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Impact of school values on mass media preference and usage: a study of a private university in North Central, Nigeria

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Research on communications has consistently demonstrated that mass media is predicted to have a strong influence on students' behavior and their overall disposition to academic performance. However, how school values influence media preference and use is less well investigated. This study investigated whether school values influence media preference and the purpose of using media in a private university in North Central, Nigeria in Nigeria. The study adopted a triangulating type of mixed method research design and stratified sampling technique in recruiting 390 respondents. Statistical Product and Service Solutions (SPSS) version 22 was used in analysing the returned questionnaires, while five (5) in-depth interviews were content analyzed. The study used both the descriptive and inferential methods of data analysis. The findings of the study revealed a decline in the reading of print media. The study also found that there was a positive relationship between school values and media preference. Further, findings revealed a non-existing relationship between the purpose for using mass media and school values. The study concluded that though, mass media, students, and the broad social system (university) are all interconnected, general institutional core values may not necessarily be upheld as individual values as reflected in the different purposes for using media by students'. The study recommends that lecturers should recommend print media sections for academic work.

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Introduction

Commercial organizations, particularly those in the educational field, heavily rely on the media for information and pleasure. In modern liberal democracies, mass media predominate the public sphere. The existence of new media, particularly the Internet, has presented a challenge to traditional media, particularly the printed newspaper (Domingo and Heinonen, 2008). Today, the media is the medium of expression, making a free press an essential instrument of openness in any given society. Despite the great influence of the mass media, it should be noted that freedom of expression should not be allowed to degenerate into freedom to abuse as mass media communications can be compared to a drug injected with a hypodermic syringe. The patient is the audience, the syringe is the medium, and the medium messages or content are what is injected. Salman et al. (2011) noted that we are now living in a media convergence period making the distinction between traditional corporate news media and digital media, such as the internet, increasingly hazy. Low academic results have been associated often time with social media usage (Harrath and Alobaidy, 2018; Sharma and Behl, 2022), and students in private missionary universities have also perceived mass media to be an influential factor in their academic performance (Arisukwu et al., 2022).

The mass media, according to Volker (1975), are powerful mediums for acquiring knowledge, leisure and change agents in society. The lack of stringent regulations on mass media usage has resulted in media overuse, and cyber violence, especially in the internet space. Some people get so carried away that they continue to communicate or browse the internet even as they walk through busy streets, leading to many road accidents (Hashash et al., 2019). Visible friends have received less attention than invisible friends, and vital activities like studying and writing have suffered as a result (Eslami et al., 2015). The focus has shifted from physical to space friendships among students who are many times seen crossing roads or attending solemn events yet surfing the net (Marlowe et al., 2017).

Similarly, Jocabsen and Forste, (2011) in reporting a June 2010 Nielsen media research survey among university freshmen in the United States, found a negative association between usage of different media and self-reported Grade Point Average (GPA), with nearly twenty-five percent of students' time spent on social networking sites. While evaluating media impact on academic performance, literature (Nauert, 2013; Moon, 2011; Ndaku, 2013; Helou and Rahim, 2014; Asemah et al., 2013) have mostly been devoted to ascertaining the impact of social media on users; changing communication patterns, participation and collaboration of information online, and the tendency for jeopardizing academic results among first-year university students due to extensive media use.

Furthermore, Arisukwu et al. (2022) study on access, usage and influence of mass media on students' academic performance: a private university experience found that access to media mediums and contents was influenced by the university school values. Arisukwu et al. (2022) study is part of the few studies to look at media influence on academic performance in a Christian missionary university; however, the study did not consider the interaction of school values on media preferences and usage. This study therefore aims to examine whether the operational Christian core values in a private university in North Central Nigeria have any effect on students' media preferences and media usage.

Media preference and reading culture

Preferences or detachment to a particular form of media is influenced by the individual engagement with the message, which is the participatory feeling (Knobloch-Westerwick, 2014). Mass media content, according to the looking glass self of Cooley (1909), depicts the identity and value of members in different categories, offers a "looking glass"—a social mirror- reflecting individual members how the culture views them, whether positively or negatively, and thereby sets parameters for self-definition (Jones, 2015).

