EPRA International Journal of Environmental Economics, Commerce and Educational Management
Journal DOI: 10.36713/epra0414 |ISI I.F Value: 0.815|SJIF Impact Factor (2021): 7.743 ISSN: 2348 – 814X
Volume: 9 | Issue: 4 | April 2022

# SOCIAL VALUE ORIENTATION AND LOCUS OF CONTROL AS DETERMINANTS OF CYBERCRIME TENDENCY AMONG YOUTHS IN RIVERS STATE, NIGERIA

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## ABSTRACT

***This study was conducted to investigate the social value orientation and locus of control as determinants of cybercrime tendency among youths in Obio/Akpor Local Government of Rivers State. Two research questions and their corresponding null hypotheses were developed in line with the psychological variable of social value orientation and locus of control. The ex-post facto research design was adopted for the study using a sample of 450 youths drawn through purposive/ accidental sampling technique. A researcher-developed instrument was used for data collection which was tested for psychometric qualities of validity and reliability. Data analysis was done using mean and standard deviations for the research questions and independent samples' t-test and ANOVA for testing the hypotheses. Result indicated that there is egoistic social value orientation and external locus of control significantly determined support and involvement in cybercrime. On the basis of the result obtained, it was therefore recommended that opportunities for legitimate internet activities be open to youths so that they can be better productive***

## INTRODUCTION

It can be safely assumed that one of the greatest invention by human kind is the computer and its associated myriads of programs. Its ubiquitous presence and impact is felt in all areas of our contemporary lives such as transportation, education, construction, medicine, and clothing. It was therefore on this premise that Adeta (2014:1) described the computer system as a "major landmark in human history".

The speedy evolution of the computer has led to the internet. According to Oyewole and Obeta (2002), the internet have reduced the world into a miniature universe and has thus created boundless opportunities for the advancement of humanity. In the words of Elumen and Bola as cited in Adeta (2014:43) the "internet or cyber space has created geometric growth and accelerated windows of opportunities for business and the removal of economic barrier hitherto faced by nations of the world." This has facilitated the use of computer by diverse individuals from a wild array of human activities to do business transactions, job search and recruitment, conduct research studies, enhance communication and facilitate rural development. When these potential benefits of the internet are considered especially within the context of a developing nation like Nigeria, it can therefore serve as a critical tool for national development.

Despite the veritable role that the internet can play in the development of Nigeria, it has not been utilized optimally, even worse it has been negatively used, what has been termed cybercrime. Cybercrime is a term used to broadly describe any criminal activity in which computers or computer network are used as a tool, target or a place of criminal activity. Cybercrime has taken an international dimension that the United Nation has conducted congress aimed at preventing and abetting its continued spread. Yet, despite the omnipresent nature of cybercrime, its definition has remained elusive (International Telecommunication Union [ITU], 2012).

The most common definition of cybercrime sees it as any activity in which computer or networks are a tool, a target or a place of criminal activity (Kumar, 2009). As stated by ITU (2012) this definition possess several difficulties because if someone used a computer keyboard to commit murder, it would still be seen as a form of cybercrime. The final definition of cybercrime to be considered is that provided by Hale (2002:15) in which cybercrime was defined as "computer mediated activities which are either illegal or considered illicit by certain

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parties and which can be conducted through global electronic network". This definition is more refined because they exclude causes where physical hardware is used to commit regular crimes. Due to the difficulty associated with the definition of cybercrime the International Telecommunication Union, instead adopted a typology-related approach in describing the phenomenon. In this regard, the ITU (2012) stated that cybercrime is divided into four different types of offences namely (i) offences against the confidentiality, integrity and availability of computer data systems (ii) computer-related offences and (iii) copyright-related offence. This shall be taken as the basis for the discussion in this study.

As stated previously, cybercrime has an international dimension but the brunt of its consequences has been felt mostly by developing countries, including Nigeria. A recent report released by Check Point Software Technologies in October 2015 revealed that Nigeria is the 20th country with the highest number of cybercrime activities. The finding of this report is not surprising because as stated by Muteme (2007) the relatively cheap cost of website registration, low or inadequate cyber security as well as poor regulatory framework and policies are contributing factors in the widespread prevalence of the threat. Confirming the menace of cybercrime to the country, the Director-General of the National Information Development Agency (NITDA), Dr. Peter Jack reported that Nigeria lost over 129 billion Naira from 2000-2013 due to cybercrime (Nigerian Pilot, 2015). He also stated that the financial sector has lad the greatest threat, which often do not report incidents of cyber-attacks so as not to generate suspicion which can lead to loss of credibility and reduced customer base.

