

TITLE:

IS LEARNING THROUGH WATCHING EDUCATIONAL VIDEOS A HAPPENING PRACTICE AMONG ADOLESCENTS, SPECIALLY THE UNDER-PRIVILEGED, IN INDIA?

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ABSTRACT:

The paper is a record of observations from the Review study done on the choice of learning among adolescents (under-privileged section of students in particular), through watching of Educational Videos, as a popular preference. The sourced literature chosen for the study is pertaining to the past decade (during which major transformation has happened in the usage of Online learning and learning through other electronic devices – Smart Phones). The observations made from the study and sources represent the changing scenario that is being witnessed during this period of transformation. In order to arrive at the findings as to what is the level of engagement of students for learning through educational videos using Smart phone, two factors are identified which become relevant, and they are – one, Scope for Accessibility to Smartphone for the adolescents for use and - two, amount of time the smart phone is used for learning, out of the total duration of accessibility. Data sourced to identify and substantiate Accessibility of Smart Phone & Utility of smart phone for learning through educational videos, was analyzed to arrive at the actual findings. The findings arrived at, based on the supporting data corroborate to state that only a small percentage of adolescents actually put to use the Smart phones for learning (though a higher percentage of the adolescents have been having access to smart phones) through educational videos, due to diversions on account of relaxation, entertainment, etc.

Objective of the Study

This study is primarily done doing the Review of Research happened in the recent past (2016-2021) to find whether the adolescents / students are engaged in learning through watching of Educational Videos, as a popular preference, if so what is the extent of such transformation in the learning preference. The Period for the Research Review reckoned has been 'Pre & Post-Covid', since access & usage of Smart-phones has increased during this period of time.

KEY WORDS

Smart Mobile Phones - Educational Videos - Adolescent Under-privileged - Online learning -Access & Utility – Technology in education – Digital tools - Personalized Learning - Information and Communication Technology - Anytime Anywhere Learning - Nomophobia

INTRODUCTION:

Education is a primary tool for bringing social transformation. Every one, irrespective of the background or the circumstances, has to be educated. Accordingly, all the countries are engaged in this task of building knowledge-societies. But the under-privileged, in the process, come across barriers such as poverty, inability to enrol in schools and discrimination.

Schools and the colleges are the places of education and the teachers and the taught are in engagement for the transfer of knowledge and skills for students, who later contribute to the society's social and economic needs. The educated youth get employed for their livelihoods and to lead respectful lives. Technology in education plays in the process a role that is vital while addressing the challenges to ensure that every student gets the opportunity to tap the full potential. Technology can break the Locational barriers; provide qualitative educational resources without difficulty, in order to make the students learn by being engaged and interactive.

The philosophy of right learning corroborates that:

- The Students' learning space & environments have to be flexible and structured to suit and support the individually relevant goals.
- Every student has to choose to pursue the path that is individualistic and which encourages the student to achieve the individual goals.

Online learning

Online learning was once an option, but the pandemic forced on us circumstances making the major part of learning to happen on-line during pandemic. Post pandemic, the practice of online learning became a need to supplement and reinforce conventional learning. Online learning, it is now felt, results improved learning outcomes in students, though the evidence for the same is limited. On the other hand, it is observed that the academics and the parents have their apprehensions about the equal access of Technology to all the students, which widens the gaps in achievement, apart from the digital distractions, which they feel are spoilers.

On the part of teachers, it is observed that they have been slow to transform their teaching methods, even though the new technology has been tapping the doors for adequate amount of time giving them reason to adopt.

Personalized learning

ISSN:1539-1590 | E-ISSN:2573-7104 12273 Personalized learning is an important thing needed in some form that suits individual students. The strength of the technology and the powerful tools support schools to meet the diverse needs and the applications thereof of the students. The scope that digital devices, software and the platforms provide us, is progressively great, tailored to meet the needs of education of individual students, based on their academic strengths, interests, motivations and the preferences, and the pace of learning that they are used to.

