



Attachment Styles and Impulsivity as Predictors of Offenders Status (Recidivism and None Recidivism) Among Inmates in Awka Correctional Service

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Abstract

Imprisonment has been observed to be the universal approach in managing violent offenders; as such, a global language in crime fighting especially, when dealing with violent offenders. Some offers abstain from crime after serving their prior sentence while many others become more though; committing many other crimes leading to reconviction. Thus, the present study examined whether attachment styles and impulsivity as predictors of recidivism among inmates of Awka. 103 inmates in Awka Correctional Service participated in this study and they were all Christians and all male. Their age ranged from 18 to 45 years with mean age of 30.3 and standard deviation of 8.8. Two instruments were used for data collection: Adult Attachment Scale and Barratt Impulsiveness Scale. The research design was a correlational design while Binary logistic regression was used for data analysis. The result showed that attachment style such as close and anxiety attachment styles significantly predicted offenders status respectively, (close, (β) = .188; Exp (OR) = 1.205 with 95% CI (1.029, 1.415)); anxiety (β = -.532; OR = .588 with 95% CI (.433, .798)). However, depend was not associated with any increase in offenders status. Impulsivity was observed to significantly predicted offender's status at (β = -.090; OR = .914 with 95% CI (.861, .969)). Lastly, attachment styles and impulsivity jointly predicted offender's status at $\chi^2(8, 103) = 49.984, p < .01$. Hence, it was recommended that family members of inmates should pay more attention to their psychological needs.

Keywords: Attachment styles, impulsivity, inmate, correctional service

Introduction

Issues regarding crime and crime punishment has multifarious approaches in handling globally; as such, different countries interprets and punishes offenders differently based on their lead down rules as stipulated in their constitution. Hence, same crime could attract different forms and degrees of punishment in different countries. Even so, imprisonment has been observed to be the universal approach; as such, a global language in crime fighting especially, when dealing with violent offenders Nweke et al., (2024). In some occasions, some offenders depart from their criminal behaviour after serving their initial sentence. Nonetheless, many other offenders go on in crime and reconviction(s). Some cases become so bad that many offenders get reconvicted even while they were still serving a sentence; making them to serve multiply or additional jail time. For instance, Bonta et al., (2022) stated that in England, over 50% rate of reconviction was observed among male inmates while over 45% rate of reconviction was found among female inmates. Also, over 19% of the reconvictions were observed to happen while the offenders were still under supervision (probation). In Nigeria, over 60% of the inmates had previously served a sentence (Chukwumerije 2012); a concept known as recidivism.

According to Beck (2001), some psychological factors of an offender during imprisonment could influence his/her reintegration back to the society. Hence, finding out those psychological factors that are associated with or that could account for criminality and recidivism would be of great importance for the reduction of recidivism among inmates. Based on that, it is important to test the predictive effect of some psychological factors (attachment styles and impulsivity) on recidivism among inmate in Awka correctional service; aiming at understanding if attachment styles and impulsivity could be among those psychological factors that predicts recidivism. As such, proffering solution for recidivism can be possible.

Attachment behaviours are those instinctive reactions towards perceived threat or losing survival advantages that comes with being cared for or attended to by an individual's primary caregiver(s) (Fraley, 2010). Since infants that engage in such behaviors have more survival opportunities, it's always selected naturally and reinforced over generations. According to Wittmer (2011), attachment styles are those special bonds and those lasting

relationships that young children develop with one or more adults which creates the child's sense of security when in company of the adult.

The amount of close relationship an individual experience influences their personal and social developmental processes considerably (Erozkan, 2011). Hence, one's attachment style is as a result of the nature of relationship the persons experienced over time during infancy. When an infant's relationships with the significant people in their life are insecure, there is tendency that they will develop insecure attachment style which could lead to difficulty in regulating one's emotion as well as negatively influences how they relate with others; leading to vulnerability to some psychological distress like loneliness and depression (Ouellette & DiPlacido 2001). Moreover, secured relationship with significant others leads to secure attachment style which promotes confidence, sense of reliance and resiliency while handling life's crises or stressors (Bowlby, 1979).

Bowlby (1973) opined that development of one's attachment style is based on three factors: first, children that are confident in the availability of their attachment figure experience less fear compare to children that are unsure. Second, the expectations they hold about their attachment figures will be based on their experiences during their sensitive period and these expectations persists as they grow and through their life time. Third, their expectations through life accurately reflect their experiences which are based on their caregivers' responsiveness and availability. Resulting to different types of attachment styles which are related to the type of care giving an individual received and are indicative of the adaptations the children made in their relationships with their attachment figure(s) (Simmonds, 2004).

