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RELIGIOSITY AND ETHNOCENTRISM AS PREDICTORS OF CYBER-AGGRESSION AMONG UNDERGRADUATES IN SOUTHEAST NIGERIA.

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Abstract

This study investigated the predictive role of religiosity and ethnocentrism on cyber-aggressive behaviour among undergraduates of three randomly selected Federal Universities in Southeast Nigeria. A total number of 1,011 undergraduates were randomly selected from the student population. They comprised 397 male (39.3%) and 614 female students (60.7%), with ages ranging from 16 to 40 years, a mean age of 22.7 years and a standard deviation of 2.89. Three self-report survey instruments, namely the Religious Affiliation Scale (RAS), the Ethnocentrism Scale (E.S.) and the Cyber-aggression Typology Questionnaire (CATQ) were utilised to collect data for the study. Multiple regression statistics was employed for data analysis using SPSS Statistics v25. The result showed that religiosity did not predict cyber-aggression among undergraduates (β =.27, P >.05). However, ethnocentrism predicted cyber-aggression among undergraduates (β =.28, P<.01). It was recommended that activities such as creating awareness that promote attitude change, negate social loafing, and reduce the perpetration of cyber-aggression is necessary.

***Keywords**: Cyber-Aggression, ethnocentrism, religiosity, students*

Introduction

Expression of aggression in Nigerian Universities has taken new dimensions with the advancement in internet-enabling technology; hence, it was perceived that one of the most currently prevalent forms of aggression is cyber-aggression. Wright (2014) opined that anonymity and permanence of digital content provided by online platforms encourage perpetrators. Aggressive behaviour is one of psychology's oldest and vastly researched topics (Jaffe, Shapir & Yinon, 1981 & 1983; Orpinas & Frankowski, 2001; Li, 2007). However, as an emerging issue, cyber-aggression and impending variables that can predict this concept have yet to be well-researched in Nigeria. Thus, given the devastating consequences of cyber-aggression (Rachoene & Oyedemi, 2015), there is a need to explore some of the psychosocial factors (religiosity, ethnocentrism) that could be implicated in cyber-aggression.

Nigeria is a multi-ethnic society with over 250 tribes and a projected population of 226 million people (National Bureau of Statistics, 2017; National Population Commission, 2018). This large population and ethnic and religious diversity make Nigeria the hub and destination for many multinational investors, including telecommunication and internet service providers (Nigerian Communications Commission, 2018). It also created a market for different levels of internet-enabling devices (e.g., smartphones, laptop computers, tablets). Thus, for over two decades, Nigeria has witnessed an unprecedented surge in mobile communication and other cyber or internet-enabling devices for personal and commercial purposes. The commercialisation of mobile networks and internet services (cybernetics) in Nigeria has

revolutionised and encouraged government agencies, private establishments, and individuals to host websites for business. This process has metamorphosised into universal acceptance of the cyber-world or cyber-culture (Mark & Ratliffe, 2011).

Similarly, it has opened up several social media platforms for interpersonal communication, news and business, which utilise graphics, video, audio and other attractive interfaces that enhance accessible communication (Fewkes & McCabe, 2012; Ahn, 2012; Bhardwaj, 2014; Kim, Kim & Huang, 2014; Yoo & Lee, 2015; Correa, 2016). Such platforms include TikTok, Facebook, WhatsApp, Instagram, IMO, 2go, Twitter and Snapchat, which are usually called new media or social media (Manovich, 2003).

Cybernetics has many advantages and disadvantages (Rachoene & Oyedemi, 2015). The main advantage is that it has eased the stress of doing business and disseminating information among the citizenry; thus, it is a means of social cohesion (Ucho, 2015). However, the misuse of this new media comes with even more devastating consequences ranging from fraud, individualism, addiction, robbery, defamation, moral disengagement, fake news and cyber aggression (Patchin & Hinduja, 2006 & 2011; Li, 2010; Wright, 2014; Rachoene & Oyedemi, 2015; Onikoyi, 2018). All these vices are termed cyber-crime (Cyber-crime Act, 2013).

