

THE INFLUENCE OF SOCIAL MEDIA ON THE ACADEMIC PERFORMANCE OF SECONDARY SCHOOL STUDENTS IN MATHEMATICS IN ENUGU EAST LOCAL GOVERNMENT AREA OF ENUGU STATE.

Okoye Nonye Franca

Department of Science and Computer Science Education, Godfery Okoye University Enugu State, Nigeria

Okoyenonye47@gmail.com

DOI: <https://doi.org/10.5281/zenodo.15585105>

Abstract: The purpose of this research was to investigate the influence of social media on the academic performance of secondary school students in mathematics in Enugu East Local Government Area of Enugu State. The specific objectives were to; find out the influence of social media activities on students' performance in mathematics and find out whether female students' engage more on social media than male students in Enugu East secondary schools. The study adopted the descriptive survey design with a population of 2,580 students from which a sample of 200 Senior Secondary II students selected randomly using simple random sampling technique. Two research question and two hypotheses guided the study. A four-point Likert type rating questionnaire titled 'Social Media and Academic performance of Students in mathematics' (SMAPSMQ) which was constructed by the researcher was used to collect data from the respondents. The questionnaire instrument was subjected to face validity and validated by three experts in the field of information and communication technology (ICT), measurement and evaluation in education with a reliability coefficient of 0.73 using Cronbach alpha. Frequency and mean (X) were used in the analysis of data and chi-square was used to test the hypothesis. The findings of the study led to the conclusion that the dominance and addiction on social media are the major causes of poor performance in mathematics both in internal and external examinations among secondary school students of Enugu East Local Government Area of Enugu State. To this end, the researcher recommended that social media should be used mainly for academic purposes by the students, more strict and proper supervision by all stakeholders should be imbibed, workshops, seminars and public enlightenment programmes should be launched by the government, parents and teachers should check the sites their students / wards are always using so as to be guided properly. This is to create a balance between social media and academic activities of students to avoid setbacks in the academic Performance of the students.

Keywords: Social Media, Mathematics, Academic Performance and Secondary School

Introduction

Social media is the fastest growing web application in the 21st century, a fact attested to by its wide usage

and the wide-ranging consequent influence on the populace. There is indeed abundant evidence that millions of people across the world use social media

on a regular basis for various reasons.(Kitsios et al (2022), Obembe et al (2021). In fact, the wide nature of applications like Wikis, video streaming applications, and social networks makes it the phenomenon of the century. Though social media use cuts across all age groups, studies have, in addition, shown that it is predominant among young persons (Kiraly, O. et al 2019), Fraser A.M., Stenberg 2017). Studies have shown that students spent approximately not less than 3-4 hours per day on social media, and it drastically affects their academic performance (GPAs) Shan, P.M & Karan K.(2019),Al-Rahmi W.M & Othma M.S. 2015) . Kaplan A.M. & Haenlein .M. (2016), Sanchez R. A. & Cortigo V. (2015), Kircaburun K, &Griffiths M.D. (2018) pointed out that these young people use social media for interaction, self-promotion and entertainment. On the other hand, to achieve the purpose of education and make knowledge transmission easy and faster, communication technology was introduced and its scope broadened through the improvement of Information and Communication Technologies (ICTs) to cover internet, satellite, cable data transmission and computer assisted equipment. The expansion in communication technology has also affected internet software, thus leading to chatting sites known by the name “social media”. With social networking sites, one can send and receive messages almost immediately. However, lack of regulation of the internet has led to its excessive use resulting in negative effects on mental health, academic performance and overall well-being. Al-Rahmi W.M & Othma M.S. 2015). Furthermore, it is common to see students chatting in sensitive and highly organized places within the school environment and even in the classroom when lessons are ongoing. Some of these students are most at times carried away that even as

