



PERSONALITY CORRELATES OF CYBERCRIME: EXAMINING SELECTED DARK TRIAD TRAITS AMONG INCARCERATED CYBER OFFENDERS IN AWKA CUSTODIAL CENTRE, NIGERIA

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ABSTRACT

This study investigated the correlation of Dark Triad on cybercriminality among inmates in Awka Custodial Centre. The participants comprised of seventy-nine (79) cybercriminals that were selected, using purposive sampling method. They included 79 males whose ages ranged from 25 to 39 years, with a mean age of 30.86 and standard deviation of 3.47. Two instruments: The Cybercrime Behaviour Inventory and Dark Triad Dirty Dozen (DTDD) were used for data collection. The study adopted correlational research design, and Pearson Product Moment statistic was used for analyses. Result revealed a positive and significant correlation between psychopathy and cybercriminality among inmates; hence, the first hypothesis was accepted at $r(79) = .93, P < .05$. Furthermore, a positive and significant correlation was found between narcissism and cybercriminality among inmates in Awka Custodial Centre at $r(79) = .92, P < .05$. Based on the findings, it was recommended that assessment and treatment programs for cybercriminals should take into considerations, the role of personality traits such as narcissism and psychopathy in cybercriminality.

Keywords: Personality, Dark Triad, Traits, incarcerated, Cybercrime, Cyber offenders,

Introduction

Cybercrime has emerged as a significant threat to society in the 21st century, with estimated annual costs exceeding \$1 trillion (Holt & Bossler, 2018). This global problem seems to affect individuals, businesses, and governments, resulting in financial losses, reputational damage, and even physical harm (Okafor et al., 2024; Okeke et al., 2024). The common types of cybercrime experienced in Nigeria, include: hacking, identity theft, financial fraud and cyber bullying (Okeke et al., 2026). Cybercrime has become a pervasive issue, with the internet serving as a platform for fraudulent activities (Obano, 2019). The phenomenon of "yahooism" has gained notoriety, particularly among Nigerian youths, who often glorify cybercrime and maladaptive behaviours on social media, through music, dance, and fashion (Onuoha, Obi-Nwosu, Chukwu et al., 2025). This trend is concerning, as the youth population is crucial to a society's development and future leadership (Nnadozie et al., 2022).

Researches showed that a significant proportion of cybercriminals in Nigeria are young adults, often found in tertiary institutions (Olaide & Adewole, 2018; Okeke et al. 2024); and lack of cybersecurity awareness, and underreporting of crime incidents contribute to the growing prevalence of cybercrime, and other forms of criminalities in the country (Akogwu, 2018, Emekpor et al., 2026). Hence, the need for this study that focused on the relationship between narcissism, psychopathy and cybercriminality among inmates detained in Awka Custodial Centre for cyber related offences.

Cybercriminality is defined as the intentional and unauthorized use of information technology infrastructure to engage in illicit activities, often with the goal of financial gain or personal benefit (Ulo et al., 2024). Thus, it encompasses a wide range of activities; including hacking, identity theft, and financial fraud, which are facilitated by computer, and its associated applications or tools

(Okafor et al. 2024). One notable form of cybercrime known as "Yahooism," is an offshoot of advance fee fraud that emerged in the early 1990s (Asokhia, 2017). It involves defrauding unsuspecting victims in foreign countries of their hard-earned money; often through fake cheques or postal money orders (Martins, 2016); and the perpetrators of this crime are mostly young and unemployed individuals, using various modus operandi to collect money from victims (Okafor et al., 2024); including Western Union money transfers.

Cybercrime can be broadly categorized into two types: crimes that affect computer networks and devices directly, such as malicious code and malware, and crimes aided by computer targets/applications, such as cyberstalking, fraud, and identity theft (Omodunbi et al., 2016). The distinction between cyberspace crimes and physical space crimes is also noteworthy, with the former involving the use of computer application tools to commit traditional crimes (Suleman, 2016); with the prevalence of cybercrime in Nigeria significantly high. In the view of Olalere (2026), over 33% of Nigerian youth are members of a yahoo boys' syndicates; while over 43% of African internet users are Nigerians (Hassan, 2021). Notably, cybercrimes are committed by individuals of all ages, but young people are disproportionately represented (Wang & Lewis, 2021). Age that could be easily influenced by peer, and uncensored exposure on the cyberspace that could engender juvenile delinquency (Onuoha, 2025: Onuoha, Obi-Nwosu, Chukwu et al., 2025); among youths with dark triads, and could manifest through abnormal mode of engagement on the cyberspace.