Many cybercrimes are too broad to be empirically understood in a single study. Thus, it becomes pertinent to examine one of these cybercrimes (cyber-aggression), which has devastating psychological implications and is gradually becoming pervasive among Nigerian youths. A more significant percentage of the Nigerian population is youths (individuals between 18 and 40 years) who spend more time online. Nigeria ranks number one in Africa in terms of mobile internet usage/subscription as a result of a large percentage of subscribers who are predominantly young adults, with a data record of 91,596,757 users as disclosed by the Nigerian Communications Commission monthly internet subscriber data report (Nigerian Communications Commission 2018; News Agency of Nigeria, 2019). Youth utilise cyberspace in their daily routines, ranging from dating, marriage proposals, academic research, betting, online games, e-news, shopping, and health-related matters (Prensky 2001; Hoffman, 2013;), thus making them more vulnerable to common dangers associated with cyberspace interactions. They may likely use aggression to manage perceived grievances in cyberspace, which hurts victims in diverse ways (Hinduja & Patchin, 2010; Li, 2010).

Cyber-aggression is the willful and repeated harm inflicted by using internet-enabled devices such as computers, cell phones, and other electronic devices (Patchin & Hinduja, 2006). Griggs (2010) defined cyber-aggression as the "intentional harm delivered by electronic means to a person or a group of persons, irrespective of age, who perceive such acts as offensive, derogatory, harmful or unwanted". According to the National Crime Prevention Council (2013), cyber-aggression is an action of torment, threatening, harassment, and humiliation meant to embarrass others using the Internet and advanced digital technologies. It encompasses all forms of online aggression, such as cyber-bullying, cyber-harassment, fake news, hate speeches, cyber-stalking, cyber-porn, cyber-victimisation, troll activity, and revenge pornography. In this study, these various forms of cyber-aggression were used interchangeably to represent cyber-aggression. Other examples include simple text messages with hostility and intentionally harmful behaviours such as: "I h8 u" (I hate you), "You are ugly", "I am disappointed in you", "fat fool", "Ugly bitch", rumour mongering/peddling; calling others downgrading, hateful and demeaning names; uploading personal pictures and videos without owners consent; spreading fake news, photo-shopping somebody's picture or video without consent; identity theft and anonymous hacking of online accounts in order to

impersonate and cause harm (Rivers & Noret, 2010; Jane, 2014; Corcoran, McGuckin, & Prentice, 2015).

Several researchers stated that cyber-aggression is an extension of social aggression and suggested that cyber-aggression is similar to traditional forms of aggression, describing it as using a new communication tool (Patchin & Hinduja, 2006; Smith, Mahdavi, Carvalho, Fisher, Russell & Tippett, 2008). Intentions of cyber and social aggression are the same, which is to cause harm, and cyber-aggression should be considered an extension of other traditional forms of aggression due to similar impacts and behaviours (Li, 2007, 2010).

For example, traditionally, among students, one expected aggressive behaviour is bullying. Bullying behaviour can continue online as cyberbullying, which is more dangerous because of its widespread effect, especially on social media. It takes many behavioural forms, which include spreading nasty rumours (bordering either on ethnic, religious, racial, socio-economic status, disability, gender, or sexual orientation); ridiculing or demeaning a person; social exclusion; unwelcome sexual advances; stalking; threatening someone (either directly or online); revealing personal information about a person which was shared in confidence (Cowie & Myers, 2016a, 2016b).