In Rivers State, Nigeria, the Tide Newspaper (2015) reported that some youths were apprehended in the state capital for using the name of a popular politician to lure unsuspecting members of the public into an employment scam on the internet. Another, instance was the kidnapping of a students by a friend she met on the internet in one of the tertiary institution in the state.

As stated by Hassan, Lass and Makinde (2012), cybercrimes are committed by people of all ages ranging from the young to the old, but in most instances by the youths. Even the popular name for those who engage in cybercrime "yahoo yahoo boys" is indicative of the young age of the perpetrators. A study by the Economic and Financial Crime Commission titled Zero Tolerance (2006) indicated that cyber criminals are usually within the ages of 18-30 years which corresponds to the age bracket of youth as defined by the National Policy on Youth (Federal Government of Nigeria, 2009). Similarly, Okeshala and Adeta (2013) found out that the highest number of cyber criminals are individuals aged 31-40. Lastly, during a workshop for Nigerian African Centre of Excellence, the Minister of Communication Barrister Adebayo Shittu blamed the bulk of cyber-attacks on financial institutions on youths whom he described as unemployed or underemployed.

The next important question is why the lure towards cybercrime for youths or rather why are Nigerian youths attracted to cybercrime? As stated by the Honourable Minister of communication, the major driving force towards cybercrime is unemployment and underemployment. Other reasons advanced for the increase in cybercrime by Okeshola and Adeta (2013) includes defective socialization, weak laws and policies, global scope, the anonymity of the internet, quest for easy money and peer group influence.

From the analysis done above, it can be seen that most of the factors identified above as causative factors of cybercrime among youths are all external factors. It is this researchers' position that although most youths experience similar economic challenges, not all youths are involved in cybercrime. Therefore, the increasing incidence of youth involvement in cybercrime may be attributed to personal or psychological such as value orientation and locus of control.

Within psychology and related fields, social value orientation (SVO) or value orientation refers to a person's preference about how to allocate resources (e.g financial) between the self and another. According to Wikipedia (2016), value orientation corresponds to how much weight a person attaches to the welfare of others in relation to their own. The concept of value orientation has had a long history in the psychological literature since the late 1960s when Messick and McClintock (1962) formulated their typology of value orientation namely individualistic, cooperative and competitive. Ever since then, it has been investigated to understand the relationship between the above value orientations and individuals' willingness to share or allocate resources. As would be used in this study, the typology provided by Van Lange (2000) posited that value orientations can be broadly classified into *altruistic* — those who would usually engage in an activity or allocate resources more for the benefit of others; *egoistic* - those who engage in activities for self-satisfaction or allocate resources to maximally benefit self and *competitors* - one who gains from allocating resources in order to gain relative advantages over members of his group. Based on this, it can be probably assumed that an individual's value orientation has a role to play in their involvement or

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perception of cybercrime. This is because cybercrime often involves the attempt at gaining financial advantage over others.

Similarly, the concept of locus of control can be probably linked to cybercrime since previous study has established its relation with juvenile delinquency (Modanlou, Haghani & Jafarpour, 2001) and ethical behaviour (Bouhoff, 2011). As defined by Onukwufor (2012), locus of control is the extent to which people believe they have influence over the events or actions in their lives. The foundation of this concept was laid by psychologist Julian Rotter in 1954. Locus of control is broadly divided into two domains namely internal and external. Internal locus of control is a situation whereby an individual believes that he has control or influence over the events of his life or the outcome of his experiences. Conversely, external locus of control refers to the attribution of life event, actions or personal experiences as being caused by external factors. In other words, individuals with internal locus of control believes that his or her behaviour as well as reactions are guided by personal principles, belief and effort while individuals with external locus of control judges or supposes the events of his life as being carried or determined by external circumstance such as luck, fate, government, society or family relations. When considered from the perspective of cybercrime, locus of control does not provide a clear prediction on who (either internal or external) would be most likely to engage in higher crime. It therefore becomes imperative to provide an empirical understanding on how it influences cybercrime among youths.