Secure attachment style occurs when an infant is cared for by a sensitive and responsive caregiver. Securely attached infants are able to regulate their distress and also know that they can freely express their needs and emotions without being rejected while insecure attachment style occurs when caregivers find it hard to accept or respond sensibly to the need of the infant. As such, such infants tend to experience hostility, rejection and controlling parenting. Such children respond to such parenting by shutting down their feelings because of the fear and anxiety that the display of such emotion may drive their caregiver away. However, attachment styles in this study will be addressed as measured by

Adult Attachment Scale by Collins and Read (1990); specifically, close, depend and anxiety attachment style.

Impulsivity as one of the study variables could refer to as a person's level of uneasiness in anticipation for the future consequences. According to APA (2013), impulsivity could be seen as any action an individual embarked on without thinking it through; which usually results to unnecessarily risky behaviour that are always inappropriate to the situation. Many actions could contain both impulsive and compulsive features; nonetheless, they are both functionally distinct. Impulsivity and compulsivity are both related in the sense that each exhibits a tendency to act hastily or without proper reasoning. Also, the outcome is usually negative and regrettable. Compulsivity could occur in response to a perceived risk or threat. However, impulsivity occurs in response to a perceived immediate gain or benefit. Compulsive behaviours have to do with repetitive actions in face of fear while impulsive behaviours have to do with unplanned reactions.

Impulsive behaviour according to Patton and Stanford (2011) is generally seen as being counterproductive; and individual differences associated with impulsivity has been observed to be related to a number of socially relevant behaviors. The likelihood to connect criminal behaviour with impulsivity has been trendy among researchers in several disciplines as well as in different theoretical orientations. This tendency to associate impulsivity with criminal conduct has been consistent with the long standing criminological believe in explaining crime in respect to individual traits (Zimmerman, 2009). Impulsivity could be related to some psychological distresses in human community which include anti-social behaviours, violence or criminal behaviour which could as well be as a result of one psychopathology or another.

Theoretically, this work was anchored on attachment theory which focuses on the relationship of an individual; especially, the long-term bond that an individual developed through their experiences with their parents or caregivers. This bond goes a long way in the development of the individual's psychological traits such as their emotional pattern as well as behavioural. For instance, a child with anxiety attachment style could be seen exhibiting high level of impulsivity same with an individual that developed insecure attachment style.

There are several empirical studies that tried to explain the relationship between attachment styles and impulsivity in association with offender's status. Kõiv and Kõiv (2016) conducted a study on Attachment styles among a sample of Estonian male offenders; Yaghoobi et al., (2016) investigated the relationship between Attachment style, Self-monitoring and Cybercrime in Social Network Users; Hove et al., (2012) investigate the link between attachment to parents and delinquency: The moderating effects of age and sex; Hansen et al., (2011) tested the role of adult attachment and personality in the relation to antisocial tendencies among Norwegian prison inmates. They observed insecure attachment style to be a risk factor associated with bullying and violent criminal behavior. Also, anxious attachment style had a positive correlation with cybercrime.

According to Nweke et al., (2024) that examined emotional regulation and impulsivity as predictors of offenders' status; Værøy et al., (2016) they investigated the link between Facets of Impulsivity and Aggression in Extremely Violent Prisoners; Komarovskaya et al., (2007), tested the relationships among impulsivity, antisocial and violent behavior, and personality disorders. From their observations, impulsivity was associated with offenders' status, personality psychopathology, aggressive behaviour as well as antisocial behaviour.

Hypotheses

1. Attachment style (close, depend and anxiety) will significantly predict offender's status (recidivism and none recidivism) among inmates in Awka correctional service.
2. Impulsivity will significantly predict offender's status (recidivism and none recidivism) among inmates in Awka correctional service.
3. Attachment style and impulsivity will jointly and significantly predict offender's status (recidivism and none recidivism) among inmates in Awka correctional service.

Method

Participants

One hundred and three (103) inmates of Correctional Service in Awka participated in this study. All the participants were male and Christian. Their age ranged from 18 to 45 years with mean age of 30.3 and standard deviation of 8.8. Among them were 83 (80.6%) single male while 20 (19.4%) others were married. 28 (27.2%) were employed before incarceration while 75(72.8%) were unemployed. 17 (16.5%) have Tertiary education, 76 (73.8%) have O, level, while 10 (9.7%) have first school leaving certificate. 48 (46.6%) were recidivist while 55 (53.4%) were non-recidivist.