While investigating reading interests and habits, Issa et al. (2012) found that students' major sources of reading materials were lecturers' textbooks and notebooks while non-availability of relevant reading materials and unserious attitudes were factors militating against students' developing reading interests and habits. Also, Palani (2012) also observed that there is an urgent need to develop reading habits among individuals in society. Similarly, Harrath and Alobaidy (2018) research noted that Social Networking Sites (SNS) had both positive and negative impacts on student academic performance. While, there has been a report on the positive link between openness and liberal news media use (Kim and Kim 2018), Akram and Kumar (2017) maintain that media does possess some negative effects on society.

Furthermore, despite, the majority of the respondents in Owusu-Acheaw and Larson (2014) study acknowledging the importance of reading habits on academic performance in Eastern Ghana, 81.9% of the respondents had neither read a novel nor a fictional book within the last two semesters. Similarly, negative social well-being was positively associated with levels of media usage in a regression analysis on media usage, face-to-face communication, media multitasking, and social well-being among 8- to 12-year-old girls study conducted by Pea et al. (2012).

Theoretical framework

Sandra Ball-Rokeach and Melvin DeFleur Media System Dependency Theory. Developed by DeFleur and Ball-Rokeach, (1976), the media system dependency theory is based on traditional sociological writings, which suggest that media and their viewers should be analyzed as part of broader "social systems". DeFleur and Ball-Rokeach, (1976) showed how the relationship between mass media, culture, and audience is one of "mutual dependency". Obaje (2011: p. 249) believes that a person's reliance on a particular medium is affected by the number of available mediums to them. This therefore implies that when a person's access to several media is restricted, he or she tends to become more reliant on what's accessible as the more options a person has for meeting his or her needs, the less reliant they become on one medium of mass media. However, the number of efficient alternatives is limited not only by audience preference or psychological characteristics but also by accessibility of specific media.

The basic dependence assumption of this theory posits that the more an audience relies on media medium to satisfy their needs, the more significant such media medium becomes in his or her life, making the media medium possess more influence on such an individual. Though dependency on forms of media differs, this theory provides a detailed description of the interrelationships of large social networks, mass media impacts, and audiences by assuming that audiences rely on available media content to satisfy needs and accomplish certain goals.

Application of media system dependency theory. The dependence model of media effects is provided as a theoretical approach in which it is presupposed that many of the impacts of the media on students and schools are most directly determined by the structure of the tripartite interaction between students, media, and schools. The study looks at the impact of Landmark University school values on students' media usage and

preferences, making dependence on media sources for knowledge by students a crucial interaction requirement for behavior modification as determined by the school value system. This implies that student dependence might be limited to available media mediums. As people's relationships with media are dependent on how well they are thought to use the media in assisting them in achieving their social goals, this theory was adopted to provide an understanding of how students' media preferences and usage can affect media dependency and its interaction with other influencing factors (school values in this case) which may act as a primary agent of control. This theory is relevant to this work in that, it demonstrates and produce a pictorial representation of how media preference and usage is a causal chain brought about by the school values of the study population.

Methods

The study adopted a triangulating type of mixed method research design which involved using survey questionnaires and In-depth Interviews (IDI) methods in collecting data from the respondents. Utilizing the stratified sampling technique, respondents were chosen from the entire students' population of Landmark University who are enrolled in undergraduate and graduate programs. Landmark University is a private Christian university, affiliated with the Living Faith Church Worldwide and located in Omu-Aran, Kwara State, Nigeria. With a population size above 3000 students, Landmark University holds mid-week church services for her students every Tuesday and Thursday and each student is expected to attend at least one of these services every week. All undergraduate students are required to live on the university's campus in the hostels built for them. Undergraduate students are expected to be back in their respective hostels before 9:00 pm daily for a roll call attendance process (Landmark University, 2018). The study location was selected purposively due to seven core values (Spirituality, Capacity building, Possibility mentality, Diligence, Responsibility, Integrity, and Sacrifice) upon which the institution is hinged as a Christian missionary school.

