



LEARNING DISABILITIES EVIDENCES AMONG CONVICTS WITH CRIMINAL BEHAVIOUR IN IBADAN PRISON

Abiodun Taofikat ADEWUNMI

*Learning Disabilities Unit
Department of Special Education and Rehabilitation Sciences,
University of Ibadan, Nigeria
P.M.B.1(001), Ibadan Nigeria.
Telephone: +234.803.831.4435.
E-mail: passionsabbey37@yahoo.com*

ABSTRACT

Learning disabilities impacts on the functional abilities of persons presenting with it, as their academic performance come with unexpected products which results into shame, frustration, and social skills deficit which could prompt anti- social behaviour, and graduate into unlawful activities such as crime and criminal behaviour. This study examined the prevalence of learning disabilities among convicts so as to determine the relationship between learning disabilities and criminal behaviour. Purposive sampling technique was used to select the 70 literate convicts who formed the participants for the study. The Crime Behaviour Factor Battery (CBFB- $\alpha = .95$) and the Wechsler Adult Intelligence Scale Revised fourth edition (WAIS- IV- $\alpha = .81$) to test for learning disabilities were used as research instruments. Three research hypotheses were generated in the study, which were then analysed with the use of frequency count and percentages. Convicted criminals with learning disabilities were found among the prison inmates 9 (18%); the specific learning disabilities of the participants with criminal behavior could not be determined, and the participants were of average intelligence ($67 < FSIQ, < 82$); ($P < 0.05$). Thus, the curriculum needs of persons with education- related special needs should be adequately met, while the judge definition of crime should be upheld in criminal hearing.

Key-words: *crime, criminal behaviour, convicts, learning, learning disabilities*

INTRODUCTION

Crime can simply be described as the violation of norms societies formally enacts into criminal law, and are acts attracting legal punishment, as well as offences against the community, with consequences that are injurious in some way to the community at large or one or more people within it (Blackburn, 1993; cited by Sammons, 1994). The many definitions of crime/ criminal behavior allowed Jackson- Dwyer and Roberts (2011) described the different definitions of crime accordingly: The legal definition states that the criminal is the person who breaks the law of the land and crime an act that breaks the law of the land, the role definition claimed the criminal is the individual who sustains a pattern of delinquency over a long period of time and whose life and identity are organised around a pattern of deviant behaviour (commitment to deviant role and lifestyle), while the societal response definition clarified that in order for an act and/or an actor to be defined as deviant or criminal, an audience must perceive and judge the behaviour in question. Criminal acts vary between countries and cultures, so also varies over time and circumstances. It is equally opined that crimes have to show intentions, which means that judgement has to be made about whether a person knew what they were doing and meant to do it (Jackson- Dwyer & Roberts, 2011). For instance, a person who is mentally ill may commit an unlawful act but may escape punishment because it could be judged that they were not fully in control of their behaviour (Jackson- Dwyer & Roberts, 2011). Earlier, Rutter, Giller and Hagell (1998) reported that criminal behaviours should be examined within the wider context of antisocial behavior, and criminality could be equated with delinquency. A criminal then is the individual that breaks the law of the land. One of the effects of crime on society is that it makes citizens feel less safe. To this end, Wasserman and Ellis (2007) submitted that everyone is affected by crime, either as a direct victim or a friend or family member of a victim. Individuals who are not direct victims of crime could also be negatively affected in a variety of ways, such as developing an increased fear of crime or experiencing the financial impact of crime (e.g., higher insurance rates, lost work days).

While primary victims of crime might be identified easily, Wasserman and Ellis (2007) opined that secondary victims of crimes such as family and clan members may not be so readily identifiable and may not receive needed services. Also, crime not only leads to material and immaterial costs for those who have become victimised, but crime also forces local and national authorities to spend billions in monetary value on the prevention of crime, and the detection, prosecution and punishment of criminals. For example, Brand and Price (2000) estimated the costs of crime to be between £35 and £60 billion per year for England and Wales. This is estimated at between #16 trillion and #27 trillion.