Technology in support of education for the underprivileged

Benefits on account of using technology are many, especially in respect of the Under-privileged students. They are:

- Better Access to education is possible by breaking down geographical barriers in order to enable better reach to the under-privileged, not-withstanding their Locational disadvantages.
- Personalized Learning Technology can make the personalized learning easily possible. Meeting the individual needs and the learning style of each under-privileged student can easily be achieved using Technology.
- Interaction Learning objectives are better achieved, when there is an ideal engagement with the teacher and the other learners providing an Interactive Learning opportunity. Such experiences help in being motivated and inspired.
- Digital Skills come handy for the under-privileged students in being successful attaining the learning outcomes

The experience has been that the Policy makers in education field always face the challenge in enabling Information and Communication Technology to be of benefit to low income communities in remote location, since the facilitation and making available of the same come from high income ecosystems and environments. Systems which are set to fit come with solutions to problems, but they are often chosen for settings which have much more challenging environments. (Michael Trucano - July 2014)

To have an ideal mix, Blended Learning is chosen as an alternate practice that is adopted, where traditional Teaching is done addressing students using technology supported instruction. While teaching acts as facilitation - igniting the students minds, inspiring, guiding and supporting, digital sources enable better understanding through supportive learning scope. The updated and current content, greater interaction possibilities and learning with individualized needs are the striking features of the digital sources. (Benjamin Herold — 2016).

Smart phone - a mini computer in hand

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Decades ago, launch of computers awe-inspired people including the students and opened up scope for access to wider learning from open resources through incisive search possibilities, quicker job completion, paperless working, 'neat execution of job' possibilities and storing loads of information in files saved for later retrieval. Computers have been companions for people for

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a considerable period of time. They supported learning in great many ways. Computers became a part of life of everyone – the desk-top & lap-top; later the smaller versions of them as Tablets; finally the Mobile phones with the features that computers have. And the evolved computers were not only the endlessly growing memory machines of high capacities, but also attaining the unbelievably dwarfed sizes. Computers retaining their original functional status with changing forms and high capacity operational efficacies, led to the hand-held device variants - the key-pad mobiles, which ultimately became the smart phones – with touch, drag and push features to give commands.

Yes today, the Smart-phone is a computer in hand with the unbelievable features that beat the efficacy of even the computers in some form. And the greatest feature with the benefit and advantage that Smart phones provide has been its mobility and pocket friendly nature. Utility of the Smart phones (Computer-in-hand) – with Anytime & Anywhere using possibility changed the whole scenario empowering all those having access to the Smart phones. For children it is 'games', and for adolescents, it is social media, connectivity and of course, immense learning possibilities from wide variety of resources – even to download for off-line reading/watching books or videos, which are freely available. Watching Videos, 'Creating of

Video' possibilities, Video calling, apart from connecting to speak or chat, gave the scope for entertainment, of a level un-imaginable hitherto.

METHODOLOGY

To arrive at the extent / level of usage of Smart phones for learning through educational videos in India by adolescent under-privileged students, Research papers on the Smart phones accessibility to these students across India, and within the duration of accessibility, the level of utility of the smart phones for learning through educational videos, have been studied for review in order to arrive the findings. Research papers both on Accessibility of Smart phones to the students & their Utility for learning through educational videos have been identified, studied to record observations, analyzed to interpret. The findings of the ground level reality of the access and usage for learning of the smart phones have been recorded as the objective of the study. The data and the information sourced and studied to arrive at the findings, have been from the Research papers and articles published in the recent past.

RESULTS & DISCUSSIONS

Connecting- anytime, anywhere and any number of times

The computers first, the mobiles of the early version, subsequently, and the smart phones later have all contributed to enlarge scope for all in a variety of ways by meeting the diverse needs. They created scope for large resources to be able to connect – anytime, anywhere and any number of times. Searching, picking, choosing, downloading and being able to engage to read the learning content, watch videos, similarly be connected to Social media, games, instant messaging have all become possible with the least time spent for getting them before us. But going through the

reports, organized and analysed, there are a number of findings, each of which has relevance significant to the perspective that it is meant for.

