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Use of Android Phone for Study Purposes among Students of Nishtar Medical University, Multan

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Abstract

Android phones are winding up progressively vital in regular day to day existence and offer a generous assortment of versatile applications for data, correspondence, instruction, and diversion purposes. Android phones ordinarily have contact screens, versatile Internet get to through Wi-Fi or cell systems, ability for establishment of Android phone applications, and different capacities, for example, media players, computerized cameras, and GPS-based route. Mobile devices have spread quickly all around the globally and have become more usually than computers. Modern mobile phones have exceeded the assumption of new technologies. People carry them with their keys and wallets all the time and everywhere. Android phones are no longer just phones; they have become multiple purpose tools. People use them to call, take pictures, record videos or audio, play music, browse the Internet, check the weather, find directions, translate a word, read an e-book, play a game, attend a virtual class, and even read a product price. The main aim of this study is to assess the purpose behind the use of Android phone by medical students, also explore barriers while using the mobile for education purpose. The nature of this study was quantitative;

questionnaire was used as data collection tool which was developed by researchers. Simple random sampling technique was used to collect the data from target population. The results of this study found that the use of Android phone for education purpose was very good in selected university, but it needed more attention of higher administration to support the use of mobile phone as tools which help in the promotion in medical education among medical students.

Keywords: Use of Android phone, Android Phone, Mobile Phone, Use of Mobile phone in Nishtar Medical University.

Background and Introduction:

Android phones are winding up progressively vital in customary everyday presence and offer a liberal collection of flexible applications for information, correspondence, guidance, and redirection purposes. Android phones usually have contact screens, flexible Web get to through Wi-Fi or cell frameworks, capacity for foundation of Android phone applications, and various limits, for instance, media players, automated cameras, and GPS-based course. Cell phones have spread rapidly all around the world and have become more for the most part than PCs. Present day cell phones have surpassed the suspicion of new advances. Individuals convey them with their keys and wallets constantly and all over the place (Franklin, Gibson, Samuel, Teeter, & Clarkson, 2011).

Android telephones are not, at this point just telephones; they have become numerous reason instruments. Individuals use them to call, take pictures, record recordings or sound, play music, peruse the Internet, check the climate, discover bearings, decipher a word, read a digital book, play a game, go to a virtual class, and even read an item cost. These computerized advancements have been a piece of the day by day life of the present understudies. The innovative condition they live in has made an age called 'computerized locals' with an alternate perspective and of handling data from past ages. This kind of student is portrayed as "carefully educated, 'consistently on', versatile, exploratory and network arranged". This wonder has incited instructive organizations to modify their instructive administrations to the current pattern of giving versatile learning. Furnishing the present students with the instructive assets that they anticipate, for example, versatile learning, is an educational need (McCombs & Liu, 2011).

Versatile learning, or m-learning, as characterized by Chuang (2009) is "discovering that occurs across areas, or that makes the most of learning openings offered by convenient advances". This definition infers that versatile learning implies the utilization of any convenient gadget in training as essential apparatuses. Analysts in various educational plan regions are investigating the utilization of versatile learning inside orders (Keskin & Metcalf, 2011) for example, arithmetic (Yerushalmy & Ben-Zaken, 2004), perusing (Todd & Tepsuriwong, 2008; Zurita & Nussbaum, 2004), clinical examinations (Scott et al., 2010), and language learning (Kukulkska-Hulme & Shield, 2007). Versatile learning "is rapidly turning into the favored technique for learning on the present school grounds" (McCombs & Liu, 2011) and portable applications have become normal strategies to convey learning (Khaddage & Knezek, 2011). Versatile learning has pulled in teachers "since cell phones are compact, omnipresent, effectively open and utilized by numerous individuals" (Keskin & Metcalf, 2011). The instructive organizations' endeavor to embrace this sort of learning; in any case, doesn't generally go easily.