The prevalence and consequences of cyber-aggression cannot be ignored. Globally, this phenomenon was underestimated, and the consequences have not been contained even with all the technological, legal and economic inputs engaged in curtailing this behaviour; perhaps, it may be attributed to poor regulations during the early days of Internet activities (Prensky, 2001; Hoffman, 2013). Presently, the prevalence of cyber-aggression in Australia, Europe and America ranges from 5% to 49.5% (NCH, 2002) (cited in Li, 2007); Ybarra, M., & K. Mitchell, 2004; Campbell, 2005; Noret & Rivers, 2006; Slonje & Smith, 2008; Cross, Piggen, Douglas, & Vonkaenel-Flatt, 2009; Mishna, Cook, Gadalla, Daciuk, & Solomon, 2010; Olweus, 2012;). Likewise, the history of religious conflicts in Nigeria has also shown that religiosity can shape attitudes toward bad in cases of extremism and fanaticism (Moghaddam, 2005; Mohammad, 2005; Ushe, 2012; Ezeonwuka, 2018). Religious conflict perpetration has evolved from the offline world to the virtual world, as observed in daily social media interactions. People fight virtually daily, from payment of tithes to a public display of charity, which some perceive should be secretly exercised.

Religiosity is the extent to which individuals engage in religious activities, hold strong views, and believe in prescribed religious practices (Omoluabi, 1995). It is also a commitment to, identification with, and involvement in religion or a system of religious beliefs. Religious commitment is the degree to which a person adheres to his or her religious values, beliefs, and practices (Hill & Hood, 1999). It denotes the importance or prevalence of religion in a person's life.

Nigerians are typical religious people. Generally, Nigerians are highly involved with different religious denominations and groups. Predominant religious sects that dominate the Nigerian religious hemisphere, among others, are Christianity, Islam, and African traditional religions. Christianity includes various denominations, such as Catholic, Anglican, Pentecostal, Methodist, and Presbyterian. These denominations differ significantly in doctrine and religious beliefs based on different levels of understanding and interpretation of the Holy Bible. Islam consists of the Sunni and Shiite factions of the Muslim religion. These Islamic factions differ significantly in understanding and interpreting the Holy Quran. African traditional religion consists of traditional practices and customs that differ across cultures in

Nigeria with attendant superstitions, myths and worship of deities symbolised by the four elements: water, land, fire and wind, which promote adherence and commitment.

The worship of a supreme being is consistent in these religious sects. Personal sacrifice and obedience to divine instructions are sacrosanct. Subjective feelings, thoughts and behaviours emanate from a search to please the sacred and fulfil a need for social identity; affiliation and wellness are some of the contents of religious practice and commitment. Believing in, belonging to and being active in religious organisations gives individuals hope, relief, and something to turn to in solving life's challenges and problems in the acquisition of unconditional love and in dealing with conflict (Rice, 1999). Religion fosters an understanding of one's relationship in numerous moral and ethical messages in religious teachings (Hill & Hood, 1999; Zinnbauer, Pargament, & Scott, 1999; Koenig, McCullough, & Larson, 2001;).

Ethnocentrism is a tendency or disposition to judge other ethnic groups, cultures, nations, or societies by the standards and customs of one's own culture, often accompanied by a dislike or misunderstanding of other such groups and a belief in the intrinsic superiority of one's own (Colman, 2003). This negative tendency has been variously labelled as ethnocentrism (Sumner, 1906), inter-group bias (Rabbie, 1993), in-group favouritism or in-group/out-group differentiation (Tajfel, 1981, 1982; Rabbie, 1993; Dougherty & Pratlzgraff, 1996). It has many commonalities with stereotyping, mirroring, prejudice, discrimination, xenophobia, racism, scape-goat theory and enemy images (Öğretir & Öscelik, 2008). It denotes a cultural narrowness in which the ethnically-centred individual rigidly accepts his or her in-group while rejecting the out-group.

Ethnocentric individuals judge other groups relative to their ethnic group or culture, especially with concern for language, behaviour, customs and religion. It is a significant reason for divisions among members of different ethnicities, races and religious groups. They believe that they are better than others for reasons based majorly on heritage and are related to problems of racism, stereotypes and prejudice. Nigeria has experienced several aggressive conflicts due to ethnocentrism; often, they come with religious or ethnocentric undertones (Ushe, 2012; Umezinwa, 2012; Ujumadu, 2017).

