



Thesis By
ERHABOR,
Idemudia
Sunday

UNIVERSITY OF
IBADAN

**Psychosocial Factors Determining
Psychological Disorders among Prison
inmates in Nigeria: Implications for
Treatment Intervention**

JUNE, 1995



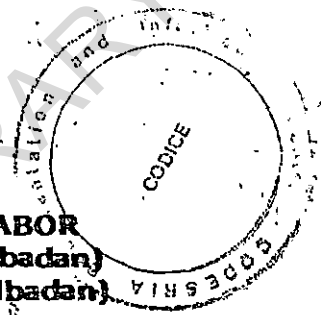
1 7 NOV. 1995

02.04.03
ERH
8715

**PSYCHOSOCIAL FACTORS DETERMINING PSYCHOLOGICAL
DISORDERS AMONG PRISON INMATES IN NIGERIA:
IMPLICATIONS FOR TREATMENT INTERVENTION**

BY

IDEMUDIA SUNDAY ERHABOR
B.Sc. (Hons.) Psychology (Ibadan)
M.Sc. Clinical Psychology (Ibadan)



A THESIS IN THE DEPARTMENT OF PSYCHOLOGY

25 OCT. 1994

**Submitted to the Faculty of the Social Sciences in partial
fulfilment of the requirements for the Degree of**

DOCTOR OF PHILOSOPHY

UNIVERSITY OF IBADAN

JUNE, 1995

ABSTRACT

This study was designed to assess the role of psychosocial variables in determining psychological disturbances among prisoners, in Nigeria and initiate a psychological treatment intervention programme for use among prisoners.

Stratified sampling was used to select four medium prisons in Nigeria. These were Kaduna, Agodi, Benin and Enugu prisons. Using a table of random numbers, 150 prisoners were randomly selected from the four prisons and another 150 non-prisoners from the general population. Also, 24 prisoners were involved in the treatment programme at the Agodi prison, Ibadan. These were randomly assigned to both experimental and control groups. Data were collected using the Personality Inventory Questionnaire (PIQ), comprising Eysenck Personality Questionnaire (EPQ), Awaritefe Psychological Index (API), the Crown Crisp Experiential Index (CCEI), and Idemudia Prison Stress Scale (IPSS). Nine hypotheses were tested in this study.

Altogether, results of the data analyses using two-3 way ANOVA, t-test for independent groups and ANCOVA, revealed that prisoners who stayed longer in prison reported more psychological disorders than prisoners serving medium and short sentences. In a similar direction, prisoners serving medium term sentences reported more

psychological disorders than prisoners serving shorter sentences. Those who are serving longer sentences reported more severe psychological disturbances than other categories of prisoners. Prisoners high on psychoticism (P) reported more neurotic disorders than those low on P. Another personality measure indicated that extraverted (High E) prisoners reported more psychological disturbances than introverted ones (Low E). Neuroticism (N) when considered separately did not reach an acceptable level of significance but when considered with P and E was highly significant. Thus, high PEN prisoners reported more psychological problems than low PEN prisoners. Also, prisoners who were introduced to the psychological treatment intervention, i.e. The Group Coping Skills instruction program, reported less psychological disorders and greater adjustment than prisoners assigned to the no treatment control group. There is no evidence that prisoner with high stress report more psychological disturbance than prisoners with low stress. Also, female prisoners did not experience more psychological disturbances than male prisoners.

Limitations of current research in prisons were discussed and intervention strategy employed for the psychological adjustment of prisoners in this study and observed administrative and governmental policies currently lacking in the Nigerian prison system were recommended.

ACKNOWLEDGEMENT

A research work of this nature is usually an outcome of many individuals who one way or the other have contributed to its planning, execution and completion. As such, a number of people grouped into members of the academia, family, professional peers, research facilitators and friends spared their time, energy, money and materials in the inception, initiation, training and generally in the successful completion of this thesis. This is a golden opportunity to express my gratitude to them all.

I am grateful to my supervisors - Professor D.C.E. Ugwuegbu and Dr D.O. Utomi - for their useful comments and time spared in guiding this work to fruition. Particular thanks to Professor Ugwuegbu for creating an atmosphere and tradition of academic rigour and uncompromising competence in the Department of Psychology at Ibadan.