With a 5 percent margin of error, the study utilized Watson's (2001) sample size calculation, which suggests that a sample size of 388 or more is appropriate for a total population of 3000 and above. Therefore, to conduct a representative survey, students' of Landmark University were stratified into colleges, and a total of 390 respondents were selected randomly from each stratum. While convenient sampling technique was used in conducting five (5) in-depth interviews.

The study used both the descriptive and inferential methods of data analysis with the aid of Statistical Product and Service Solutions (SPSS) version 22 was used to analyze the data, and frequency counts and percentages were used to present the results in tables. Association between the variables and the test of hypotheses was discovered using chi-square. The five (5) in-depth interviews were inductive content analyzed.

Results

Above average (58.2%) of the respondents in Table 1 are in the age group of 16–20 years. The age group dominance in the study indicated that respondents were qualified to answer questions contained in the questionnaire item because they belonged to the economic and media-active age. The study population possesses more male (58.2%) respondents, with representation at all levels of the school. These findings corroborate that of Asekun-Olarinmoye et al. (2014) study.

Table 2 showed that 21.5% of the respondents indicated being influenced by the value of capacity building which implies that their skills, instincts and ability to process media information are well-

Table 1 Respondents by bio-data.

Description	Category	Frequency (N = 390)	Percent (%)
Age	16–20	227	58.2
	21–30	152	39.0
	31–40	10	2.6
	41 and above	1	0.3
	Total	390	100.0
Gender			
	Male	227	58.2
	Female	163	41.8
	Total	390	100.0
Level			
	Freshman	63	16.2
	2nd year	22	5.6
	3rd year	80	20.5
	4th year	129	33.1
	5th year	58	14.9
	Postgraduate	38	9.7
	Total	390	100.0

Table 2 Distribution by influencing school values.

School values	Frequency	Percent (%)
Spirituality	25	6.4
Capacity building	84	21.5
Possibility mentality	3	0.8
Diligence	17	4.4
Responsibility	19	4.9
Integrity	16	4.1
Sacrifice	22	5.6
No influence	204	52.3
Total	390	100.0

developed and give them an edge to survive, adapt, and thrive in fast-changing organizations and communities (Okorafor et al., 2012). Also, above average (52.3%) of the respondents were not influenced by any of the university's core values despite the explicit nature of every activity hinged on one or more of the school values.

A final year student in-depth interview revealed thus: *"Though, I cannot absolutely agree to being 100% influenced by the school values, however, I find the capacity building value more influencing on my preferences".*

This is a reflection of the fact that the value of an organization may not necessarily be in line with an individual value on every issue. The data generated from the respondents clearly shows that the institution's core value has little influence on the people's choice of media usage.

School values and media preference. Above average (52.3%) in Table 3 disagreed with the question of school's values influencing media preference. The respondents' disagreement denotes that despite their exposure to the school's core values, it does not influence their media preference.

This implies that the audience respondents are active media users capable of making self-informed choices without influence from external factors such as the school's core values. This finding negates the media dependency theory which does not see the audience as independent entities. This is also contrary to Balanza and Tindowen (2019) study which revealed that media exposure was greatly influenced by the manifestation of students on their school's core values which are true Christian living, academic excellence, professional responsibility and social involvement and awareness.

Table 3 Distribution by influence of school values on media preference.

Statement	Frequency	Percent (%)
School values influence my media preferences	186	47.7
School values do not influence my media preferences	204	52.3
Total	390	100.0

Table 5 Distribution by influence of school values on media use.

Statement	Frequency	Percent (%)
School values influence my media usage	186	47.7
School values do not influence my media use	204	52.3
Total	390	100.0

Table 4 Distribution by preferred media medium.

Media mediums	Frequency	Percent (%)
Radio	11	2.8
Television	16	4.1
Newspaper/Magazine (Print)	15	3.8
Internet	348	89.2
Total	390	100.0

Table 6 Distribution by purpose for media use.

Purpose	Frequency	Percent (%)
For entertainment	21	5.4
To connect with family and friends	44	11.3
Research	18	4.6
All options	307	78.7
Total	390	100.0

A penultimate graduate student in-depth interview revealed thus: *"The school values are not mandated upon the graduate students and I do not live within the university premises so technically, my media preference is not influenced by the school values"*. This is clear evidence that human beings are dynamic in nature and tend to determine what they want irrespective of any value in the organization or setting they may find themselves.