Theoretical framework

General Aggression Model (GAM)

The General Aggression Model (GAM) is a social-cognitive model that includes personal, biological and situational factors that interact to produce various cognitive, emotional, physiological and behavioural outcomes (Anderson & Bushman, 2002). Person and situational factors are termed 'input variables' in the general aggression framework. Person factors include personality traits, sex, gender, beliefs, attitudes, values and long-term goals. Situational factors include aggressive cues, provocation, frustration, pain, discomfort, drugs, and incentives. These input variables influence the final behaviour outcome through the present internal state which they create. It is a comprehensive and integrative framework within which multiple social, cognitive, and developmental theories are incorporated to aid comprehension of human behaviour. Some theories incorporated into the general aggression model (GAM) include social learning theory, behavioural script theory, and cognitive neo-association theory. Each theory offers crucial insight into why people behave aggressively, especially regarding media effects. Suppose the environment, such as parents, peers, society, religious organisations, and social groups, does not reinforce aggressive behaviours but

instead rewards non-aggressive solutions to conflict. In that case, a non-aggressive behaviour style becomes more likely to manifest. Exposure to prosocial content in media leads to both long-term and short-term prosocial tendencies. GAM applications are not limited to media effects research, nor were they ever intended as merely a model for media effects. Instead, as a general model of aggression, GAM can be and is applied to numerous other aggression research topics, such as cyber-aggression. These include (but are certainly not limited to) provocation, intimate partner violence, intergroup violence, global climate change effects on violence, and suicide.

Theory of Relative Deprivation

The theory of relative deprivation was propounded by Stouffer (1950) (cited by Pettigrew, 2015). However, it was based on the work of Hovland and Sears (1940) (cited by Hepworth & West, 1988), who noticed that during the recession in 1930 in the United States of America, there was an increase in anti-black violence and lynching. Relative deprivation occurs when individuals or groups subjectively perceive themselves as unfairly disadvantaged and marginalised over others who perceive themselves as having similar attributes and deserving similar rewards. It contrasts with absolute deprivation, where biological health is impaired or where relative levels of wealth are compared based on objective differences. Discontent feelings arising from relative deprivation have been used to explain radical politics, religious conflicts, the rise of social movements, industrial disputes and the whole plethora of crime and deviance; inequalities on economic and ethnic grounds between groups seem to bring about hostility between persons or groups.

In Nigeria, people have experienced riots, aggression and violence emanating from religious and cultural teachings, where one group sees opportunity in other groups and feels that they should be able to have access to the same opportunity (national cake); for example, the disparity between Northerners and other geopolitical zones in Nigeria. Opportunities and amenities include Government presence, an equal share of states, federal road networks, housing, job opportunities and security. Another example is the systemic form of deprivation that created restiveness in the Niger Delta, hence the creation of all kinds of militant groups who organise to blow up crude oil pipelines. It is a fact that the Nigerian leadership are unfair to the youth in the Niger Delta; utilising the oil drilled from their land to develop other places is not correct; cleaning up oil spillage that has destroyed their lands and waters has been politicised. Another example is the creation of MASSOB and IPOB secessionist groups in the southeast. These youths organised themselves to fight because it was perceived that the southeast had been relatively deprived of development and left out in the scheme of things in Nigeria. The Nigerian government sent the military to enforce sanity in response to this aggression. Efforts have been made to maintain the peace in Nigeria. What efforts have been made to control the organisation in cyberspace? In today's world, individuals who are relatively deprived and aggrieved go online to vent their aggression.

Hypotheses

The following hypotheses were tested to provide direction to the study.

1 Religiosity will predict cyber-aggression among undergraduates in Southeast Nigeria.
2 Ethnocentrism will predict cyber-aggression among undergraduates in Southeast Nigeria.