Special and many thanks to Dr D.O. Utomi for sensitizing me to the challenge to accomplish clinical competence, and for providing the necessary encouragement for achieving excellence in research and clinical practice. I have benefitted immensely from their dedication, experience and wisdom. God will continue to provide abundantly for you and your families.

I am also grateful to Professor Alfred Awaritefe, of Mental Health Department, University of Benin, for his love, concern, friendship,

and whose philosophy of life has a great influence on me. I love you and your family particularly, Milena, your wife, Oro and his brother.

I must also thank other members of the Department of Psychology, U.I. Dr E.O. Atolagbe, for providing me with research materials at different stages of the study; Dr I.B. Udegbe, Dr H.O. Osinowo for her insistence on thoroughness, and provision of materials and ideas and all-presence moral support; Dr S.K. Balogun, my friend and colleague, for his pleasant disposition, concern, interest in my progress and constant 'nagging'. Without your support, progress would have been better imagined. Thank you very much;

Dr B. Ehigie, for your kindness, moral support and advise. I am particularly grateful to Dr Adegbenga Sunmola, who is like a brother to me, words cannot describe your assistance, helpful comments, suggestions, moral support, and your thorough understanding.

I cannot forget Mrs Gray, your sisterly advice has made this work a reality; Mr Adefisoye, Stanley Nwoko and Samuel - my 'government' friends, Deola, James and other members of the Faculty, particularly my number one 'enemy' Mrs Ebun C. Ojo and Mrs O.A. Aregbe - without you, my happiness would not be complete.

I have been opportuned to grow up in a family environment where those before me have charted for themselves high standards of performance. They had visions and the completion of this work

is an evidence of this. For this, I am grateful to my parents, for their ceaseless support and complete parental guidance. I am happy because I am there for you; my uncle, Mr Nelson Iriogbe for pioneering this laudable tradition of seeking excellence.

To my brothers, Donny, Chris, Kingsley and Jackson, my sisters, Maria - for your love and concern, Felicia, Flora - for perpetuating the virtue of hardwork, love and support, Gladys, Patience, Dorris, Bridget, Catherine, Odion, Akhere and Magdalene. To the entire members of the Chief Dame-Oboh's family, I register my appreciation for recognizing the worth of academic pursuit, and for giving encouragement at all times.

I am particularly grateful to those who have made contributions at the different stages of this research - Assistant Controllers of Enugu, Kaduna, Benin and particularly Ibadan prisons and members of the welfare department - especially Mr Daramola, for their constant and helpful supervision; Tunde and Ayo for providing the computer facility for analyses of data; Mr Friday Omuta, for typing; Samson Adeyemi, Shola Maduka Sylvester and Razaq, for facilitating the administration of the questionnaires in various prisons. I sincerely thank Ayo, a prisoner who was jailed for 10 years. Ayo was a student of Obafemi Awolowo University, Ile-Ife. He was the most educated prisoner and he more or less co-ordinated my research strategies in

the prison. He was my 'eye' among the inmates. God will be with you throughout your jail term.

I shall ever remain grateful to my uncles, Professor Vincent Aimaku, and Professor Sylvester I. Abumere, for their constant support and love; my God fathers, Professors J.A.I. Omueti, Head, Department of Agronomy and J.O. Okogun of the Department of Chemistry, for their being everything to me. I love you both. Also, I thank my God mother, Dr (Mrs) Izebhaye, for her love and motherly concern. I also thank Professors Alex Gboyega and M.O. Filani, for their love and support.

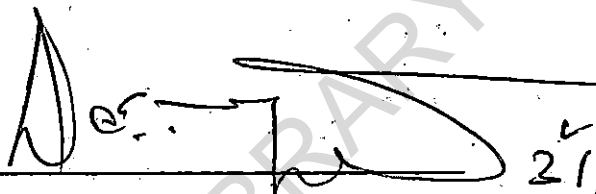
My gratitude also goes to my friends, Timothy Inebenoise, Peter Ohonsi, Jackson Osu, Big Joe Agbon, Aleburu Marlon, T. Nath Ozakpolor - for still being there for me; Jegede, Yinka, Drs Adewunmi, Olutayo, Jerry, Sunday Babalola, for your inspiration and love. I am also grateful to Ekanem, Chinyere, Nwokeafor, Chi-Chi and Onyeka, for their moral support. I thank Lucky Edeko, for her optimism, words of solace and support.