ACCESSIBILITY OF SMART PHONE

The study of the reports above, gives us a fair idea about the actual usage of educational videos for learning when there is a scope for access to smart phone. Several instances could be reckoned, where there is one smart phone being available for a family (presumably the family head – father or mother having it). In such a case, the actual availability of access to the child for using the smart phone, and again out the total time available for use by the child, the amount of time the child uses the smart phone for learning, after allotting time for usage of the phone for other applications – such as social media, entertainment, instant messaging, etc., will give us an idea about the limited time usage of smart phone for learning by the child. Available accessibility to phone; the duration of access available to the learning member in the family and the actual utility of the mobile by the learner for learning exclusively, are only presumable.

To arrive at the extent of learning hours spent by the learners/adolescents – the two factors have to be understood in the possible measures.

- 1) Available access for the school going children / adolescents to the smart phone which is a pre-requisite for using it for the purpose of learning.
- 2) Actual Usage of educational videos for learning by the school going children / adolescents, when they have access to Smart phone.

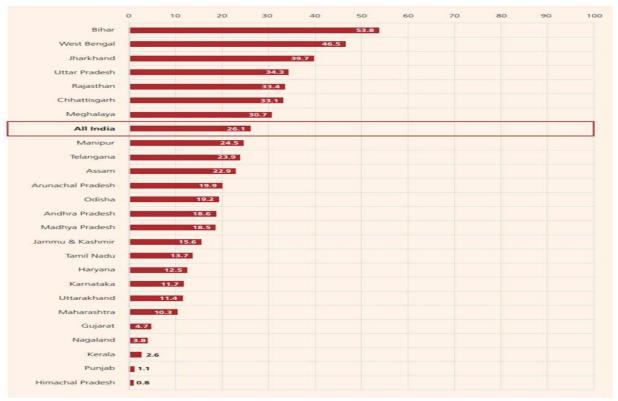
Access to Smart phone for the learners/adolescents

The report showing the availability and access of Smart-phones to the School going children across Indian states gives us an indication of the scope available for the adolescents' usage of educational videos. The information as to the availability of smart phone to the learning member of the family will indicate the scope for use of the device for learning by him / her using educational videos. The table below released by **Annual Status of Education Report** (ASER) Rural, confirms that 67.6 percent of students, as having access to mobile learning. More than 27 percent of learning members of a family did not have access, which meant one in every four kids had no access to smart phone. These figures are of the year 2021, which grew from the levels of the year 2018 (Pre-Covid), when only 36.5 percent of the families had access to smart phone.

Children having a smart phone available at home, % children who are unable to access it for their studies. By State. Year - 2021

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ASER) Rural - 2021

It could be understood from the illustration above that 30 percent of children of Government schools had access to smart phone – One phone available at home, as per the figures in the year 2018. This rose up to 56.4 percent in the year 2020 and up to 63.7 percent in the year 2021.

The figures arrived at, as above, are from the study by **ASER 2021** conducted in 25 states and three Union Territories, 76,706 households (families) and 75,234 children, of the age - 5-16 years, and the teachers from 7,299 government schools, who were interviewed. It is also noted that the survey was done with a team 3,000 and above volunteers.

The table below is much more focused – for our understanding as to quantum of access of smart phone available to the school going children from out of the access available to the families. The figures indicating the availability of access to the 'One Smart phone' available for the family are further broken down into the dimensions – 1. Available at all times — 2. Available sometimes 3) Not available for access at all. The percentage of 'Availability of access at all times' is mostly half of the percentage of "available of access sometimes" except in a few states, such as Kerala (3 times more), Nagaland, Odisha, and Telangana (around 10% more)

