering. A proportion of 84.3 participants utilized social platform products by means of their phones. Habitual indicators made an appearance through extended phone use comprehended asthenopia with a proportion of 67.9%, 31.4% had lack of sharpness of vision & insensibility/prickling in the hands consisting a proportion of about 30.9%. Nearabout 52.7% participants faced problems regarding overuse of mobile phones as stated by the scale. The face time exceeding four hours existed by having a link accompanied by elevated likelihood of compulsion of mobile phones in which p value was less than 0.0001. A remarkable alliance initiated in the middle of precariousness of addiction of smartphones & strained condition of the eye muscles in which the value of p was less than 0.0001. It also had refractive errors in which the value of p was less than 0.0115, stupefaction in the hands in which the value of p was less than 0.0001, & burning inside the acoustic zone same comprising the value of p which was found to be less than 0.0001.

6. The sixth study had most of the participants having restrained amount in the knowledge section comprising a total of 56.4% participants from the total & the attitude section comprised a total of 57.1% participants in the whole study, while in the practice outcomes most of them illustrated an impoverished proportion which was nearabout 73.6%. The knowledge and attitude part of the questionnaire demonstrated a positive correlation holding the value 0.440 for r.

Discussion

1. The first study had complications regarding mobile consumption that outstretched a distressing strength. So, it is very important to generate consciousness in difficult situations & propose productive interceding programmes.

2. The second study refined the 1st squama of mobile phone addiction feature through a symptomatic handbook. The scale that was used in the process was manifested by being proportionally justifiable and well grounded.

3. The third study guided towards the technical dissonance regarding problems related to health of mobile phones exasperating the communal solicitude regarding infrequent familiar consequences & as a result, it sustains & prompts favourable viewpoints amid the participants. Furthermore, comes off as that deficiency regarding precise comprehension able knowledge concerning mobile phone well-being risks & shielding proposition can impact sufficient applications. Principles such as ALARA which stands for "as low as reasonably achievable" ought to be acquired by taking on mobile phone utilization although crucial attempts are being crisped towards auditing of

the newly discovered prospective concussion on well-being of the participants.

4. The fourth study was regarding the rendition in Serbian Mode about the Smartphone Addiction Scale Short Version is authentic & logical tool onto perceiving mobile phone addiction amidst college going students. Beyond investigation regarding the subject matter is reinforcing by sanctioning a superior apprehension about perpetually escalating the health-related issues of the society in general.

5. The fifth study manifests an unnerve figure of menace of mobile phone addiction amid the participants who were pursuing medicine. Participants conceivably stimulate to evaluate addiction of smartphone ranking & embellish by becoming appreciative towards the subject matter. Supplementary research study might be performed to implement systematized apparatus by an expeditious recognition of obsession of mobile phones & suitable remedies regarding corrections for the same.

6. The sixth study displays the escalating comprehension on certain components of intemperate computerized & electronic game conventions & constituents that aggrandizes a peril for progression of disorders like depression might be benevolent in tackling the accelerating surge in disorders like depression betwixt the young adults in the country Malaysia.

Author Statements

Acknowledgement

We thank all the associates who took part in the study. We greatly appreciate their consistent accent and attempts, along with their valuable comprehension that made this study feasible.

Declaration of Interest Statement

There were no conflicts of interests as detailed by the author(s).

References

1. who.int. World Health Organization, "Management of substance abuse". 2021.
2. Karger CP. Mobile phones and health: A literature overview. *Zeitschrift für Medizinische Physik*. 2005; 15: 73-85.
3. Yılmaz MF. Üniversite öğrencilerinin psikolojik iyi oluşlarının problemleri internet kullanımı ve bazı demografik değişkenler açısından incelenmesi. (Yüksek lisans tezi, Anadolu Üniversitesi Eğitim Bilimleri Enstitüsü, Eskişehir). 2013.
4. Gümüş İ, Örgen C. Önlisans öğrencilerinin akıllı cep telefon kullanmalarının başarı ve harcama düzeylerine olası etkileri üzerine bir çalışma. *ISCAT/Akademik Platform*. 2015; 310-315.
5. Davey S, Davey A. Assessment of smartphone addiction in Indian adolescents: A mixed method study by systematic-review and meta-analysis approach. *Int J Prev Med*. 2014; 5: 1500-11
6. Lin YH, Chiang CL, Lin PH, Chang LR, Ko CH, Lee YH, et al. Proposed Diagnostic Criteria for Smartphone Addiction. *PLoS one*. 2016; 11: e0163010.
7. Karaaslan Aİ, Budak L. Üniversite öğrencilerinin cep telefonu özelliklerini kullanmalarının ve gündelik iletişimlerine etkisinin araştırılması. *Journal of Yaşar University*. 2012; 26: 4548-4571.
8. Chen YF, Katz J. Extending family to school life: college students use of the mobile phone. *Human-Computer Studies*. 2009; 67: 179-191.
9. Bhattacharya M, Bashar A, Srivastava A, Singh A. NOMOPHOBIA: NO MOBILE PHONE PHOBIA. *Journal of Family Medicine and Primary Care*. 2019; 8: 1297-1300.
10. Al-Barashdi H, Bouazza A, Jabur N. Smartphone addiction among university undergraduates: A literature review. *J Sci Res Rep*. 2015; 4: 210-25.
11. Lin Y-H, Chang L-R, Lee Y-H, Tseng H-W, Kuo T-B, Chen S-H. Development and validation of the Smartphone addiction inventory (SPAII). *Plos One*. 2014; 9: e98312.
12. Sim MS, Kim EM. The smart phone use survey. Seoul: Kor-Korea Communications Commission press. 2011; 21-23.
13. Porter G. Alleviating the "dark side" of smart phone use. *Technology and Society (ISTAS), IEEE International Symposium*; June 7-9, Rutgers. Conference Publications. 2010; 435-440.
14. Awadalla H. Health effects of mobile phone. *Web med Central Public Health*. 2013; 4: 1-24.
15. Karger CP. Mobile phones and health: A literature overview. *Zeitschrift für Medizinische Physik*. 2005; 15: 73-85.
16. Number of Smartphone Users Worldwide 2014-2020 | Statista. 2019.
17. Cheever NA, Rosen LD, Carrier LM, Chavez A. Out of Sight Is Not out of Mind: The Impact of Restricting Wireless Mobile Device Use on Anxiety Levels among Low, Moderate and High Users. *Comput Hum Behav*. 2014; 37: 290-297.
18. [economictimes.indiatimes.com, "Indian to have 820 million smartphone users by 2022," 2020, https://economictimes.indiatimes.com/industry/telecom/telecom-news/indian-to-have-820-million-smartphone-users-by-2022/articleshow/76876369.cms?from=mdr](https://economictimes.indiatimes.com/industry/telecom/telecom-news/indian-to-have-820-million-smartphone-users-by-2022/articleshow/76876369.cms?from=mdr).
19. Smart phone user penetration rate as share of mobile phone users India 2014-2020. 2021.
20. WHO. Addictive behaviours: Gaming disorder. 2020.
21. Li J. A Systematic Review of Video Games for Second Language Acquisition. In: *Handbook of Research on Integrating Digital Technology with Literacy Pedagogies*. 2020; 472-99.