I acknowledge with deep appreciation the support of CODESRIA for awarding me a grant for this study.

Finally, I am grateful to God Almighty, the provider of life and giver of knowledge, love, grace, favour, protection and understanding for fulfilling the dreams of my parents through the completion of this work and the whole Doctor of Philosophy programme.


CERTIFICATION

We certify that this work was carried out by Erahbor Sunday Idemudia, in the Department of Psychology, University of Ibadan.


21/07/95

(Supervisor)

**D.C.E. Ugwuegbu, B.A., M.A. (Wayne State University, Detroit, Michigan), Ph.D. (Kent State University, Ohio),
Professor and Head of the Department of Psychology, University of Ibadan, Ibadan, Nigeria.**


31/07/95

(Supervisor)

**D.O. Utomi, Ph.D. (Clinical Psychology),
Department of Psychology,
University of Ibadan,
Ibadan, Nigeria.**

DEDICATION

To my Father, Chief P. Dame-Oboh, (the Obarode of Ekpoma),
for his constant spiritual guidance and love;

To my Mother, - a model of a mother - Mrs Lizzy Dame-Oboh
(Omonorobo) for her love, ever understanding, moral and prayerful
support;

To the illustrious memory of my brother, Lawrence, who the
cruel cold hands of death wrenched from me at his tender age thereby
leaving a perpetual pang in my heart;

To my wife and children - yet to be gotten
and

To the Glory of God for His Goodness and Mercies.

TABLE OF CONTENTS

| | PAGES |
|---|-------|
| TITLE PAGE | i |
| ABSTRACT | ii |
| ACKNOWLEDGEMENT | iv |
| CERTIFICATION | viii |
| DEDICATION | ix |
| TABLE OF CONTENTS | x |
| LIST OF TABLES | xiv |
| LIST OF FIGURES | xv |
| CHAPTER ONE | |
| 1.0 Introduction | 1 |
| 1.1 The British Prison System | 10 |
| 1.2 American Prison System | 18 |
| 1.3 Reforms in the America Prisons | 20 |
| 1.4 Nigeria Prison System: Pre-Colonial Era | 22 |
| 1.5 Nigeria Prison System: Colonial and Post Colonial Period | 24 |
| 1.6 Reforms in Nigeria Prisons | 29 |
| 1.7 Consequences of Imprisonment and Implication for this Study | 34 |

| | PAGES |
|--|--------------|
| 1.8 Statement of Problem | 43 |
| 1.9 Study Objectives | 51 |
| 1.10 Relevance of Study | 53 |
| CHAPTER TWO | |
| THEORETICAL FRAME WORK AND REVIEW OF RELEVANT LITERATURE | 57 |
| 2.1 Theoretical Background | 57 |
| 2.1.1 Gender Theories | 58 |
| 2.1.2 Sensory and Social Deprivation (Isolation), Theories | 63 |
| 2.1.3 Stress Theories | 67 |
| 2.1.4 Personality Theory: Theory of Personality and Criminal Behaviour | 84 |
| 2.1.5 Personality Theory: Theory of Personality and Psychopathology | 93 |
| 2.1.6 Socio Cultural Theories of Psychopathology | 101 |
| 2.1.7 Theory of the Inmate World and Development of Pathology | 113 |
| 2.1.8 Psychological Intervention: Ecobehavioural Perspective | 121 |
| 2.1.9 Psychological Intervention: Group Psychotherapy | 127 |
| 2.1.10 Summary of the Theoretical Background | 135 |
| 2.2 Literature Review | 137 |
| 2.2.1 Gender Differences and Psychological Disorders | 138 |