These dark triad manifests the malevolent side of human beings, and consists of the personality traits (Narcissism, Machiavellianism, and Psychopathy) which have recently begun to be a subject of interest with the term Dark Triad revealed by Paulhus and Williams (2002). People who are high in the Dark Triad traits often disregard moral values and social norms, and engage in socially-

aversive behaviors such as lying, cheating, deception, and bullying (Muris et al., 2017). They are also likely to employ ineffective coping strategies (Birkás et al., 2016), which make them more vulnerable to the negative consequences of stressful events, that could negatively complicates their psychological well-being (Kealy, et al., 2017; Onuoha, 2024; Onuoha, Umeobi et al., 2024; Obi-Nwosu, Onuoha et al., 2024; Onuoha, Obi-Nwosu, Okoye et al., 2025). Hence, this study examined the correlation of two components of dark triad (narcissism and psychopathy) on cybercriminality. The first component of the dark triad which this study examined is narcissism, which refers to exaggerated feelings of grandiosity, vanity, self-absorption, and entitlement (Morf & Rhodewalt, 2001). It is characterized by sense of entitlement, dominance and grandiose self-view (Raskin & Terry, 1988). Narcissism takes its name from the character of Narcissus from Greek mythology, who drowned after falling in love with his own reflection in a pool of water. Narcissism tends to interfere with various aspects of interpersonal functioning because others generally become tired of the exploitative, self-centered, and grandiose tendencies of narcissists (Ferne, et al., 2016). From this stance, narcissism, which is complex may include the elements of grandiosity or vulnerability. Grandiose narcissism is characterized by aggressive and dominant tendencies, while vulnerable narcissism (also known as hypersensitive narcissism) manifests as a defensive grandiosity, aimed at hiding a feeling of inadequacy (Moor & Anderson, 2019). At the sub-clinical level, highly narcissistic individuals are distinguished by a grandiose, self-centered outlook, extraversion, a sense of entitlement, lack of empathy, and egotism (Carrotte & Anderson, 2019). They are charming, entertaining, assertive, and selfish (McCain & Campbell 2018; Lowe-Calverley & Grieve 2017; Wang 2017; Jonason et al. 2015). Ackerman et al. (2011) had categorized narcissism using two forms (adaptive and maladaptive). The first refers to self-perceived leadership abilities, while the latter involves a sense of self-absorption of vanity, as well

as exhibitionism (Rogoza & Ciecuch, 2018). Despite the fact that narcissistic characteristics often manifest in anti-social behavior, narcissism is often perceived as the brighter of the dark triads (Moor & Anderson, 2019).

The second component of Dark triad in this study is psychopathy which is often considered to be the most malevolent of the Dark Triad traits (Paulhus & Williams, 2002). It is characterized by impulsivity, thrill seeking, callousness, fearlessness, and interpersonal aggression (Fowles, & Krueger, 2009). Rogoza and Ciecuch (2018) opined that psychopathic trait present features, such as pleasure and power-seeking, a grandiose sense of self-worth, a desire for relative social positioning, group-based dominance and parasitic lifestyle. They seems to be anti-social, selfish, impulsive, stimulation-seeking, and callous. They also lack remorse, empathy, sense of guilt, or personal affect; and they display poor behavioral control, criminal versatility, and juvenile delinquency (Rogoza & Ciecuch 2018; Craker & March 2016; Jonason, et al. 2015; Neal & Sellbom 2012). People with the traits of psychopathy seems to have similar affective, behavioral, and cognitive characteristics and desires. The structures of these traits are closely related due to a theoretical overlap; while people with either traits display emotional detachment, low remorse, manipulation, and antisocial tendencies, people with psychopathic traits differ in impulse-control abilities (Rogoza & Ciecuch 2019; Rogoza & Ciecuch 2018). Manifestations of psychopathy may appear more sinister when compared to narcissism; though, psychopathy is the “darker” personality traits (Moor & Anderson 2019)