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	% Children with at least one smartphone available at home	Of children with a smartphone available at home, % children able to access for their studies:				
		Yes, at all times	Yes, sometimes			
Andhra Pradesh	72.3	35.8	45.7	18.6	100	
Arunachal Pradesh	84.6	29.4	50.7	19.9	100	
Assam	71.0	25.7	51.4	22.9	100	
Bihar	54.4	11.8	34.4	53.8	100	
Chhattisgarh	81.6	25.3	41.6	33.1	100	
Gujarat	88.4	37.9	57.5	4.7	100	
Haryana	86.3	38.4	49.2	12.5	100	
Himachal Pradesh	95.6	25.1	74.2	0.8	100	
Jammu & Kashmir	72.8	40.1	44.4	15.6	100	
Jharkhand	60.2	20.7	39.6	39.7	100	
Karnataka	71.6	35.6	52.7	11.7	100	
Kerala	97.5	76.2	21.2	2.6	100	
Madhya Pradesh	69.2	31.8	49.7	18.5	100	
Maharashtra	85.5	27.0	62.7	10.3	100	
Manipur	92.9	35.6	39.9	24.5	100	
Meghalaya	77.9	35.2	34.2	30.7	100	
Nagaland	92.9	55.2	41.0	3.8	100	
Odisha	64.6	46.5	34.3	19.2	100	
Punjab	89.9	43.2	55.7	1.1	100	
Rajasthan	66.6	21.1	45.5	33.4	100	
Tamil Nadu	66.1	26.8	59.5	13.7	100	
Telangana	79.3	42.2	33.9	23.9	100	
Uttarakhand	75.6	31.0	57.6	11.4	100	
Uttar Pradesh	58.9	18.7	47.0	34.3	100	
West Bengal	58.4	12.8	40.7	46.5	100	
All India	67.6	27.0	47.0	26.1	100	

ASER) Rural - 2021

It is also to be noted from the data available that children studying in higher classes are having more access to smart phones – the percentage of more access to higher classes children are around 15% more. The table below released by ASER corroborates the observation.

Std	% Children							
	At least one smartphone available at home	Of children who have a smartphone available at home, % children able to access it for their studies:				Bought a new phone for children's education		
		Yes, at all times	Yes, sometimes	Not accessible	Total	since the lockdown began		
Std I-II	64.9	19.9	40.8	39.3	100	19.3		
Std III-V	66.6	23.7	47.2	29.0	100	24.6		
Std VI-VIII	66.6	27.6	50.2	22.2	100	30.0		
Std IX & above	72.6	35.4	47.5	17.0	100	36.4		
All	67.6	27.0	47.0	26.1	100	28.0		

ASER) Rural - 2021

UTILITY – LEARNING & ENTERTAINMENT

Studies done and findings arrived at provide us the following facts:

The study done, based on a survey conducted using 10000 students pursuing collegiate education, on the investigation to find the relationship between smart phone usage and academic performance reveals a mix of findings, which are as follows:

- 1. Though usage of smart phones by the college students is high, usage of the device is in general discouraged as it is perceived that an impact on the academic performance is perceived as negative.
- 2. The fear of losing availability of mobile phone is termed Nomophobia. It is a factor that mediates a continuing relationship between the mobile phone and the academic outcome.
- 3. The other factor has been Behavioural Habit/s late sleep is one dimension and the other dimension has been insomnia, responsible for mediation.
- 4. Different mobile applications were also studied during the investigation and the same were found to be SIX in numbers Mobile Learning, News, Social Media, Mobile games, Music and Video & Entertainment book reading.
- 5. While learning in general has been on account of all the SIX applications, direct effects on academic performance were on account of Mobile Learning apps & news apps. The other applications had only adverse effects. The negative impacts were on account of the other FOUR apps. which are Mobile games, Social media, music and video, entertainment-reading.
- 6. It is also reported as a finding that Nomophobia is not caused by mobile learning, while other applications do contribute to Nomophobia.

ISSN:1539-1590 | E-ISSN:2573-7104 Vol. 5 No. 2 (2023) 7. As the Conclusive outcome, it was found that the Smart phones motivate positively academic performance, provided they are appropriately used. It therefore shows that the impact varies depending upon the application of the mobile, as positive impact on academic performance is rendered only when learning application is used. All other applications contribute to nomophobia and behavioural habits.

Analyses, post studies, as referred above, confirm that the mobile learning application has a direct impact on the Academic outcomes of students. The specific aspects of study findings are that

- Mobile learning RESULTS in impact on academic performance.
- Activities using Social Media, Music and Videos, Playing mobile games and reading entertainment based books result in adverse effects. (Jackson et al., 2011; Jang & Ryu, 2016; Lin & Chiang, 2017)
- Users of mobiles for long durations and spending more time on entertainment-oriented applications result in adverse effects.

