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Social media and Students attitude: A study of Accessibility, Addictiveness, Exposure and Communication among College students in Coimbatore, Tamil Nadu

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Abstract

Information and Communication Technology has broadened the scope of communication, education and learning. ICT provides a virtual learning space and experience as it would enable technology mediated learning among teachers and students. Mobile phone and social media usage has become inevitable in today's life. The ubiquity of smartphones made easy access of multimedia teaching aids as it is user friendly and convenient (anytime, anywhere learning). Apart from classroom learning, social media provides a platform for innovative and collaborative learning experience. The aim of the present study is to measure and analyse Students' attitude towards social media. The demographic variables are age, gender and educational qualification. The dependent variables—exposure, communication, addictiveness and accessibility. A survey was conducted among 507 college students from coimbatore were chosen through multistage stratified random sampling technique. Results states that there is no difference with respect to their age, gender, educational qualification towards exposure, communication, addictiveness and accessibility with respect to social media usage.

Keywords: Social media, Addictiveness, Accessibility, Exposure, Communication

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Introduction

Technology plays a predominant role in today's world and it has invaded in human's life to a very great extent. Webster & Robins (2003) study mentioned that since the post two decades, the invasion of technology in people life is so high and the technology grows at rapid swift as it creates intensive change in people behaviour and attitude. One of the largest and latest revolution of networking is social networks, it helps users who have common interest to stay connected and also exchange information (Lequerica et al., 2010) and emergence of web 2.0 has altered the web into a dynamic and interactive platform (Rodrigues et al., 2011) and increased availability and accessibility enhances collaboration among users (Bradley, 2010).

Kakihara & Sorensen (2002) study states that the primary access of internet is for social media usage as it helps the users to stay connected. The aspect and the most notable concept of mobility in mobile and internet technology has helped human to alleviate the geographical barrier; the three salient interrelated dimensions—spatial, temporal, and contextual—are the important aspect of mobility. Deuze (2011) states that in Netherland and Finland amount of media users are growing at a fast pace; the multi-tasking facility of the media enabled users to made people to spend more time than intended and it has become the part and parcel of day-to-day life. Papacharissi, (2002) mentioned that the internet and the booming technologies has revived the public sphere virtually, and it augments the various aspects of new technology potentially.

Apart from formal learning, students have ample opportunities to acquire knowledge and to learn from social media. Bates (2005) mentioned E-Learning as an outcome of historical progression in the arena of distance education, where new media and technology are amalgamated in teaching and learning process. Tuckman (1975)

posited the observable illustrations like knowledge, understanding, skills and ideas are used to evaluate academic performance; the outcome of this learning process provides mastery of the subject.

Welsh (2003) demonstrated about the readiness and cost effective nature of the E-Learning as it is cheap; both the learner and the teacher can be benefitted. Banquill et al., (2009) mentioned about the millenials, who are addicted to social media. They surf their social media account regularly for updates; it makes them passive. They spend more time than intended in social media. Sirois & Pychyl (2013) argued that social networking site like Facebook, twitter and others cannot be used for academic purposes, they can lead to distraction from the subject; makes students subtle and at last ends with procrastination. Whereas productive group discussions, chats and email can act as a constructive tool for classroom learning.

Greenfield (2010) posited about the harmful effects of social media when used continuously for number of hours. Social media obsessed students are lacking the ability of move away from the social media screen. Their academic performance becomes deficit as they could not spend time for studies. Thus, this study investigates the factors influencing the students' attitude towards social media usage—accessibility, addictiveness, exposure and communication. Many studies done in developed countries were included in the literature review. Most of the studies were focused on the exposure of social media among the college students.

This study is significant to the teachers, parents and students. The present study attempts to identify the students' usage level of social media, factors that are influencing the students attitude towards social media. It will be relevant in assisting students to understand the diversified nature of social media. The primary focus of this research is to measure the influence of social media among college students in Coimbatore.

Review of Literature

Bennett et al., (2008) study states about 'digital natives'. They are also termed as 'net generation'. The term itself denotes that these people are born in digital era and the technology has immersed in their life to a very great extent, they are permeate with worldly technical skills and traditional education is not prepared for these learning preferences. Bharucha (2018) mentioned that social media and the online application will remain to play the key role in Indian education system. Plenty of college, universities and educational institutions use online media to assist their pedagogy, but the effective confrontation of using social media in curriculum should yield positive outcome. Zheng et al., (2018) suggests that social media can be used potentially and effectively to promote students' motivation in writing skills and increases their authorships.