Table 4 revealed that compared to other mediums of mass media, the Internet is the most preferred medium by the majority (89.2%) of the respondents. The information generated in the table above clearly shows the sharp move from traditional mass media platforms (radio with 2.8%, Television with 4.1%, and News Paper/Magazines with 3.8%) to a whole lot of preferred interest in the internet medium. It could be deduced that the speed offered by internet over the other media platforms may warrant the preference for the Internet over others. It could also be explained that the current generation otherwise referred to as GenZ is gradually phasing out the use of radio, Television, and print media mediums since the information on those media can be gotten faster through the internet.

A final-year student motioned thus: *"Almost everyone in this generation would obviously prefer the Internet! From academic purposes to social interactions, the internet makes it easy. A single click on an internet connecting device is quickly changing the world into a global marketplace where everything can be accessible"*. Another undergraduate student also said: *"The internet is our companion here. It makes the atmosphere bearable and our relations to the outside world closer. Without the internet, I have no idea how the majority of the students would survive!"* A final-year female student also said; *"In one word, I would describe the internet as a coping strategy/ mechanism in this institution."*

These findings are in line with the media system dependency theory which noted that a person's reliance on a particular medium is affected by the number of available mediums to them. This can also imply that the Internet being the most preferred by the respondents in this study is a result of its availability and bandwidth allotment to each student at the beginning of every semester which enables access to the Internet reported by Arisukwu et al. (2022).

School values and media use. While 47.7% of the respondents in Table 5 asserted that their media usage was being influenced by school values, the majority (52.3%) of the respondents

maintained that school values have no influence on their media use. This implies that the respondents are responsible enough to distinguish the importance of the school values and the use of media and despite their exposure to both, they can successfully utilize them without each having influence on the other. Though, the data provided information on how people are influenced by the happenings in their environment, i.e., the environmental determination in the use of media, however, a postgraduate candidate stated thus: *"In as much as the school values stand to positively affect students' lifestyle and media usage, however, humans have independent of choices. Humans have independent mindsets, therefore, even when the school can track and monitor media usage in terms of content accessed, students will always have a way of self-fulfilling prophecy"*.

Table 6 shows that compared to research (4.6%), connection to family and friends (11.3%) and entertainment (5.4%), the majority (78.7%) of the respondents use the media for multiple purposes. This corroborates findings from other authors (Obaje, 2011; Knobloch-Westerwick, 2014; Jones, 2015; Marlowe et al., 2017; Arisukwu et al., 2022) and the media dependency theory that media audiences rely on available media content to satisfy needs and accomplish certain goals.

Decision criterion for a relationship test. Reject H$_0$ if the calculated (observed value) of chi-square (χ^2c) is found to be greater than the critical (table) value of chi-square χ^2t (0.5), if not, do not reject.

Table 7 shows that the chi-square value to determine the influential state of school values on students' media preferences was significant at a 3% chance. Following the stated decision criterion for the relationship test, the null hypothesis is rejected and the alternate hypothesis is accepted because the calculated χ^2 (3) = 5.527 is lesser than the critical chi-square ($P < 0.5$). It follows that there exists a relationship between school values and media preference. This result is statistically significant as it determined the regulating power of the school on respondents' exposure to media mediums, thereby acting as an agent of control to exposure to contents in certain media mediums. This means that the choices of media preference exhibited by the respondents' are influenced by the school values. This could be because the school values act primarily as agents of control in available media mediums within the school premises. This therefore means that respondents are not at liberty to make individual choices as their choice is affected by the external influence of the school value.

Table 7 Influence of school values and media preference relationship.

