

Perceived Impact of Electronic Teaching on Mental Health and Wellbeing of Students in South-East Tertiary Institutions in Nigeria

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Abstract: *The study was on the perceived impact of electronic teaching on mental health and student wellbeing in south-east tertiary institutions in Nigeria. It adopted descriptive survey design using three hundred (300) students as target population. Purposeful random sampling technique was used to select the population from four (4) selected tertiary institutions in the area studied. The instrument was validated by three (3) experts from curriculum, health education and measurement and evaluation was researcher developed questionnaire titled Perceived Impact of Electronic teaching on Students mental health and wellbeing (PMPEMWQ). Reliability co-efficient index value of 0.85 was established which was considered adequate for the study. Administration of instrument was carried out by three (3) research assistances. Percentages, mean standard deviation, T-test were used to answer and obtain prove for research questions and hypothesis respectively. Findings revealed positive impact of electronic teaching on students' mental health and wellbeing. It also revealed high extent influence on students' anxiety and stress, management and further revealed more impacts on females than on males. The study established no significant different impact based on gender, and recommended wide adoption of electronic teaching pedagogical strategy, charging the government, stakeholders and parents to equip schools, students and wards with electronic teachings facilities like electronic teaching laboratory with qualified technicians to adequately embrace the 21st century education. The paper recommended a wide adoption of electronic teaching peadagogical strategy and charged the government, stakeholders and parents to equip schools, wards with electronic teaching facilities to embrace the 21st Century education.*

Keywords: *Mental, Health and Wellbeing.*

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INTRODUCTION

De-emphasizing students' mental health and wellbeing should be of utmost concern amidst stressful, anxiety and safety threatening school environments. Safety Education according to M. Mahruf (2021) implies education for safe living. It is education for freedom from mental, social wellbeing and psychological pre-disposing factors of their enslavements. Mental Health and wellbeing is ubiquitous and affect cognition in different forms, as O, regan (2021) described as vital especially during online education, putting mental health at the centre of e-teaching and learning and relating it as a driving force for academic achievement, motivation, efficiency, identity formation, students development and overall wellbeing , yet it may have negative influence on the academic gains, progress and experience especially during crisis to reduce the inherent health harzards in psychological, emotional and

learners' mental stability as it affects thinking, feelings and actions that may be opposing to stress and anxiety management. Khorbach, M. (2021) is of the opinion that the whole body including affective, emotional, psychological, motivational and expressive elements are implicated in mental wellbeing. The correlation between cognition and mental health is bi-directional showing that cognition and mental health operate in diverse and both must be better understood. Maria B. et al opined that ensuring an emotional health electronic teaching and learning environment is essential to the teachers and learners, they are fundamental components of quality dynamic in learning, cognitive success, stress, anxiety and pressure during learning and may degrade understanding thus inadequate learning, challenge of related stress may have a positive relationship to learning performance while

Zulkefli, N.A. M., Hashim, H and Syahrim, S. (2020). In their opinion stated that barrier related stress may trigger negative relationship learning performance and mental health in an electronic teaching and learning;

According to Al-Essa, N.S (2018) stated that e-teaching tends to resolve the learning problems associated with motivational changes, loss of focus, control and tensions Alberto, M. and Inaki, S. (2021) observed that male students show higher levels of negative emotions and greater emotional arousal, while female students appear to be more open to obtaining teacher support. Nevertheless, mental wellbeing and emotions are experienced by all. Bearer (2021), Oleifienco, N. v. (2019) and Guri-Roserbita (2018) indicated that an electronic environment are full of experiences, anxiety, fun, anger, satisfaction, dissatisfaction and pride notwithstanding negative experiences of mental health problems can be compounded in an online teaching as it is devoid of physical connection with peers and few accessible mental support systems. Palmer, T. (2015) asserted that developing digital self-efficacy and technological proficiency can minimize some fears, anxiety and stress that could possibly challenge students' mental health and wellbeing, Donkni B. et al (2019) also stated that teachers ought to pay close attention to learners epistemic wellbeing to foster self-regulated knowledge generation, co-operation and competition independence and self-evaluation using e-teaching approach to build students strength.