| | PAGES |
|--|--------------|
| 2.2.2 Stress and Psychological Disorders | 142 |
| 2.2.3 Personality Factors and Psychological Disorders | 151 |
| 2.2.4 Duration (Period of Confinement) and Psychological Disorders | 156 |
| 2.2.5 Critical Review of Literature | 160 |
| 2.2.6 Hypotheses | 171 |
| 2.2.7 Operational Definition of Terms | 172 |
| CHAPTER THREE | |
| METHODOLOGY | 177 |
| 3.1 Study One | 177 |
| 3.1.1 Design | 177 |
| 3.1.2 Instrument and Measures | 178 |
| 3.1.2.1 Idemudia Prison Stress Scale (IPSS) | 178 |
| 3.1.2.2 Personality Measures (EPQ) | 180 |
| 3.1.2.3 Awaritefe Psychological Index (API) | 182 |
| 3.1.2.4 The Crown Crisp Experiential Index (CCEI) | 185 |
| 3.1.3 Subjects | 188 |
| 3.1.4 Procedure | 189 |
| 3.2 Study Two | 191 |
| 3.2.1 Design | 191 |
| 3.2.2 Instruments and Measures | 192 |

| | PAGES |
|---|--------------|
| 3.2.3 Subjects | 192 |
| 3.2.4 Procedure | 193 |
| 3.2.4.1 Assessment | 193 |
| 3.2.4.2 Experimental Conditions | 193 |
| 3.2.4.3 Therapeutic Criterion | 195 |
| 3.2.4.4 Group Process | 196 |
| 3.3 Analysis of Data | 208 |
| CHAPTER FOUR | |
| RESULTS | 212 |
| 4.1 Psychosocial Factors Determining Psychological Disorders Among Prison Inmates | 212 |
| 4.2 Psychological (Treatment) Intervention | 221 |
| CHAPTER FIVE | |
| DISCUSSION AND CONCLUSION | 225 |
| 5.1 Discussion | 225 |
| 5.2 Conclusion | 243 |
| 5.3 Implication | 245 |
| 5.4 Therapeutic and other Recommendations for Use in Prisons | 249 |
| 5.5 Limitations of the Study | 256 |
| 5.6 Suggestions for Further Studies | 257 |
| REFERENCES | 259 |
| APPENDICES | |

LIST OF TABLES

| | PAGES |
|--|--------------|
| 3.1 Standardization and Validity of CCEI by Ihezue and Kumaraswamy | 187 |
| 4.1 Summary of A-Three Way Analysis of Variance as Determined by Duration Stress and Sex for Psychological Disorder (General Psychopathology and Neurotic Disorders) | 213 |
| 4.2 Mean Ratings on Psychological Disorders (General Psychopathology and Neurotic Disorders as Determined by Duration) | 214 |
| 4.3a Cross-Tabulation of Duration, Stress and Sex: Sex is Held Constant for Male | 216 |
| 4.3b Cross-Tabulation of Duration, Stress and Sex: Sex is held Constant for Females | 217 |
| 4.4 2x2x2 ANOVA Summary Table Showing Neurotic Disorders as Determined by Psychoticism, Extraversion and Neuroticism | 218 |
| 4.5 Summary of Differences Between Pairs of Means Indicating Source of Interaction between psychoticism, Extraversion and Neuroticism on Psychological Disorder. | 220 |
| 4.6 Independent T-Test Showing Means and Standard Deviation of Prisoners in Experimental and Control Groups on Psychological Disorder (General Psychopathology and Neurotic Disorders) | 222 |
| 4.7 Summary of a One Treatment Analysis of Covariance Showing the Effects of Treatment Intervention and Prisoners Adjustment on General Psychopathology and Neurotic Disorders | 223 |

LIST OF FIGURES

| | PAGES |
|---|--------------|
| 2.1 Stress and the Anxiety Process | 78 |
| 2.2 A Schematic Representation of Lazarus Cognitive Model of Stress | 82 |
| 3.1 Schematic Representation of Before and After Research Design | 191 |

CODESRIA - LIBRARY

CHAPTER ONE

INTRODUCTION

Imprisonment is essentially a form of punishment, although some have seen it as affording a means of reforming the criminal. Punishment is an ancient response to wrong doing; but throughout man's history both the forms of punishment and the rationale for using it have changed markedly. Many of the changes can be traced to economic considerations, the development of a more humanitarian outlook, and the emergence of a secular viewpoint in human affairs, as well as to the development of new concepts about the nature of man and society. But if society's treatment of the law breaker has become, in theory at least, more rational, more benign, and more concerned with rehabilitation, this does not mean that society's reaction to the criminal has lost its punitive tone. Actually, there is little evidence as to the effect of punishment on the amount of crime in society. It is not known with any certainty that one mode of treatment is more effective than others. Penal systems everywhere remain largely based on contested assumptions and inferences derived from inadequate data.

