

Curbing the Influence of Digital Video Games on Teenagers as a Panacea for Security Challenges (A Case Study of Northeast Nigeria)

Odesanya Akeem Dele

Department of Computer Science, Federal Polytechnic Bali, Taraba State

Email: deleodesanya3@gmail.com

Abstract

This paper examined the effects of digital video games among teenagers in Northeast Nigeria on security challenges in Northeast Nigeria on present security challenges as well as to proffer possible solution to the present security challenges posed by exposure to digital video games. The study formulated two research questions and one hypothesis. The population for the study comprises of 10 million teenagers in Northeastern Nigeria out of which four hundred and fifty (450) was purposefully selected randomly based on the Krejcie and Morgan Table. But the four hundred and thirty (430) questionnaires were retrieved and used for the study. The Arithmetic Mean was used to analyze and answer the research questions while Chi-Square technique was used to test the hypothesis formulated for the study. The result of the study revealed that teenagers' exposure to digital video games in Northeast Nigeria have negative impacts and contributes immensely to the present security challenges in the region. The researcher recommended among many others that the teenagers and the young adults should be properly guided on the use of ICT gadgets and that adequate orientation should be given to them on the impacts of digital video games on the present security challenges.

ARTICLE HISTORY

Received: August 16, 2022

Revised: October 6, 2022

Accepted: November 2, 2022

Keywords: Security Challenges, Digital Video Games, ICT, Teenagers, Exposure

Citation

Odesanya, A. D. (2022). Curbing the Influence of Digital Video Games on Teenagers as a Panacea for Security Challenges (A Case Study of Northeast Nigeria). *International Journal of Women in Technical Education and Employment*, 3(2), 20–30.

Introduction

Digital video game could be defined as a system in which people referred to as players engage in artificial structured conflict simulation that is defined by rules which is expected to bring quantifiable results (Meshi, et al, 2015). A digital video game is played on different platforms and devices such as the computer or a console. Everyone love playing video games, but it is common among teenagers and children between the ages 5 and 17 years (Mills, 2014). Video games serve as avenue for social activity as a result of latest changes in the development of the tools that allow the interaction of multiple players online. Digital video games are of different structures, there are some that

are designed to enhance sociability of the people, some for testing the critical thinking ability of the player in arriving at some decision and providing solutions (Norris, et al. 2016) while some are focus on the use and proper handling of some real-life objects like guns, motorbikes, motorcycles etc. Digital video games have both positive and negative effects on children and teenagers. Many studies have shown that exposure to video games can increase aggressive behaviour according to Orben & Przybylski (2019) and desensitization to violence (Przybylski, 2019). In studies conducted by Starcevic (2017) and Lee, et al. (2017)), it was identified that the negative effects of gaming also include depression, loneliness, aggression, self-defense and addiction.

Furthermore, Gaming is no longer a strange vocabulary in the normal activities of people especially the teenagers and young adults (Starcevic, 2017). In recent past children run to a particular center designated as gaming centers where they pay or beg to play games and participate in gaming activities. Today, the advent of computers and various IT gadgets have made the work easier for the teenagers, they now have different kinds of games on their Personal Computers and mobile devices (Sim, et al, 2012). The modern-day youths are even much more comfortable playing games online with other players across the world. Digital Video Games (DVGs) is very common among the teenagers as their parents and guardians supported them and buy those ICT gadgets for them. Digital Video Games keeps the teenagers busy as they spend most of their time playing games either all alone by themselves on single player or with other players (Turner, et al., 2012). The video game industry is increasing in values excess of billion dollars on yearly basis and the attention of many youths and teenagers have been captivated (Juan, et al., 2017; Hopkins, et al., 2013).