The importance attached to crime and criminal activities has brought much deliberation among researchers on what factors are responsible for crime, criminal activities and criminal behaviour. For instance, Loeber and Dishion (1983) suggested family size, quality of parental supervision, parental alcoholism and employment history are possible causes of criminal behaviour. Patterson (1982) on the other hand suggested amount of discord and distress in the family, parental criminality, ineffective and inconsistent discipline, family discord and a deviant social group are responsible for crimes and criminal behaviour. However, Hargreaves (1982) clearly stated that low academic achievement is associated with criminal behaviour.

Failure at school may be because of low intelligence, but also could be due to undiagnosed learning difficulties such as Dyslexia. This has earlier been proposed by Hargreaves (1980) that 'status deprivation' of those who fail in the school system leads to both negative attitudes towards education and the motivation to join delinquent groups. Gold (1978, as cited in Dwyer, 2001), equally argued that school failure results in lowered self-esteem whilst antisocial behaviour amongst peers helps to present an attitude of defiance, which is rewarded by peer admiration. This then leads to arrest and adjudication. Tulman (2000) postulated that a factor fuelling the disproportionate representation of children with education-related disabilities in delinquency system, is the failure of some school system personnel to find, evaluate, and serve children with special needs (disabilities).

Puritz and Scali (1998) described the relationship between learning disabilities and criminal behaviour by stating that the school personnel's failure to identify the 'failing' child for a number of years, and the child increasingly falling behind in academic achievement and repeating several grades could make these children in most of the cases to develop extreme behavioural problems, and then become truant until the seventh, eighth, and ninth grades, in which they often begin to manifest substance abuse- a criminal act. When, such behaviour becomes sustained, then the child with learning disabilities graduates into an adult with criminal behaviour. By this simple analogy, learning disabilities could be supposed to have some relationships with crimes and criminal behaviour. The studies of previous researchers certainly corroborate the existence of a relationship between learning disabilities and crime/ criminal behaviour. For instance, the report of Fels (1994) showed that 20% of the prison population has some form of learning disabilities, while half of the prison population has literacy difficulties.

Einat and Einat(2008) corroborated this fact by claiming that 69.9% of adult prisoners had learning disabilities and attention deficits. Beebe and Mueller (1993) equally found that 95% and 98% of the sample prisoners under investigation were functioning below grade level in reading and mathematics respectively, while Portwood (1996) submitted that 61% of young offenders present with dyspraxia, though they have never been diagnosed of such. It is against this background that this research is tilted towards identifying the nature of the relationship between learning disabilities and crime/criminal behaviour. The main purpose of the study was to identify convicted criminals with learning disabilities, to determine the prevalence of learning disabilities among them and to examine the intelligence distribution among them. The questions raised were: (1) Do more convicts with crime/ criminal behavior (participants) have learning disabilities? (2)

What is the most common specific learning disabilities among participants with learning disabilities? And (3) What is the intelligence distribution of the participants with learning disabilities?

METHODOLOGY

Participants

The samples for the study comprised 70 literate male convicts of Agodi prisons, Ibadan; who were purposively selected to participate in the study. The participants were adult male convicts found to be within the ages of 18 and above 60 years. As at the time of carrying out the research, there were a total of 125 convicted criminals- 121 male convicts and 4 female convicts, supporting the notion that women crime rate are far lower than men crime rate (Abdul-Rasheed, Yinusa, Abdullateef, Ganiyu & Abdulbaqi, 2016). The female convicts were dropped from the study because the researcher was not interested in investigating gender differential in crime. There were therefore 121 male convicts available for the research. Because some level of literacy was required in the research, the welfare officer was asked to help the researcher with the literate male convicts. The research assistant searched the case notes of the 121 convicts in order to identify the literate ones and then qualify them for the research. After a thorough search of the case notes, 70 of the convicts were found to present with some forms of literacy and then became the participants for the study.

Design

The research design was a descriptive research design of the ex post facto type.

Measures

The instruments used were the the Crime Behaviour Factor Battery (CBFB), and the Wechsler Adult Intelligence Scale- Fourth Edition (WAIS- IV).The Crime Behaviour Factor Battery (CBFB) is a self- rating paper- pencil instrument constructed in simple English Language to meet the response needs of students, school- leavers, juvenile offenders, prisoners and all categories of both free and incarcerated individuals (Animashaun, 2006).The Crime Behaviour Factor Battery (CBFB) is a self- rating paper- pencil instrument constructed in simple English Language to meet the response needs of students, school- leavers, juvenile offenders, prisoners and all categories of both free and incarcerated individuals (Animashaun, 2006).