POSITIVE IMPACT & LEARNING SCOPE

Mobile Learning – a self-disciplined effort

Mobile Learning is not fun, but a self-disciplined effort oriented towards cognitive purpose. Hence Mobile learning has its advantages over non-academic purpose oriented applications. Mobile learning directly impacts academic performance and does not result in nomophobia, since it is a conscious effort to stay on the platform to learn and not to while away time on fun and pleasure. It is not anxiety out of tendency-urge, but a need of knowledge fulfilment as a forward movement.

Interest & Desire to Learn – pre-requisite to Mobile Learning

The study and the findings of *Bonk, Lee, Kou, Xu, & Sheu (2015)* show that Curiosity, interest and desire to learn, seeking of information and the purpose of self-improvement, drive the usage of web for learning. Interest is one of the major factors which push the students to connect to web environments, of course - YouTube here for learning

Supplementing & Reinforcement in learning

Learning through Video lessons with Smart phones has a distinct advantage – one can pause, skip, use them a number of times (reinforcement in learning). So there is a great scope for managing through proper planning, as to what is required, when it is required, where it is required, how many times of usages needed, what is the depth of knowledge and reinforcement aimed at by the learner, are all possible if the Learner is interested, passionate and is able to manage the time and the content needed to learn. Smart phones supplement the learning and comes to rescue the missed out classroom face-to-face learning sessions. *Raikos and Waidyasekara* (2013)

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For the learning of complex type of concepts easily, smart phones come handy, since they offer visual and interpretative teaching and learning possibilities. *Chtouki, Harroud, Khalidi, & Bennani* (2012). The other great advantage over other types of learning is the diverse kind of learning choices, which are huge in the form of online resources, which the Smart phone and the internet platforms provide for the students to pick and choose from, according to their liking.

Informal Learning & Entertainment

Going by the above statement, one can substantiate that those not having interest in learning, would seek mobile association for their interests in other applications, such as Social media, instant messaging, reading books for entertainment, mobile games, etc.

Further it is considered that YouTube is a platform for learning informally, since these platforms provide entertainment as an additional dimension. The quality of the content, reliability as a supporting factor and suitability of the content meeting the requirements vary in the case of informal learning environments – such as YouTube. (Kocyigit, Nacitarhan, Koca & Berk, 2019; Tan, 2013).

Educational Videos – a great support – for distance learners

The other study done through a survey using a sample size of 400 University students (200 from urban areas and 200 from rural areas) in our neighbouring country Pakistan and the findings of the study reports reveal that there is a positive impact of educational videos on University students studying through distance learning.

Economic status of a family also is found a valid reason for smart phone availability in the family. The ASER report based on the studies held states that when the parents education level goes up, the chances of the family having smart phone increases.

The survey conducted by a school done on "Emergency report on School education', revealed that 51 percent of rural families as having Smart phone, and only 8 percent of the kids were found to have Smart phones.

Certain other peculiar reasons also come in the way of Smart phone usage despite access being available.

- 1. One phone available in the family is used by the working adult hence not available for learning by the students/adolescents
- 2. Money not being available for getting data for the phone, which is essential for the apps to work
- 3. Poor connectivity is another significant reason.

NEGATIVE IMPACT & ADVERSE EFFECTS

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Distractions

Speaking about the detrimental effects of usage of Smartphone applications, the dimensions of which are common for all sections of adolescent students – not to mention specially about the Under-privileged, the usage of these phones and ill-effects are much more (of course benefits also are significant) keeping in comparison with the benefits through learning by students. (Gokçearslan, Mumcu, HasLaman, & Çevik, 2016). The addiction that the students get into with the usage of Smart phones results in their exhibiting symptoms of phobia and 'dependent personality trait disorder' (King et al., 2013).