Király & Demetrovics (2017) also observed that, teenagers play, learn and socialize through video games to the extent that it is now becoming very difficult to separate it from the normal life of some teenagers. Digital Video Games is the major recreational hobbies of many youths and people in our today society (Islam, et al., 2020). There are many reasons while people especially teenagers engage in the playing of digital video games and some of the reasons are fun catching and relaxation, mental challenge and stress reliever. Kuss & Griffiths (2011) & Bourgonjon, *et al.* (2013) agreed that video games have both positive and negatives effects on children which actually depend on how they are guided and the type of video games they are exposed to. Video games have the tendencies to improve teenagers' cognitive functions, help the hand and eye coordination of teens, contributes to their quick thinking and accuracy, aids

in the development of problem-solving skills in teens, it can also improve the moods of teens and ward off anxiety (Ng, et al., 2018). However, Norris, et al. (2016) and Kato (2017) pointed out that digital video games have some negative effects which are mostly related to the amount of play and the game content. It is agreed that too much of exposure to very violent video games can make children exhibit behaviours that are not acceptable in the society and consequently learn and imitate the characters they watched and played (Sim, *et al.*, 2012).

The group observation of teenagers and the report from the works of Ogunleye-Adetona (2010) and (Ebohon & Ifeadi, 2012) are coherent to the facts that most children and teens learn to perform some certain skills from their engagement in the technology. Many are exposure to the functions and parts of a motorcar, bicycle and bike through playing digital video games. Some of the teens even attempt to drive a car or ride a bike through what they have seen and be engaged with on their mobile device through playing video games (Nwagboso, 2012; Hale & Guan, 2015). Teenagers learn the operation of various weapons such as guns, arrows and even bomb planting and how to use them. (Igbuzor, 2011) pointed out that children who are exposure to the use of gun will not hesitate to practice it when the opportunity present itself to them for real weapons if not guided and controlled.

Security which is the duty of everybody is one of the major contemporary issues in the Northeastern region of Nigeria and in the areas of the country. Security challenge is any activity, event or occurrence that threatens the life and property of people. These are actions or events that put other people's lives, materials and means of livelihood at risk (Stern & Ojendal, 2010). The major security challenges that Nigeria is battling with borders on activities of Jihadists, clashes between herders and farmers, oil militancy, insurgency, banditry and kidnapping, frauds and cybercrimes (Hettne, 2010). In all the

categories of the threats to the national security, the percentage of the youth's contribution and population is high. The youths and the teenagers are the major group found in the forefront of these security challenges (Adagba, *et al.*, 2012). Many of them have been exposed and they are being recruited to threaten the lives of others and given weapons to use. Kim and Chang (2010) noted that though it might not be immediate but the constant exposure and utilization of violent digital video games by children will not leave them without a mark in their life. Many children learn bullying, aggressive behaviours, cheating, fraud and various other forms of cybercrimes online (Adeola & Oluyemi, 2012).

In addition, Adachi & Willoughby (2013) in their study noted that most of these negative effects of children's exposure to video games can be linked to excessive gameplay. On the contrary, many studies have also shown that exposure to video games can improve and increase the cognitive learning abilities of children (Bourgonjon, *et al.*, 2013). Taking subject such as Mathematics for example, Turner, *et al.* (2012) realized that students playing games relating to cooperative group video play showed the most positive attention and attitudes towards Mathematics than others who only played interpersonal competitive games. Aside learning, there is also evidence that video games can affect the social behaviour and emotional stability of children (Sim, *et al.* 2012). It does affect their social interactions and civic engagements in the society. They are more willing to volunteer and help other after been engaged in a video game where civic responsibilities are called to questions. Some digital video games enabled their players to be more creative and critical when attending to live issues (Jarvin, 2015). The puzzle or role-playing games have been proved to aid the problem-solving skills of children (Granic, *et al.*, 2013).