Method

Participants

A total number of 1,011 undergraduate participants filled out copies of the questionnaires administered in three Federal Universities. These universities were randomly selected via simple balloting by dip-picking three of the five federal universities in Southeast Nigeria. Those selected include Alex Ekwueme Federal University, Ndufu-Alike, Ebonyi State (AE-FUNAI); Nnamdi Azikiwe University, Awka, Anambra State (UNIZIK); and University of Nigeria, Nsukka, Enugu State (UNN). They comprised of 397 (39.3%) male undergraduate students and 614 (60.7%) female undergraduate students (N=1011), with age ranging from 16 to 40 years. The mean age of participants was 22.7 years, and the standard deviation was 2.89. Participants were all Christians (100%) who owned internet-enabling devices and were registered members of at least one or more social media platforms.

Instruments

Three instruments (Religious Affiliation Scale, Ethnocentrism Scale, and Cyber-aggression typology questionnaire) were merged into one questionnaire designed to collect data from respondents.

Religious Affiliation Scale (RAS)

Religious Affiliation Scale (RAS) is a 21-item scale developed by Omoluabi (1995); it was used to assess religiosity and ascertain the extent to which respondents commit or engage in religious activities and hold strong religious views and beliefs in prescribed religious practices. Sample items include: "I believe in the Supreme God / Allah" and "I am a member of some Christian / Muslim societies". To accommodate respondents from the African Traditional Religious group, a few changes and additions were made to items 1, 2, 3, 4, 5, 6, 9, 10, 11, 13, 15, 17, and 21. Some words were changed or replaced, such as: 'God/Allah' was changed to 'Supreme Being' for item 1; 'born again' was changed to 'committed Christian, Muslim or traditionalist' in item 2; 'shrine' was added to item 3; cultural societies were added to item 4; 'shrine' and 'sacrificial offerings' was added to item 5; 'cultural festivals and shrine' was added to items 6,9,10,11,13; 'cite incantations' to item 15; 'charm' to item 17 and 'sect' to item 21 respectively. The response format is true or false, where TRUE is scored 1, and FALSE is scored 0. (Erinosho, 1996, as cited in Onwukwe, Njemanze, Ebeh, Nwazonobi and Ojiaku (2017), obtained a divergent validity of -0.26 by correlating RAS with Life Satisfaction Index (LSI) (Neugarten, Havighurst & Tobin, 1961). A Cronbach's Alpha reliability coefficient of .79 and a convergent validity score of .32 were obtained from a pilot test in this study among 97 undergraduate students in Chukwuemeka Odumegwu Ojukwu University, Igbariam, Anambra State, for Religious Affiliation Scale (RAS). The validity score of .32 was obtained when the Religious Affiliation Scale was correlated with the Age Universal Religious Orientation Scale (AUROS) developed by Gorsuch and Venable (1983).

Ethnocentrism Scale (ES)

The Ethnocentrism Scale (Revised) was developed by Neuliep and McCroskey (2013) and was used to measure ethnocentrism in this study. The scale is a 22-item instrument measured on a 5-point Likert scale where 1 = strongly disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, and 5= = strongly agree. Sample items of the scale include: "Most other cultures are backwards compared to my culture", "Other cultures should try to be more like my culture", and "Lifestyles in other cultures are just as valid as those in my culture" (reversed), "Other cultures should try to be more like my culture". This scale is valid (Nwafor, Obi-Nwosu, Atalor & Okoye, 2016) and has a Cronbach's Alpha reliability coefficient of .92, as Neuliep (2002) reported. A Cronbach's Alpha reliability coefficient of .71 and divergent validity were obtained for ethnocentrism from a pilot test in this study among 132 undergraduate students

in Oko Federal Polytechnic, Oko, Anambra State, Nigeria. The Ethnocentrism Scale was correlated with the Global Index Scale [GIS] by Türken & Rudmin (2013), and a divergent score of -0.26 was obtained.