Käihkö (2018) states that instant messaging feature of social media enables users to communicate in a rapid speed. The message dissemination takes place in a fast pace and reaches the receiver. Most of the information or communication through social media are passively consumed in the fast pace of an integral part of concurrent life and it is shared only with the acquaintances (Hall, 2018). Floridi (1995) study states that internet is an essential tool to manage the human knowledge efficiently on a global scale. Pallen, (1995) stated that internet (virtual community) is the largest computer network in the world, with its own set of 'netiquette'. Easy access and acquisition of connection empowers users to explore the resources, manipulate and disseminate data on internet.

In traditional teaching methods, students and teachers are highly associated and students share high degree of personal contact with teachers. But with ICT, the socially oriented activity has become much students-centered learning and teacher-student relation is technologically mediated (Oliver, 2002). Deshpande and Hwang (2001) stated that virtual classroom learning allows live classroom experience for remote participant, it enables them to interact in live classroom session with audio and video with the help of Internet and communication technology. E-learning helps remote learners and promotes learner-centered activity which in turn results better performance than traditional learning experience (Zhang et al., 2004).

Mobile computing enables students to involve content production and communication using digital media platform (Gikas and Grant, 2013). Fox et al., (2009) study results revealed that the students who are reported with more amount of time spending on Instant Messaging has low reading comprehension scores. Selwyn (2012) argued that social media goes hand in hand with knowledge acquisition and knowledge construction, but it does not follow traditional education principles.

The present study aims to identify and analyze the students' attitude towards social media among a cross section of the students in Coimbatore, Tamil Nadu, India. Through multistage stratified random sampling method, 507 college students' were chosen for this study.

Objective:

- To measure difference between Independent variable—age and Dependent variable (Student's attitude towards social media: Accessibility, Addictiveness, Exposure, Communication).

- To measure difference between Independent variable—gender and Dependent variable (Student's attitude towards social media: Accessibility, Addictiveness, Exposure, Communication).
- To measure difference between Independent variable—educational qualification and Dependent variable (Student's attitude towards social media: Accessibility, Addictiveness, Exposure, Communication).

Methodology

Based on the critical analysis of previous research studies based on this field, objectives were developed, which provides reliable and valid measures of the variables chosen for this study. The developed scale will offer scope to predict the psychometric properties in empirical terms. To measure the students attitude, social media and students attitude scale was adopted which contains set of descriptive questions developed on the extensive review of literature that extracts the nature of students attitude towards social media. (2018).

In the present study, the independent variables are- age, gender and educational qualification of the respondents. The dependent variables are— students' attitude towards social media—accessibility, addictiveness, exposure and communication.

The samples for the present study were chosen as per the demands in objectives. The present investigation intends to include all college students in Coimbatore, Tamil Nadu, India. Importance has been accorded to those college students from various disciplines. However, considering the vastness of the area, multistage stratified random sampling method was adopted to chose the respondents, who are included in the sample for the present study. In order to find out the reliability of the scale, scale reliability test was performed and the reliability coefficient of the scale was $r = .703$. Keeping the objective in mind the following research questions were framed and presented in the Table 1.1 for the present study.

Table 1.1: Summary table of Research Question. Independent Sample T-test: Demographic variable vs. Students' attitude towards social media

Major Research Question: Is there any difference between Independent Variable (Age, Gender, Educational Qualification) and Dependent variable (Student's attitude towards social media: Accessibility, Addictiveness, Exposure, Communication)?		
Specific Research Questions		
Research Questions	Hypotheses	Null hypotheses
1.11: Is there any difference between Gender (male, female) and Student's attitude towards social media (Accessibility)?	Ha 1.11: There is a difference between Gender (male, female) and Student's attitude towards social media (Accessibility).	H01.11: There is no difference between Gender (male, female) and Student's attitude towards social media (Accessibility).
1.12: Is there any difference between Gender (male, female) and Student's attitude towards social media (Addictiveness)?	Ha 1.12: There is a difference between Gender (male, female) and Student's attitude towards social media (Addictiveness).	H01.12: There is no difference between Gender (male, female) and Student's attitude towards social media (Addictiveness).
1.13: Is there any difference between Gender (male, female) and Student's attitude towards social media (Exposure)?	Ha 1.13: There is a difference between Gender (male, female) and Student's attitude towards social media (Exposure).	H01.13: There is no difference between Gender (male, female) and Student's attitude towards social media (Exposure).
1.14: Is there any difference between Gender (male, female) and Student's attitude towards social media	Ha 1.14: There is a difference between Gender (male, female) and Student's attitude towards social	H01.14: There is no difference between Gender (male, female) and Student's attitude towards