With the increasing problem of worldwide incidences of cybercrime, scholars and researchers have made ample attempt at study its causes and consequences from a wide range of perspectives. Okeshola and Adeta (2013) investigated on the nature, causes and consequences of cybercrime in tertiary institutions in Zaria, Kaduna State. The study adopted the descriptive survey research design using a population of students from tertiary institutions, cyber café operators, and lecturers from computer science departments in three institutions namely Ahmadu Echo University, Federal College of Education and Nuhu Bamali Polytechnic all in Zaria Metropolis. A sample of 400 respondents were drawn using both probability and non-probability sampling techniques. Data for the study was collected by means of a semi-structured questionnaire and in-depth interview. Analysis of data was done using the triangulation technique in which respondents both qualitative and quantitative were used for interpreting the findings obtained from the questionnaire and interviews. Findings from the study revealed that majority of the respondents (49%) revealed that cybercrime frequently occurs in the area of the study. While 85.5% of respondents showed that it is a problem more common among the youths, while it was discovered that more individuals carry out the act in cyber cafes followed by the home. On the whole, it was agreed that Hacking and credit card fraud were the most common forms of cybercrime. The finding also revealed that more males were involved in the act than females and higher educational qualification is a significant influence on cybercrime.

Boateng, Olumide, Isabalija and Budu (2011) conducted a study on cybercrime in Ghana. The descriptive survey research was used as the research design of the study, while the purposive sampling technique was used to select 40 respondents comprising of 10 bank officials, 10 internet café operators, 10 police investigators, 5 legal practitioners and 5 internet fraud victims. Data was collected through in-depth interview over a nine week period. The findings from the study revealed that majority (80%) of the cybercrime suspects were youths between the ages of 18-35, while Europeans were the major victims of cybercrime as reported in the study.

As can be seen from the brief review above, it can be internet fraud or cybercrime has taken a global dimension and effort aimed at understanding it has equally taken a universal dimension. Although previous effort has been made to understand this phenomenon and factors influencing it, these attempts have been limited to understanding its consequences in terms of financial or economic loss to nations and institutions. In addition, studies investigating the menace of cybercrime has only done so from purely economic dimension, with almost a total neglect for the psychological antecedents to the best of these researchers' knowledge. It is therefore against this background that this study departs from previous studies in its attempt at approaching the issue from a psychological perspective by using social value orientation and locus of control as possible factors influencing cybercrime tendency among youths in Rivers State.

## AIM AND OBJECTIVES OF THE STUDY

The aim of this study was to identify the influence of psychological factors of social value orientation and locus of control on cybercrime tendency of youths in Obio/Akpor Local Government Area of Rivers State. Specifically, the objectives of this study included:

1. Investigating how the social value orientation of youth influences them towards cybercrime tendencies in Obio/Akpor Local Government Area of Rivers State, Nigeria.

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2. Find out how locus of control influences cybercrime tendencies among youths in Obio/Akpor Local Government Area of Rivers State.

## RESEARCH QUESTIONS

The under listed research questions were developed to guide the conduct of the present study

1. To what extent is cybercrime tendency influenced by the social value orientation of youths in Obio/Akpor Local Government Area of Rivers State?
2. To what extent is cybercrime tendency influenced by the locus of control of youths in Obio/Akpor Local Government Area of Rivers State?

## HYPOTHESES

From the objectives and research questions developed to guide the study, the following hypotheses were further tested at 0.05 level of significance to guide the current study:

1. There is no significant difference in the influence of egoistic, altruistic and competitive value orientation on cybercrime tendency among youths in Obio/Akpor Local Government Area of Rivers State.
2. There is no significant difference on the influence of internal and external locus of control on cybercrime among youths in Obio/Akpor Local Government Area of Rivers State.

## METHODOLOGY

The study adopted the expost-fcto research design. This study is an expost-facto work because the researcher collected data from a large sample of youths in Obio/Akpor Local Government Area in order to identify the influence of social value orientation and locus of control on cybercrime tendencies among youths without manipulating any of the variables. This study was conducted in Obio-Akpor Local Government Area of Rivers State. From the number of youths in the area, a sample of 450 were drawn based on the Krejcie and Morgan table of specification for drawing sample size as presented in Kpolovie (2011). The non-proportional stratified sampling technique was used to draw a representative sample of 450 youths, with 150 youths each drawn from the three clans that make up the area. The choice of using the non-proportional stratified sampling technique is because the composite number of youths in each of the clans was not known.