Statement of the Problem

Ugbogu (2019) posited that providing education amidst emergencies calls for serious consideration on how to reduce the risk of mental health, psychological stability and morals. Mental health is a condition of an individual that includes emotional, psychological and social wellbeing affecting how people think, feel and act and manage stress and anxiety. The role of educators in ensuring students' mental health and wellbeing in online teaching are similarly complex and varies widely across higher education and within e-learning. Chin et al argued that students satisfaction is a key elements in successful implementation of electronic teaching programme and claimed that students high satisfaction is associated with lower drop outs rates increased engagement and learning success. Moreso learners' with conceded wellbeing problems generally dropout of learning and tend to avoid continuing e-learning and opined that course designers and researchers should be mindful when determining the quality of the e-learning course on the basis of end-of-course surveys, striving harder to consider how to capture the hidden mental wellbeing of students in addition to accessing students impression before they are disaffected and dropout. From the afore-goings, the problem therefore is how to capture the perceived impact of

electronic teaching on mental health and wellbeing of selected tertiary institutions in the south-east Nigeria.

Objective of the Study

The objective of the study is predicated on determining the perceived impact of electronic teaching on mental health and wellbeing of students in south-eastern Nigeria tertiary institutions.

Specifically, it sought to:-

1. Determine the perceived impact of electronic teaching on mental health of students in the area of study.
2. Find out the influence of electronic teaching on wellbeing of students' in the south-east tertiary Institutions in Nigeria.
3. Find out the influence of electronic teaching on anxiety and stress management in south-east tertiary Institutions in Nigeria.
4. Determine if there is a significant difference on perceived impact of electronic teaching based on gender.

Research Questions.

Three research questions guided the work, they include:-

1. Is there any perceived impact of electronic teaching on mental health of students in south eastern tertiary Institutions in Nigeria?
2. What extent has electronic teaching influenced the management of anxiety and stress of students in the area of study?
3. How has electronic teaching impacted on mental health and wellbeing of male and female students in the area of study?

Hypothesis

To guide the research, the researcher postulated one null hypothesis, thus there is no significant difference in the impact of electronic teaching on mental health and wellbeing of male and female students in the area of the investigation.

Methods.

Descriptive survey design was used with a total population of three hundred (300) respondents who were selected using purposeful random technique from the area of investigation. The validated instrument was self-developed questionnaire with twenty two (22) items while reliability co-efficient established at 0.85 index using Conbach's alpha method. The instrument was administered by three (3) research assistants. The obtained data was analyzed using percentage, mean, standard deviation and t-test. Research questions were

answered using 2.50 standard for acceptance while t-test was used to obtain prove of the hypothesis.

Data Presentation and Results

Results

Table 1: Demographic Information of Respondents

Demographic Gender	Frequency	Percentage
Male	140	46.5
Female	160	53.5
Total	300	100.00
Institution		
Imo State University Owerri	140	40%
MichaelOkpara Uni. Umudike,Umuahia	100	33.3%
Ebonyi State University Abakaliki	60	26.7%
Total	300	100
Area of Study		
Education	133	44.3%
SocialScience	92	30.2%
Environmentalscience	75	25.0%
Total	300	100%
Age		
16–20yrs	95	31.7%
21–25yrs	100	33.3%
26–30yrs	70	23.3%
31 and above	35	11.7%
Total	300	100%

Table 1 above showed demographic data of the respondents for the study revealing that 140 (46.5%) respondents were male while 160 (53.5%) respondents were female. This explicated that more female than males took part in the study. Institutionally, the table showed 140 respondents representing 40% were from Imo State University Owerri, 100 (33.3%) were from Michael Okpara University Umudike, Umuahia while 60 representing (26.7%) were from Ebonyi State University. In terms of discipline, 133 representing (44.3%) respondents were from education followed by social sciences with 97 representing 30.7% respondents while 75 representing 25.0% respondents were from Environmental sciences. This further revealed that majority of the respondents were

from the faculty of education. Age distributions of the respondents showed 95 representing (31.7%) respondents came within age range of 16 – 20 years, 100 respondents (33.3%) respondents falls within age range of 21 – 25 years, 70 respondents falls within the age brackets of 26 – 30 years and lastly 35 respondents representing (11.7%) respondents falls within the age range of 31 and above. This inferred that majority of the respondents were between the age range of 21 – 25 years.