they are walking along the high way, they keep chatting. The manufacturing and distribution of equally sophisticated cellular phones has complicated the situation, as students no longer need to visit a cybercafé before they send and receive messages. Attention has been shifted from visible to invisible friends, to the utmost neglect of important ventures like quality study time as a result of distractions from the social media which negatively affects their learning outcomes. Ozohun Suleman Y. & Uzuegbu.C. (2017). this is a trend that has become a source of worry to well-meaning Nigerians in all spheres of life who believe in knowledge and skill acquisition. Moreover, from the above, it is evidence that Social media Anxiety Disorder is largely at present. Thus, while social media, generally, presents such benefits as encouraging greater social interaction via electronic mediums, promoting interactions among students and teachers, providing greater access to information and information sources, creating a sense of belonging among users, reducing barriers to group interaction and communications such as distance and social/economic status, and increasing the technological competency levels of frequent users, among others. (Green, L & Jenkins, A. 2015; Manca, S, &Ranieri 2015; Al-Rahmi,W.M., et al 2015; Kaplan,A.M, & Haenlein, M. 2016) preliminary investigation and interviews with some teachers and students have, however, revealed a number of challenges in relation to student’s participation on social media networks and the many adverse influences on them. These include a high addiction rate, which affects their time of study, exposure to misinformation as well as distractions from their studies. As stated by Fraser, A.M & Stenberg. (2017) students spend a lot of time on social networking sites than in their academic activities and this affects their

performance. Given the foregoing, therefore, this study seeks to investigate the influence of social media on the academic performance of senior secondary school students in mathematics using Enugu East Local Government Area of Enugu State. Academic performance refers to the extent to which a student achieves their educational goals, typically measured by grades, test scores and overall academic accomplishments, reflecting their mastery of subject matter and engaging in their studies. It is also the measure of students' acquisition of certain skills at the end of teaching and learning activities. Moreover, it is the students' ability to carry out their achievement across different academic subjects using objective measures such as final course grades and grading point average. To Anekwe (2016), performance is something which has been accomplished successfully, especially by means of exertion, skill, practice or perseverance. Moreover, considering the issue of gender on Social media usage, it seems as though female students are more prone to use social media in relation to their social life as well as academics than the male counterparts. Research conducted by Vanden Abeele M. & Zaman, B (2018),Lonn and Morberg A (2019) to find out the extent of multitasking based on student's gender, revealed that female students typically spend about 3-4 hours per day using Social media. Again, most of the Social media consist of listening to music, using the internet and of course using social networking sites. The study adopts Social learning theory (Albert Bandura 1977) which was based on the idea that students learn through observing others, modelling i.e imitating behaviors observed by others and believe in one's ability to perform task. According to (Leung 2015) a distraction is something that makes it hard for one to think or pay attention. It is the process

by which an individual is being distracted from the desired focus area, blocking or reducing the desired information. Social media activities decrease focus, attention and cognitive resources leading decreased math learning efficiency, reduced math problem solving accuracy and lower math achievement due to attention fragmentation, cognitive overload and task switching. As such, this determines how social media influences them in return, particularly on their academic performance. Students at all levels of learning have now divided attention to studies, as a result of available opportunities to be harnessed from Social media. It is speculated that an average Nigerian student spends about six to seven hours on the internet daily, some even do all night browsing. Valuable time is being wasted resulting to less study time and higher percentage of failure amongst secondary school students prompting Sanchez R.A. & Cortijo, V. (2015) to assert that excessive social media use was negatively correlated with students GPAs.

Concept of Social Media

Social media has emerged as a term frequently used (and variously defined) to describe different types of communication platforms and electronic ways of interacting. Aichner et al (2021) define Social media as an online platform that facilitate the creation and exchange of user-generated content, enabling social interactions and community building. It can also be defined as a group of internet-based applications that build on the ideological and technological foundations of Web 2.0, which allows the creation and exchange of user generated content and depend on mobile and web based technologies to create highly interactive platforms through which individuals and communities share, create, discuss and modify user generated content. They refer to the internet-based social websites like the Facebook,

Myspace, Twitter, etc. which allow users to interactively communicate with one another. Social media can also refer to those “web based and mobile-based technologies which are used to turn communication into interactive dialogue between organizations, communities and individuals (www.wikipedia).