Instrument

Two instruments were adopted for data collection; they are: Adult Attachment Scale (AAS) and Barratt Impulsive Scale (BIS-11).

Adult Attachment Scale (AAS)

Adult Attachment Scale by Collins and Read (1990) consisting of 18 items that measures adult attachment style using three subscales labeled “Close”, “Depend” and “Anxiety”. The Close subscale in AAS means the extent to which a person is comfortable with closeness and intimacy (ie, I find it relatively easy to get close to others), Depend subscale indicated the extent to which a person feels he/she can depend on others to be available when needed (ie, I am comfortable depending on others); whereas the Anxiety subscale shows the extent at which a person is worried about being rejected or unloved (ie, my desire to merge sometimes scares people away). AAS is scored on a 5 point likert scale ranging from 1 = not at all characteristic to me to 5 = very characteristic to me. Collins and Read (1990) reported a Cronbach’s alpha coefficients of .69 for Close, .75 for Depend, and .72 for Anxiety; and Test-retest correlations for a 2-month period of .68 for Close, .71 for Depend, and .57 for Anxiety.

Barratt Impulsiveness Scale (BIS-11; Patton et al., 1995):

Barratt Impulsiveness Scale (BIS) was developed by Barratt (1959). However, BIS-11 was

reversed by (Patton, Stanford & Barratt 1995) to assess the personality/behavioural construct of impulsiveness. BIS-11 comprises of 30 items describing common impulsive and non-impulsive behaviours and preferences. The items are scored on a 4-point likert scale: 1 = Rarely/Never, 2 = Occasionally, 3 = Often/Almost 4 = Always/Always. Items number 1, 7, 8, 9, 10, 12, 13, 15, 20, 29 and 30 are reversed scored. The items are summed and the total score ranges from 30-120; with higher scores indicating higher level of impulsivity. Scores greater than 70 indicates psychological impulsivity. The items reliability of BIS-11 was reported by Agbeniga et al., (2017) with a Cronbach's alpha value of .81; a test-retest coefficient of .47, and a Guttman split-half coefficient of .45.

Procedure

The researchers collected a letter of introduction from the office of the Head of Department of Psychology, Nnamdi Azikiwe University, Awka for a formal introduction of the researchers to the administration of Awka Correctional Service which assisted the researchers on easy accessibility and approval of the study involving inmates in Awka correctional Service. After the approval, appointment was giving to the researchers by the management of the correctional service on the date for data collection. On the agreed date for the research, the researchers went to the Correctional Center with a research assistant that helped them in the distribution and retrieval of the distributed questionnaires. The management of the Correctional Center also directed two wardens at the Correctional Center to assist the researcher during the process of the data collection. Convenience sampling method was used in selecting 130 inmates in the Correctional service center that were administered the questionnaires (Adult Attachment Scale and BIS-11). However, of the 130 copies of the administered questionnaires, 118 copies were returned and 103 copies were properly filled. The 103 copies that were properly filled were selected and used for data analyses.

Design and Statistics

This study utilized a correlational design and Binary logistic regression analysis was adopted as the statistical tools for analyses using Statistical Package for Social Sciences (SPSS) version 25.

Table 1: Means, Standard Deviations and Correlation Coefficients of attachment styles and impulsivity among offenders' status (recidivism and non-recidivism inmates) in Awka correctional service.

Variables	Mean	Std. Deviation	Correlation Coefficients							
			1	2	3	4	5	6	7	
Offenders' status	1.39	.49	1							
Close	19.45	4.61	.26*	1						
Depend	26.19	17.47	-.22*	.07	1					
Anxiety	20.04	2.20	.20	.34**	.08	1				
Attentional Impulsivity	21.76	34.93	.19	.05	.49**	.01	1			
Nonplanning Impulsivity	30.56	27.53	-.28**	-.29**	.35**	-.12	.35*	1		
Motor Impulsivity	64.61	29.74	-.60**	-.29**	.13	-.29**	-.14	.30*	1	

Note. ** $p < .01$, * $p < .05$.