Cyber-Aggression Typology Questionnaire (CATQ)

This study used a cyber-aggression typology questionnaire developed by Runions, Bak, and Shaw (2017) to measure cyber-aggression. It is a 29-item instrument on a 7-point Likert scale where 1 = Strongly Disagree, 2 = Disagree, 3 = Partially Disagree, 4 = Neither Agree nor Disagree, 5 = Partially Agree, 6 = Agree, and 7 = Strongly Agree. Sample items include: "If someone tries to hurt me, I will use an ICT device to get back at them immediately". "If someone makes fun of me on the internet, I get frustrated and respond angrily right way". "Sometimes I can be mean to people online to get what I want". The scale is valid, having undergone content, construct, convergent and divergent validation with a Cronbach-alpha reliability coefficient of 0.89, as reported by Runions et al. (2017). This instrument is valid for use in Nigeria (Haruna, 2015). A Cronbach's Alpha reliability coefficient of .85 and a convergent validity score of .46 were obtained from a pilot test in this study among 132 undergraduate students in Oko Federal Polytechnic, Oko, Anambra State, for the Cyber-Aggression Typology Questionnaire. The convergent validity score was obtained when the Cyber-Aggression Typology Questionnaire was correlated with the Aggressive Behaviour Scale developed by Orpinas and Frankowski (2001).

Procedure

Three (3) Federal Universities: Alex Ekwueme Federal University, Ndufu-Alike, Ebonyi State [AE-FUNAI]; Nnamdi Azikiwe University, Awka, Anambra State [UNIZIK], and University of Nigeria, Nsukka, Enugu State [UNN]), were randomly selected from the five (5) Federal Universities in the southeast through simple random sampling technique (ballot). The remaining federal universities not randomly selected were the Federal University of Technology, Owerri, Imo State (FUTO), Michael Okpara University of Agriculture, Umudike, and Abia State (MOUA). Using the infinite sample size formula for an unknown population (Mensah, 2013), 350 copies of the questionnaire were arranged for distribution to each randomly selected University, giving a total of 1,050 copies administered. Informed consent by participants was obtained orally. A total number of 334 (95.4%) questionnaire copies were obtained from AE-FUNAI, 341 (97.4%) copies were obtained from UNIZIK, and 336 (96%) copies were obtained from UNN, respectively. After that, copies of the questionnaires administered were collated, screened, scored and utilised for data analysis.

Design and Statistics

This study used a correlation design, multiple regression statistics for data analysis, and the Statistical Package for the Social Sciences (SPSS Version 23) to manage the raw data obtained from the study.

Results

The statistical analysis results of data obtained from this study are currently presented in Tables 1, 2, and 3. **Table 1** presents the descriptive data assessing the normal distribution of data, skewness, kurtosis, mean and standard deviation of study variables. **Table 2** summarises the zero-order correlation coefficient matrix and determinant of study variables. **Table 3** summarises multiple regression analysis of Religiosity and Ethnocentrism as predictors of Cyber-aggression among undergraduates in South-Eastern Nigeria.

Table 1: Descriptive data assessing the normal distribution of Data, Skewness, Kurtosis, Mean and Standard Deviation of study variables

S.N.	Variables	N	Minimum	Maximum	Mean	SD	Skewness		Kurtosis	
							Statistic	Std Error	Statistic	Std Error
1	Cyber-aggression	1011	29	145	70.09	20.45	.05	.07	-.25	.15
2	Religiosity	1011	4	21	15.40	3.70	-.43	.07	-.24	.15
3	Ethnocentrism	1011	22	110	66.30	10.88	-.40	.07	2.14	.15

Table 1 presents the descriptive table for the normal data distribution using skewness and kurtosis. The results showed that all the study variables were normally distributed, ranging from .54 to -.72 for skewness and 0.24 to 2.82 for kurtosis, respectively. Cyber-aggression has a mean value of 70.09 and a standard deviation of 20.45. Religiosity has a mean value of 15.40 and a standard deviation value of 3.70. Ethnocentrism has a mean value of 66.30 and a standard deviation value of 10.88