The media allow users to meet friends, exchange ideas, images, audios, videos and most importantly stay connected. Since through their inventions, they have become increasingly popular in different countries across the globe. Kanthawala et al (2020) describes social media as a web-based applications that allow the creation and exchange of users generated content”, while Hanaysha,J,(2018) defines it as “modern interactive communication channels through which people connect to one another, share ideas, experiences, pictures, messages and information of common interest”.

Students Addictiveness to Social Media:

Herz, M, et al (2020), declared as follows about the modern generation of young people: Welcome to the Net Generation also known as Gen Z or Zoomers. Born in the mid/late 1990s -2012 they spend their days immersed in a “media diet” accumulating a fulltime job plus overtime devouring entertainment, communication, and every form of electronic media. They are master multitaskers, social networkers, electronic communicators and the first to rush to any new technology. They were born surrounded by technology and with every passing year add more tools to their electronic repertoire. They live in social networks such as Facebook, Myspace instagram, twitter and second life gathering friends, they text more than they talk on the phone and they twitter the night away often sleeping with their cell phones vibrating by their sides. This clearly indicates that

social media is part and parcel of youth life today. Thus, over the years, scholars have examined how much time students invest in social media. Kardefelt-Winther (2017), found that majority of college students in the United States used social networking sites (SNSs) at least one hour a day. Kiraly .O.et al (2019) in a study conducted at St. Cloud State University in Minnesota found that while both males and females spent time on SNSs, the said time however, decreased as the age of the respondents increased and the results revealed that female college students spent more time on SNSs than male students.

Influence of social media network on students’ academic performance in general and on their performance in mathematics in particular:

It is generally agreed that social media has both positive and negative effects on the academic performance of students across the world. In fact, many researchers today are working to explore the correlation between social networking sites and academic performance. The advent of the social media has made the erstwhile impossible become possible, as one can conveniently communicate with anyone at any time irrespective of geographical barriers and distance. Sonia livingstone (2017) has expressed that social media has both positive and negative effects on the student. This is the power of social media. It has made business, politics and social life effortless and easy. This is further accelerated by the fact that these social media sites are accessible with mobile smart phones, anywhere and at any time. Before examining the influence of the social media on the performance of students in mathematics we outline briefly these effects in general.

Positive effects:

Social media offer great benefits. Ostic et al (2021) have observed that “social media are new

communication technologies which are used as channels of information dissemination to heterogeneous audiences without the constraints of time, space or distance". With the social media one can conveniently send or receive information to or from anyone and at any time irrespective of geographical barriers. Al-Rahmi et al (2018), Social media can facilitate collaboration and communication among students potentially improving academic performance. Burke et al (2018) in a study titled "social network activity and social well-being found out that social media use brought about social connections and social support. Kiraly et al (2019) notes the effect of social media depends largely on the degree of usage. He emphasized that moderate social media use can have positive effect.

Internet engagement: In a world where online engagement is important for businesses, students are becoming experts at developing a sense of internet presence. Not only do they know how to interact with others on the internet, they know how to use basic and even complex functions in order to do so. Thus, students use social networking sites to interact with their peers and even teachers about class-related subjects.

Informal knowledge and skill: Social Networking sites can facilitate learning and skill development outside formal learning environments by supporting peer to peer learning, skills collaboration and diverse cultural expression. The knowledge and skill young people are learning through SNSs are directly relevant to the 'participatory web' in which 'user generated content is now integral in a rapidly developing online business model that capitalizes on the social networks, creativity and knowledge of its users; and this means that new business models are expected to emerge.