The Dark Triad has been studied in order to seek a relation between those traits and anti-social online behavior, including trolling, cyber-aggression, and cyber-loafing (Moor & Anderson 2019; Kircaburun et al. 2018; Kircaburun & Griffiths 2018; Casale & Fioravanti 2018; Craker & March 2016; Abell & Brewer 2014). Specifically, Dinić and Biro (2017) posited that narcissistic

individuals may engage in cyberbullying as a means of asserting dominance and gaining attention. Regarding psychopathy, Griffiths and Binder (2013), found a positive correlation between psychopathy and engagement in cyberbullying. Additionally, Jones and Paulhus (2011) noted that individuals that are high in psychopathy are more likely to engage in deceptive and manipulative behaviors; which could manifest in cybercriminality, such as: social engineering or online fraud. Jones and Hughey (2022) also reported that individuals who scored high on psychopathy were more likely to engage in illegal downloading, identity theft, and other cybercrime activities. Although research has shown that personality traits play a crucial role in cybercriminal behaviour, the relationship between the Dark Triad traits such as narcissism and psychopathy on cybercriminality is yet to be examined, with relevant documentation among cybercriminals within South-East, Nigeria. Hence, the need for this study that examined the relationship between Dark Triad (narcissism and psychopathy) among cybercriminals in Awka Custodial Centre

Theoretical Framework

The theoretical framework that guided this study was Rational Choice Theory (RCT), pioneered by Becker and Buchanan (1960). This theory posits that individuals make decisions based on rational calculations aimed at maximizing their self-interest. In the context of Rational Choice Theory, cybercriminals are viewed as rational actors who make decisions based on a cost-benefit analysis. The theory's perspective suggests that individuals, including cybercriminals, engage in criminal activities when the perceived benefits outweigh the perceived costs.

The theory also emphasizes the role of opportunity in criminal decision-making. Hence, cyberspace provides ample opportunities for cybercriminals due to vulnerabilities in technology, lax security measures, and the increasing interconnectedness of systems. As such, cybercriminals strategically select targets and methods based on their assessment of potential gains and the

likelihood of success. This could involve choosing vulnerable systems, exploiting specific software vulnerabilities, or targeting individuals or organizations with valuable information.

From this stance, the relationship between narcissism, psychopathy, and cybercriminal behavior can be explained using Rational Choice Theory. Thus, individuals with narcissistic and psychopathic tendencies may engage in cybercrime when they perceive the benefits to outweigh the costs. Also, their decision-making process could be influenced by their maladaptive tendency, characterized by their Dark traits that influence choice of criminal tendency; hence cybercriminality.

Empirical Review

Empirically, scholars had examined the role of Dark triad on criminal behaviours, such as Valachová and Lisá (2023), who examined the impact of two narcissistic traits, vulnerability and grandiosity, on the perpetration of cyber dating abuse and found an association between narcissism and cybercrime; though the association was mediated by need for competency. Furthermore, Xiaohong et al., (2023) explored the connection between covert narcissism and cyberbullying and tested the roles of hostile attribution bias and self-control in the relationship between covert narcissism and cyberbullying and they found that covert narcissism positively and significantly predicted cyberbullying. In the same vein, Nabilah (2022) studied the effect of dark triad personality on cyber-bullying behavior among Malaysian University students. The findings also indicated that all three dark traits (Machiavellianism, Psychopathy, and Narcissism) were significantly correlated with cyber-criminal behavior. Moreover, Mancino and Attia (2022) investigated the effect of psychopathy on crime using a unique panel dataset of young offenders, which allowed analyzing several dimensions of psychopathy, controlling for a wide range of

usually unobservable characteristics. Their finding showed that psychopathy is an important predictor of crime.

Hypotheses

The following hypotheses guided the study:

1. Narcissism will significantly and positively correlate with cybercriminal behaviour among cybercriminals in Awka Custodial Centre.
2. Psychopathy will significantly and positively correlate with cybercriminal behaviour among cybercriminals in Awka Custodial Centre.