A few components are considered as snags to the utilization of Android phones in training, for example, absence of direct correspondence among understudies themselves and with their educators, utilizing them for cheating, or diverting understudies (Pietrzyk, Semich, Graham, & Cellante, 2011), absence of legitimate guidelines for versatile learning, perfect stages for cell phones, and faith in the adequacy of the Android telephones in the study hall, just as issue with extra expenses to the previously rising educational cost (Polat & Lee, 2006). Actualizing another innovation in instruction can confront deterrents and difficulties. Consequently Cell phone assumes a significant job in our day by day lives, since we are living in an electronic time.

The cell phone has additionally demonstrated helpful in populaces of clinical understudies. Trelease portrayed the utilization of cell phones as a potential "adapt anyplace" asset for understudies, with extra exploration investigating the utilization of webcasts on Cell phone as a methods for giving instruction. Inside the clinical school, the prerequisite to get endorsement of abilities during clinical connections is truly relevant to compact innovation, with proof of better utilization of the case log. Therefore, the point of this examination is to distinguish the understudy's discernments about the utilization of Android phone for instruction reason.

Research Questions:

1. How much Android phone is helpful among MBBS students for reading purpose?
2. What are the understudies' view of Android phone use in training in the (NMU) Nishtar Medical University Multan?
3. What difficulties are faced by MBBS students while using Android phone (digital media sites)?

Literature Review:

Related studies have been inferred from scholarly journals, peer-reviewed research papers, databases, open access sources etc.

Use of Cell in educational institutions

Stone, Briggs, and Smith (2002) reports the aftereffects of a test embraced to test the viability of a two-way SMS crusade for a UK youth brand. These outcomes are introduced, and considered from the point of view of utilizing these outcomes in an instructive innovation setting. It is recommended that these outcomes and their discoveries can illuminate more successful future utilization regarding portable innovations in training. Haaparanta and Ketamo (2005) show their work on versatile learning. The goal of this investigation was to investigate new and versatile joint effort advances and to attempt to discover more successful ways for historical center encounters with portable innovations. The examination was executed in December 2002 with 20 Finnish secondary school understudies. The understudies were taking an interest in elective craftsmanship course. The entirety of the understudies appeared to adapt effectively the innovations and strategies utilized in this investigation yet at the same time there was an absence of time in each exercise. This leads us to hardly any significant ends: When the new innovations are utilized with new understudies and in new situations, it is important the save enough an ideal opportunity for understudies to get acquainted with new advances and new instructing courses of action.

Rice and Katz (2003) chip away at correlation among web and cell phone utilization. Results from a national agent phone review of Americans in 2000 show that Web and cell phone

utilization was fundamentally the same as, and that few advanced partitions exist as for both Web and cell phone use. The investigation distinguishes and examines three sorts of advanced partitions for both the Web and cell phones—clients/nonuser, veteran/late, and proceeding/dropout—and similitudes and contrasts among those computerized separates dependent on segment factors. The hole between Web clients and nonusers is related with salary and age, yet no longer with sex and race, when different factors are controlled. The hole between cell phone clients and nonusers is related with salary, work status, and conjugal status. The veteran/late Web hole is anticipated by salary, age, instruction, telephone client, enrollment in network strict associations, having kids, and sexual orientation; for cell phones, age, work status and conjugal status are indicators. The hole among proceeding and dropout clients is anticipated by instruction for Web utilization and pay for cell phone use. At long last, cross-classification of Web and cell phone use/non usage is recognized (essentially however feebly) basically by pay and instruction. Along these lines, there are a few advanced partitions, each anticipated by to some degree various factors; and keeping in mind that Web and cell phone use levels in 2000 were about the equivalent, their clients cover yet don't establish totally equal populaces.