The level of insecurity in Nigeria today is a matter of great concern to everyone. Insecurity hinders and

affects national development and for any state or area to survive, grow and developed, national security is inevitable. It is surprising how the rate of crimes and atrocities being committed in the country is increasing on daily basis and the news is filled with stories of various security problem or the other ranging from ethnic militancy, insurgency, kidnapping, armed robbery, cultism, and various acts of cybercrimes. The youth and teens of the average age were the majority of these evil perpetrators. The question now remains, what are factors that contributes to the large percentage of youth population at various levels of security threats to the nation? Whereas there are many factors such as unemployment and low level of socio-economic status among others that could lead to it, the exposure of innocent children to activities that are capable of enhancing their boldness, confident and knowledge on acts of aggressiveness and violence like playing violent video games cannot be neglected. A preliminary study has been carried out by the researcher to survey the level of exposure and utilization of digital video games among teenagers in Northeast Nigeria, result of which revealed that the teenagers are highly exposed to the use of digital video games, and it is therefore on this note that this study look at the effects of video games among teenagers in Northeast Nigeria on security challenge

All the stakeholders in security will benefit maximally from the result of this study. It helps to create security consciousness in people and help the major stakeholders in security issues to channel and look at other areas in their bids to maintain security, law and order in the society. The government, security personnel as well as various community leaders will be able to understand the contributions of teenagers' exposure to violent video games to security threats and potentials areas to check in the area of crime investigations. The parents and guardians will be able to supervise, control and checkmate the engagement and activities of their children especially the teens on video games. Teachers, educators and other

researchers will find the results of this study very useful to them.

This study therefore examined the effects of digital video games among teenagers in the Northeastern Nigeria on security.

Methodology

The study utilized descriptive survey design which was designed to examine the effects of digital video games among teenagers in Northeast Nigeria on security challenges.

The targeted population for the study was comprised of all the teenagers in Northeast Nigeria. The region is made up of six states which includes Adamawa, Bauchi, Borno, Gombe, Taraba and Yobe state and the estimated population of youth of ages 13 to 20 years was 10 million according to the United Nations' projected population for year 20202.

A total sample size of four hundred and fifty (450) teenagers across all states in the Northeast Nigeria was used for the study and this was determined purposefully through a random sampling technique using the Krejcie and Morgan Table. Forty (40) and thirty-five (35) teenagers making a total of seventy-five each were selected from the major public secondary schools and the popular markets respectively from all the states in the Northeast region.

The instrument for data collection for the study was a structured questionnaire that was divided into two sections; Section "A" which was designed to acquire basic information on the demography of the respondents and Section "B" designed basically to solicit information on the perception of teenagers on violent video games and its effects on security challenges in Northeast Nigeria. Five options were provided for the respondents to choose one that contain their decisions. The five points rating scale

options provided for them were coded as thus on the questionnaire; Strongly Agreed (SA), Agreed (A), Undecided (UD), Disagreed (DA), and Strongly Disagreed (SD).

The questionnaires for the collection of data for the study were vetted by three different experts from the Department of Statistics and Computer Science in the Polytechnic Bali to ascertain content and face validity. The questionnaires were considered to be valid for the examination of the effects of digital video games among teenagers in Northeast Nigeria. Pre-testing was carried out for the questionnaires to be tested and the result of it confirmed its reliability. The researcher and three other researcher assistants administered the questionnaire for the collection of the data for the study. The researcher used Arithmetic Mean was to analyze the data in order to provide answers to the research questions and from the collected data, any mean response of 3.00 and above based on the 5 points Likert scale was accepted and considered positive while any mean response below 3.00 was rejected and considered negative. The research hypothesis formulated for the study was tested using the chi-square technique at 0.05 significance level and based on its decision rule; the null hypothesis will be accepted when the computed value of chi-square is lesser than the critical value and vice versa.

Results

The entire four hundred and fifty (450) questionnaires distributed were not to be collected as twenty (20) out of them were not returned. Therefore, the data analysis was based on four hundred and thirty (430) that were retrieved.

Research Question One: What are the perceptions of teenagers in Northeast Nigeria on violent video games?

Table 1: Teenagers’ perception on violent video games.