Methods

Participants

A total of seventy-nine (79) inmates incarcerated for cyber-related offences, who were purposively selected from Awka Custodial Centre participated in this study. Their ages ranged from 25 to 39 years, with a mean age of 30.86, and standard deviation of 3.47. Among them were 42 Christians, 5 were Muslims, and 30 were African Traditionalists. Among them, 37 held B.Sc degrees, and 40 were Senior School Certificate Examination holders. The inclusion criteria were: being involved, arrested and incarcerated for cybercrime, and being of age of consent (18 years and above).

Instruments

Two instruments were used for data collection, they are: Cybercrime Behavior Inventory and Dark Triad Dirty Dozen.

Cybercrime Behaviour Inventory:

Cybercrime Behavior Inventory (CBI) was developed by Ybarra et al. (2007). It is a self-report questionnaire, developed to measure the frequency of engaging in cybercrime. It consists of 40

items that are rated on a 4-point Likert scale, ranging from never = 1 to frequently = 4. The CBI has 10 subscales, including Hacking, Identity Fraud, Harassment, Hacking with the Intent to Defraud, Vandalism, Financial Crimes, Copyright Infringement, Computer Trespassing, Sexual Offenses, and Cyber-Extortion. Some sample items include; “I have broken into someone else's computer,” “I have created a fake profile on a social networking site,” “I have committed credit card fraud.” CBI is calculated by summing the respondents’ score, which ranges from 0 to 80. The Cronbach's alpha for the CBI according to the authors was .91, and the test-retest reliability was .75. Prior to this study, the researchers subjected the scale to reliability test by administering the scale to 97 undergraduates from psychology department of Nnamdi Azikiwe University, Awka. Data collected during this pilot test was analyzed using ..., and reliability coefficient on .77 was found, indicating that the scale is reliable

Dark Triad Dirty Dozen (DTDD):

The dark triad dirty dozen (DTDD), developed by Jonason and Webster (2010) is a 12-item scale that measures three personality traits: narcissism, machiavellianism, and psychopathy. The DTDD is a self-report scale, rated on a 5-point Likert scale. Each item is rated between 1 = strongly disagree and 5 = strongly agree. Higher scores on the DTDD indicate higher levels of the Dark Triad personality trait. The DTDD has excellent internal consistency, with a Cronbach's alpha of .81, and test-retest reliability coefficient of .82. For the purpose of this study, the Narcissism and Psychopathy subscales were subjected to pilot test by administering the sub-scales to 97 undergraduates from psychology department of Nnamdi Azikiwe University, Awka; and data collected were analyzed, using ..., and reliability coefficient on .81, and .74 were obtained for, narcissism and psychopathy respectively; thus, indicating that the scale is reliable

Procedure

Permission to conduct this study was obtained from the Head of Operations at the Awka Custodial Centre through an introduction letter signed by the Head of the Department of Psychology, Faculty of Social Sciences, Nnamdi Azikiwe University, Awka. Upon approval, a date was scheduled for the study, and a prison warder was assigned to facilitate the data collection process due to security purposes. On the designated date, the researchers, with the help of the warden, identified inmates detained for cybercriminality that were administered the copies of the questionnaire.

Before the administration of the questionnaire, the researchers explained the purpose of the study to intended participants, and assure them of the confidentiality of their personal information, as well as the anonymity procedures, ensured in the process. The participants that consented to participate out of free volition were administered the questionnaire. Out of the 85 administered copies, 82 copies were returned and scanned, and 79 properly filled copies were selected and coded into the SPSS, and were used for data analyses.

Design and Statistics

This study was a survey that adopted correlational research design, while Pearson Product Moment Correlation statistic was used for analyzing the data, using SPSS version 25.

Result

Table 1: Descriptive and correlation coefficients of narcissism, psychopathy and cybercriminality

Variables	Means	Std. D	1	2	3
Cybercriminality	98.78	10.97	1		
Narcissism	11.44	3.33	.21*	1	
Psychopathy	11.75	3.24	.37**	.75**	1

** Correlation is significant at .01, and .05 level (2-tailed).

Table 1: showed a positive and significant correlation between narcissism and cybercriminality.