Thornton and Houser (2005) present three distinct undertakings on versatile learning. First, overviewed 333 Japanese school understudies with respect to their usage of mobile phones. 100% uncovered having a wireless. 99% send email on their PDAs, exchanging some place the scope of 200 email messages each week. 66% email peers about classes; 44% email for mulling over. On the other hand, simply 43% email on PCs, exchanging a typical of only 2 messages for consistently. Simply 20% had used a PDA. Second, informed 100-word English language practices at facilitated ranges to the mobile phones of 44 Japanese school understudies, intending to propel standard examination. Appeared differently in relation to understudies asked with routinely study indistinct materials on paper or web, understudies tolerating adaptable email discovered more ($p < 0.05$). 71% of the subjects supported tolerating these activities on PDAs rather than PCs. 93% felt this critical educating methodology. Third made a site explaining English interesting expressions. Understudy made movement shows each saying demanding essentialness; a video shows the conversational significance. Abstract materials join an explanation, substance, and test. 31 school sophomores evaluated the site using video-capable mobile phones, finding scarcely any particular difficulties, and rating significantly its educational practicality.

Fozdar and Kumar (2007) chipped away at portable learning and understudy maintenance. Understudy maintenance in open and separation learning (ODL) is similarly poor to customary instruction and, in certain specific situations, embarrassingly low. Writing regarding the matter of understudy maintenance in ODL demonstrates that in any event, when mediations are planned and attempted to improve understudy maintenance, they will in general miss the mark. Besides, this territory has not been all around explored. The primary point of our examination, in this manner, is to more readily comprehend and gauge understudies' mentalities and recognitions towards the adequacy of portable learning. We would like to decide how this innovation can be ideally used to improve understudy maintenance at Four year certification in scientific studies programs at Indira Gandhi National Open College (IGNOU) in India. For our examination, we utilized a study. Consequences of this study obviously demonstrate that offering versatile learning could be one technique improving maintenance of BSc understudies, by upgrading their educating/learning and improving the adequacy of IGNOU's current understudy emotionally supportive network. The greatest bit of leeway of this innovation is that it tends to be utilized anyplace, whenever. Besides, as cell phone utilization in India detonates, it offers IGNOU simple access to a bigger number of students. This examination is expected to help illuminate the individuals who are trying to receive portable learning frameworks with the point of improving correspondence and enhancing understudies' learning encounters in their ODL establishments.

Use of Android Phone Applications for Study Purpose

Jebraeily, Fazlollahi, and Rahimi (2017) expressed the utilization of cell phone is getting high from a decade ago, cell phone is one of the ICT instrument which utilized by the vast majority of clinical understudy and suppliers. This examination attempts to decide the Cell phone applications which use by clinical understudies for their investigation reason. The outcome uncovered that 82.3% of the respondents had cell phone, which as far as working framework the most elevated was connected Andriod (53%) and iPhone (32%). The most well-known application utilized by number of members that was Forward-thinking, PubSearch, Ascertain by QxMD, Epocrates and OMnio. Pandey, Hasan, Dubey, and Sarangi (2013) verbalizes in his exploration that the cell phone applications are instrument which use to convey the human services data

exceptionally quick, further they says that they share distinctive sort of wellbeing related data with the assistance of versatile applications for example arrangements of tasks, general data about illnesses, Quiet consideration proficient help and late development research.

Franko and Tirrell (2011) stated that the use of mobile apps is becoming very popular among medical student at undergraduate and postgraduate level. The results of this study revealed that huge number (85%) of participants were used the smartphone out of which 58 % used the Iphone most of the time. Some were use it of update the medical knowledge, download the medical books in electronic format etc.

Barriers in Use of Mobile Phone Apps

Mehdipour and Zerehkafi (2013) talked about some specialized hindrances in his investigation which for the most part make obstacles in the utilization of cell phone by clinical understudies for their examination reason for example Network and battery life, Number of record/resource groups upheld by a particular gadget, Meeting required transfer speed for relentless/quick streaming, Screen size and key size (Maniar, Bennett, Hand, & Allan, 2008), Restricted memory (Elias, 2011), Danger of abrupt outdated nature (Crescente & Lee, 2011), Content security or copyright issue from composing gathering, Different guidelines, various screen estimates, numerous working frameworks and revising existing E-Learning materials for versatile stages.