Education: Social networking sites help in schools and universities programmes. Such social networking sites for example, blogs help to leverage or complement formal educational activities and enhancing outcomes. SNSs are also used to extend opportunities for formal learning across geographical contexts. Thus, social media can enhance the interactions of marginalized young people with their teacher and increase their confidence in educational activities. Individual identity and self-expression: Because SNSs are essentially flexible and designed to promote individual customization, they are used to experiment as well as find legitimacy for their political, cultural or sexual identity. Social networking sites can provide users with a space to work out identity and status, make sense of cultural cues, negotiate public life and increase user's sense of personal belonging. This sense of personal belonging and identity has been

Negative effects:

Different researchers have conducted research to ascertain the influence of social media on users; for example, Sawar et al 2020)(in a study on "impact of facebook on students social relationship averred that: excessive social media usage have negative impact on students. According to the result, the more students use facebook, the more it affects their academic performance. Similarly, Sonia Livingstone (2017) notes that most of the younger students use social networking sites mainly for socializing activities, rather than for academic purpose. Sonia livingstone (2017) further observed that most of the students do feel that social networking sites have more positive impact on their academic performance. In another study conducted by Al-Rahmi et al (2020), it was revealed that students use social network mainly for making friends and chatting. The result showed that

only about 26 percent of the students (respondents) indicated that they use social media for academic purpose. Kpolovic et al (2016) found out in his study that there is negative correlation between the social media and maths performance. His study revealed that student who spent more time on social media had lower math performance together with student who are addicted to social media usage. Also Ojedokun et al (2017) revealed that students with high social media addiction reported higher math anxiety. He also revealed that social media distraction decreased math focus and productivity

Displacement Effect on Academic Activities:

Since majority of students use social networking sites for socializing purposes, they therefore tend to spend more time for socializing rather than learning. Thus, excessive use of SNSs reduces student's academic performance since time meant for studies is used on non-academic issues like chatting and making friends (Meier et al (2016). For instance, the Meier's research shows that students who used Facebook had a "significantly" lower grade point average than those who did not use the site. The majority of the students who use Facebook every day are under achieving by an entire grade compared with those who shun the site. Researchers have discovered how students who spend their time accumulating friends, gossiping and poking others on the site may devote as little as one hour a week to their academic work.

Psychological Disorders and Health Problems: It has been discovered that anxiety, depression, poor eating habits, lack of physical exercise; increasingly short attention spans and subverted higher order reasoning skills such as concentration, persistence, and analytical reasoning are among the common disorders seen in the frequent users of social media and this manifest itself more these days because

people are more closer to those far away from them but far away to those very close to them. It has also been added that a tendency to overestimate one's ability to multi-task and manage projects; and technology being seen as a substitute for the analytical reasoning process are tendencies evidenced amongst frequent users of the social media. However, amidst all sociological benefits, social media have regrettably contributed to moral degeneration and decadence among youths in several countries, including Nigeria. This, no doubt, stems from the gross obsession with and abuse of these social networking sites. There is evidence that while social media is used as means of communication, it can also be used to propagate deviant behavior among young people. Deviant behavior is considered to be abnormal or anti-social if it is uncommon or different from the norm and does not conform to what society expects Jeffery LAN Ross (2018).

Sari et al (2020) investigates the impact of Facebook being a social medium on students' performance on academic courses. The research analyzes data from 1839 respondents studying 4 years degrees in residential institutes of northeastern USA to find trends on frequency of Facebook visits and activities, time spent on Facebook, time spent on class preparation and academic grades of the students under research. Analysis of the collected data reveals that time spent on Facebook and frequency of visiting Facebook are negatively related to students' performance in terms of their GPA. However, there is slightly negative correlation between time spent on this widely used social medium and the time spend in studying in class. He further adds that although time spent on social media and academic performance are negatively correlated but, this relationship in real world scenarios does not seem to be a major hurdle in

academic success. Since social media users have low GPA than the non-user of Social media, and a continued outcry from well-meaning Nigerians on the danger of over indulgence of students on Social media over their studies. In environs to ascertain the influence of students' involvement Social media activities on achievement response to the outcry, this research is carried out on secondary school II students in mathematics in Enugu East in Enugu state.