Punishment inflicted by the state in response to a violation of the criminal law has been justified in various ways. It has been

seen as society's vengeance upon the criminal, as atonement by the wrong doer, as a means of deterring other criminals, as protection for the law abiding and as a way of rehabilitating the criminal. Thus, the individual who has inflicted harm on another, must be made to suffer for his or her crime; for only an act of vengeance can undo the harm that has been done and assuage the suffering of the victim. The concept of punishment as a form of atonement dated far back to the history of human culture. The roots of the idea are religious; in the Judeo-Christian tradition, punishment has been seen as the undoing of a wrong by means of the suffering of the wrong doer, who thus, brings his moral account with God back into balance.

The use of punishment as a deterrent has been justified not only for the convicted criminal. The law-abiding man who totters on the edge of illegal behaviour is also deterred, it is said, and one must calculate the effect of society's penal system not simply in terms of its impact on the known offender who is punished but also in terms of its influence on the great mass of those who conform. As a practical matter this is ethically unsatisfactory: to justify punishment of the criminal by its effect on the non-criminal is a little like hurting Peter to keep Paul honest. However, an accurate assessment of

the efficacy of legal punishment would have to measure its influence on both criminals and non-criminals.

In so far as punishment by the state isolates the criminal from the ranks of the law abiding, it has been argued, the amount of crime in society is likely to be diminished. Such isolation may include branding or marking the criminal, so that honest men may avoid him, or it may involve thrusting the criminal beyond the pale in some form of exile or confining him in prison. This argument assumes that the isolation of the offender is not outweighed by his becoming more criminal while in prison. It also assumes that the social and economic costs of isolating the criminal from the rest of society are less than those of the crimes he might have committed, if he had been left free. Both of these assumptions have been seriously questioned.

Some writers (Glasser 1964, Sykes 1958) have maintained that punishment ought to be designed to transform the values and attitudes of the criminal so that he no longer wishes to commit illegal acts. The problem, of course, has been to discover how to do it. Those with a psychiatric bent have pinned their faith on programs of individual and group counselling and on the creation of what they have called a therapeutic milieu. Others, more sociologically inclined, have looked to such measures as education and job training. Still others have taken a more radical view and argued that the

causes of crime do not lie with the individual so much as with the community that shapes him - if criminal behaviour is to be diminished, they say, the social context within which it occurs must be changed. Theories of rehabilitation are largely speculative, since there is a lack of scientific evidence to support them. The paucity of research funds, restrictions on social experimentation, political considerations and other difficulties have prevented any thorough appraisal of the merits of this approach. Nevertheless, it has been influential in the development of modern penology.

Men have shown much ingenuity in devising forms of punishment. Throughout history these have ranged from ostracism and ridicule to flogging, burning, branding, mutilating, disemboweling, crushing, beheading, and mass-extirpation. In general, however, the many forms of punishment can be classified into five major types: corporal punishment, capital punishment, transportation, fines and imprisonment. The infliction of physical suffering is currently regarded as barbarous and has been generally abandoned as a form of punishment in most modern industrial countries. The use of such devices as the knouts, cat-o'-nine-tails, sweatbox, and deprivation of food and water were abandoned partly because of an increasing value attached to the individual and his person, as well as a growing sense that the person who had broken the law maintained his humanity despite his crime. In addition, there was an increasing acceptance of the idea

that much of the physical, and psychological suffering inflicted in the name of punishment was little more than sadistic torture, as degrading to the society that inflicted it as to the criminal who bore it. Cruel punishments produce cruelty in people, argued the English reformer, Sir Samuel Romilly in the 18th century and modern societies have tended to agree with him.