The Battery consisted of 2 major parts, which are the background information section and the tests section. The first part which is the background information section requires the client to provide self basic biographical and demographical information. The part consists of 21 items to be carefully completed by the participants which includes Date, Name, Gender, Age, Qualification, Religion, e.t.c. The second part consists of 14 tests with items constructed in negative items. The tests are: Crime Behaviour Rating Scale, Personal Factors, Family/ Parental Factors, School-Based Factors, Social Factors, Economic Factors, Societal Factors, Political Factors, Law Enforcement Agencies' Factors, Judiciary Factors, Religious Factors, Peer Group Factors, Media Factors, Career- Related Factors. The Crime Behaviour Rating Scale has a Norm of 63 which means the testee is a potential criminal. Scores 0- 62 indicates low level of crime intention, 63- 90 indicates moderate level of crime intention, and 91- 165 indicates high level of crime intention. Tests 2 – 14 are the independent variables, while test 1 is the dependent variable. For tests 2- 14, the percentage of the score is to be found to determine the level of prevalence ($x/\text{total score} \times 100/1$).

The description of the test (CBFB) is provided below:

Table 1: CBFB descriptions

S/N	Title of the test	Number of items	Minimum score	Maximum score	Norm
1	Crime behaviour rating scale	33	33	165	63
2	Personal factors	38	38	190	-
3	Family/parental factors	38	38	190	-
4	School- based factors	30	30	150	-
5	Social factors	22	22	110	-
6	Economic factors	16	16	80	-
7	Societal factors	31	31	155	-
8	Political factors	41	41	205	-
9	Law-enforcement Agencies factors	24	24	120	-
10	Judiciary factors	15	15	75	-
11	Religious factors	15	15	75	-
12	Peer group factors	7	7	35	-
13	Media factors	7	7	35	-
14	Career related factors	20	20	100	-

The test is a self- report paper pencil power test, which has no predetermined time limit for completion. It has no right or wrong answer, as participants are only required to indicate their current behaviour/feeling on each item, by rating themselves on a five- point scale. The test is generally scored on a 5 point Likert scale as thus:

- 1- Strongly Disagree
- 2- Disagree
- 3- Not sure
- 4- Agree
- 5- Strongly Agree

As soon as the scale is duly completed by the testee, it is the duty of the tester to score the test. This is done by adding up the scores in each section. For Test 1, scores below the norm of 63 indicates minimal or low level of crime intention which does not pose any threat. However, any score above 63 should be carefully asterisked as a problematic situation, as it indicates the presence of crime intention. Scoring of tests II to XIV is similar but different from that of Test 1. The score is being added up and the percentage for each test recorded and compared. The highest one is the greatest disposing factor to crime for the candidate, while others follow systematically. Clients who score above 63 in Test 1 are to be subjected to proper counselling for remediation, reformation and rehabilitation. The percentage scores in their other tests (II- XIV) would be used to determine the greatest motivating factor predisposing such clients to crime, and efforts must be made to address such factors. The results in other tests, as well as the relationship with criminal behavior are being considered in another publication.

The Wechsler Adult Intelligence Scale fourth edition (WAIS IV) with subtests scores, according to the Columbia Health Disability Services Guidelines for Documentation of Learning Disabilities (2012), is the preferred instrument for measuring the aptitude of adults with learning disabilities. The Wechsler Adult Intelligence Scale (WAIS IV) is a standardized instrument that has been validated across a large representative sample for assessing adult intelligence, and for identifying adults with learning disabilities.

The test consists of a total of 10 subtests with additional 5 supplementary subtests. The subtests are divided into verbal test and performance test. The items of the core subtests include: Block Design, Similarities, Digit Span, Matrix Reasoning, Vocabulary, Arithmetic, Symbol Search, Visual Puzzles, Information, and Coding. The supplementary subtests include Letter- Number Sequencing, Figure Weights, Comprehension, Cancellation and Picture Completion.