Statement of the problem

One of the factors that have been associated with the steady decline in the quality of Nigerian education system and the students they produce is the very fact that the system had in a recent time being with the wide range of educational laxity in the use of social media network. This worrisome, uncultured behaviors beside their influence among students also tends to cut across all strata of the school system both junior, senior and tertiary. It is now a common knowledge that most secondary school students not only possess Facebook, Twitter, WhatsApp, etc., accounts, but also that most of them are now addicted to the online crave of the moment (Wang, C., et al (2019), Kuss, D., & Griffiths M.D. (2017). With so many social networking sites displayed on the internet, many secondary school students are tempted to abandon their homework and reading times in preference for chatting online with friends more than their academics that disrupt the educational equilibrium. Some studies have found a drop in students' grades and academic performance, and lack of time for studies as consequences of social media network participation (Kiraly, O., et al (2019), Obembe O., O. et al (2021) which results in their poor performance in both internal and external examinations in Mathematics In Nigeria secondary schools today more especially in Enugu East

Education Zone, there is a serious concern about the increase in social media network problems such as distraction, social media distractions decrease maths grades (Meier et al (2016), lepp et al (2015), Hawi (2016), reducing of attention span (Uncapher, M.R., & Wagner, A.D. (2018), cyberbullying which affects math anxiety (Herz et al ,2017) .There is need for this distortions and anomalies to be corrected. Based on this foregoing, therefore, this study is designed to investigate the influence of social media networks on the academic performance of secondary school students in mathematics in Enugu East Educational Zone.

Purpose of the Study

The purpose of this study is to find out the influence of Social media on secondary school student performance in Mathematics in Enugu East LGA in Enugu State. Specifically, the objectives of the study are to:

- i. Find out the influence of Social media activities on students' academic performance in mathematics in secondary schools in Enugu State.
- ii. find out whether female students' use more of Social media than male students in Enugu State secondary schools

Research Questions

- i. Is there a significant association between social media usage and students 'academic performance in Mathematics
- ii. To what extent do female and male students' engagement in Social media activities affect their academic performance?

Hypotheses

The following hypotheses were tested at 0.05 level of significance

H₀₁: There is no significant relationship between Social media usage and secondary school students'

academic performance in mathematics in Enugu State secondary schools.

H₀₂: There is no significant relationship between male and female Social media engagement in Enugu State secondary schools.

Research Methods

The research design for this study was descriptive survey with questionnaire as instrument for data collection. The study was carried out in Enugu East Educational zone. The population of the study was 10 public secondary school from the area with a 2,580 senior secondary students. . The researcher selected 5 public secondary schools for the study using simple random sampling technique. From each of the sample school, 40 students were selected to get a sample size 200 selected from the population above to form the sample frame for the study. The simple random sampling was used to select the 200 students that form the sample size for the study. The instruments for data collection was a self-constructed questionnaire titled “Social media Usage on Students Academic

performance in mathematics Questionnaire (SMUSAPMQ)” The questionnaire instrument was subjected to face validity and validated by three experts in the field of information and communication technology (ICT), measurement and evaluation in Education. The experts were renowned lecturers from Education Faculty and supervisors from Godfrey Okoye University. The experts made professional suggestions and corrections which helped in modifying the questionnaire in order to achieve its overall objectives. The data collected for the study from the respondents were carefully analyzed by the researcher using mean scores while hypotheses were tested using chi-square.