Table 2: Summary of Zero-order Correlation Coefficient Matrix and Determinants (r^2) of study variables

S/N	Variables	Cyber-aggression	Religiosity	Ethnocentrism
1	Cyber-aggression	1		
2	Religiosity	.06* ($r^2 = 0.36$)	1	
3	Ethnocentrism	.26** $R^2 = 6.76$	.02	1

**Correlation is Significant at P < .01 (2-tailed)
* Correlation is Significant at P < .05 (2 tailed)

Table 2 summarises zero-order correlation coefficients and determinants (r^2) of study variables: Cyber-aggression, Religiosity and Ethnocentrism among undergraduates in Southeast Nigeria. As can be observed, religiosity gave an r-value of .06 and an r^2 value of .036, and ethnocentrism gave an r-value of .26 and an r^2 value of .067.

Table 3: Summary of Multiple Regression Analysis of Study Variables

Models	R^2	Df, (df2)	F	β	Standard Error	t	P
Model	.12	4(1010)	35.73				
Religiosity				.27	.16		.35
Ethnocentrism				.28**	.05		.00

DV – Cyber Aggression (CATQ)
* = P< .01
* = P < .05

The results of multiple regression using the enter method show that the four independent variables contributed 12%, and adjusted R^2 is .12. This model is significant at $F(4,1010) = 35.73$, $P< .01$.

The beta coefficient table shows that religiosity did not significantly predict cyber-aggression (β = .27, $P>.05$). ethnocentrism significantly and positively predicted cyber-aggression (β = .28, $P< .01$).

Discussion and conclusion

The results showed that religiosity did not predict cyber-aggressive behaviour among undergraduates in southeast Nigeria. However, ethnocentrism predicted cyber-aggressive behaviour among undergraduates in southeast Nigeria. Ethnocentrism significantly and positively predicted cyber-aggressive behaviour, while religiosity did not predict cyber-aggression in this study. Previous studies on the influence of religion on aggression generally were similar to this finding (Pabian & Vandesbosch,2014). This provides crucial information where necessary for designing interventions. However, although no definite study has been conducted in Nigeria about cyber aggression and religiosity, this study suggested that religiosity may not likely increase cyber aggression. What direction that may have been interesting is testing whether religious denomination will have an impact on cyber aggression and whether people will be more likely to show aggression towards people from different religious denominations (e.g. Muslims vs Christians)

On the contrary, the second hypothesis was confirmed. Ethnocentrism significantly and positively predicted cyber-aggression. This implies that ethnocentrism is a strong predictor of cyber-aggression perpetration among undergraduates in the southeast of Nigeria. The finding is in agreement with Romera et al. (2017), who found that interpersonal contextual factors had a significant positive relationship with cyberbullying. The work of Bauman and Baldasare (2015) on levels of distress in the perpetration of cyberbullying also agrees with the findings of this research. This finding was also supported by Wright and Li (2012), whose findings indicated that cyber-victimisation in social contexts may endanger maladaptive coping strategies such as cyber-displaced aggression, revenge and motivation to retaliate against perpetrators. Such maladaptive coping response strategies are perpetrated through

social media platforms, especially WhatsApp, Facebook and Instagram, as observed by the researcher. Daily in Nigeria, political texts and videos that border on ethnocentrism and other psychosocial issues are passively shared via WhatsApp, Facebook, and Instagram.