(Communication)?	media (Communication).	social media (Communication).
1.21: Is there any difference between age (16 to 20 years, above 20 years) and Student's attitude towards social media (Accessibility)?	Ha1.21: There is a difference between age (16 to 20 years, above 20 years) and Student's attitude towards social media (Accessibility).	H01.21: There is no difference between age (16 to 20 years, above 20 years) and Student's attitude towards social media (Accessibility).
1.22: Is there any difference between age (16 to 20 years, above 20 years) and Student's attitude towards social media (Addictiveness)?	Ha1.22: There is a difference between age (16 to 20 years, above 20 years) and Student's attitude towards social media (Addictiveness).	H01.22: There is no difference between age (16 to 20 years, above 20 years) and Student's attitude towards social media (Addictiveness).
1.23: Is there any difference between age (16 to 20 years, above 20 years) and Student's attitude towards social media (Exposure)?	Ha1.23: There is a difference between age (16 to 20 years, above 20 years) and Student's attitude towards social media (Exposure).	H01.23: There is no difference between age (16 to 20 years, above 20 years) and Student's attitude towards social media (Exposure).
1.24: Is there any difference between age (16 to 20 years, above 20 years) and Student's attitude towards social media (Communication)?	Ha1.24: There is a difference between age (16 to 20 years, above 20 years) and Student's attitude towards social media (Communication).	H01.24: There is no difference between age (16 to 20 years, above 20 years) and Student's attitude towards social media (Communication).
1.31: Is there any difference between educational qualification (under graduation, post graduation and above) and Student's attitude towards social media (Accessibility)?	Ha1.31: There is a difference between educational qualification (under graduation, post graduation and above) and Student's attitude towards social media (Accessibility).	H01.31: There is no difference between educational qualification (under graduation, post graduation and above) and Student's attitude towards social media (Accessibility).
1.32: Is there any difference between educational qualification (under graduation, post graduation and above) and Student's attitude towards social media (Addictiveness)?	Ha1.32: There is a difference between educational qualification (under graduation, post graduation and above) and Student's attitude towards social media (Addictiveness).	H01.31: There is no difference between educational qualification (under graduation, post graduation and above) and Student's attitude towards social media (Addictiveness).
1.33: Is there any difference between educational qualification (under graduation, post graduation and above) and Student's attitude towards social media (Exposure)?	Ha1.33: There is a difference between educational qualification (under graduation, post graduation and above) and Student's attitude towards social media (Exposure).	H01.31: There is no difference between educational qualification (under graduation, post graduation and above) and Student's attitude towards social media (Exposure).
1.34: Is there any difference between age educational qualification (under graduation, post graduation and above) and Student's attitude towards social media (Communication)?	Ha1.34: There is a difference between age educational qualification (under graduation, post graduation and above) and Student's attitude towards social media	H01.31: There is no difference between age educational qualification (under graduation, post graduation and above) and Student's attitude towards social

	(Communication).	media (Communication).
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Results and Analysis

To test the difference between the demographic variables (age, gender and educational qualification) and dependent variable—Student's attitude towards social media— Accessibility, Addictiveness, Exposure and Communication an Independent sample T-test was conducted and the results are presented in the Table 1.2.

Table 1.2 Summary table of Independent Sample T-test: Demographic variable vs. Students' attitude towards social media

Summary table showing the influence between Independent Variable (Age, Gender, Educational Qualification) and Dependent variable—Student's attitude towards social media—Accessibility, Addictiveness, Exposure, Communication			
Dependent variable	Independent variable	Analysis/test performed	Null hypothesis
Accessibility	Male	T-test	Tenable
	Female		Tenable
Addictiveness	Male	T-test	Tenable
	Female		Tenable
Exposure	Male	T-test	Tenable
	Female		Tenable
Communication	Male	T-test	Tenable
	Female		Tenable
Accessibility	16-20 years	T-test	Tenable
	21-25 years		Tenable
Addictiveness	16-20 years	T-test	Tenable
	21-25 years		Tenable
Exposure	16-20 years	T-test	Tenable
	21-25 years		Tenable

Communication	16-20 years	T-test	Tenable
	21-25 years		Tenable
Accessibility	UG	T-test	Tenable
	PG and above		Tenable
Addictiveness	UG	T-test	Tenable
	PG and above		Tenable
Exposure	UG	T-test	Tenable
	PG and above		Tenable
Communication	UG	T-test	Tenable
	PG and above		Tenable

To answer the specific research question 1.11, T-test was conducted to evaluate the null hypothesis (H01.11). There is no difference between Gender (male, female) and Students' attitude towards social media (Accessibility). (N=507) The independent variable, gender included two groups: Male and Female. The assumption of homogeneity of variances was tested and found tenable using Levene's Test. There was no significant difference in the scores of Male (M=1.71, SD=.41, n=263) and Female (M=1.77, SD=.44, n=243); $t(504) = -1.33, p = .184$. Thus there is significant evidence to accept the null hypothesis (H01.11) and conclude there is no difference between Gender (male, female) and Student's attitude towards social media (Accessibility).