Javed and Bhatti (2015) present a contextual analysis on Utilization of Online networking by Clinical and Dental Understudies at Nishtar Clinical School, Multan, Pakistan. This study investigates the use of web based life by Single guy of Medication, and Unhitched male of Medical procedure and Lone ranger of Dental Medical procedure (MBBS and BDS) postgraduate understudies (PGS) at Nishtar Clinical School, Multan, Pakistan. It investigates the utilization of online life, understudy explanations behind utilizing web based life, the favored spot of utilization, issues looked in utilizing web based life destinations, and web based life's adequacy in their scholarly exhibition. A survey was utilized that was created after a far reaching audit of writing. The reaction rate was 65%. The gathered information were dissected by utilizing SPSS Measurements, rendition 17. The discoveries show that most of respondents use Facebook and

YouTube as contrasted and other web-based social networking destinations. Eighty-seven percent of respondents were individuals from various internet based life networks or gatherings. Generally.

Parsons, Thomas, and Inkila (2016) showed that the Arranging flexible learning practices expect us to consider which key affordances of Android phones can reinforce the ideal learning establishment. This short paper gives bits of knowledge about the plan and testing of a BYOD versatile learning action that depended upon an assessment of affordances and an examination of understudy tendencies. It outlines the affordances and inclinations that were seen and how these were joined into a more wide strategy of plan necessities. It clarifies the selection of devices got for the movement, and how they were melded into the general learning association with light of utilizing Android phones to discover locales and hoard sensor information. Some between time perceptions are made around the experience and the total informative record gathered by the people.

Reid and Pechenkina (2016) exhibited their work without any other person Gadget or Endorsed Mobile Innovation? Looking at Understudy Gadget Inclinations for Mobile Learning. This research adds to the developing group of insightful investigation into the BYOD (Bring Your Own Device') versus recommended (least gauges) innovation for learning by providing details regarding discoveries of a versatile innovation preliminary. The examination researched understudy encounters with and inclinations for Android phones, contingent upon whether those were advanced or claimed. Understudy members were credited a Samsung Tablet and educated on the most proficient method to utilize it for different learning exercises all through an instructing period. Information gathered by means of online review and eye to eye interviews uncovered that understudies tended to utilize their possessed and lent gadgets simultaneously and in an integral way instead of utilizing one gadget for all learning air conditioning activities. As most understudy members effectively possessed individual Android phones and utilized them for some learning exercises of their picking, understudies don't think they obtained any new abilities because of this activity. Be that as it may, understudies felt that utilizing the lent Table had in general demonstrated their computerized proficiency aptitudes, for example, composing and perusing speeds and in addition upgraded their efficiency and capacity to perform multiple tasks. Drawing on discoveries, we offer contemplations on the best way to completely use versatile

learning innovation in the classroom, paying little heed to whether portable devices are advanced or possessed.

Tisdell and Usachev (2016) conducted study on How a Mixed, M-Learning Way to deal with Understudy Assessments Builds Investment Rates as schools have changed from paper to online understudy evaluations, concerns have been brought up with respect to falling or low audit loan fees. We expound on our continuous assessment that examined how blended investigation techniques could extend participation rates in online understudy contemplates. At the center of our procedures was the use of individual devices by understudies inside class time to complete the audits. We found that this strategy in a general sense extended the number and pace of understudies taking an intrigue. From time to time, the response rate was higher than those of standard paper outlines. We in like manner graph the framework behind how the blended reviews were coordinated and give some future lines of enquiry for the assessment.