Research Question (1): What is the perceived impact of electronic teaching on mental health of students in the area of study.

Table 2: Percentage perceived impact of electronic teaching on mental health of students

S/N.	Item	Response			
		SA	A	D	SD
1	E-teaching minimizes stress and anxiety	120 (40%)	80 (26.6%)	10 (20%)	40 (13.1%)
2	Ensures students against kidnapping and its attendant health issues	108 (36%)	120 (40%)	45 (15%)	35 (11.6%)
3	Prevents accidents that may affect mental and physical health of students	90 (30%)	120 (40%)	45 (15%)	35 (11.6%)
4	During global health challenges, health information are taught and learnt via e-teaching.	100 (33.3%)	119 (40%)	44 (14.6%)	39 (12.3%)
5	E-teaching and learning improves mental capacity of students.	59 (19.6%)	106 (35.3%)	74 (24.6%)	61 (20.3%)
6	E-teaching in global health crisis ensures mental health protection maintenance	100 (33.3%)	118 (39.3%)	45 (15.0%)	37 (12.3%)
7	Ensures students optimal mental health stability during health distress period	180 (60%)	100 (33.3%)	19 (6.3%)	1 (0.3%)

A – Agree, = 3,

SA - Strongly Agreed = 4;

D - Disagree = 2 ,

SD - Strongly Disagree = 1

The above table showed percentage perceived impact of electronic teaching on students' mental health. Items 1 – 7 in the table were used to elicit responses to answer research question one (1). It revealed that 120 respondents representing 40% of the respondents strongly agree, 80 representing 26.6% disagree while 40 representing 31.1% strongly disagree, 60 representing 20% respondents agree that electronic teaching minimizes students stress and anxiety, while 120 respondents representing 40% strongly disagree to item one (1). This is a clear evidence that electronic teaching heightens students stress and anxiety. Second item on the table showed that 120 representing 40% agree that electronic teaching ensures students against kidnapping and its adverse health attendants while 120 representing 40% agree that electronic teaching prevents automobile accidents enroute to and from school and its consequences on mental health and physical health. On

4th item 119 respondents agree that health information/tips are taught and learnt via electronic during global health issues, contrarily 106 representing 35.3% agree on item 5, this explicates that embanking on electronic teaching and learning has positive impact on students mental health capacity, 118 respondents, representing 39.3% agree and affirm on item 6 that students mental health protection and maintenance is ensured through electronic teaching in emergency education, 180 respondents representing 60% of the respondents strongly agree that electronic teaching ensures optimal health stability. From the results and anti-cidents of the table, it all implied that electronic teaching impacted positively on all mental health indexes.

Research question (2). To what extent has electronic teaching influenced the management of anxiety and stress in south-east tertiary institutions?

Table 2: Extent influence of electronic teaching on anxiety and stress management of students.

S/N.	Item	Response				ΣX	\bar{X}	SD	Decision
		VHE	HE	LE	VLE				
1	Learning via electronic teaching increases tension	130	90	50	30	920	3.07	0.9	VHE
2	Electronic teaching minimizes stress	120	80	62	38	882	2.94	1.05	HE
3	Electronic teaching helps in students stress management	110	90	60	40	870	2.90	1.04	HE
4	Creates stress in students	45	35	130	90	635	2.12	1.00	HE
5	Limits emotion sharing with peers	160	60	46	34	946	3.15	1.06	VHE
6	Reduces students learning anxiety	170	50	43	37	953	3.18	1.09	VHE
7	Increases students' eagerness to learn	170	50	41	39	957	3.17	1.09	VHE

Cluster Mean 2.93

KEY: Very High Extent (VHE)4, High Extent (HE)3, Low Extent (LE)2, Very Low Extent (VLE)1.

Analysis in table (2) above revealed the mean responses of students on extent influence of electronic teaching on students' anxiety and stress management.

The table revealed that mean responses of all the items fell within the 2.93 range of 2.94 – 3.18 and cluster mean indicating very high extent influence electronic influenced students anxiety and stress management.

Research Question 3: How has electronic teaching impacted on mental health and wellbeing of both male and female students in the area of investigation?

Table 3: Mean and standard Deviation of electronic teaching impact based on gender.