Table 1 above displayed the correlation coefficient of the variables of study. It was observed from the table that close attachment style positively and significantly correlated with offenders' status ($r = .26, p < .01$) but depend attachment style was observed to have a negative though significant correlation with offenders' status at $r = -.22, p < .05$. Nonetheless, anxiety attachment style was not observed to correlate significantly with offenders' status at $r = .22, p > .05$. This indicated that close and depend attachment styles were among the strong psychological factors to address in issues regarding offenders' status of inmates. Similarly, impulsivity dimensions such as attentional impulsivity did not correlate with offenders' status at $r = .19, p > .01$; while, non-planning and motor impulsiveness were observed to be negatively and significantly correlated with offenders' status among inmates respectively, $r = -.28, p < .01$; $-.60, p < .01$. This indicated that the relationship between impulsivity and offenders' status is an inverse one. Thus, as non-planning and motor impulsiveness increases, offenders' status also increases in a negative way.

Table 2: Binary logistic regression analysis of attachment styles and impulsivity on recidivism and non-recidivism among correctional service inmates.

Predictors	B	S.E.	Wald	D f	Sig.	Exp(B)	95% C.I. for EXP(B)	
							Lower	Upper
Step 1 ^a								
Close	.188	.081	5.340	1	.021	1.207	1.02	1.415
Depend	.007	.026	.085	1	.771	1.007	.958	1.059
Anxiety	-.532	.156	11.605	1	.001	.588	.433	.798
Attentional Impulsivity	.025	.027	.884	1	.347	1.026	.973	1.082
Motor Impulsivity	-.044	.021	4.466	1	.035	.957	.919	.997
Nonplanning Impulsivity	.044	.026	2.782	1	.095	1.044	.992	1.099
Constant	9.373	4.137	5.135	1	.023	11772.082		
Test			χ^2	D f	P			
Overall model evaluation								
Wald test			.475	1	.491			
Overall Percentage	77.7							
Omnibus Tests of Model Coefficients			49.984	8	.000			
Goodness-of-fit test								
Hosmer & Lemeshow Test			12.372	8	.135			
Model Summary								
Cox and Snell R square	.384							
Nagelkerke R Square	.513							

a. Variable(s) entered on step 1: CLOSE, DEPEND, ANXIETY, Attentional impulsivity, Motor impulsivity, Non-planning impulsivity.

In table 2 above, a logistic regression analysis was performed to ascertain the effects of attachment styles and impulsivity on the likelihood that correctional service inmates have recidivism and non-recidivism. The logistic regression model was statistically significant, $\chi^2(8, 103) = 49.984, p < .01$. The pseudo-R-square statistics showed that the model

explained 51.3% (Nagelkerke R^2) of the variance in recidivism and non-recidivism and correctly classified 77.7% of cases. This means that the model exhibits good sensitivity. The goodness of fit test (Hosmer and Lemeshow test) was adequate for the model, $\chi^2(8) = 12.372$, $p = .135$. Note, based on the assumption of Hosmer and Lemeshow test, it is expected to be greater than .05 in order to adequately describe the model. Thus, hypothesis 3 was accepted. This means that the predictor variables jointly predicted offenders' status among correctional service inmates, although in different directions.

The odd ratio (OR) of correctional service inmates with close attachment styles were 1.207 times more likely to be recidivists than non-recidivists (Beta coefficient (β) = .188; Exp (OR) = 1.205 with 95% CI (1.029, 1.415)). Inmates with anxiety attachment styles were .59 times more likely to be recidivists than non-recidivists, ($\beta = -.532$; OR = .588 with 95% CI (.433, .798)). Hence, hypothesis 1 was accepted. This indicates that attachment styles are significant factor that may determine offenders' status (recidivism and non-recidivism) among correctional service inmates. Also, inmates with motor impulsiveness were .96 times more likely to be recidivists than non-recidivists ($\beta = -.044$; OR = .957 with 95% CI (.919, .997)). Thus, hypothesis 2 of the study was accepted. By implication, this means that impulsivity as a negative emotion significantly contributed to offenders' status (recidivism and non-recidivism). However, both attentional and non-planning impulsiveness were not associated with the increased likelihood to exhibit recidivism or non-recidivism behaviour.

Discussion

This present study that investigated attachment styles and impulsivity as predictors of offenders' status (recidivism and non-recidivism) among Awka correctional service inmates have a statistical significant result. Which indicated that attachment styles (close, depend and anxiety) and impulsivity were among the psychological factors that predicts offenders' status (recidivism and non-recidivism) among inmates in correctional service centers.