Variable		Preferred medium of mass media				Total
		Radio	Television	Newspaper/ Magazine (print)	Internet	
Do school values influence your media preference	Yes	6 (3.2%)	6 (3.2%)	6 (3.2%)	162 (87.1%)	186 (100.0%)
	No	5 (2.5%)	12 (6.5%)	9 (4.4%)	186 (87.1%)	204 (100.0%)
Total		11 (2.8%)	16 (4.1%)	15 (3.8%)	348 (89.2%)	390 (100.0%)

$X^2 c = 5.527 < X^2 t\ (0.5)$, df = 3, n = 390, P = 0.137

Table 8 Influence of school values and purpose for using mass media relationship.

Variable		Purpose for using mass media				Total
		Entertainment	Connect with family and friends	Research	All of the above	
Do school values influence your media use	No	12 (5.9%)	21 (10.3%)	17 (8.3%)	154 (75.5%)	204 (100.0%)
	Yes	9 (4.8%)	23 (12.4%)	1 (0.5%)	153 (82.3%)	186 (100.0%)
Total		21 (5.4%)	44 (11.3%)	18 (4.6%)	307 (78.7%)	390 (100.0%)

$X^2 c = 13.944 > X^2 t(0.05)$, df = 3, n = 390, P = 0.003.

This would therefore imply that one of the two basic propositions put forward by the media dependency theory is that dependency on a media medium by an individual is determined by the individual's exposure to a particular available medium.

Decision criterion for a relationship test. Reject H_0 if the calculated (observed value) of chi-square ($\chi^2 c$) is found to be greater than the critical (table) value of chi-square $\chi^2 t$ (0.5), if not, do not reject.

Table 8 shows that the chi-square value to determine the influential state of the school values on students' media use was not significant. Following the stated decision criterion for the relationship test, the null hypothesis is accepted and the alternate hypothesis is rejected because the calculated χ^2 (3) = 13.944 is higher than the critical chi-square ($P > 0.05$). It follows that there is no relationship between school values and respondents' purpose for using mass media. This result is not statistically significant. In other words, it implies that media usage can be individualistic, not binding by popular or established norms. This could be because of an individual's ability to make choices that are not being considered resultant effects of external influence. This further implies that despite the schools' institutionalized core values that determine the kind of mass media mediums available to students, students exhibit individualistic tendencies in their choices of what purpose to utilize mass media content. This would therefore imply that the second basic proposition put forward by the media dependency theory is that an audience's dependency on a media medium is informed by the number of social functions performed for an audience by that particular medium.

Discussion
On preferred media medium, the study found a larger portion of the study population's media preference is the Internet. This could be because of the lack of openness and availability to every form of media medium which was also noted by Kim and Kim (2018). This could inform the respondents' purpose for using media which showed a higher multipurpose use. This is in line with Knobloch-Westerwick (2014) study as well as the media dependency perspective, which holds that people tend to be more dependent on available media mediums if their access to alternative media is limited and that the number of outlets available to them affected their reliance on a particular medium. Also, the study found that there was a positive relationship between school values and media preference, implying that school values act as agents of control over media mediums. This means that the choices of media preference exhibited by the individual audience are influenced by the values within a space. This corroborates previous literature (Jones, 2015; Knobloch-Westerwick, 2014; Arisukwu et al., 2022).

The study hypothesis found that the study population's media use was not influenced by the school values. Despite the looking-glass self premise, this finding supports existing literature (Pea et al., 2012; Arisukwu et al., 2022) that humans have the potential to uphold personal values and choice rationale. Inferences from this finding along the media dependence theory premise would imply that, if what the audience chooses to use the mass media for is dependent on the social functions performed by such a media to the audience, or the ability of the media content to satisfy the audience's needs. Additionally, the study's findings corroborated that of Harrath and Alobaidy (2018) study on the impact of SNS on student academic performance at the University of Bahrain which revealed that students used media for research purposes. This implies that the media can positively affect students' academic performance when used effectively and efficiently.

On the preferred medium of mass media, the study found that print media readership was significantly low. This could be a defect from formative years as children who have been taught to read may develop a love for books, thereby utilizing reading to explore the broad array of human experiences and knowledge (Palani's, 2012). This result is consistent with Owusu-Acheaw and Larson (2014) findings, which indicated a significant portion of students' had not read a novel or a work of fiction in the previous two semesters despite the recognition of the value of reading by the majority of the students. This implies that, it would be challenging for students' to eventually form good reading habits if they do not get the chance to connect with books throughout their formative years. This finding suggests that the respondents choose to browse the internet over the print section, which could be a result on the expanding and overwhelming presence of the Internet base media medium as noted by Palani's (2012) that, the impact of media could deter people from reading books, magazines, or journals very often.