Unfortunately, the researcher observed that while most information shared by individuals is accurate, the majority are hate speeches and fake news created as propaganda to boost perceived marginalisation mentality and prejudice among ethnic groups. The Nigerian-Biafran civil war and several other genocidal pogroms against south-easterners residing in Northern Nigeria are strong reinforcers of this ideology. Such violent history increases levels of distress, especially in times of rising insecurity and activities, as experienced by residents in the southeast (Agbakwuru, 2019). Undergraduates from Southeast Nigeria are active social media discussants of social and political events in Nigeria. Inspection of online daily newspaper commentaries and social media platforms such as Facebook, Twitter, and Blog sites revealed that individuals from different Nigerian cultures exchanged heated arguments, insults, and disagreement sessions. Such hostile communications and arguments are regular occurrences, which most times erupt in aggressive behaviour among ethnic groups in Nigeria.

Implications of the Study

Theoretically, findings from this study added to the body of knowledge on cyber-aggression. They extended the frontier of knowledge on the predictive roles of religiosity and ethnocentrism among undergraduates in Southeast Nigeria. Results from the study provided information for the enhancement, deeper understanding, and conceptualisation of study variables, as well as the necessity for students to be sensitised to the influences of ethnocentrism to reduce cyber-aggression perpetration and avoid falling victim online. Practically, findings from this study imply that the National Universities Commission (NUC), Ministry of Education, Vice-Chancellors and other relevant stakeholders in the education sector need to take measures to monitor the online behaviours and activities of students to reduce the perpetration and victimisation of vulnerable students in their institutions. Understanding the behavioural online patterns of undergraduate students will enable promulgating policies, rules, and regulations that will moderate, modify, and check students' negative online behaviour, such as cyber-aggression. Psycho-educational intervention should be sponsored and promoted by the university management (especially as it relates to ethnocentrism) to help reduce cyber-aggressive perpetration and online passivity. This will also promote and instil positive values in students, enhance online sensitivity/ carefulness and improve undergraduate students' academic performance and psychological well-being.

Limitations of the Study

Only selected undergraduates participated in this study., so generalisationsbeyond this group should be made with caution. The population was limited to undergraduate students in South-Eastern Nigeria. Secondly, the present study does not infer causation; hence, only linear inferences were implicated.

Suggestions for Future Studies

These limitations suggest several directions for future research on cyber-aggression. Manipulation of independent variables in experimental conditions is hereby recommended. Further research with a mature adult population should be conducted to explore the nature of religiosity and ethnocentrism in cyber-aggressive behaviour. Further research on cyber-aggression prevalence, perpetration, and victimisation in other geopolitical zones in Nigeria is also encouraged to capture the diversity in ethnicity and religious affiliations in Nigeria.

Recommendations

i. Inclusion of language-restraining online technology with the capacity to detect and restrain cyber-aggressive behavioural words and language patterns, especially ethnocentric behaviour. This should be introduced in social media and online newspaper comment pages to deter perpetrators.
ii. Psycho-education and inoculation therapy against negative social loafing should be introduced among Southeast Nigeria undergraduates to reduce perpetration and boost confidence in conformity to standard legal norms, rules and regulations.
iii. Interventions that work with peer group relationships among young adults (undergraduates) should be encouraged to keep student minds busy on engaging positive ideals.
iv. Parents should discuss the benefits, challenges, and risks of internet technology with their children in order to provide mature social and emotional support in difficult times.
v. Lawful punishment should be applied to perpetrators of cyber-aggression to serve as deterrence to shape and weaken cyber-aggressive behaviour in current and intended offenders.

Conclusion

From the findings in this study, it is evident that cyber-aggression is a potent issue in this generation, where digital communication via the Internet has evolved into a significant means of interpersonal communication among undergraduates. Understanding the risk factors implicated in cyber-aggression is vital to developing strategies that will target discouragement and management of cyber-aggression. To this end, the present study isolated ethnocentrism and peer relation as crucial risk factors that predicted cyber-aggression. Therefore, university management, policymakers, caregivers, therapists, researchers, and stakeholders in tertiary educational systems may put more effort into developing ways of managing these critical predictor variables of cyber-aggression. Further research is therefore needed on how to integrate this knowledge into practice and therapy.

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