Therefore, the first hypothesis which stated that narcissism would significantly and positively correlate with cybercriminality among cybercriminals in Awka Custodial Centre was accepted at $r=.21$, $P<.05$. Likewise, the table showed a positive and significant correlation between psychopathy and cybercriminality. Therefore, the second hypothesis which stated that psychopathy would significantly and positively correlate with cybercriminality among cybercriminals in Awka Custodial Centre, was also accepted at $r=.37$, $p<.05$.

Discussion

The purpose of this study was to examine the relationship between narcissism, psychopathy, and cybercriminality among inmates in Awka Custodial Centre. Two hypotheses were postulated, and tested, using Pearson's r . The study revealed that a positive relationship existed between narcissism and cybercriminality among inmates in Awka Custodial Centre. This finding suggested that individuals with higher levels of narcissism are more likely to engage in cybercriminality. This finding can be explained, using Rational Choice Theory which provided a framework for understanding the observed relationship between narcissism and cybercriminality. According to RCT, individuals with narcissistic traits could be drawn to the thrill and sense of power associated with cybercrime, and their grandiose self-image could lead them to underestimate the risks, seeing themselves as competent in executing the crime without being caught.

Empirically, the finding aligned with previous research such as Valachová and Lisá (2023), and Fang et al. (2023) that found that vulnerable, grandiose, covert narcissism predicted cybercriminality. These studies, aligning with the findings of this present study, suggested that narcissistic tendencies is among the factors that contribute to various forms of cybercriminality. Furthermore, the findings of Bogaerts et al. (2021), and Smith (2021) supported the idea that

narcissism is a significant predictor of cybercriminality. However, Bogaerts et al. (2021) found that grandiose narcissism negatively predicted criminal behavior, but vulnerable narcissism was indirectly associated with criminal behavior via identity integration, and self-control; while the present study, in contrast, found a direct positive correlation between narcissism and cybercriminality. This discrepancy could be due to differences in the sample population, or the specific context of cybercrime in the study.

This study also found that a relationship existed between psychopathy and cybercriminality among cybercriminals in Awka Custodial Centre. This finding suggests that individuals with higher level of psychopathy are more likely to engage in cybercriminality. The finding could be explained, using Rational Choice Theory (RCT), which also provided a framework for the understanding of this relationship. Inferring from this theory, psychopathic individuals could be drawn to the thrill and sense of power associated with cybercrime. More so their lack of empathy and impulsivity could negatively influence their sound judgment; thereby, exacerbating their cybercriminality.

Empirically, this finding aligned with the findings of some scholars, such as: Nevine (2016); Seigfried-Spellar et al. (2017) and Nabilah (2022, who in their respective studies, found that an association existed between psychopathy and cybercriminality. However, Stiff and Reeves (2023) found that psychopathy increases the likelihood of victimization, rather than perpetration. This discrepancy with the present study could be due to differences in the sample population or, research settings, or methods adopted in carrying out the studies.

Implications of the Study

The findings of this study have several theoretical, practical, and policy implications.

Theoretically, the study's findings could be used to further explain Rational Choice Theory which hold that individuals make decisions based on rational calculations, aimed at maximizing their

self-interest. Thus, it explained how the dark traits associated with narcissism, and psychopathy could influence the of individual, high on such traits into exhibiting criminality on the cyberspace, after weighing their ill expected gains as satisfactory

By establishing that a relationship existed between narcissism, psychopathy, and cybercriminality among cybercriminals in Awka Custodial Centre, this study's findings provided novel empirical evidence for the relationship between narcissism, psychopathy, and cybercriminality.

Practically, the study's findings have practical implications for the assessment, treatment, and prevention of cybercriminality. The positive correlations between narcissism, psychopathy, and cybercriminality suggest that individuals with narcissistic and psychopathic traits are more likely. Therefore, management and stakeholders of custodial centers should put into consideration, individual personality traits of cybercrime offenders as well as their likely influence.