Townsend (2018) mentioned in their work on A Hypothesis of Improvement of Expert Learning for Native and Torres Waterway Islander Pre-advantage Instructors in Exceptionally Far off Networks through Versatile Learning Native and Torres Waterway Islander pre-advantage teachers in very distant systems in Australia checked out semi-sorted out gatherings on their practices and acknowledgments about the use of Android telephones in their examination. Revelations highlighted four educational jobs of Android telephones and four andragogy parts of compact learning. The informative purposes behind existing were for getting the chance to content, dealing with association, giving and tolerating educational assistance and sharing individual encouragement. The use of Android telephones enabled adults to pick seasons of study, pick spots of study, finish examination noteworthy to their course, and achieve a calling objective. Taking into account the investigation disclosures a Grounded Hypothesis was worked to explain upgrading capable learning through Android telephones. Six arrangements underlie the thought: empowering access, empowering customization, propelling joint exertion, enabling sorting out, completing the course, and connecting with association. The theory adds to the field of versatile learning by putting the upsides of the usage of Android telephones in tertiary examination for non-Western culture bundles in detached regions.

Trede, et al. (2016) demonstrated their work on Upgrading Workplace Learning through Android Phone: Barriers and Opportunities to the Use of android phone on Placement in the Healthcare and Education Fields. Working environment learning (WPL) and Mobile learning are each significant needs for Australian colleges. However, they once in a while cross by and by. We give an account of a multi-college venture that investigated how WPL can be improved using Mobile innovation on arrangement. The point was to all the more likely comprehend the hindrances and chances of utilizing portable innovation for WPL. A mix of studies and inside and out meetings was utilized to gather information from understudies, scholastics and working environment instructors about their practices in utilizing portable innovation and their impression of how it could upgrade their learning and educating on arrangements. The discoveries demonstrate that there was a high utilization of Android phones and high trust in their utilization among all member gatherings. Scholastics saw numerous chances to utilize Android phones, and their potential to positively affect understudies' learning. Be that as it may, information additionally featured specialized and social boundaries and the requirement for better planning and preparing, capable implementation of web based life approaches and rules, more solid web get to, more extensive combination of versatile and WPL and a more noteworthy spotlight on individual and authoritative impression of the estimation of portable innovation for WPL.

Wu, Pammi, and Yu (2016) conducted work on Location-Based Vocabulary Learning App. This paper exhibits a versatile application that produces vocabulary learning recreations in view of the client's geological area—film, eatery, historical center, and so forth. The application sends the client a notification and offers three fun vocabulary recreations—Unscramble, Hangman and Matching—when the client enters the premises of the area of intrigue. This task utilized film corridors as the essential area. The diversions are consequently created from the film words and expressions extracted from New York Times motion picture surveys. The client can either learn new words or audit words adapted beforehand. A starter think about with seven dialect students has indicated take in ers' uplifting mentality towards the fundamental standards of area based vocabulary learning. It has likewise given productive input to the future advancement.

Research Methodology:

This area depicts the examination philosophy used to acquire the reasons for the investigation, the strategies utilized for writing survey and the example determination for the examination. It additionally depicts the structure of the instrument which was utilized for information assortment, procedure of information assortment and examination of information for the culmination of study.

Research Design

The point of this examination is to research the utilization of android telephone for study reason by clinical understudies of Nishtar Medical college Multan. The idea of this investigation is quantitative.

Population

This research was conducted in Nishtar Medical University Multan, a public sector university of Pakistan attached with teaching hospital which name is Nishtar Hospital Multan. The total population of this study was 1600 medical students who were currently enrolled in MBBS five years degree program in the year of 2018 at Nishtar Medical University Multan.

Sample Size

Sample is an illustrative piece of population. It is hard to gather the information from whole populace. Basic arbitrary testing strategy has been received to get to the information from the populace. Yamane (1967) gives a rearranged equation to ascertain test sizes. This recipe used to compute the example size.

$$n = \frac{N}{1 + N(e)^2}$$

Where:

n – the sample Size

N – the population size

e – the acceptable sampling error

$$n = \frac{N}{1 + N(e)^2} \quad n = \frac{1600}{1 + 1600(0.0025)^2}$$

As per his formula:

$$n = 320$$

The masses have subgroups as demonstrated by the sexual direction, age, status, research understanding, number of dispersions and grounds. The model was picked such that apparent subgroups were tended to in the model in a comparable degree wherein they exist in the individuals.