To answer the specific research question 1.12, T-test was conducted to evaluate the null hypothesis (H01.12). There is no difference between Gender (male, female) and Student's attitude towards social media (Addictiveness). (N=507) The independent variable, gender included two groups: Male and Female. The assumption of homogeneity of variances was tested and found tenable using Levene's Test. There was no significant difference in the scores of Male (M=2.08, SD=.55, n=264) and Female (M=2.06, SD=.54, n=243); $t(505) = -.539, p = .590$. Thus there is significant evidence to accept the null hypothesis (H01.12) and conclude there is no difference between Gender (male, female) and Student's attitude towards social media (Addictiveness).

To answer the specific research question 1.13, T-test was conducted to evaluate the null hypothesis (H01.13). There is no difference between Gender (male, female) and Student's attitude towards social media (Exposure). (N=507) The independent variable, gender included two groups: Male and Female. The assumption of homogeneity of variances was tested and found tenable using Levene's Test. There was no significant difference in the scores of Male (M=1.75, SD=.54, n=264) and Female (M=1.74, SD=.50, n=243); $t(505) = -.394, p = .694$. Thus there is significant evidence to accept the null hypothesis (H01.13) and conclude there is no difference between Gender (male, female) and Student's attitude towards social media (Exposure).

To answer the specific research question 1.14, T-test was conducted to evaluate the null hypothesis (H01.14). There is no difference between Gender (male, female) and Student's attitude towards social media (Communication). (N=507) The independent variable, gender included two groups: Male and Female. The assumption of homogeneity of variances was tested and found tenable using Levene's Test. There was no significant difference in the scores of Male (M=2.18, SD=.52, n=264) and Female (M=2.16, SD=.57, n=243); $t(505) = -.429, p = .668$. Thus there is significant evidence to accept the null hypothesis (H01.14) and conclude there is no difference between Gender (male, female) and Student's attitude towards social media (Communication).

To answer the specific research question 1.21, T-test was conducted to evaluate the null hypothesis (H01.21). There is no difference between age (16 to 20 years, above 20 years) and Student's attitude towards social media (Accessibility). (N=507) The independent variable, age included two groups: 16 to 20 years and above 20 years. The assumption of homogeneity of variances was tested and found tenable using Levene's Test. There was no significant difference in the scores of 16 to 20 years (M=1.75, SD=.43, n=399) and above 20 years (M=1.70, SD=.43, n=107); $t(504) = 1.175, p = .241$. Thus there is significant evidence to accept the null hypothesis (H01.21) and conclude there is no difference between age (16 to 20 years, above 20 years) and Student's attitude towards social media (Accessibility).

To answer the specific research question 1.22, T-test was conducted to evaluate the null hypothesis (H01.22). There is no difference between age (16 to 20 years, above 20 years) and Student's attitude towards social media (Addictiveness). (N=507) The independent variable, age included two groups: 16 to 20 years and above 20 years. The assumption of homogeneity of variances was tested and found tenable using Levene's Test. There was no significant difference in the scores of 16 to 20 years (M=2.05, SD=.54, n=400) and above 20 years (M=2.14, SD=.55, n=107); $t(505) = -1.422, p = .156$. Thus there is significant evidence to accept the null hypothesis (H01.22) and conclude there is no difference between age (16 to 20 years, above 20 years) and Student's attitude towards social media (Addictiveness).

To answer the specific research question 1.23, T-test was conducted to evaluate the null hypothesis (H01.23). There is no difference between age (16 to 20 years, above 20 years) and Student's attitude towards social media (Exposure). (N=507) The independent variable, age included two groups: 16 to 20 years and above 20 years. The assumption of homogeneity of variances was tested and found tenable using Levene's Test. There was no significant difference in the scores of 16 to 20 years (M=1.74, SD=.48, n=400) and above 20 years (M=1.77, SD=.55, n=107); $t(505) = -.669, p = .503$. Thus there is significant evidence to accept the null hypothesis (H01.23) and conclude there is no difference between age (16 to 20 years, above 20 years) and Student's attitude towards social media (Exposure).