The descriptions and rationale of the subtests are provided as follows:

Table 2: Descriptions and rationale of WAIS- IV Sub- test

Testtype	Descriptions	Rationale
VerbalComprehension		
Similarities	The examinee is presented two (2) words that represent common objects or concepts and describes how they are similar. It consists of 18 items.	It is designed to measure verbal concept formation and reasoning, and involves crystallized intelligence, abstract reasoning, auditory comprehension, auditory memory, associative and categorical thinking, distinction between non- essential and essential features, and verbal expression (Kaufman & Lichtenberger, 2006)
Vocabulary	It consists of both picture and verbal items. For picture items, the examinee names the objects presented visually. For verbal items, the examinee defines words that are presented visually and orally. It consists of 30 items- 3 picture items and 27 verbal items.	It is designed to measure an examinee’s word knowledge and verbal concept formation. It also measures crystallized intelligence, fund of knowledge, learning ability, long- term memory and degree of language development
Information	The examinee answers questions that address a broad range of general knowledge topics. It consists of 26 items.	To measure an examinee’s ability to acquire, retain, and retrieve general factual knowledge
Comprehension*	The examinee answers questions based on his or her understanding of general principles and social situations. It consists of 18 items.	To measure verbal reasoning and conceptualization, verbal comprehension and expression, the ability to evaluate and use past experiences, and the ability to demonstrate practical knowledge and judgment
Perceptual Reasoning		
Block Design	Working within a specified time limit, the examinee views a model and a picture, or a picture only, and uses red-and-white blocks to re-create the design. It consists of 14 items.	To measure the ability to analyse and synthesise abstract visual stimuli.
Matrix Reasoning	The examinee views an incomplete matrix or series and selects the response option that completes the matrix or series. It consists of 26 items	To test for fluid intelligence, broad visual intelligence, classification and spatial ability, knowledge of part- whole relationships, simultaneous processing and perceptual organization
Visual Puzzles	Working within a specified time limit, the examinee views a completed puzzle and selects three respond that when combined, reconstructs the puzzle. It consists of 26 items.	To measure non- verbal reasoning and the ability to analyse and synthesise abstract visual stimuli
Figure Weights*	Working within a specified time limit, the examinee views a scale with missing weight(s) and selects the response option that keeps the scale balanced. It consists of 27 items.	To emphasize inductive or deductive logic
Picture Completion*	Working within a specified time limit, the examinee views a picture with an important part	To measure visual perception and organization, concentration and

	missing and identifies the missing part. It consists of 24 items.	visual recognition of essential details of objects (Sattler, 2008)
Working Memory		
Digit Span	It is composed of three tasks of Digit Span Forward (DSF), Digit Span Backward (DSB), and Digit Span Sequencing (DSS). It involves the examinee being read a sequence of numbers and recalled in the same order, in reverse order, and in ascending order. DSF involves rote learning and memory, attention, encoding, and auditory processing. DSB involves working memory, transformation of information, mental manipulation, and visuospatial imaging (Sattler, 2008). DSS was developed in order to increase the working memory demands of the Digit Span subtest relative to the previous version. There are 8 items in each task of two trials each.	To increase the working memory demands of the Digit Span Subtest
Arithmetic	Working within a specified time limit, the examinee mentally solves a series of arithmetic problems. It consists of 22 items.	To test for mental manipulation, concentration, attention, short-and long- term memory, numerical reasoning ability, and mental alertness; and may also involve sequential processing, fluid, quantitative, and logical reasoning, and quantitative knowledge (Sattler, 2008)
Letter- Number Sequencing*	It is a subtest for ages 16:0- 69:11. The examinee is read a sequence of numbers and letters and recalls the numbers in ascending order and the letters in alphabetical order. It consists of 10 items with three trials each	To test for sequential processing, mental manipulation, attention, concentration, memory span, and short- term auditory memory. Also may test for information processing, cognitive flexibility, and fluid intelligence
Processing Speed		
Symbol Search	Working within a specified time limit, the examinee scans within a search group and indicated whether one of the symbols in the target group matches. It consists of 60 items.	In addition to processing speed, the test is designed to test for short-term visual memory, visual motor coordination, cognitive flexibility, visual discrimination, psychomotor speed, speed of mental operation, attention and concentration. May also measure auditory comprehension, perceptual organization, fluid intelligence, and planning and learning ability (Sattler, 2008)
Coding	Using a key, the examinee copies symbols that are paired with numbers within a specified time. It consists of 135 test items	In addition to processing speed, the subtest measures short- term visual memory, learning ability, psychomotor speed, visual perception, visual motor coordination, visual scanning ability, cognitive flexibility, attention, concentration, and motivation. It may also involve visual sequential

		processing and fluid intelligence (Sattler, 2008).
Cancellation*	A subtest for ages 16:0- 69:11. Working within a specified time limit, the examinee scans a structured arrangement of shapes and marks target shapes. It has two items.	To measure processing speed, visual selective attention, vigilance, perceptual speed, visual- motor ability (Sattler, 2008).