S/N	Teenagers’ Perception	SA	A	UD	DA	SD	ϵFX	N	\bar{X}	Decision
1	Digital video games involving the use of guns and weapons are interesting to play	185	105	5	65	70	1560	430	3.63	Accepted
2	Teenagers learn the use of guns and weapons through playing video games	170	125	0	82	63	1577	430	3.67	Accepted
3	Violent video games involving actions takes away boredom as compared to others	180	90	2	90	68	1514	430	3.52	Accepted
4	Violent video games are more common in our areas	150	145	0	65	70	1530	430	3.56	Accepted
5	Male teenagers love violent video games more than the females	180	107	0	70	73	1541	430	3.58	Accepted

Source: Field Work, 2022

The responses obtained from the perception of teenagers on violent video games in Northeast Nigeria in table 1 above revealed with mean score of 3.63 that digital video games involving the use of guns and weapons are interesting to play. Also, the mean score of 3.67 accepted the statement that teenagers learn the use of guns and weapons through playing of video games. The respondents agreed with a mean score of 3.52 that violent video games involving actions takes

away boredom as compared to others. Violent video games are more common in the area of the teenagers with mean score of 3.56 and with the mean score of 3.58, it was accepted that male teenagers love violent video games more than the females.

Research Question Two: What are the effects of violent video games on security challenges in Northeast Nigeria?

Table 2: Effects of violent video games on security challenges in Northeast Nigeria

S/N	Effects of video games	SA	A	UD	DA	SD	ϵFX	N	\bar{X}	Decision
6	Violent video games teach teenagers how to be bully	180	117	0	85	48	1586	430	3.69	Accepted
7	Teenagers get interested in violence and fighting through playing violent video games	175	125	5	62	63	1577	430	3.67	Accepted

8	Teenagers who are exposed to excessive violent video games tends to be aggressive among their mates	155	160	0	72	43	1602	430	3.73	Accepted
9	Teenagers exposed to violent video games tends not to be compassionate and can do anything	170	125	0	80	55	1565	430	3.64	Accepted
10	Violent video games makes teenagers to think critically and seeks for opportunities to practice what they have learnt	160	135	0	82	53	1557	430	3.62	Accepted

Source: Field Work, 2022

Table 2 above on the effects of violent video games on security challenges in Northeast Nigeria revealed that violent video games teach teenagers how to be bully with mean score of 3.69 and with the mean score of 3.67 it was accepted that teenagers get interested in violence and fighting through playing violent video games. It was equally accepted that teenagers who are exposed to excessive violent video games tends to be aggressive among their mates with mean score of 3.73 and with mean score of 3.64 the respondents agreed

that teenagers exposed to violent video games tends not to be compassionate and can do anything while with the mean score of 3.62 it was accepted that violent video games makes teenagers to think critically and seeks for opportunities to practice what they have learnt.

Research Question Three: What are the strategies for curbing the influence of violent video games on teenagers?

Table 3: Strategies for curbing the influence of violent video games on teenagers.

S/N	Teenagers' Perception	SA	A	UD	DA	SD	ϵFX	N	\bar{X}	Decision
11	Parental guidance can help in curbing the menace of violent video game	175	115	0	70	70	1545	430	3.59	Accepted
12	Time limit of how long and how often to playing video games.	165	125	0	87	63	1562	430	3.63	Accepted
13	Educating teenagers on the positive and negatives effects of video games.	170	85	2	95	78	1464	430	3.40	Accepted
14	Government policy in accessing the violent video game.	160	140	0	60	70	1550	430	3.60	Accepted
15	Introduction of topics on use of video game in the curriculum of secondary education.	165	107	0	85	73	1496	430	3.48	Accepted

Source: Field Work, 2022

From the table 3 above on the strategies for curbing the influence of violent video games on teenagers, it was revealed that the statement which state that parental guidance can help in curbing the menace of violent video games was accepted with a mean score of 3.59 and the statement that time limit of how long and how often to playing video games was also accepted with a mean score of 3.63. With a mean score of 3.40 the statement that educating teenagers on the positive and negatives effects of video games was accepted and the statement that government policy in accessing the violent video game was equally accepted with a mean score 3.60 while the mean score of 3.48 accepted the statement that the introduction of topics

on the use of video games in the curriculum of secondary education.