The first hypothesis of this study was confirmed which indicated that attachment styles (close and anxiety) are among the predictors of offenders status (recidivism and non-recidivism) however, depend attachment style does not influence offender's status; which

is in consonance with the observation of Yaghoobi, et al., (2016) which examined the relationship between Attachment style, Self-monitoring and Cybercrime in Social Network Users; involving two hundred and three network users in Iran. The researchers observed that anxious attachment style has a positive significant correlation with cybercrime; the dependent attachment style had a negative significant correlation with cybercrime while secure attachment style had a negative significant correlation with cybercrime. Based on their observations, they concluded that attachment style significantly predicted cybercrime. However, Kõiv and Kõiv (2016) conducted a study on Attachment styles among a sample of Estonian adult male offenders involving one hundred and ten Estonian male inmates; and reported that violent offender's reported higher anxious/ambivalent attachment scores than non-violent inmates. Also, insecure attachment style was observed as a risk factor in prison bullying and violent criminal behavior.

Furthermore, Hovee et al., (2012) investigate the link between attachment to parents and delinquency: The moderating effects of age and sex. Seventy four published and unpublished manuscripts were used for this study; involving 55,537 participants. The researchers found attachment to be associated with juvenile delinquency. Furthermore, Hansen, et al., (2011) conducted a study that examined the role of adult attachment and personality in relation to antisocial tendencies among Norwegian prison inmates involving ninety-two inmates. It was observed that inmates scored higher on avoidant than on anxious attachment style; while age and agreeableness (negatively associated) emerged as significant predictors of violence; anxious attachment explained most of the variances in aggression in intimate relationships.

The second hypothesis was also confirmed indicating that impulsivity is also a factor that influences offender's status (recidivism and non-recidivism). The result of the second hypothesis is in line with the finding of Nweke et al., (2024) they examined emotional regulation and impulsivity as predictors of offenders status (recidivism and non-recidivism) among in Awka correctional service; and observed that impulsivity predicted offender's status. Also, Værøy et al., (2016) investigated the association between Facets of Impulsivity and Aggression in Extremely Violent Prisoners involving seventy-three

participants; among them were fifteen violent criminals in a strictly secured prison in Oslo Norway and fifty-eight non-criminals. Their observation researchers observed a strong relationship between urgency and aggression subscales of hostility and anger. Likewise, Komarovskaya et al., (2007), explored the relationships among impulsivity, antisocial and violent behavior, and personality disorders in five hundred and ninety female prisoners in a maximum-security female prison in central Virginia. The finding revealed that impulsivity was related to personality psychopathology, aggressiveness and antisocial behavior.

Furthermore, it was noticed that the predictor variables jointly predicted offenders' status (recidivism and non-recidivism) among inmates in Awka correctional service; thus, the third hypothesis was accepted; indicating that attachment styles and impulsivity are among the psychological factors that predicts offenders' status.

Implication of the Study

Theoretically, this recent study added new literature and empirical discovery to the body of knowledge in terms of attachment styles and impulsivity on offenders' status which can be used for further elaboration of the theoretical framework of the study.

As attachment styles (close and anxiety), and impulsivity were observed in this study to influence offender's status (recidivism and non-recidivism) of inmates, management of correctional service centers should ensure some necessary policies as well as psychological interventions that will positively influence these psychological factors (attachment styles and impulsivity) so as to reduce recidivism.

In policy making, need for easily accessibility of psychological services for inmates in correctional service centers should always be emphasized on and monitored properly for adequate implementation.

Limitations of the Study

The limitation in this study is that only male participants participated in this study; as such, in the generalization of the findings from this study, the demographic profile of the participants should be considered. Also, been a survey research that depend on self-report

mode of data collection, inmates might try to give information that will make them seem good; hence influencing the research outcome. Nonetheless such was controlled before the distribution of the questionnaire when they were assured of the confidentiality of their information as well as not to include the identity while filling the questionnaire.

Recommendation

1. Based on the finding of this study, there is need for both the relatives and management of correctional centers to be attentive on the inmate psychological need so as to be able to identify those at risk of recidivism.
2. The services of clinical psychologist in correctional centers are very important. Thus, the need for a functional psychological service center in all Nigerian prisons.

Suggestion for Further Studies

It was suggested that future studies should replicate this topic in other location to examine the similarity or differences in the finding. Also, future researchers should include both genders in future study of this title as well as examine the impact of other demographics.

Conclusion

From the findings in this study that examined attachment styles and impulsivity as predictors of offender's status among inmates of Awka correctional service, it was observed that attachment styles and impulsivity are among the psychological factors to consider during inmates rehabilitation so as to mitigate recidivism.

Moreover, there is need for a functional psychological service center in all correctional centers in Nigeria so as to utilize the principles in psychology in modifying the negative attachment styles of inmates as well as impulsivity; as such, recidivism would be reduced.

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