Although this study reported a decline in reading printed materials, the large number of respondents indicating their

preference for the internet medium and for all purposes (entertainment, research and connection) suggests a reading culture among the respondents'. This finding corroborates Palani's (2012) assertion that reading is an essential and crucial component of creating a literate society since it alters a person's personality and aids in the development of excellent thinking habits and the generation of novel ideas. This result also confirms the claim made by Issa et al. (2012) that reading enables one to construct or repair objects, take pleasure in stories, learn about other people's beliefs, and form one's own ideas or beliefs. This also implies that there are various means of garnering all kinds of information required for the person's day-to-day survival and growth in society, whether academic or socio-cultural, according to the authors (Issa et al., 2012). Overall, this study assumes the premise of the media system dependency perspective which noted that the relationship between mass media, the nature of the society (Landmark University), and the behavior of the audience (students') is that of "mutual dependency" and that people depend on media content to fulfill certain needs and accomplish certain goals.

Study limitation. Though the purposive rationale for this study is a strength for achieving the objective of this study in the study location, it limits the generalization of the study findings to other institutions possessing different core values than the studied institution. The study, therefore, recommends a replicable study in a public institution, and also, a comparative study should be conducted to ascertain results confirmation or rejection based on diverging school values.

Study implication. Researchers have begun to systematically evaluate how the media affects students' academic performance, but no research has been done to look at how school ideals affect media preferences and consumption in private missionary institutions in North and Central Nigeria. This study in line with previous studies discovered that;

- The Internet remains the most commonly preferred media medium.
- While mass media mediums themselves are not the issue, it is how they are used that makes a difference.
- Irrespective of the aim of an organizational value system, individuals do maintain autonomy on media usage to a large extent.
- It is challenging to forecast exactly which socio-cultural group values affects and influences individual members' choice.

By triangulating in its methodology, this study provides information that will be helpful to researchers and other educational stakeholders. Findings from the study can be adopted by both students as well as the institution to make positive use of mass media content towards academic delivery and pursuit. Also, irrespective of the pros and cons of mass media, it is crucial to recognize that many students regularly use and rely on media outlets for both academic work and fun, making the media a powerful force in knowledge and social skills development. Further, this study adds to the growing body of data demonstrating the importance of technology in today's student success equation, particularly in non-traditional school settings. With the aid of the Media Dependency Theory, it is possible to see that although Landmark University's school values are distinctively grounded and its students are expected to use media differently than students at other universities, the school's values have little or no bearing on students' media preferences and usage.

Conclusions
This study concludes that mass media, students, and the broad social system (university) are all interconnected. Since there are limitations to what students can learn within the physical lecture halls, they can use media to obtain additional knowledge to meet their needs. The student tends to develop a dependent relationship when media is used extensively, and media can create a dependent relationship with target audiences by utilizing their media power. This concludes among other issues, that despite the established school values which all activities within the school are expected to be hinged upon, students like every human possess some level of independence and no matter the restrictions, they would still find ways to exhibit such independence. More so, because the institutional norms operate autocracy, students are limited in their media preferences (mediums that are considered good by the institution). This, in turn, affects what students use the available mediums for.

Recommendations
The study recommends;

1. Faculty members should encourage students to use the library, borrow books, and read more than simply the lecture materials posted on the OMS platform (which encourages more neglect of print media).
2. The administration of the school should see to it that the library has a good selection of fiction and novels; this would greatly encourage students to read.
3. The fact that students frequently rely on lecture notes or unchecked material from Google rather than thorough study conducted by visiting the library for information is becoming quite a significant problem in many academic institutions. Therefore, the administration of educational institutions should support handouts as supplementary materials for the soft copy notes.
4. The school should take advantage of the positive functions performed by the mass media such as its ability to act as surveillance in the environment by not just informing students about the happenings, and how they are expected to fit in, but also entails essentials to the sustenance of academic Morales, and prowess.
5. Students should cultivate good reading habits and refrain from finding books dull in order to avoid total reliance on media to complete their schoolwork.