The execution of criminals was carried out in the past by such methods as drowning, stoning, burning and decapitation; in modern times, hanging, electrocution, the gas chamber, in developed countries and by firing squad in developing countries. The use of capital punishment has declined in recent times, although in many places it is still permitted by the law. The issue of abolishing it has aroused much controversy. The advocates of capital punishment claim it is a necessary deterrent to crime and relatively painless if done properly. Their opponents argue that executions are far from physically painless, involve extreme mental anguish, may entail irrevocable miscarriages of justice, and are ineffective as a deterrent since the crimes for which capital punishment are imposed are frequently crimes of impulse or emotion beyond the individual's control. Even where it has been legally retained, capital punishment is now seldom employed. Fewer crimes are punishable by death than formerly, the courts increasingly choose alternative penalties; and many death sentences are not carried out. According to the Chambers

Encyclopaedia (Vol. XI), 1970, in the United States of America, the annual number of executions dropped from about 155 in the period 1930-1934 to about 26 in 1961-1965, and in some subsequent years, there were none. In Nigeria, crime against the state, for example, coup plotting, attracts death penalty. The death penalty has been eliminated in such nations as the Scandinavian countries, West Germany, the Netherlands, Austria, Italy, Portugal and Switzerland. However, the fear of capital punishment may have a temporary deterrent effect. Homicide rates decline during those weeks when highly publicized executions take place; but unfortunately, they soar to above-average levels several weeks later, cancelling out the gain (Phillips, 1980).

Exile and banishment have been known since ancient times and were often tantamount to a death sentence. The practice of transforming criminals beyond the national boundaries did not appear, however, until the beginning of the 17th century when England began shipping offenders to America. The American Revolution forced the British to seek a new dumping ground in Australia. With the discovery of gold and the emergence of sheep raising and wheat growing as profitable ventures, which brought new settlers resentful of the criminal population, the English system of transportation came to an end. France established penal colonies in Africa, New Caledonia, and French Guiana (the latter the location of the Famed

Devil's Island). Russia set up penal colonies in Siberia under the Tsars, and the system was greatly expanded by Stalin. Since World War II, transportation as a method of punishment has been generally abandoned. The brutal conditions of life in convict communities, their economic inefficiency and the lack of space in a world growing ever more populated have been factors in its decline. Rather than expelling the criminal, society found it more convenient to imprison them.

The imposition of fines upon criminal offenders has long played a role in many societies. A number of early cultures, including the Anglo-Saxon, had intricate systems of blood money that defined in money terms the value of a man's life - for which his murderer would be forced to pay. There were also fines for personal injuries and larcenies varied according to the social rank of both the victim and the wrong-doer. As crimes came to be defined as public wrongs against the state rather than private wrongs done to a particular individual or family, fines tended to become a subsidiary form of punishment. In the modern era, fines remain as a penal sanction for a large number of relatively minor offences but are seldom considered as the major element in a system of punishment except in the case of a limited number of white-collar crimes; and the money is only occasionally handed over to the person who suffered an injury. Unless money payments are carefully regulated with regard

to the ability to pay, they weigh unequally on persons from different socioeconomic levels, and may even become an informal method of licensing illicit activities. A systematic use of fines is made in some countries, for example, in Sweden, where fines are adjusted to the income of the offender and may be paid on instalment plan. The State of Wisconsin in the United States of America, allows prisoners to work off their fines by holding jobs outside the institution in which they reside, paying for their maintenance and the support of their families. In Nigeria, fines remain a rather haphazard adjunct to the penal process.

Locking up criminals in dungeons and jails is a practice that goes as far back as recorded history. Before the 18th century, however, such confinement was largely reserved for suspected offenders awaiting trial or for convicted criminals awaiting the lash or the hangman's noose. Only in the last 300 years has the prison been an important penal sanction. Even today, it is not the method applied to most criminals: approximately two-thirds of the offenders in the United States penal system, for example are under supervision in the community rather than behind bars.