Deteriorated Academic performance

A special mention has to be made that while many scholars attribute the usage of specific applications of the so called smart devices turn out significant academic outcomes, studies also, reported to have revealed deteriorated academic performance of both school and college students. The reason could be that these youngsters resort to access more of mobile games and social media postings, instant messaging, resulting in distraction from the academic studies. There are also instances of Social media contributing positively on the academic studies. (Ainin, Naqshbandi, Moghavvemi, & Jaafar, 2015). Music applications usage is another aspect which is said to have positive relationship between usage of Smart phone and academic results.

Among all mobile applications, mobile learning is said to be benefiting the learners in the areas of – Individualized Learning, Situated Learning (Cheon, Lee, Crooks, & Song, 2012). Examples quoted are learning in museums, laboratory learning with pre-selected learning materials (e.g., Hall & Bannon, 2006). Similarly, Chiou, Tseng, Hwang, and Heller (2010) have reported to have developed an 'adaptive navigation support system' on the smart phone devices to aid learning in the museums. Such a system helped in exploiting the learning resources much more in regard to effectiveness and efficacy.

Even in the ambit of the positive relationship between the smart phones and academic achievement, Chen and DeNoyelles (2013) claimed to have observed a negative relationship. It is said that the 'grade points and the averages' of students and their use of Learning applications (reading of e-books) of smart phone devices showed negative correlation. The protracted study in which analysis of 24 students was done revealed that prior to use, smart phones were found to be favourable to them for university education, which was later found to be detrimental in attaining their academic goals. *Tossell et al.* (2015). There was also a mention that smart phones were a distraction in learning than a help in education. This was attributed to noticeable changes in their habit forming behaviours. (*Tossell et al.*, 2015, pp. 720–721).

Studies exploring the effects on account of learning using mobile applications on academic performance, have revealed mixed results. It is said that learning through usage of mobile application could yield immediate positive results / Learning & exhibition of knowledge about a

ISSN:1539-1590 | E-ISSN:2573-7104 Vol. 5 No. 2 (2023) pre-meditated object. But it reduced the overall performance of the capability, which could take time to reach the surface and also result in cultivating nomophobia and other adverse modes of learning and habits. (Tossell et al., 2015)

Nomophobia

From the study and the findings thereof, it is found that the Smart phone usage increases the incidence of 'nomophobia' among the teenage groups (Yildirim & Correia, 2015). One with nomophobia will have anxiety and concern for not having access to smartphone/mobile. Symptoms of it are frequently checking the phone and not turning it off. (Gezgin & Çakır, 2016). Disturbed sleep / Insomnia are the effects of it. (Fu, Chen, & Zheng, 2020; Tamura, Nishida, Tsuji, & Sakakibara, 2017). Decreased sleep duration and irritation are also the visible behaviours. Sleep habits and sleep durations change the life habits thereby changing the total mental disposition of the affected.

CONCLUSION

The objective of the study has been to arrive at the findings (by doing review of the decade-old available literature, since Smart phones and Tablets as mobile devices, belong to the recent past – 5-8 years) on the current status of learning through educational videos among under-privileged Accessibility of Smart phone to the students and the Utility of Smartphone for adolescents. learning using educational videos, have been identified as the important variables. The data sourced for review of literature were adequate enough to arrive at an indicative conclusion with a close range of quantification possible. The study done, the observations recorded, analyzed and interpreted to arrive at the findings reveal that a small percentage (around 10%) of accessibility is the reality, especially since the availability of a smart phone has been ONE phone per house hold. The finding also holds good as a ground reality in the case of an underprivileged family, where, at best, the head of the family only could have the smart phone – considering one phone one family finding from the data sourced. And further the Smart phone available – one in the family – is mostly used by the head of the family – and made available to the studying children only during some part of the day for studying. Utility of the Smart phone for learning through educational videos and other digital tools for learning, is possible only within the time of access available to the student. Out of this very limited time of access also, the students / children are more attracted towards the entertainment and social media applications' usage leaving very less time for learning through material available – videos, e-books, etc. The literature review also unfolds the facts on the adverse effects of Smartphone usage due to getting addicted to entertainment and social media applications, which distract the students and lead to nomophobia and other psychological effects, with prolonged usage of smart phones avoiding the learning applications. Distinct observations could be made from the review of literature that the adolescent students stand to gain much by way of learning through usage of learning applications of smart phones, when students have Interest, objective and desire to learn. In

such situations the relationship between Smart Phone and Academic achievements is very high.