Sampling Technique

The straightforward arbitrary example method was utilized to choose the members structure entire population.

Data Collection Instrument

The idea of this investigation is quantitative. It was chosen to utilize the survey to gather the information from populace. Questionnaire is entirely reasonable instrument for gathering the information from countless populaces. It has been effectively applied in research which asses the utilization of android telephone among clinical understudies of Nishtar Medical University Multan. Survey was partitioned in two areas and 7 fundamental inquiries; a few changes/alteration were made with the assistance of specialists. The principal area included individual data of respondents and known the utilization of Android telephone for study purposes, the subsequent segment was about the investigating points of interest, boundaries and discoveries of applicable material identified with clinical examination.

Pilot Study

Pilot study is conducted on small level, it helps to find out flaws and problems in the instrument which is used to gather the data. To check the reliability of data collection tool in local set up, it was distributed among some medical students of MBBS randomly. Students were approached in classrooms, library and cafeteria. Twenty doctors filled up the questionnaire, they were also asked not fill the questionnaire again in final data collection process.

Data Collection Procedure

In the wake of considering and breaking down a few investigations identified with the use of Android telephone for study purposes, it was chosen to appropriate the printed polls to clinical understudies for information gathering.

Data Analysis and Tabulation

All measurable examination were performed utilizing Information will be broke down utilizing SPSS-adaptation 21.0 Programming. Information was additionally deciphered with the assistance of tables and figures. Some straightforward measurable techniques were utilized in the information examinations like 'Recurrence circulation unmistakable measurements, i.e., mean and standard deviation.

Data Analysis and Interpretation:

Gender of Respondents:

Table 1 shows that 50.5 % participants were male and 49.5% were female. In this way it is concluded that greater part of the respondents' were male.

Table 1
Respondents' Gender

| | Frequenc y | %cent | Valid %cent | Cumulative %cent |
|--------------|---------------|-------|-------------|---------------------|
| Male | 142 | 50.5 | 50.5 | 50.5 |
| Valid Female | 139 | 49.5 | 49.5 | 100.0 |
| Total | 281 | 100.0 | 100.0 | |

Study Year of the Respondents:

Table 2 shows that 21% respondents were concentrating in MBBS first year, 20% respondents were in second year, 18% respondents were in class third year, 20% in class fourth year and 21 % were concentrating in MBBS fifth year. Subsequently it is concluded that dominant part of the respondents' were in first year.

Table 2
Respondents' study year

| Year | Frequency | %cent | Valid %cent | Cumulative %cent |
|----------------|-----------|-------|-------------|------------------|
| 1st Year | 60 | 21.4 | 21.4 | 21.4 |
| 2nd Year | 57 | 20.3 | 20.3 | 41.6 |
| Valid 3rd Year | 51 | 18.1 | 18.1 | 59.8 |
| d 4th Year | 55 | 19.6 | 19.6 | 79.4 |
| 5th Year | 58 | 20.6 | 20.6 | 100.0 |
| Total | 281 | 100.0 | 100.0 | |

Study on the Basis to Read Text Books

Table 3 clarifies that 12.8 % respondents never perused reading material, 20.6 % respondents once in a while, 22.8 % respondents so often, 24 % respondents much of the time and 19.6 % respondents' oftentimes.

Table 3
To Read Text Books.

| | Frequency | Percent | Valid Percent | Cumulative Percent |
|--------------------|-----------|---------|---------------|--------------------|
| Never | 36 | 12.8 | 12.8 | 12.8 |
| Rarely | 58 | 20.6 | 20.6 | 33.5 |
| Valid Occasionally | 64 | 22.8 | 22.8 | 56.2 |
| Frequently | 68 | 24.2 | 24.2 | 80.4 |
| Very Frequently | 55 | 19.6 | 19.6 | 100.0 |
| Total | 281 | 100.0 | 100.0 | |

Study on the Basis to Taking Class Notes

Table 4 clarifies that 9 % respondents' never used class notes, 16 % respondents rarely used class notes, 20 % respondents at times, 43 % respondents most of the time and 11 % respondents as often as possible.