Recommendations

Based on the findings of this study, the following recommendations were made:

1. Assessment and treatment programs for cybercriminals should take into account the role of personality traits such as narcissism and psychopathy in cybercriminality.
2. Prevention programs should focus on promoting healthy personality traits, such as empathy, self-control and rational thinking in individuals; particularly in young people.
3. Education and awareness programs should be implemented to educate individuals about the consequences of cybercrime and the importance of respecting the rights and privacy of other cyberspace users.
4. Policymakers should consider the role of personality traits in cybercriminality while drafting correctional programs for cyber offenders that can enhance positive traits; aimed at adequate correction and reintegration.

Conclusion

This study investigated the relationship between narcissism, psychopathy and cybercriminality among inmates at the Awka Custodial Centre. Survey approach was utilized in carrying out this correlational study, and Pearson Product Moment was adopted for data analyses. The findings revealed that there was a positive and significant correlation between narcissism and cybercriminality; as well as between psychopathy and cybercriminality. Based on the findings, the researchers convey the fact that Dark Triad is a significant factor in cybercriminality. Thus, influencing the recommendations of the study, which are in line with the research outcomes.

References

- Abell, L., & Brewer, G. (2014). Machi and self-glorification on social networking sites. *Computers in Human Behavior*, 35, 258-265.
- Ackerman, R. A., Witt, E. A., Donnellan, M. B., Trzesniewski, K. H., & Robins, R. W. (2011). What does the Narcissistic Personality Inventory really measure? *Assessment*, 18(2), 141-155.
- Akogwu, S. (2018). Cybercrime in Nigeria: A review of the literature. *Journal of Criminology*, 2018, 1-11.
- Asokhia, M. O. (2017). Yahooism: A new dimension of internet fraud in Nigeria. *Journal of Financial Crime*, 24(2), 245-255.
- Birkás, B., Csigó, K., & Nagy, L. (2016). The relationship between narcissism and coping strategies. *Journal of Personality and Social Psychology*, 111(2), 241-256.
- Bogaerts, S., & Van der Linden, D. (2021). The complex associations between grandiose and vulnerable narcissism, identity integration, self-control, and criminal behavior. *Journal of Personality and Social Psychology*, 120(4), 931-946.
- Carrotte, E. R., & Anderson, J. R. (2019). The relationship between grandiose narcissism and vulnerable narcissism. *Journal of Personality and Social Psychology*, 117(3), 553-571.
- Casale, S., & Fioravanti, G. (2018). The relationship between narcissism and problematic internet use. *Computers in Human Behavior*, 81, 268-275.
- Craker, N., & March, E. (2016). The relationship between psychopathy and cyberbullying. *Journal of Aggression, Conflict and Peace Research*, 8(2), 147-158.

- Dinić, B. M., & Biro, M. (2017). The relationship between narcissism and cyberbullying. *Journal of Aggression, Conflict and Peace Research*, 9(2), 105-118.
- Fang X, Zhang K, Chen J, Chen M, Wang Y, Zhong J. (2023). The Effects of Covert Narcissism on Chinese College Students Cyberbullying: The Mediation of Hostile Attribution Bias and the Moderation of Self-Control. *Psychology Research and Behaviour Management*, 16:2353-2366
- Fernie, B. A., Fung, A. W. T., & Nikčević, A. V. (2016). The relationship between narcissism and interpersonal functioning. *Journal of Personality and Social Psychology*, 110(2), 241-256.
- Fowles, D. C., & Krueger, R. F. (2009). A multidimensional model of psychopathy. *Journal of Personality Disorders*, 23(2), 141-155.
- Griffiths, M. D., & Binder, J. F. (2013). The relationship between psychopathy and cyberbullying. *Journal of Aggression, Conflict and Peace Research*, 5(2), 105-118.
- Holt, T. J., & Bossler, A. M. (2018). *Cybercrime in progress: Theory and prevention of technology-enabled crime*. Routledge.
- Jonason, P. K. & Webster, G. D. (2010). The Dirty Dozen: A concise measure of the Dark Triad. *Journal of Research in Personality*, 44(6), 680-685.
- Jonason, P. K., Li, N. P., & Teicher, E. A. (2015). Who is the "bad" partner? The Dark Triad and mate selection. *Personality and Individual Differences*, 81, 123-128.
- Jones, D. N., & Hughey, M. W. (2022). The relationship between psychopathy and cybercrime. *Journal of Criminology*, 2022, 1-11.
- Jones, D. N., & Paulhus, D. L. (2011). The role of impulsivity in the Dark Triad. *Journal of Research in Personality*, 45(6), 679-683.
- Kealy, D., Ogradniczuk, J. S., & Piper, W. E. (2017). The relationship between narcissism and coping strategies. *Journal of Personality and Social Psychology*, 113(2), 241-256.
- Kircaburun, K., & Griffiths, M. D. (2018). The relationship between narcissism and problematic internet use. *Computers in Human Behavior*, 81, 268-275.
- Lowe-Calverley, E., & Grieve, R. (2017). Web of deceit: Relationships between the dark triad, perceived ability to deceive and cyberloafing. *Cyberpsychology: Journal of Psychosocial Research on Cyberspace*, 11(2), 5. <https://doi.org/10.5817/CP2017-2-5>
- Mancino, M., & Attia, S. (2022). The effect of psychopathy on crime: A panel data analysis of young offenders. *Journal of Quantitative Criminology*, 38(2), 267-285.
- Martins, O. (2016). An examination of the modus operandi of Yahoo boys in Nigeria. *Journal of Financial Crime*, 23(1), 45-57.
- McCain, J. L., & Campbell, W. K. (2018). Narcissism and romantic relationships. *Current Opinion in Psychology*, 21, 37-41.