NB: * means supplemental subtest

The scale was designed to identify the individual’s specific area of learning disabilities. With the scale, the individual is assessed on each of the subtest, according to specified time appropriated in the test manual, and scored according to the scoring principles identified in the manual. After the individual is assessed on the subtests, a total of raw scores is obtained, which is the sum of the scores obtained from each of the subtest, which is then converted to scaled scores. The scaled score is to be calculated by corresponding the individual’s raw scores with the Test Age (Actual Age). The Test Age is calculated as the Birth Date subtracted from the Test Date. The scaled scores are then arranged into four profiles of Verbal Comprehension, Perceptual Reasoning, Working Memory, and Processing Speed thus:

Table 3: WAIS- IV Subscale score profiles

Type of Test	Verbal Comprehension	Perceptual Reasoning	Working Memory	Processing Speed
Core Subtests	Similarities (SI), Vocabulary (VC), Information (IN)	Block Design (BD), Matrix Reasoning (MR), Visual Puzzle (VP)	Digit Span (DS), Arithmetic (AR),	Symbol Search (SS), Coding (CO)
Supplemental Subtests	Comprehension (CO)	Figure Weights (FW), Picture Completion (PCm)	Letter- Number Sequencing (LN)	Cancellation (CA)

For each of the above profiles, only the core subtests are calculated, even if the supplemental subtests are administered. The profiles are then summated to produce a Full Scale Score, i.e. the Full Scale is the sum of the scaled scores of the core subtests of Verbal Comprehension, Perceptual Reasoning, Working Memory, and Processing Speed. Thereafter, the sum of scaled scores of each profile subgroup is then converted to Composite Score Index, i.e. the sum of scaled scores of the Verbal Comprehension will produce a composite score index called the Verbal Comprehension Index (VCI). Correspondingly, the Perceptual Reasoning scaled scores will produce a composite score of Perceptual Reasoning Index (PRI), Working Memory will produce a Working Memory Index (WMI), Processing Speed Processing Speed Index (PSI), as well as the Full Scale of the Full Scale Index Quotient (FSIQ). The FSIQ represents the global measure of the individual’s intelligence, while the VCI, PRI, WMI and PSI represent the specific intelligence areas of the individual. The FSIQ is not the sum of the VCI, PRI, WMI and the PSI; but rather is the Composite Score conversion of the Full Scale. Each of these scales also has a corresponding Percentile Rank, and a Confidence Interval which could be set at either 90% or 95%. The WAIS IV provides a classification for the composite scores thus:

Table 4: Composite scores classification of the WAIS- IV

Composite score range	Descriptive classification
130 and above	Very superior
120- 129	Superior
110- 119	High average
90- 109	Average
80- 89	Low average
70- 79	Borderline
69 and below	Extremely low

The Composite Score Profile is then displayed, which is a chart showing the composite scores of the individual. This profile enables the examiner to have a brief glance and understanding of the overall performance and ability of the individual. The WAIS- IV further provides for the Discrepancy Comparison for the individual, both at the Index Level and at the Subtest Level. The Discrepancy Comparison at the Index Level is the difference of the Composite Score Index, i.e. the difference of the VCI and PRI, VCI and WMI, VCI and PSI, PRI and WMI, PRI and PSI, and WMI and PSI. At the Subtest Level, the Discrepancy Comparison is the difference of the Digit Span and Arithmetic, and Symbol Search and Coding.

Procedure

Prior to the commencement of this study, the researcher obtained the permission of the Ibadan Prison Authority and other agencies for ethical approval. In carrying out the research, the researcher with the assistance of the welfare officer who doubled as research assistant assessed the criminal records of the convicts in order to identify who qualifies to participate in the study. As at the time of carrying out the research, there were a total of 125 convicted criminals- 121 male convicts and 4 female convicts. The female convicts were dropped from the study because the researcher was not interested in investigating gender differential in crime. There were therefore 121 male convicts available for the research. Because some level of literacy was required in the research, the welfare officer was asked to help identify the literate male convicts. The research assistant searched the case notes of the 121 convicts in order to identify the literate ones and then qualify them for the research. After a thorough search of the case notes, 70 of the convicts were found to present with some forms of literacy and then became the samples for the study.