A researcher-developed instrument titled Psychological Influences on Cybercrime Tendencies Inventory (PICTI) was used for collecting data. The instrument had spaces for the respondents to indicate their demographic characteristics such as gender, employment status, and highest education qualification. The instrument has three other sections A-C. Section A of the instrument contained 9 items meant to assess the value orientation of the respondents. This section is constructed on with imaginary scenarios in mind. It was adapted from Van Lange (2000) *Triple Dominance Measure of Social Orientation.* Three items each were constructed to assess the three types of social value orientations. Section B of the instrument is a 10-item researcher-developed scale for assessing the locus of control of individuals. It was constructed on a 4-point likert scale of Strongly Agree (A), Agree (A), Disagree (D) and Strongly Disagree (SD), with a corresponding value of 4, 3, 2 and 1. Section D of the instrument was made up of 10 items that seek to assess cybercrime tendency among respondents. This instrument is constructed on a four-point likert scale. Respondents are expected to respond to the items according to the perceive regularity in which they exhibit the action represented by each item as follows: regularly, sometimes, rarely and never. The reliability of the instrument using test-retest technique showed that Sections A, B and C had reliability coefficients of 0.70, 0.73 and 0.81 respectively. Data collection was done using the convenience sampling technique method. The instruments were administered at tertiary institutions, sport viewing centers, internet cafes, relations spot and parks. The instruments were collected immediately on the spot.

Mean and standard deviation were used for the analyses of the research questions, while One Way Analysis of Variance, Least Square Difference and Independent Samples t-test were used for the testing of the hypotheses where applicable.

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## RESULT PRESENTATION

**Table 1: mean and standard deviation of the influence of social value orientation on cybercrime tendency of youths.**

| Social Value Orientation | N | Mean | SD |
|---|---|---|---|
| Altruistic | 112 | 22.58 | 6.73 |
| Egoistic | 214 | 25.71 | 6.43 |
| Competitive | 124 | 24.70 | 6.35 |

As shown in table 1 above, youths who identified with the altruistic social value orientation (N = 112) had the lowest mean value on the cybercrime tendency subscale, followed by those who were identified as having a competitive social value orientation (n = 124) who had a mean value of 24. 70 (SD - 6.35). The youths who were identified as being of egoistic value orientation (n 214) reported the highest mean value of 25.71. From the data analysis done, it can be stated that egoistic social value orientation had the greatest influence on cybercrime tendency among youths followed by competitive and lastly altruistic value orientations.
A one way analysis of variance was conducted to test if any significant different exist in the influence of social value orientations on cybercrime among youths. The results obtained are presented in table 2 below

**Table 2: ANOVA of youth cybercrime tendency on the basis of social value orientation**

| Sources of Variation | Sum of Squares | Df | Mean Square | F | Sig | Decision |
|---|---|---|---|---|---|---|
| Between Groups | 724.977 | 2 | 362.489 | 8.609 | 0.0005 | Reject HO1 |
| Within Groups | 18822.003 | 447 | 42.107 | | | |
| Total | 19546.980 | 449 | | | | |

As shown in table 2, a One Way ANOVA was conducted to determine if social value orientation have significant influence on cybercrime among youths. Result obtained yielded F (2, 447) = 8.609, p = 0.0005, which was lesser than the chosen alpha level of 0.05. This result suggest that any observed difference in the cybercrime of youths is statistically significant based on their personal social value orientation. To identify pairwise difference, a multiple comparison test using LSD was conducted with the result presented in table 3 below

**Table 3: Post Hoc Test of cybercrime tendency among youths on the basis of social value orientation**

| Variables | Mean Difference | Sig | Decision |
|---|---|---|---|
| Altruistic vs. Egoistic | 3.139 | 0.005 | Significant |
| Altruistic vs. Competitive | 2.129 | 0.012 | Significant |
| Egoistic vs. Competitive | 1.009 | 0.169 | Not Significant |

The result of the pair-wise multiple comparison test as shown above in table 3 indicates that there was a significant difference between the influence of altruistic and egoistic social value orientations (mean difference 3.139, p = 0.0005), between altruistic and competitive (mean difference = 2.129, p = 0.0 12), on cybercrime among youths. Conversely, it was discovered that egoistic and competitive social value orientations do not differ significantly in their influence on youth cybercrime tendency (mean difference = 1.009, p = 0.169).