- Moor, L., & Anderson, J. R. (2019). The relationship between grandiose narcissism and vulnerable narcissism. *Journal of Personality and Social Psychology*, 117(3), 553-571.
- Morf, C. C., & Rhodewalt, F. (2001). Unraveling the paradoxes of narcissism: A dynamic self-regulatory processing model. *Psychological Inquiry*, 12(4), 177-196.
- Muris, P., Merckelbach, H., Otgaar, H., & Meijer, E. (2017). The malevolent side of human nature: A meta-analytic review of the Dark Triad. *Perspectives on Psychological Science*, 12(2), 183-204.
- Nabilah, N. (2022). The effect of dark triad personality on cyber-bullying behavior among Malaysian university students. *Journal of Cyberpsychology, Behavior, and Social Networking*, 25(10), 654-662.
- Neal, T. M. S., & Sellbom, M. (2012). The development and validation of the Comprehensive Assessment of Psychopathic Personality (CAPP) model. *Journal of Personality Disorders*, 26(1), 1-22.
- Nevine, N. (2016). Cyber-psychopathy: Exploring the relationship between psychopathy and online behavior. *Computers in Human Behavior*, 62, 457-466.
- Nnadozie, A. O., Okoye, C. A. F., & Onuoha, O. C. (2022). Relationship between antisocial personality, antisocial behaviour: the moderating role of intrapersonal peace among adolescents. *ZIK Journal of Multidisciplinary Research*. 5: 76-88.
- Obano, S. E. (2019). Cybercrime and the Nigerian youth: A study of the causes and consequences. *Journal of Youth Studies*, 22(3), 257-272.
- Obi-Nwosu, H., Onuoha, O. C. & Victoria, O. O. (2024). Dimensions of Psychological Wellbeing as Predictors of Stress among Undergraduates. *Journal of Advanced Psychology*, 6, 1, 55-69.
- Okafor, J., C., Nwafor, C., E., Ezenwa, M., O., & Onuoha, O., C. (2024). Moral disengagement as a predictor of attitude towards cybercrime: the moderating role of social identity. *Practicum Psychologia*. 14 (1), 27-40.
- Okeke, C. V., Obi-Nwosu, H., Onuoha, O. C. & Ofili, I. A. (2026). *International Journal of Criminal Justice Reform*, 2, 1, 1-22.
- Okeke, V. O., Obi-Nwosu, H. & Onuoha, O. C. (2024). Parental styles and moral disengagement as predictors of attitude towards Cybercrime among Undergraduates. *ZIK Journal of Multidisciplinary Research*. 7(1), 207-222.
- Olaide, O. A., & Adewole, O. J. (2018). Cybercrime and the Nigerian university system: A study of the prevalence and consequences. *Journal of Educational Administration and Policy*, 13(1), 1-15.
- Olalere, M. (2026). *Africa's Digital Weak Link? Nigeria's Alarming Position in Cybercrime Rankings*. The Journal News. Retrieved from <https://thejournalnigeria.com/africas-digital-weak-link-nigerias-alarming-position-in-cybercrime-rankings-modupe-olalere-2/> on 10th February, 2026.