The hypothesis in this paper was tested through Chi-Square analysis to make the right decision on the assumption formulated for the work.

H₀: There is no significant relationship between violent video games among teenagers and security challenge in Northeast Nigeria.

H₁: There is significant relationship between violent video games among teenagers and security challenge in Northeast Nigeria.

Table 4: Table of Observed Values

Responses	S1	S2	S3	S4	S5	Total
SA	180	175	155	170	180	840
A	117	125	160	125	135	662
UD	0	5	0	0	0	5
DA	85	62	72	80	82	381
SD	48	63	43	55	53	262
Total	430	430	430	430	430	2150

Source: Fieldwork, 2022

$$\text{Expected Cell } ij = \frac{\text{ith ROW TOTAL} \times \text{jth COLUMN TOTAL}}{\text{GRAND TOTAL}}$$

$$\text{Column 1 – SA} = \frac{840 \times 430}{2150} = 168$$

$$\text{Column 2 – A} = \frac{664 \times 430}{2150} = 132.4$$

$$\text{Column 3 – UD} = \frac{5 \times 430}{2150} = 1$$

$$\text{Column 4 – DA} = \frac{381 \times 430}{2150} = 76.2$$

$$\text{Column 5 – SD} = \frac{262 \times 430}{2150} = 52.4$$

Table 5: Table of Expected Values

Responses	S1	S2	S3	S4	S5	Total
SA	168	168	168	168	168	840
A	132.4	132.4	132.4	132.4	132.4	662
UD	1	1	1	1	1	5
DA	76.2	76.2	76.2	76.2	76.2	381
SD	52.4	52.4	52.4	52.4	52.4	262
Total	430	430	430	430	430	2150

Source: Fieldwork, 2022

The Chi-Square formula used in deriving this was; Chi-Square (X^2) = $(F_o - F_e)^2 / F_e = 39.84$

Table 6: Chi-Square Result

Chi-Square (X^2)	Degree of Freedom (df)	Significance Level (α)	Critical Table Value (p-value)
39.84	16	0.05	26.30

Source: Field Work, 2022

Decision Rule: From the table 6 above, it was seen that the value of Chi-Square calculated is 39.84 while the critical table value is 26.30 and the degree of freedom is 32 at 0.05 level of significance. Therefore, since the value of calculated $X^2 = 39.84$ is greater than the table value p-value = 26.30, the null hypothesis which states that there is no significant relationship between violent video games among teenagers and security challenges in Northeast Nigeria was rejected while the alternative hypothesis that there exist relationship between violent video games among teenagers and security challenges in Northeast Nigeria was accepted.

Discussion of Findings

This study was majorly on the effects of digital video games among teenagers in Northeast Nigeria on security challenges. From the analysis of the result of the study, it was revealed that majority of the respondents perceived that violent video games involving the use of guns and other weapons were common in their areas and that teenagers found them to be more interesting to other types of video games.

This was in consonance with the study of Starcevic (2017) who revealed that teenagers love playing actions video games that get them engaged. (Granic, *et al.*, (2013) pointed out that though it may not be immediate, but children learn consciously and unconsciously from playing video games and this was supported by the study that many of the teenagers learn the use of guns and other weapons of war from playing violent video games. It was perceived that violent video games bring solution the issues of boredom in the lives of the teenagers and that the males are engage and love more violent video games than the females. This somehow goes with the study of Nwagboso (2012) who said the male teenagers tend to be more violence and bully as compared to their female counterparts.