Results

Research Question One: Is there a significant association between social media usage and students’ academic performance in mathematics

Table 1: The extent to which student’s addictiveness to social media network influence their performance in mathematics

S/N	ITEMS STATEMENT	SA(4)	A(3)	D(2)	SD(1)	TOTAL	MEAN (x)	DECISION
1	Hours spent on-line affects student academic work	85	70	20	25	200	3.3	Accepted
2	Students addictiveness to social media activities make them have low academic grade	90	75	15	20	200	2.95	Accepted
3	Social media activities seduces me erotically	40	35	70	55	200	2.35	Rejected

4	I use social media to watch movies, find friends, chatting etc	75	80	30	15	200((3.1	Accepted
---	--	----	----	----	----	-------	-----	----------

From table 1 above, it can be seen that responses from items 1, 3, and 4 with the mean score of 3.3, 2.95, and 3.1, were above 2.5 bench mark and therefore agrees with the statement that students addictiveness to social media network influence their academic

performance. But only the item 3 with the mean score 2.35 disagreed with the statement that student’s addictiveness to social media network does not influence their academic performance in Enugu East Local Government Area of Enugu State.

Research Question Two

Table 2: Extent of Secondary School Students Engagement in Social Media Activities Based on Gender

Gender	Frequency	Percent	Valid Percent	Cumulative Percent
Male	87	43.5	43.5	43.5
Female	113	56.5	56.5	56.5
Total	200	100	100	100

Table2 shows that 87 male students representing 43.5% of the respondents were represented in the study while 113 females representing 55.5% were represented in the study. This implies that more

female students engaged in social media activities in secondary schools in Enugu State than the male students

Table 3: Chi-square (X²) Statistical Test of Significant Difference between Social Media Usage and Secondary School Students Academic Performance (P =0.05)

Categories	fo(fe)	fo(fe)	N	Df	² cal	² CritRemark
Social Media Usage	70 (65.5)	65(64.5)	135	3	5.6	3.5Rejected
Academic Performance	45(44.5)	20(19.5)	65			
Total	(89.5)	(85.5)	200			

Table 3 indicates that the calculated χ^2 of 5.6 is greater than the critical χ^2 value 3.5 at 0.05 significant level at 3 degree of freedom, so hypothesis 1 was rejected. Thus there is significant relationship between social media usage and academic performance of senior secondary student in Enugu state.

Gender	SA	A	D	SD	χ^2 Cal	Crit ²	Remark
MALE	88	75	123	145			
FEMALE	112	125	67	55			
TOTAL	200	200	200	200	3.7	2.8	Rejected

Table 4: : Chi Square Statistical Test of to what extent do female and male students engagement in Social media activities affect their academic performance?

Table 4 indicates that the calculated χ^2 of 3.7 is greater than the critical χ^2 of 2.8 value at 0.05 significant level at 3 degree of freedom so null hypothesis 2 was rejected. Thus there is significant relationship in the engagement of female and male senior secondary student in social media usage

Discussions

The researcher focused on the influence of social media on senior secondary school student’s academic performance in mathematics in Enugu East LGA, Enugu State. The finding revealed that there are some negative influences of social media on secondary school students. These include low academic grade, vulnerable to examination malpractice, spend very much time on twitter, erotic seduction, withdrawal from academic work which are in line with Vanden Abeele, M,& Zaman, B.(2018),they found that adolescents’ use of social networking has a negative influence on their academic achievement. It is also in collaboration with Aichner ,T et al (2021) who found that excessive social media use negatively affects academic performance of students and Andrews et al (2015) who identified a negative relationship

between social media use and academic achievement particularly for students with lower GPAs. The hypothesis showed that there is a significant different between social media usage and secondary school students’ academic performance in mathematics in Enugu East LGA of Enugu state. This finding is not unexpected because of the recent increase in social networking among adolescents in both urban and rural areas. It was also revealed that there is significant relationship between the mean ratings of male and female student’s engagement in social media activities on academic performance. This finding agrees with Lonn and Morberg .A. (2019), Obembe O.O. et al (2021) whose studies found that female college students use social media more frequently and for longer periods than male students. Also Dr Muscanell &Utz (2015) discovered that female students are more active on social media, sharing more personal information and photos. In order words there was significant difference between secondary school students on the basis of gender. It is not surprising that social media influence academic performance of students because most of their

activities are seem to be embedded on internet resources. They usually engage in internet surfing probably because it helps them to develop interpersonal relationship.