Gender	Item	Response				ΣX	\bar{X}	SD
		SA	A	D	SD			
Male	Learning via electronic teaching increases tension	80	40	15	5	475	3.39	0.73
	Minimize students learning stress and anxiety	8	2	42	88	210	1.05	1.05
	Limits emotion sharing with peers	80	38	17	5	473	3.38	1.16
Female	Ensures student health stability	80	40	15	5	475	3.39	0.82
	Learning via electronic teaching minimizes students learning stress and anxiety	94	38	16	12	534	3.34	0.46
	Learning via electronic teaching increases tension	10	30	40	80	290	1.81	0.95
	Limits emotion sharing with peers	88	46	20	6	536	3.35	0.84
	Ensures students mental health stability in distress period	94	40	21	5	543	3.39	0.83
Boost students self esteem	92	42	18	8	538	3.36	0.87	
Saves negative psychological feelings for poor academic performance	90	44	16	10	534	3.33	0.89	

Cluster mean - 3.10
Cluster SD - 0.89
Mean Scale - 2.50
SD scale - 0.05

The analysis above showed the impact of electronic teaching based on gender. It revealed means response of males on all the items falling within the range of 3.38 – 3.39 and cluster mean of 2.92 and cluster standard deviation scores of 2.92 and 0.878 respectively. This means that electronic teaching impacted positively on mental health and wellbeing of males in the study but impacted more positively on females' mental health and wellbeing with higher mean score of 3.101 and standard deviation cluster of 0.89 which is greater than that of males. This can be attributed to the fact that electronic teaching creates no

tension, maximally reduces anxiety and stress while ensuring students mental health stability and boosting students' self-esteem.

Testing of Hypothesis

Hypothesis – There is no significant difference in the impact of electronic teaching on mental health and wellbeing of male and female students in selected tertiary Institution in the southeast, Nigeria

Table 4: Significant impact of electronic teaching based on gender.

Variable	N	X	SD	T	SUP.	DECISION
Male	140	2.92	0.878	0.144	0.012	Rejected
Female	160	3.10	0.890			

The above table revealed t-calculated value of 0.144 indicating rejection of the null hypothesis resulting from t – value of 0.012 being less than 0.05 significant alpha level, thus established no significant difference in the impact of electronic teaching based on gender.

Discussion of Findings

The findings on research question one (1) on the impact of electronic teaching on mental health and wellbeing of students in south-east tertiary Institutions revealed that 60% of the respondents indicated strong inclination that electronic teaching ensures students optimal mental health and wellbeing stability, implying positive impact on their mental and wellbeing, this collaborated with Zulkflic, N.A, and Syathens (2020) they affirmed that electronic teaching improved students self-efficiency and technology proficiency that minimized fears, anxiety that would pose dangers to their mental but rather improved students epistemic mental health and wellbeing.

Findings on research question two (2) on the extent influence of electronic teaching on anxiety and stress management of students in the South-east tertiary Institution revealed very high extent influence. This implies that electronic teaching extensively influenced students' management of anxiety and stress, this also collaborated with Maria, B. et al (2021), they established that challenged-related stress has positive relationship to learning performance, the findings had collaboration with Palmer, T. (2015), who agreed that technological proficiency minimized students fears, stress and learning anxiety. The findings also agreed with Kharbach, M. (2021) who stated that electronic teaching in health distress era helped to reduce inherent mental health hazards but helped in stress and anxiety management.

Findings on research question three (3) on gender impact of electronic teaching in south-east tertiary Institutions revealed mean score range of 3.38 – 3.39 of male responses and cluster mean of 2.92 while mean score range of female responses fell within 3.33 – 3.39 with cluster mean score of 3.101 meaning more positive impact of electronic teaching on females than on males. This finding could be attributed to the fact that electronic teaching creates no tension but maximally reduce stress and anxiety and ensuring Students' Mental health stability and self esteem. The finding also collaborated with Purdu (2018), Al-Essa, N.S. (2018) and FAO (2011). They affirmed that electronic teaching had more positive impact on female than males. It's findings are also in interderm with Akabugwo and Namadu, (2021), they found out that social media (electronic teaching) do not pose any danger to students' concentration, articipation during lectures rather achieved increased academic performance and productivity. The work revealed no significant impact of electronic teaching based on gender.