The study showed clearly that excessive exposure of teenagers to violent video games affects and contributes to various security challenges in the society. The study revealed that violent video games teach teenagers how to bully others. It also pointed it out that violent video games make teenagers to be

interested in violence activities and fighting always. Chang, Wu, Weng and Sung (2012) noted that excessive exposure of children to video games could lead to the development of aggressive behaviours in them and the result of this study confirmed to the fact that teenagers who are exposed to excessive violent video games tends to be aggressive among them mates. The study revealed that violent video games dried the tears of compassion out of the eyes of the teenagers that are exposed to excessive violent video games and make them to do anything anyhow. It was revealed that teenagers will love to practice what they learn from violent video games if given the chance and opportunities which was supported by the studies of Ogunleye-Adetona (2010) and Sim, Gentile, Bricolo, Serpelloni and Gulamoydeen (2012) who said children always imitates and act out whatever they learn from digital space.

The study revealed that some of the strategies for curbing the influence of violent video games on teenagers in Northeast Nigeria include parental guidance on the use of violent digital video games by the teenagers and that time limit should be set for teenagers on how long or how often they are to video games which was in conformity with the study of (Hale and Guan (2015). It was also revealed another strategy is that the teenagers should be educated on the positive and negative effects of over exposure to violent video games and that the government should formulate policies and as well introduce the topic of the use of video game into the curriculum of secondary education as a way of curbing the influences and bring about positive solution, the study of (Adagba, et al., (2012) agreed to it that government have major role to play in ensuring the safety and security of everyone in the country.

The researcher provided the following recommendations so as to tackle current and potential security challenges facing the Northeast Nigeria as a result of teenagers' exposure to excessive violent video games.

Parents and guardians should monitor the types of video games installed on their teens' gadgets and devices. Time limit of how long and how often to playing video games should be set for teenagers by their parents. Schools and teachers should educate teenagers on the positive and negatives effects of video games playing. Teenagers should emulate and practice good lessons from the video games they are playing. The government should include topics on use of video game in the curriculum of secondary education especially the civic/security education.

Conclusion

The conclusion drawn out of this study was that teenagers always believed and agreed that violent video games are more interesting, realistic and pleasurable to play as they perceived it to drive away boredom and keep them active. However, excessive exposure of teenagers to violent video games will influence the behaviours, thinking and practices as they tend to be aggressive and bully in their manner and approach and more so, teenagers learn the use of guns and various others forms of weapons through the playing of violent video games and could post a security threat to the society if not properly handled and checked. In curbing the influence of video game on the teenagers, all hands must be on deck as the parents, the teachers, the government as well as the teenagers themselves have their parts to play.

References

- Adachi, P. J., & Willoughby, T. (2013). More than just fun and games: The longitudinal relationships between strategic video games, self-reported problem solving skills, and academic grades. *Journal of Youth and Adolescence*, 42(7), 1041-1052.
- Adagba, O., Ugwu, S.C. & Eme, O.I. (2012). Activities of Boko Haram and Insecurity Question in Nigeria. *Arabian Journal of*