During the course of the study, there was attrition as some participants had to be screened out- 1 participant completed the CFBF, but was transferred to Ogbomoso prison before the WAIS IV could be administered on him; 2 samples were dropped out of the study because they were found to present with some forms of visual deformities, 2 samples voluntarily opted out of the study as they became discouraged, while 5 other samples were dropped out of the study as they could not give 100% support during the period WAIS IV administered on them. There were therefore 60 literate male convicts who were samples all through the period of the study. Each of these samples had both the CFBF and the WAIS IV administered on them. After the CFBF of the samples had been collated, 50 of them were found to present with crime/ criminal behaviour and thereafter became the participants for the study.

RESULTS

In an attempt to answer the question on if more convicts with crime/criminal behaviour have learning disabilities, the CFBF score of the participants are sorted out, and the results show that 2 of the samples scored between 0-50, and 8 between 51 and 62. These 10 on the CBFN had no crime intention, and were therefore left out of the study. Of the remaining 50, 28 had moderate

crime intention, and 22 high crime intention. Thereafter, the WAIS results of the 50 were analysed in order to determine their intelligence distribution, as persons with learning disabilities have at least average intelligence (American Psychiatric Association, 1994). Based on this, only 23 of the participants with criminal behaviour qualify to be assessed in order to determine if they present with learning disabilities or not (Table 5).

Table 5: Intelligence distribution of the participants with criminal behaviour

Composite score	Descriptive classification	Frequency	Percent (%)	Valid Percent
130 and above	Very superior	0	0	0
120- 129	Superior	0	0	0
110- 119	High Average	5	10	10.0
90- 109	Average	18	36	46.0
80- 89	Low Average	25	50	96.0
70- 79	Borderline	2	4	100.0
69 and below	Extremely low	0	0	100.0

The Table above shows that 5 (10%) of the participants had High average intelligence-, 18 (36%) had average intelligence, 25 (50%) had low average intelligence, while 2 (4%) had borderline intelligence.

The composite scores revealed their relative intellectual strengths and weakness. The composite subscales of the population was low in average, while their FSIQ will be average or above average. only 9 (18 %) of the participants present with learning disabilities, as they demonstrated below average intelligence in their VCI, PRI, WMI and PSI scores, though their FSIQ remain average or high average (Table 6).

Table 6: composite subscale of the 9 participants with criminal behaviour with average/ high average intelligence

109 < FSIQ < 119 (N= 5)			
Composite score	Frequency	Percent (%)	Percent of N= 50
VCI < 90	0	0	0
PRI < 90	0	0	0
WMI < 90	0	0	0
PSI < 90	0	0	0
Total	0	0	0
89 < FSIQ < 109 (N= 18)			

VCI < 90	2	11.1	4
PRI < 90	6	33.3	12
WMI < 90	1	5.6	2
PSI < 90	0	0	0
Total	9	50	18
89 < FSIQ < 109 (N= 9)			
89 < VCI < 109	6	66.7	12
89 < PRI < 109	3	33.3	6
89 < WMI < 109	6	66.7	12
89 < PSI < 109	6	66.7	12
Total	21		
89 < FSIQ < 109 (N= 9)			
89 < VCI < 109	0		0
89 < PRI < 109	0		0
89 < WMI < 109	5	55.6	10
89 < PSI < 109	3	33.3	12
Total	8		
89 < FSIQ < 109 (N = 9)			
119 < VCI < 129	1	11.1	2
119 < PRI < 129	0		0
119 < WMI < 129	0		0
119 < PSI < 129	0		0
Total	1		
109 < FSIQ < 119 (N = 9)			
VCI > 129	0		0
PRI > 129	0		0
WMI > 129	0		0
PSI > 129	0		0

Table 6 above shows that none o-f the high-aver-aged intelligent participants had less than average in either the PRI, VCI, PSI or WMI. Out of the 18 averagely intelligent participants, 2 had a VCI score- less than 90, 6 had a PRI score less than 90, and 1had a WMI score less

than 90. Only a participant was superior in the VCI, while no participant was very superior in either the PSI, VCI, PRI or WMI.