Table 4
Sample Description of the Study on the Basis to taking class notes.

| | Frequency | Percent | Valid Percent | Cumulative Percent |
|--------------------|-----------|---------|---------------|--------------------|
| Never | 25 | 8.9 | 8.9 | 8.9 |
| Rarely | 46 | 16.4 | 16.4 | 25.3 |
| Valid Occasionally | 56 | 19.9 | 19.9 | 45.2 |
| d Frequently | 122 | 43.4 | 43.4 | 88.6 |
| Very Frequently | 32 | 11.4 | 11.4 | 100.0 |
| Total | 281 | 100.0 | 100.0 | |

Study on the Basis of Video Lectures:

Table 5 shows that 4 % participants never watched video lectures, 13 % rarely watched video lectures, 25 % respondents occasionally consulted video lectures, 32 % frequently availed video lectures and 26 % respondents very frequently utilized video lectures.

Table 5

Sample Description of the Study on the Basis to watch video lectures.

| | Frequency | Percent | Valid Percent | Cumulative Percent |
|------------------|-----------|---------|---------------|--------------------|
| Never | 12 | 4.3 | 4.3 | 4.3 |
| Rarely | 38 | 13.5 | 13.5 | 17.8 |
| Occasionally | 69 | 24.6 | 24.6 | 42.3 |
| Valid Frequently | 89 | 31.7 | 31.7 | 74.0 |
| Very Frequently | 73 | 26.0 | 26.0 | 100.0 |
| Total | 281 | 100.0 | 100.0 | |

To Access Research Journals:

Table 6 makes clear that 23 % respondents never accessed research journals, 20 % respondents rarely utilized research journals, 18 % respondents occasionally accessed research journals, 29 % respondents frequently availed research journals and 10 % respondents very frequently used research journals.

Table 6

Sample Description of the Study on the Basis to access research journals.

| | Frequency | Percent | Valid Percent | Cumulative Percent |
|------------------|-----------|---------|---------------|--------------------|
| Never | 64 | 22.8 | 22.8 | 22.8 |
| Rarely | 56 | 19.9 | 19.9 | 42.7 |
| Occasionally | 51 | 18.1 | 18.1 | 60.9 |
| Valid Frequently | 81 | 28.8 | 28.8 | 89.7 |
| Very Frequently | 29 | 10.3 | 10.3 | 100.0 |
| Total | 281 | 100.0 | 100.0 | |

Sharing of Learning Content among Students:

Table 7 demonstrates that 1 % participants never shared learning content, 7 % medical students rarely made sharing, 23% students sometimes made collaboration, 37 % respondents shared content as often as possible and 31 % respondents shared learning content every now and again.

Table 7

Sample Description of the Study on the Basis to share learning contents among the students.

| | Frequency | Percent | Valid Percent | Cumulative Percent |
|--------------------|-----------|---------|---------------|--------------------|
| Never | 4 | 1.4 | 1.4 | 1.4 |
| Rarely | 21 | 7.5 | 7.5 | 8.9 |
| Valid Occasionally | 65 | 23.1 | 23.1 | 32.0 |
| Frequently | 104 | 37.0 | 37.0 | 69.0 |
| Very Frequently | 87 | 31.0 | 31.0 | 100.0 |
| Total | 281 | 100.0 | 100.0 | |

Activities Perform on Android Phones

Table 8 shows mean and standard deviation (Descriptive Statistics) of the different activities which are performed by the Medical Student through android phones. These include useful ethical education, group discussion, useful time management, aid in learning course, ability to access during learning, submission of assessments and help in (receiving/sending) e-mails. Results show that android phones are mostly used for the activity of educational help with mean 3.95. Group discussion is also frequently availed through smart android devices with mean 3.90. Through android phones, time management becomes easy (M=3.88).