Data availability
All data generated or analyzed during this study are included in this published article. Supporting data or materials (See Supplementary information).

References
Akram W, Kumar R (2017) A study on positive and negative effects of social media on society. Int J Comp Sci Eng 5(10):351–4. https://doi.org/10.26438/ijcse/v5i10.351354

Arisukwu O, Mkperedem AA, Etta-Oyong SO, Afolabi AO, Erondu UI, Abang C, Adedayo RA (2022) Access, usage and influence of mass media on students' academic performance: a private university experience. Cogent Edu 9(1):2102117. https://doi.org/10.1080/2331186X.2022.2102117

Asekun-Olarinmoye OS, Asekun-Olarinmoye EO, Adebimpe WO, Omisore AG (2014) Effect of mass media and Internet on sexual behavior of

undergraduates in Osogbo metropolis, Southwestern Nigeria. Adolesc Health Med Therapeut 5:15–23. https://doi.org/10.2147/AHMT.S54339

Asemah ES, Okpanachi R, Edegho I (2013) Influence of social media on the academic performance of the undergraduate students of Kogi State University, Anyigba, Nigeria. Res Humanit Soc Sci 3(12):90–97

Balanza MAA, Tindowen DJC (2019) The effects of media exposure to students' core values. Int J Humanit Soc Sci Edu 6(2):1–10. https://doi.org/10.20431/2349-0381.0602001

Cooley CH (1909) Social organization: a study of the larger Mind New York. Scribner's. Disponibil online: https://www.stefamedia.com/sinele-oglinda-charles-horton-cooley/#fn1-6579 (accessed at 09.11. 2022)

Ball-Rokeach SJ, DeFleur ML (1976) A dependency model of mass-media effects. Commun Res 3(1):3–21. https://doi.org/10.1177/009365027600300101

Domingo D, Heinone A (2008) Weblogs and journalism: a typology to explore the blurring boundaries. Nordicom Rev 29(1):3–15

Eslami M, Rickman A, Vaccaro K, Aleyasen A, Vuong A, Karahalios K, Hamilton K, Sandvig C (2015) I always assumed that I wasn't really that close to [her]" Reasoning about Invisible Algorithms in News Feeds. In: Proceedings of the 33rd annual ACM conference on human factors in computing systems 18. pp. 153–162

Jacobsen WC, Forste R (2011) The wired generation: academic and social outcomes of electronic media use among university students. CyberPsychol Behav Soc Network 14(5):275–280. https://doi.org/10.1089/cyber.2010.0135

Jones JM (2015) The looking glass lens: Self-concept changes due to social media practices. J Soc Med Soc 4(1). https://www.thejsms.org/index.php/JSMS/article/view/97

Kim M, Kim C (2018) Personality basis for partisan news media use: Openness to experience and consumption of liberal news media. Mass Commun Soc 21(6):814–833. https://doi.org/10.1080/15205436.2018.1506035

Harrath Y, Alobaidy H (2018) Impact of social networking sites on student academic performance: the case of university of Bahrain. In student engagement and participation: concepts, methodologies, tools, and applications. 1238–1254. IGI Global. https://doi.org/10.4018/978-1-5225-2584-4.ch062

Hashash M, Abou Zeid M, Moacdieh NM (2019) Social media browsing while driving: effects on driver performance and attention allocation. Trans Res Part F: Traffic Psychol Behav 63:67–82. https://doi.org/10.1016/j.trf.2019.03.021

Helou AM, Rahim NZ (2014) The influence of social networking sites on students' academic performance in Malaysia. Int J Electron Comm Stud 5(2):247–54

Knobloch-Westerwick S (2014) Choice and preference in media use: advances in selective exposure theory and research. Routledge Taylor & Francise Group

Issa AO, Aliyu MB, Akangbe RB, Adedeji AF (2012) Reading interest and habits of the federal polytechnic students. Int J Learn Devt 2(1):470–486. https://doi.org/10.5296/ijld.v2i1.1470