- Omodunbi, B. A., Olaniyi, O. A., & Adebayo, O. S. (2016). Cybercrime in Nigeria: A review of the literature. *Journal of Criminology*, 2016, 1-11.
- Onuoha O. C., Obi-Nwosu H., Chukwu O. E., Okeke C. V., Philip P. O. (2025). Examining the moderating role of embarrassability in the relationship between social media exposure and risky sexual behaviour. *International Journal of Emerging Trend in Health Promotion*. 2(1): 1- 16.
- Onuoha O. C., Obi-Nwosu H., Chukwu O. E., Okeke C. V., Philip P. O. (2025). Examining the moderating role of embarrassability in the relationship between social media exposure and risky sexual behaviour. *International Journal of Emerging Trend in Health Promotion*. 2(1): 1- 16.
- Onuoha, O. C. (2025). From Parenting to Callousness: The Role of Peer Influence. *International Journal of Advancement in Psychological Research*, 2 (1); 1-24
- Onuoha, O. C., Obi-Nwosu, H. Okoye, C.A. F., Azuh, G., Ugwue, A. O. (2025). Prevalence of Stress and Depression: A Comparative Study of First Year and Final Year Undergraduates. *International Journal of Global Health and Tropical Diseases Research*. 2 (1); 1-14
- Onuoha, O. C., Umeobi, G. C., Tobih, B. T., Nwosu, C., D. & Nnadozie, A., O. (2024). Authoritarian Parenting Style and Stress as Predictors of Suicidal Ideations among University Undergraduates: Could Resilience Play a Moderating Role? *ZIK Journal of Multidisciplinary Research*. 7(1), 43-59.
- Paulhus, D. L., & Williams, K. M. (2002). The dark triad of personality: Narcissism, Machiavellianism, and psychopathy. *Journal of Research in Personality*, 36(6), 556-563.
- Raskin, R., & Terry, H. (1988). A principal-components analysis of the Narcissistic Personality Inventory and further evidence of its construct validity. *Journal of Personality and Social Psychology*, 54(5), 890-902.
- Rogoza, R. & Ciecuch, J. (2018). Dark Triad traits and their structure: An empirical approach, *Current Psychology*, 39:1287–1302, <https://doi.org/10.1007/s12144-018-9834-6>
- Seigfried-Spellar, K. C., et al. (2017). Relations between psychopathy and computer crime in a sample of online participants. *Computers in Human Behavior*, 73, 522-531.
- Smith, J. (2021). Dark triad personality and cybercriminal behavior. *Journal of Cyber Criminology*, 15(2), 123-136.
- Stiff, C., & Reeves, P. (2023). The Dark Triad and online victimization: An examination of the relationship between Machiavellianism, narcissism, and psychopathy and online crime. *Computers in Human Behavior*, 141, 107655.
- Suleman, S. (2016). Cybercrime and the Nigerian economy: A study of the impact and implications. *Journal of Economic and Financial Sciences*, 11(2), 1-11.
- Ulo, F. U., et al. (2024). Cybercriminal behavior among Nigerian youths: A study of the correlates and consequences. *Journal of Criminology*, 2024, 1-11.

- Valachová, K., & Lisá, E. (2025). The impact of narcissistic traits on cyber dating abuse: The mediating role of basic psychological needs. *Journal of Interpersonal Violence*, 30(1), 3-20.
- Wang, Y., & Lewis, M. (2021). Cybercrime and the African internet user: A study of the prevalence and consequences. *Journal of Information Technology and Politics*, 18(2), 1-15.
- Ybarra, M. L., Mitchell, K. J., & Korchmaros, J. D. (2007). The development and validation of the Cyber Crime Behavior Inventory. *Computers in Human Behavior*, 23(6), 2811-2826.