Table 8

Descriptive Statistics of the Activities Performed through Android Phones

| Variables | Mean | Std. Deviation |
|--|-------------|-----------------------|
| Ethical education is useful/helpful | 3.95 | .957 |
| Group discussion | 3.90 | 1.029 |
| Useful time management | 3.88 | 3.575 |
| Aid your learning in the course | 3.83 | .872 |
| The ability to access during your learning | 3.80 | 1.018 |
| Bedside learning | 3.75 | 1.169 |
| Use specific app in your medical studies. | 3.67 | 1.125 |
| Submit assessments | 3.60 | 1.158 |
| Get help in (receiving/sending) e-mails | 3.49 | 1.131 |
| Valid N (listwise) | | |

Barriers in Using Android Mobile Phones

Table 9 shows barriers which are faced by medical students while using android mobile phones. These barriers include storage problem, downloading problem, information overload, unavailability of internet, lack of compatibility to fulfilling the requirement, battery issues, slow response, limited memory, health risks., small screen size and key pad size, information not

trustworthy, use of android phones camera in classrooms affects the privacy of students, using in classrooms causes disturbance to students, facing some technical problems during their lecture, privacy leakage, and spam mails. Majority of the respondents mentioned that they faced the problems of storage (M.=3.33), Downloading issues (M.=3.31) and Information Overload (M. 3.30). Privacy leakage and spam emails were rated as the less faced barriers by the respondents with Mean 2.72 and 2.51 respectively.

Table 9
Barriers in the Usage of Android Mobile Phones

| Sr. No | Barriers | Mean |
|--------|---|------|
| 1 | Storage problem | 3.33 |
| 2 | Downloading problem | 3.31 |
| 3 | Information overload | 3.30 |
| 4 | Non Availability of Internet | 3.27 |
| 5 | Compatibility(similarity) | 3.19 |
| 6 | To fulfilling the requirement | 3.14 |
| 7 | Battery Issues | 3.12 |
| 8 | Slow Response | 3.11 |
| 9 | Limited memory | 3.11 |
| 10 | Health risks. | 3.10 |
| 11 | Small screen size and key pad size | 3.01 |
| 12 | Information not trustworthy | 2.96 |
| 13 | Use of android phones camera in classrooms affects the privacy of students. | 2.96 |
| 14 | Using in classrooms cause disturbance to students. | 2.92 |
| 15 | Facing some technical problems during their lecture. | 2.90 |
| 16 | Privacy leakage | 2.72 |
| 17 | Spam mails | 2.51 |

Conclusion:

Findings of the investigation show that 50.5 % participants were male and 49.5% participants were female. Dominant part of the respondents were males. The outcome shows that 21% respondents were studying in MBBS first year, 20% respondents were in second year, 18% respondents were in class third year, 20% in class fourth year and 21 % were in MBBS fifth year. Thus it is concluded that most of the participants were in first year.

Results of the study show 12.8 % respondents never preferred course books. 9 % respondents' never used class notes, 16 % respondents rarely used class notes, 20 % respondents at times, 43 % respondents most of the time and 11 % respondents as often as possible. 4 % participants never watched video lectures, 13 % rarely watched video lectures, 25 % respondents occasionally consulted video lectures, 32 % frequently availed video lectures and 26 % respondents very frequently utilized video lectures. 23 % respondents never accessed research journals, 20 % respondents rarely utilized research journals, 18 % respondents occasionally accessed research journals, 29 % respondents frequently availed research journals and 10 % respondents very frequently used research journals.

1 % participants never shared learning content, 7 % medical students rarely made sharing, 23% students sometimes made collaboration, 37 % respondents shared content as often as possible and 31 % respondents shared learning content every now and again. Medical Students performed different activities through android phones. These included useful ethical education, group discussion, useful time management, aid in learning course, ability to access during learning, submission of assessments and help in (receiving/sending) e-mails. Results show that android phones are mostly used for the activity of educational help with mean 3.95. Medical students also face problems of storage, downloading, information overload, un- availability of internet, battery issues, slow response, limited memory, privacy leakage, and spam mails while using android phones.

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