Conclusion

Social media are becoming an integral and fundamental part of life everywhere. Social networking sites users are rising each day including secondary students in Nigeria and Enugu State in particular. The study concluded that social media has negative influence on secondary school student's academic performance in mathematics. Furthermore, there is a significant difference between social media engagement and students' academic performance in mathematics and female students spent more time on social media than the male students.

Recommendations

1. Parents should guide their wards on various sites on the internets for the purposes which are based on their academics. School authority should ban the use of phone during school hours so that they don't get distracted from their primary aim.

More strict and meticulous supervision and examining procedure should be adopted in the teaching and learning of mathematics to check students activities during lectures.

Public enlightenment programmes should be launched by the government and various stockholders and school administrators to reach out to both urban and rural students on the effect these unchecked and excess use of social media has on their person and academics. Such programmes could be seminars, workshops, teaching etc.

REFERENCES

Aicher ,T, Grunfelder M.Maurer 0.(2021);Social media analytics : A systematic review and future research directions “ Computers in

Human Behaviour, 114,106532.DOI: 1016/j.chb.2021.106532

Albert Bandura's (1977). Social Learning Theory.Prentice Hall.

Al-Rahmi W.M. & Othman M.S. 2015; the impact of social media on students' academic performance”Journal of Educational Computing research 53(4), 437-453.DOI: 10:2190/EC.53.4.b

Al-Rahmi W.M. et al (2020).Social Media addiction and its impact on students' academic performance “Journal of educational computing Research 58(4) 419-433.DOI:10:2190/EC.58.4.b

Anekwe, J. U. (2016). Instructional system design. In C. Williams and E. Avwiri (eds.), information and communication technology in education: A new Learning Portal, P. 291-311. Port Harcourt: Pearl Publishers International.

Andrews et al (2015).The Relationship between Social Media Use and Academic Performance: A Systematic Rewiew.

Burke et al (2018), Social Network Activity and social well-being Journal of computer in Human behavior 89,184-191 DOI:10:1016/j.chb,2018.07.034

Connolly, M. (2017), Benefits and drawbacks of social media in education, Retrieved from Wisconsin Center for Education http://www.wcer.wisc.edu/news/coverstories/2011/benefits_and_drawbacks.php