CONCLUSION

The study investigated perceived impact of electronic teaching on mental health and wellbeing of students in South-East Tertiary Institutions in Nigeria. The researcher concluded that electronic teaching impacted more positively on females than males' mental health and wellbeing, owing to the fact that it does not mount tension but rather maximally reduce stress and anxiety. In furtherance, the study also concluded that electronic teaching very highly influenced student's stress and anxiety management established no significant impact on gender

RECOMMENDATION

The researcher recommends among others that electronic teaching be widely adopted as pedagogical strategy since 21st century education demands teachers sharing guidelines, stressing the importance of feedback to students to balance education remotely. Government, parents and education stake holders should ensure maximum procurement of electronic instructional facilities to their wards, schools ensuring periodic re-training of staff and students to acquire skills for technological proficiency as its inherent benefits cannot be over emphasized especially in pademics and security challenged places.

REFERENCES

- Alberto, M. Inaka (2021): Potentials of virtual classroom: Teacher and learning tools. Malaysian Online Journal of Education Sciences.
- AL – Essa, N.S; (2018): The impact of using Edmodo as a blended learning medium on promoting Saudi EFZ female secondary School Students' English grammar. Arab world English journal, 221, 1-112.
- Bala Abdullahi et al (2021): Relationship between Emotional Adjustment and Academic achievement undergraduate in college of Education Nasarawa State, Nigeria: Journal of Interdisciplinary Research Academy (NIJIRA) Vol. 2 No. 3.
- Bear (2021): Mental Health, developing digital self-efficiency and technological proficiency.
- Donkin, R., Askew, E and Steven, H; (2019): Video feedback and e-learning enhances laboratory skills and engagement in medical laboratory science students. BMC medical Education 19: 310
- F.A.O. (2011), E-Teaching methodologies: A guide for designing courses, food and Agricultural Organization of United Nations Rome, Italy 141 pp
- Guri-Rosenblit, S., (2018): E-Teaching in higher education: An essential prerequisite for e-learning. Journal of New Approaches in Educational Research 7 (2):93 – 97.
- Kharbach, M. (2021). Ed Tech tools for the 21st century classroom. Educational Technology and mobile learning, 1 – 4.
- Mafa, K. R. (2018). Capabilities of Google classroom as a teaching and learning tool in Higher Education, Malaysian online journal of Educational sciences.
- Maria, B. and Cristobel, C. Alberto, M and Inaki, S. (2021). The changing Role of Teachers and Technologies amidst the Covid-19 pandemic: Key finding from across – country study.
- M. Mahruf (2021): Safety Education: Prerequisites for online courses. Jjournal of Education and Practice 4(20) 64 – 70
- Onuoha (2021). Technology, Integration in Mathematics Curriculum Implementation in public secondary schools in Aba educational zone of Abia State, Nigeria: Nigerian Journal of Interdisciplinary Research Academy (NIJRA) Vol. 2 No. 3 November.
- Ogbonna and Uya (2023) – Virtual learning tools in the classroom and undergraduate students Acquisition of 21st century skills among tertiary Institutions in Nigeria. International journal of Education and science (IJESD) Vol. 2 issue 2 Sept. Elevis & Brainspec Publishers, USA.
- O' Regan (2021): Mental health and psychology: A driving force for academic achievement, motivation, efficiency and overall wellbeing – Journal of Research and Reflection in Education sciences 3(4), 81 - 88.
- Palmer, T. (2015). 15 Characteristics of a 21st Century Teacher. Teacher Technology Integration Journal 4, 342 – 357.
- Purdue University (2018). 21st Century skills and online learning. Purdue repository for online teaching and learning. Purdue University Press.
- Ugbogu; (2019); E-Teaching and learning. Coping with Realities of Nigerian University system.
- Vivya. B. (2015); Digital tools NAAC, Re-accredited with grade "A"(CGP A3. 26-2nd cycle). CPE status (3rd time) by UGC mentor college under paramarshkin by S.G.; B Amravati University Amravate
- Zulkefli, N.A.M., Hashim, H and Syahrin, S. (2020): Evaluating e-learning Google classroom tools for computer science subjects during Covid-19 pandemic. International journal of Advanced Trends in Computer Sciences and Engineering, 9 (4), 1 – 8.