- Business and Management Review*, 1(9), 77-99.
- Adeola, G.L & Oluyemi, F. (2012). The political and security implications of Cross Border Migration between Nigeria and Her Francophone Neighbours. *International Journal of Social Science Tomorrow*, 1(3), 1-9.
- Bourgonjon, J., De Grove, F., De Smet, C., Van Looy, J., Soetaert, R., & Valcke, M. (2013). Acceptance of game-based learning by secondary school teachers. *Computers and Education*, 67, 21-35.
- Chang, K. E., Wu, L. J., Weng, S. E., & Sung, Y. T. (2012). Embedding game-based problemsolving phase into problem-posing system for mathematics learning. *Computers & Education*, 58(2), 775-786.
- Ebohon, S.I & Ifeadi, U.B. (2012). Managing the problems of public order and internal security in Nigeria. *African Security*, 5(1), 1-23.
- Granic, I., Lobel, A., & Engels, R. (2013). The benefits of playing video games. *American Psychologist*, 69(1), 66-78.
- Hale, L. & Guan, S. (2015). Screen time and sleep among school-aged children and adolescents: A systematic literature review. *Sleep Medicine Reviews*, 21, 50-58.
- Hettne, B. (2010). Development and security: Origins and future. *Security Dialogue*, 41(1), 31-52.
- Hopkins, L., Brookes, F. & Green, J. (2013). Books, bytes and brains: The implications of new knowledge for children's early literacy learning. *Australasian Journal of Early Childhood*, 38(1), 23-28.
- Igbuzor, O. (2011). Peace and Security Education: A critical factor for sustainable peace and national development. *International Journal of Peace and Development Studies*, 2(1), 1-7.
- Jarvin, L. (2015). Edutainment, Games, and the Future of Education in a Digital World. *New Directions for Child and Adolescent Development*, 147, 33-40.
- Juan, A.A., Loch, B., Daradoumis, T., & Ventura, S. (2017). Games and simulation in higher education. *International Journal of Education Technology, High Education*, 14, 37-37.
- Kato, P.M. (2017). Serious games for health, well-being, and medical applications. *Digital Medicine*, 3, 43-43.
- Kim, S., & Chang, M. (2010). Computer Games for the Math Achievement of Diverse Students. *Educational Technology & Society*, 13(3), 224-232.
- Király, O. & Demetrovics, Z. (2017). Inclusion of gaming disorder in ICD has more advantages than disadvantages. *Journal of Behavioral Addictions*, 6(3), 280-284.
- Lee, E., Spence, J. & Carson, V. (2017). Television viewing, reading, physical activity and brain development among young South Korean children. *Journal of Science and Medicine in Sport*, 20(7), 672-677.
- Meshi, D., Tamir, D. & Heekeren, H. (2015). The emerging neuroscience of social media. *Trends in Cognitive Sciences*, 19, 771-782.
- Mills, K. (2014). Effects of Internet use on the adolescent brain: Despite popular claims, experimental evidence remains scarce.

- Trends in Cognitive Sciences*, 18(8), 385-387.
- Ng, Y., Khong, C.W. & Nathan, R.J. (2018). Evaluating Affective User-Centered Design of Video Games Using Qualitative Methods. *International Journal of Computer Games Technology*, 1-13.
- Norris, E., Hamer, M. & Stamatakis, E. (2016). Active video games in schools and effects on physical activity and health: A systematic review. *The Journal of Pediatrics*, 172, 40-46.
- Nwagboso, C.I. (2012). Security challenges and economy of the Nigerian State (2007 - 2011). *American International Journal of Contemporary Research*, 2(6), 244-258.
- Ogunleye-Adetona, C.I. (2010). Human resources and economic resources in Nigeria. *Journal of Sustainable Development in Africa*, 12(3), 204-211.
- Orben, A. & Przybylski, A.K. (2019). The association between adolescent well-being and digital technology use. *Nature Human Behaviour*, 3, 173–182.
- Przybylski, A.K. (2019). Digital screen time and pediatric sleep: Evidence from a preregistered cohort study. *The Journal of Pediatrics*, 205(1), 218-223.
- Sim, T., Gentile, D. A., Bricolo, F., Serpelloni, G., & Gulamoydeen, F. (2012). A conceptual review of research on the pathological use of computers, video games, and the Internet. *International Journal of Mental Health and Addiction*, 10(5), 748-769.
- Starcevic, V. (2017). Internet gaming disorder: Inadequate diagnostic criteria wrapped in a constraining conceptual model. *Journal of behavioral addictions*, 6(2), 110-113.
- Stern, M. & Ojendal, J. (2010). Mapping the security development nexus: Conflict, complexity, cacophony, convergence? *Security Dialogue*, 41(1), 5-29.
- Turner, N. E., Paglia-Boak, A., Ballon, B., Cheung, J. T., Adlaf, E. M., Henderson, J., & Mann, R. E. (2012). Prevalence of problematic video gaming among Ontario adolescents. *International Journal of Mental Health and Addiction*, 10(6), 877-889.