Marlowe JM, Bartley A, Collins F (2017) Digital belongings: the intersections of social cohesion, connectivity and digital media. Ethnicities 17(1):85–102. https://doi.org/10.1177/1468796816654174

Moon AL (2011) The impact of Facebook on undergraduate academic performance: implications for educational leaders. (Doctoral dissertation, Central Michigan University)

Nauert R (2013) Social media, facebook and twitter use may harm grades of college freshman. http://psychcentral.com/news/2013/04/12/social-media-use-may-harm-grades-of-college-freshman/53711.html. Accessed Apr 2022

Ndaku AJ (2013) Impact of social media on students' academic performance. A study of students of university of Abuja. Unpublished B. Sc. Dissertation. Department of Mass Communication Management and Social Sciences. Caritas University, Enugu, Nigeria

Obaje C (2011) Awareness and utilization of the internet by students of Kwara and Benue States Universities in Nigeria. Nigeria J Comm 9(1):235–261

Okorafor AO, Okorafor PN, Ike CU (2012) Enhancing human capacity building in open distance education through information communication technology in Nigeria. J EduMedia Tech–JEMT. 16(2):16–22. https://www.researchgate.net/publication/307601637

Owusu-Acheaw M, Larson AG. (2014) Reading habits among students and its effect on academic performance: a study of students of Koforidua Polytechnic. Lib Philosophy and Practice. p.0_1. http://digitalcommons.unl.edu/libphilprac/1130?utm_source=digitalcommons.unl.edu%2Flibphilprac%2F1130&utm_medium=PDF&utm_campaign=PDFCoverPages

Palani KK (2012) Promoting reading habits and creating literate society. Res World 3(2):90

Pea R, Nass C, Meheula L, Rance M, Kumar A, Bamford H, Nass M, Simha A, Stillerman B, Yang S, Zhou M (2012) Media use, face-to-face communication, media multitasking, and social well-being among 8-to 12-year-old girls. Devt Psy 48(2):327–336. https://doi.org/10.1037/a0027030

Salman A, Ibrahim F, Abdullah MY, Mustaffa N, Mahbob MH (2011) The impact of new media on traditional mainstream mass media. Innov J Public Sector Innov J 16(3):1–1

Sharma S, Behl R (2022) Analysing the impact of social media on students' academic performance: a comparative study of extraversion and introversion personality. Psychol Stud 67(4):549–59. https://doi.org/10.1007/s12646-022-00675-6

University, Landmark University | (2018) Student Life https://lmu.edu.ng/life-lmu/student-life Retrieved 2018-01-17

Volker T (1975) The Animal in Far Eastern Art: And Especially in the Art of the Japanese Netzsuke, with References to Chinese Origins, Traditions, Legends, and Art (No. 6-7). Brill

Watson J (2001) How to determine a sample size: Tipsheet# 60. Penn State cooperative extension, University Park, PA, Retrieved on 21(10):2012

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Conceptualization, AAM, JAO; methodology, AAM, SOE-O, and AOA; software, AAM, UIE, and CA; validation, JAO, DIO, and UIE; quantitative analysis, AAM; SOE-O, and AOA; qualitative analysis, AAM, OWO, and CA; investigation, AAM; and RAA; resources, A-LAI, and RAA; data curation, SOE-O, and OAA; writing—original draft preparation, AAM; writing—review and editing, AAM, RAA, DIO, A-LAI, and OAA; visualization, AAM; supervision, JAO; project administration, JAO; All authors have read and agreed to the published version of the manuscript.

Competing interests

The authors declare no competing interests.

Ethical approval

The study was granted exemption from requiring ethics approval as it does not contain nor require any form of blood experimentation by any of the authors, however, freely given, informed consent to participate in the study was obtained from participants of Landmark University.

Informed consent

Informed consent was obtained from individual participants involved in the study. Participants' confidentiality was upheld and ensured. After all elements of the consent form were carefully, patiently, and clearly explained to the prospective participants, a signed copy of the written informed consent form was obtained from willing participants.

Additional information

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