Although some institutions akin to the prison, existed at an early date, such as the 'Delle Stuche' in Florence in 1300, the first modern prison is thought to have been the Walnut Street Jail built in Philadelphia in 1790. Its antecedents are to be found in the work

houses and houses of correction established in London (1557), Amsterdam (1596), Rome (1704) and Ghent (1773). In these institutions, there was little segregation by age, sex or other characteristics. The main emphasis was on strict discipline and hard labour. Those who operated the houses of correction depended for their living on fees paid by the prisoners. By the end of the 18th century, the modern concept of the penitentiary had taken firm shape, partly through the work of John Howard in England. Upon becoming high Sheriff of Bedfordshire in 1773, Howard was appalled by the conditions of the Country Jail and spent a number of years travelling through Europe to study methods of penal treatment. The squalid living conditions, idleness, and immorality that he found in the crowded houses of correction distressed him. Like other prison reformers of the time, he also had a strong belief in the beneficial effects of solitary confinement. He conceived of the penitentiary as a firmly ruled institution where criminals would be kept completely apart from one another and would work at regulated labour. In the 1790s, Jeremy Bentham designed the "Panopticon" - a circular, glass roofed central rotunda where guards could keep the prisoners under constant surveillance. It was a monstrosity by modern penological standards and was never built in England although its influence is to be seen in the maximum

security institutions at Breda in Holland and at Joliet, Illinois, in the U.S.

Relatively speaking, Nigeria has no identity in the sense that having passed through the tutelage of British colonial administration, many of the politico-legal aspects of the governmental system bear a large portion of British trade mark. And in view of recent political developments in the country - specifically, the inclination towards American style of administration - any glance at some inter-and/or intra-governmental set ups such as the prison, will necessarily call for a look, even if brief, into equivalent set ups in Britain and the United States of America. Therefore, in discussing brief history of the Nigerian prison, it is only appropriate that to arrive at what the situation is at present, I will of necessity first briefly discuss prison in Britain and the United States.

1.1 THE BRITISH PRISON SYSTEM

Imprisonment as a punishment has had a place in the British Penal system for a comparatively short time, though prisons have been in use throughout history by those who would be rid of their enemies or confine an embarrassing rival. Every mediaeval castle had its dungeons for the incarceration of enemies or the punishment of idle serfs, but this was private or political use of imprisonment and was generally only a preliminary to more definite punishment

or a method of enforcing conditions on which release might be granted.

Prison as a public institution came into use as codes of law were established but was only a prelude to other treatment. Rough and speedy justice dealt with the minor offenders by whipping, ducking stool, stocks or pillory but the more serious offenders were committed to prison to await trial at the next sessions or assizes. At the opening of the court, the prisons were cleared, the trials were held and the guilty sentenced. The penalties prescribed varied from fines to branding, banishment or execution, so many prisoners being sentenced to death that prison was referred to as the ante chamber to the gallows.

The first use of prison as a means of punishment came at the end of the 16th century when the vagrancy laws provided for the imprisonment of those who were idle or found wandering. Early in the next century minor felons were also committed to prison, and offenders who had been fined were kept there until they paid, while the unsuccessful creditor could put the debtor in prison where he might apparently remain indefinitely. The prisons holding these offenders were usually the same 'common jails' which held the unconvicted but a few places had separate 'houses of correction'. All were foul and unpleasant, crowded and unhealthy. There were

a few small lock-ups built for the purpose but more often the common jail was the cellar of the court house, the dungeon of the local castle or some back room of an ordinary house or inn.

Officially, these prisons were privately owned by dukes, land owners, bishops, the church or local authorities. The owners rarely saw them and sublet them at substantial rents to jailers amongst whom competition was keen. The farming out of prisons in this way was largely responsible for their unhappy state, for the jailer paid his rent and thereafter was concerned only to make a profit. He had complete power over his charges. Fees were imposed for locking up and unlocking, for shackling where this was due; the jailers charged for bread and water or for more substantial meals and luxuries to those who could afford them. Even prisoners who were released by the courts could not leave prison until their debts to the jailers were cleared. For all this profitable business the jailers gave only minimum service; prisoners were packed into inadequate room without segregation of ages or sometimes even of sexes, and slept on bare floors or with only straw for bedding. It was not surprising that disease and immorality were rife.