- Dr Muscanell & Utz (2015) Social Media and Self Presentation. .A study of Gender differences
- Hanaysha J.(2018) Social Media Marketing and customer retention .A systematic review. Journal of Business Research 89,241-255
- Hawi N.S. (2016).Cyber Psychology, behavior and social networking. 19(10), 661-666.DOI:10:1089/cyber2016.0293.
- Herz, M, et al (2020) the impact of social media on the mental health and wellbeing of Generation Z .Journal of Adolescent Health, 66(4), 541-546 DOI.10:1016/j.jadohealth 2019:11:006 .
- Idankwo, N.M. (2019). The use of social media among Nigerian youth's www.slideshare.net/goldlami/the-use-of-social-media-networks-among-Nigerian-youths. Retrieved 26/7/ 2019
- The effect of Twitter on college student engagement and grades, Journal of Computer Assisted Learning, 27(2), 119-132.
- Jeffery Lan Ross (2018) Routledge Handbook of Deviance publisher Routledge ISBN 978-1-13865812-5
- Kaplan ,A,M, & Haenlein M. (2016). Higher education and the digital revolution, knowledge, skills and attitudes for digital era Business Horizons 59(4), 441-453: DOI: 10.1016/j.bushor 2016.03.008
- Kanthawala et al (2020) Social Media .A systematic review of definitions usage and impact. Computers in Human Behaviour 103,102763
- Kardefelt-Winthers 2017.How does the use of social media affect the mental Health of adolescents. Journal of Computers in Human Behaviour 66,764-771. DOI: 10:1016/j.chb 2016-06-024
- Kiraly .O.et al (2019); Problematic internet use and its relationship with symptom of anxiety and depression in young adults. Cyberpsychology, behavior and social networking. 22(1)) 690 - 697.DOI: 10:1089/cyber 2018-0693.
- Kpolovic et al (2016).The relationship between Social Media Use and Mathematics performance Among secondary School Students.; Journal of education and Human Development Volume/issue: 5(1),2016.
- Kitsios et al (2022).Impact of Social media on mental Health. A systematic review. Journal of computers in Human Behaviour 126,107023 DOI:10:1016/j.chb.2021.107023
- Kuss, D.J & Griffiths M.O. (2017)" Social Networking sites and addiction. Ten lessons learned" International Joournal of environmental Research and public Health, 14(3), 311.DOI:10.3390/ijerph 14030311
- Leung,L.Nexus between smartphone addiction, sleep quality,anxiety and depression Journal of Computers in Human Behaviour (51).618-625,DOI:10:16/jchb 2015.03.010
- Lonn and Morberg A.(2019) Social media use and social comparison. A study of young adults

- .Social media use and its relationship to self-esteem and life satisfaction” *Computers in Human behavior* 97, 102758.DOI: 10:1016/jchb.2019.04.015.
- Lepp,A.,et al (2016).The relationship between cell phone use, physical activity and sedentary behavior in college students, *Computers in Human Behaviour* , 54,343-349. DOI:10-1016/jchb’2015.08.033
- Meier et al (2016).”Facebocrastination”.) Predictors of using facebook for procrastination and its effects on student’s wellbeing. *Computers in Human Behaviour*, 64, 65 -76.DOI 10:1016/jchb.2016.06,016
- Obembe O.O.Ogundipe,O.M.& Adegboyega O.O.(2021).Social media usage and academic performance of students; A systematic review. *Education and information Technologies* 26(2), 1475-1495.DOI:10:1007/s 10639-020-10343-6
- Ojedokun et al (2017) Impact of Social Media on students Academics performance in Nigeria students. *Journal of education and Practice*8, 22,124-133
- Ostic et al (2021).Exploring the relationship between social media use and Psychological wellbeing .A mediated Model. *Journal of Computers in Human Behaviour*.0747-5632, 1873-7827
- Sanchez R.A. & Cortijo V. (2015); Social media usage and academic performance. A systematic review “*Journal of education computing Research* 53(4), 419-436. DOI: 10.2190 /EC.53.4,9
- Sari et al (2020). The impact of Facebook usage on academic performance and social relationship among university students .*Journal of educational Technology development and exchange* volume 12, Issue 1
- Sarwar et al (2020).The impact of Facebook use and social Relationship. *Journal of Social science Research*.
- Sonia Livingstone (2017) *The Class: living and learning in the Digital Age*, publisher NYU Press 978-1479878736
- Vanden Abeele, M, & Zaman, B. (2018). How Does Social Media use relate to Adolescents wellbeing. *Cyber psychology, Behaviour and social Networking* 10.648-654.DOI:10:1089/cyber:2017.0651
- Exploring the relationship between social media use and mental health in adolescent “*Computers in human Behaviour* 89, 343-354.DOI: 10,1016/jchb.2018.02.027
- Uncapher M.R. & Wagner A.D. (2018) Minds on the Go. Mental context and the brains default network, *Neuron*, 98(2),226-235.DOI:10:1016/j.neuron-2018-03-023
- Wang,C.,et al (2019) Social Media addiction and depression: A systematic review” *Cyber psychology, Behaviour and social networking*,22(10),698-705.DOI: 10:1089/cyber 2018.0694