Also, the Table shows that the majority of the participants with criminal behaviour (54%) were of low average to borderline intelligence, they were therefore a population with intellectual disabilities. Further, in order to clarify if Nigerian adult convicts were predisposed to crime due to learning disabilities, the school- based factors as correlates of crime and criminal behaviour of the participants with both criminal behaviour and learning disabilities were sorted out in their CFBF. The 9 participants were found to rate items such as poor study habits, lack of readiness to learn, lack of motivation to learn, truancy, school drop-out, poor curriculum, and inadequate educational facilities high as causes of crime and criminal behaviour. These items are peculiarities of learning disabilities, and to a large extent described the predictive abilities of the disorder on crime and criminal behaviour of the aforesaid participants. No single participant presenting with both criminal behaviour and learning disabilities had both the WMI and the VCI lower than 90, and/ or the PRI and the WMI lower than 90 (Table 7),

Table 7: Composite analysis of participants with learning disabilities

FSIQ > 89		
Composite scores	Frequency	Percentage (%)
WMI & VCI < 89	0	0
PRI & WMI < 89	0	0
Total	0	0

Table -7 above shows that none of the participants with learning disabilities met the criteria to be classified as presenting with specific learning disabilities either in reading or in mathematics, while participants with learning disabilities were found to be of average and above average intelligence (Table 5).

DISCUSSION

The results that a few convicts with criminal behaviour have learning disabilities – 9, i.e. 18% means that some convicted criminals have some form of learning disabilities. Some participants also have intellectual disabilities (50%). The 18% participants were found to present with some forms of auditory and visual deficits (Learningrx, 2013); and represent those with difficulties in one or more of the areas of motor coordination, time management, verbal expression, memory, attention, organizational skills, processing speed, emotional maturation, and social skills needed to make friends and maintain relationships (LDPrize.net, 2012). The predictive abilities of the School- based factors of the participants with criminal behaviour and learning disabilities showed that learning disabilities were predictive of their behaviour. These findings therefore support the claim of Fels (1994) that 20% of the prison population has some form of learning disabilities. These findings also lend credence to claim that low academic achievement is associated with criminal behavior (Hargreaves, 1982), and are consistent with the chromosomal theory of crime that most criminals have XYY chromosomes.

Further, these findings are similar to the findings of 61% of young offenders who were found to present with dyspraxia, with none of them not being diagnosed of such (Portwood, 1996), and uphold the temporal antecedence postulations of Cook and Campbell (1976), and School Failure hypotheses of Keilitz and Dunivant (1986).The finding on the intelligence distribution of convicts with learning disabilities shows that the intellectual capacity of this group was average and above average. This means that these group are equally as smart as persons



without learning disabilities. This finding is therefore consistent with the claim of Werts, Cullata and Tompkins (2007) that because persons with learning disabilities are typical or average in intellectual functioning, the learning disability lies in their ways of learning, in their perceptual systems, and in how they interpret and integrate information to make sense of their world.

The study was not without limitation. The participants were restricted to convicted criminals, but what was found peculiar to convicted criminals could as well be peculiar to awaiting trials. There was attrition, as 14.3% of the sample dropped out. The results on the types of specific learning disabilities among the convicts with criminal behaviour were inconclusive, as the WAIS- IV could not identify the specific kinds of learning disabilities they face. More standardized scales could have been used to screen further the types of learning disabilities. It is therefore suggested that future researchers should probe into prevalence of learning disabilities among the waiting trials, and into the specific kinds of learning disabilities adults with criminal behaviour face. Further, interviews could be used as part of the research instrument, as in-depth probe of the convicts is necessary in order to have their case history. In addition, future researches should make use of standardized tests that are culturally fair for diagnosis. Nonetheless, the study was able to establish that some adults with criminal behaviour present with some evidence of learning disabilities, that learning disabilities are responsible for criminal behavior, and that adults with learning disabilities are a significant part of the prison population.