To answer the specific research question 1.24, T-test was conducted to evaluate the null hypothesis (H01.24). There is no difference between age (16 to 20 years, above 20 years) and Student's attitude towards social media (Communication). (N=507) The independent variable, age included two groups: 16 to 20 years and above 20 years. The assumption of homogeneity of variances was tested and found tenable using Levene's Test. There was no significant difference in the scores of 16 to 20 years (M=2.18, SD=.55, n=400) and above 20 years (M=2.14, SD=.54, n=107); $t(505) = -.682, p = .496$. Thus there is significant evidence to accept the null hypothesis (H01.24) and conclude there is no difference between age (16 to 20 years, above 20 years) and Student's attitude towards social media (Communication).

To answer the specific research question 1.31, T-test was conducted to evaluate the null hypothesis (H01.31). There is no difference between educational qualification (under graduation, post graduation and above) and Student's attitude towards social media (Accessibility). (N=507) The independent variable, education qualification included two groups: under graduation and post graduation and above. The assumption of homogeneity of variances was tested and found tenable using Levene's Test. There was no significant difference in the scores of under graduation (M=1.74, SD=.43, n=432) and post graduation and above (M=1.71, SD=.41, n=74); $t(504) = .608, p = .543$. Thus there is significant evidence to accept the null hypothesis (H01.31) and conclude there is no difference between educational qualification (under graduation, post graduation and above) and Student's attitude towards social media (Accessibility).

To answer the specific research question 1.32, T-test was conducted to evaluate the null hypothesis (H01.32). There is no difference between educational qualification (under graduation, post graduation and above) and Student's attitude towards social media (Addictiveness). (N=507) The independent variable, education qualification included two groups: under graduation and post graduation and above. The assumption of homogeneity of variances was tested and found tenable using Levene's Test. There was no significant difference in the scores of under graduation (M=2.05, SD=.53, n=433) and post graduation and above (M=2.17, SD=.61, n=74); $t(505) = -1.643, p = .101$. Thus there is significant evidence to accept the null hypothesis (H01.31) and conclude there is no difference between educational qualification (under graduation, post graduation and above) and Student's attitude towards social media (Addictiveness).

To answer the specific research question 1.33, T-test was conducted to evaluate the null hypothesis (H01.33). There is no difference between educational qualification (under graduation, post graduation and above) and Student's attitude towards social media (Exposure). (N=507) The independent variable, education qualification included two groups: under graduation and post graduation and above. The assumption of homogeneity of variances was tested and found tenable using Levene's Test. There was no significant difference in the scores of under graduation (M=1.75, SD=.50, n=433) and post graduation and above (M=1.72, SD=.49, n=74); $t(505) = .440, p = .660$.

Thus there is significant evidence to accept the null hypothesis (H01.31) and conclude there is no difference between educational qualification (under graduation, post graduation and above) and Student's attitude towards social media (Exposure).

To answer the specific research question 1.34, T-test was conducted to evaluate the null hypothesis (H01.34). There is no difference between age educational qualification (under graduation, post graduation and above) and Student's attitude towards social media (Communication). (N=507) The independent variable, education qualification included two groups: under graduation and post graduation and above. The assumption of homogeneity of variances was tested and found tenable using Levene's Test. There was no significant difference in the scores of under graduation (M=2.18, SD=.49, n=433) and post graduation and above (M=2.09, SD=.54, n=74); $t(505)=1.29$, $p=.196$. Thus there is significant evidence to accept the null hypothesis (H01.31) and conclude there is no difference between age educational qualification (under graduation, post graduation and above) and Student's attitude towards social media (Communication).

Discussion and Conclusion

The factors influencing students' attitude towards social media—accessibility, addictiveness, exposure and communication. Social media has become the main source of information and important tool for communication, particularly among school and college students. From the recent years there is a substantial increase in the usage of social media among college students, irrespective of their gender and those who attended college is more likely to use than who are not educated. Perrin (2015).

In recent years, students are extensively dependent on social media platform to share, interact and communicate with each other which helps them to improve their academic performance. Considering the broad usage of social media by college students it is agreed and ascertains their usage for academic purpose which discerns its implications on students performance. Findings of the present study states that there is no difference with respect to their age, gender, educational qualification towards exposure, communication, addictiveness and accessibility with respect to social media usage.

From the findings of the present study it is evident that there is no difference in gender towards communication. Which supports the Sarva Shiksha Abhiyan (SSA) programme by Government of India, was universalization of elementary education. It also aims to bridge gender and social gaps in the society, and to achieve universal retention at the elementary education. Floridi (1995) study states that internet is an essential tool to manage the human knowledge efficiently on a global scale. The result of the present study states that through the social media platform students are exposed to various topics and discourse with their fellow users which in turn enables them to be rational.

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