The conclusion to study therefore is that while there are strong benefits of learning possible through the usage of Smart phones, the 'variable factors' – Accessibility and Utility patterns now experienced in the families, deny the possibility to major percentage of the students to benefit from Learning through Smart phone learning applications.

Under-privileged Adolescent - The sourced data for Study and Review of the previous literature done, also attribute to show only small percentage of impact of smart phones on learning through educational videos on the adolescent under-privileged. And since the **access** for normal / privileged student itself is seen as a small percentage, it will be much less for the under-privileged, which can be understandable. And the impact of Smart phones on Utility, when access is available, could be understood as same, since adolescence is one common feature, irrespective of whether one is privileged or Under-privileged adolescent, since the mental disposition cannot be different looking at the interests, desires and distractions. So the study and observations recorded in the conclusion apply to the Under-privileged adolescent also in the same measure.

LIMITATION:

The review study done to carve out the findings about the ground reality on the accessibility to smart phones & the actual utility of smart phones for watching educational videos among adolescents, has been based on the decade old data, more especially after 2010 till 2021. The quantitative data sourced for study provides a fair amount of authenticity for the findings. The error therefore could be only to the extent of 5-10% and cannot be more than that. Data relevant to the period from (2021-2023), which is not reckoned for the study here, could contribute to the difference. However the findings recorded in the paper and the conclusive statement on the current scenario of Accessibility of Smart phones and Utility of them for learning purposes provides a leading direction for necessary corrective actions if any.

REFERENCES

1. Watching Videos Improves Learning?

Jakob Bruhl - United States Military Academy West Point et al - 2008

2. Potentials and Limitations of Educational Videos on YouTube for Science Communication

Sarah Kohler1 – etal - 2021

3. Technology in Education

Benjamin Herold — February 05, 2016

4. Revisiting the relationship between smartphone use and academic performance: A large-scale study - Yanqing Lin a, etal - **2021**

5. Motivations, achievements, and challenges of self-directed informal learners in open educational environments –

Curtis J. Bonk - 2017

6. Why Do University Students Prefer YouTube to Learn and Study

Satı BURHANLI1, etal – 2021

7. The impact of YouTube videos on the student's learning

Yousra Chtouki, H. Harroud, etal – 2012

8. Why Do University Students Prefer YouTube to Learn and Study

Kocyigit, Nacitarhan, Koca & Berk, 2019; Tan, 2013

9. Smartphone ownership has doubled during the pandemic in rural India; but it has been of no help to most children

https://en.gaonconnection.com/smartphone-covid19-pandemic-rural-india-children-education-online-learning-aser-internet/ - 2021

10. Modelling smart phone addiction: The role of smartphone usage, self-regulation, general self-efficacy and cyberloafing in university students

Şahin Gökçearslan, Etal - 2016

11. The impact of social media on mental heal al health: a mixed methods research of service providers' awareness

Sarah Nichole Koehler - 2020

12. Social Media Network Participation and Academic Performance In Senior High Schools in Ghana

Jeffrey Mingle - 2015

13. An investigation of mobile learning readiness in higher education based on the theory of planned behaviour

Jongpil Cheon, et al - 2012

14. Designing ubiquitous computing to enhance children's learning in museums

T. Hall, L. Bannon - 2006

15. An adaptive navigation support system for conducting context-aware ubiquitous learning in museums

CK Chiou, et al - 2010

16. Exploring students' mobile learning practices in higher education

B Chen, A Denovelles - 2013

17. You can lead a horse to water but you cannot make him learn: Smartphone use in higher education

Chad C. Tossell, et al -2014

- 18. Exploring the dimensions of nomophobia: Development and validation of a self-reported questionnaire C Yildirim, et al -2015
- **19.** Analysis of nomofobic behaviors of adolescents regarding various factors DM Gezgin, Ö Cakır 2016

ISSN:1539-1590 | E-ISSN:2573-7104 Vol. 5 No. 2 (2023)