**Table 4: independent sample t-test of locus of control influence on cybercrime tendency among youths.**

| LOC | N | Mean | SD | df | t | Sig | Decision |
|---|---|---|---|---|---|---|---|
| Internal | 268 | 23.86 | 6.40 | 448 | 3.144 | 0.002 | Reject HO1 |
| External | 182 | 25.83 | 6.71 | | | | |

From table 4 above, it can be seen that there is a difference in the extent to which locus of control influences cybercrime among youths. The data presented in the table reveal that youths who reported internal locus of control (n = 268) had a mean value of 23.86 (SD = 6.40) while those who reported external locus of control had a mean of

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25.83 (SD = 6.71). This result therefore suggest that external locus of control had a greater influence on youth cybercrime than internal locus of control. Result from the independent samples t-test further revealed that the difference in the extent to which internal and external locus of control influences cybercrime among youth was statistically significant because the t-value obtained (3. 144) at 448 degrees of freedom yielded a p-value of 0.002 which was lesser than the chosen alpha of 0.05.. The null hypotheses was therefore rejected.

## DISCUSSION OF FINDINGS

The result of the study revealed that there is a statistically significant difference in the extent to which social value orientation influences cybercrime tendency among youths in Obio/Akpor Local Government Area of Rivers State. From the analysis done on the data collected, it was revealed youths who reported egoistic social value orientation has the greatest influence on cybercrime among youths followed by competitive value orientation and lastly altruistic value orientation. The result obtained in this study is not surprising but expected. This is because this researcher believes that one of the characteristics of cybercrime is that individuals try to gather as many resources as possible from others, without considering the harm it causes to others. Cybercrime often has a victim who suffers the harm of the incident. Egoistic individuals do not care about the impact of their action on others. Thus their high reported level of cybercrime. Conversely, altruistic do not just live for themselves. They are concerned about the welfare of others ad how best to share equally with them. It was on this basis, that the present researcher did not see this result as surprising.

The present study is similar to that obtained by Perreti (2001) who found out that boys who reported egoistic value orientation were more involved in delinquent behaviour than those who reported competitive and altruistic value orientations in a Midwestern state in the United State of America. Despite the similar in this result, it can be seen that while Perreti study was focused on delinquency among adolescents, the present study is focused on investigating the influence of social value orientation on the cybercrime of youths in Nigeria.

The result of the study also revealed that internal locus of control had a significantly lesser influence on the cybercrime tendency of youth than external locus of control. What this result means is that youth who reported external locus of control are more likely to be involved or positively disposed to cybercrime than those who reported external locus of control. The result obtained from this study is not surprising because those who reported external locus of control are more likely to believe that they are not in control of their lives and may see need to engage in illegal activities. On the other hand, those who reported internal locus of control are most likely to take responsibility for their life and engage in productive activities.

The result of this study is similar to that conducted by Holloran, Doumas, John and Margolin (1999) who found out that among female students in the United States, external locus of control was more positively related to aggressive behaviour while internal locus of control was less related with aggressive behaviour. Similarly, it was discovered that external locus of control was significantly positively - related to behavioral problems among form three students in Kisii Couty in Kenya. Despite the similarity between the present study and the previous ones cited, some differences exist in the sense that the sample used for the studies were drawn from a different population and the variables that were considered (aggressive behaviour and behavioural problems) were different from that of the present study which was cybercrime.

**Recommendations**

From the result obtained in this study, the following recommendations were made

1. Seminars and workshops should be organized and conducted to assist youths develop more altruistic behaviour in all areas of life, as this will not only empower them to resist the lure of, cybercrime, but enable them to become good citizens of the country.
2. Psychological assessment of individuals, especially youths, should be made to enable them understand their personal characteristics, including locus of control and how to adjust their perspective if need be.
3. Effort should be made to assist youths with productive and economically useful skills so that they would have less time to involve in unwholesome activities including cybercrime.

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