Also, the study has established that adults with intellectual disabilities (evidenced by their below average intelligence) are in the majority in prison population, and also that adults with learning disabilities present with at least average intelligence. The study has shown the significant contributions of the variables identified and implications consequent of the study to teachers and curriculum planners. Based on the established implications of this study, the teachers both in regular and special schools should intensify their efforts in teaching adequately non- averaged students with poor educational output. Curriculum planners should ensure that the needs of persons with learning disabilities, as well as those with intellectual disabilities are well provided for adequately in the curriculum content.

**REFERENCES**

- Abdul-Rasheed, S.L., Yinusa, M.A., Abdullateef, R., Ganiyu, O.A., & Abdulbaqi, S.Z. (2016). Gender differentials in criminal behavior in Nigeria. *Pathways to African Feminism and Development- Journal of African Women Studies Centre*. 1 (4) , 24- 36.
- Animashaun, RA. (2006). *The Crime Behaviour Factor Battery*. Ibadan: Spectrum Books.
- Beebe, M.C. & Mueller, F. (1993). Categorical offenses of juvenile delinquents and the relationship to achievement. *Journal of Correctional Education*, 44(4), 193 – 198.
- Brand, S., & Price, R. (2000). The economic and social costs of crime. Home Office Research Study 217.
- Cook, T. D., & Campbell, D. T. (1976). *The Design and Conduct of Quasi-Experiments and True Experiments in Field Settings*. In M. D. Dunnette (Ed.), *Handbook of Industrial and Organizational Research*. Chicago: Rand McNally, 223-326
- Dwyer, D. (2001). *Angles on Criminal Psychology*. New York: Nelson Thornes Inc
- Einat, T. & Einat, A. (2008). "Learning disabilities and delinquency: a study of Israeli prisons inmates", *International Journal of Offender Therapy and Comparative Criminology*, 52(4), 416-434.
- Fels, H. (1994). Learning Disabilities in Prison. The University of California San Francisco School of Medicine. Report presented to the Washington Institute on Learning Disabilities.
- Hargreaves, D.H. (1982). *The challenge of the Comprehensive School: Culture, Curriculum and Community*. Routledge & Kegan.
- Jackson- Dwyer, D., & Roberts, C. 2011. *Revise Psychology for GCSE level*. Retrieved From <http://www.amazon.com/> on Jan 14, 2011
- Kaufman, A.S., & Lichtenberger, E.O. (2006). *Assessing adolescent and adult intelligence (3rd ed.)*. Hoboken, NJ: Wiley.
- Keilitz, I, & Dunivant, N. (1986). The Relationship between Learning Disability and Juvenile Delinquency: Current State of Knowledge. *Remedial and Special Education* 7 (3),
- LDPride.net. 2012. Top 5 Emotional Difficulties of People with Learning Disabilities. Retrieved from <http://www.ldpride.net.htm>
- Learningrx. 2013. Characteristics of a learning disability in adults. Retrieved from <http://www.learningrx.com>.
- Loeber, R., & Dishion, T. 1983. Early predictors of male delinquency: A review. *Psychology Bulletin* 94:68-99,
- Patterson, G.R. 1982. *Coercive family process*. Castalia; Eugene.
- Portwood, M. 1996. *Developmental Dyspraxia. A Practical Manual for Parents and Professionals*. Durham: Educational Psychology Service.
- Puritz, P., & Scali, M.A. (1998). Beyond the Walls: Improving Conditions of Confinement For Youth In Custody (OJJDP Report, January 1998)
- Rutter, M., Giller, H. & Hagell, A. (1998). *Antisocial Behavior by Young People*, Cambridge University Press, Cambridge
- Sammons, A. (1994). Problems in Defining Crime. *Criminal Psychology*. Retrieved from: <http://www.psychotron.org.uk/>
- Sattler, J.M. 2008. *Resource guide to accompany assessment of children: cognitive foundations (5th ed.)*. San Diego, CA: Author
- Tulman, (2000). Disability and Delinquency: How Failures to Identify, Accommodate, and Serve Youth with



Education-Related Disabilities Leads to Their Disproportionate Representation in the Delinquency System

Wasserman, E., & Ellis, C.A. (2007). *Impact of crime on victims*. 2007 National Assistance Academy. Track 1, Foundation- Level Training

Werts, M.G; Culatta, R.A; & Tompkins, J.R. (2007). *Fundamentals of Special Education: What every Teacher Needs to know*. Merrill Prentice Hall: Upper Saddle River.