The more famous prisons provided the worst possible example to the country. Newgate, for instance was already condemned in 1725 for the way in which prisoners were herded together; in

1750 its condition was so bad that prison fever was carried by prisoners to courts and the Lord Mayor, two judges, several jurymen and counsel died, where upon, instructions were given for the prison to be cleaned. The place was destroyed by Gordon rioters in 1780; but the city of London refused to adopt a new model and rebuilt on the old style. By 1814 the new prison was declared to be a public nuisance, and a House of Lord's committee in 1835 said the place tended to extend rather than suppress crime, and discovered that common rooms were still shared by young and old, felons and debtors, tried and the untried. There were extortions by the jailers throughout its history, and intoxicants were always available for those who could afford the prices.

The great Westminster prisons reveal similar conditions. A House of Commons committee in 1729 discovered that the warden of the fleet prison who was reported to have bought his post from the previous occupant for 5,000, sold the right to escape to those who could afford his terms. At King's Bench prison "extortions, cruelties, promiscuity, drunkenness and every irregularity" were exposed by an inquiry in 1754. The House of Lords nevertheless rejected a bill to reduce the overcrowding as that would interfere with the income of the jailers. Marshalsea, which was the prison

for debtors, share the same all-round condemnation, yet these prisons remained in use until the middle of the 19th century.

Similar conditions existed all over the country in the 18th century, and there was no overriding authority to check the abuses. The justices of the peace in each country were nominally responsible through the Sherrif, but that office did not appear to have been taken seriously until John Howard was appointed Sherrif of Bedfordshire in 1773. Howard, whose name is commemorated by the Howard League responsible for much of the most valuable work for the improvement of British prisons, was the first of a notable band of reformers who interested themselves in the welfare of criminals. Howard, Elizabeth Fry and Enoch Wines were precursors of such distinguished officials of modern times as Sir Alexander Paterson of the English prison commission. Howard had once been a prisoner in French hands and knew something of a straw bed, meagre food and lack of water, so his sympathy with prisoners was perhaps the more acute. His visits to Bedford prison where he discovered the general exploitation, misery and filth, led to his immediate proposal that fees should be abolished and a salary fixed for the jailer, with proper administration of the prison by the quarter sessions, but his fellow justices were reluctant to create such a precedent. Howard investigated the situation throughout the country and later, abroad. He was horrified by the discoveries he made of abuse and squalor in every

part of the land. His notes, detailed and unsparing appeared as the "The State of the Prisons in 1777", but his investigations had already affected the theory of penal treatment if not its practice. His earliest reports in 1774, led to acts directing the periodical washing of prisons and prisoners and the immediate release from prison of any person discharged by the courts, without further extortions by the jailer. Several local authorities, shocked or inspired by Howard, applied for acts authorizing them to build and control new prisons, but meantime the very pressure of prison populations forced some national action. Transportation, the major penalty short of execution, had come to an end with the loss of the American colonies and was replaced by sentences of imprisonment. This caused a critical situation in the prisons, which was relieved by shipping convicts on to old hulks which stood in the Thames and other rivers. The hulks provide as black a spot in the national penal history as the common prisons do in local government. Thousands lived in the utmost misery on them before the discovery of Australia made possible the resumption, in 1787, of transportation, first to New South Wales and later to Van Diemen's land (Tasmania). But the hulks were not finally abandoned until 1858. The use of imprisonment as a penalty in itself had, however, been established and the practice grew. The planning and erection of prisons as penal institutions became extremely urgent and the first general

Prisons Acts in 1791 provided for the establishment of national prisons on a cellular system and the acceptance of this pattern for local prisons.

19th Century Improvements:- The agitation for cellular prisons had been led by Howard and others and was a natural reaction to the crowded dungeons. Jeremy Bentham prepared plans for his giant prison and actually contracted to build it, but later abandoned it due to insufficient fund. The reformers shared a common ideal of providing isolation for each individual with the intention that such solitary confinement gave for moral and physical cleanliness, spiritual reflection and repentance and the belief in the benefits of lonely meditation was probably based on the tradition of the monastic cell.

With the completion of millbank prisons in 1821 as a model for the world, the private, profit making and over-crowded prisons gradually gave way to the silent, strict and lonely segregation of prisoners. The improvement and reformation were carried further by the efforts of people like Elizabeth Fry, George P. Holford, Samuel Romilly and Sir Robert Peel.

The complete take over of all prisons together with their prisoners by the government was ushered in by the third major Prison Act of 1835 which brought all prisons under Home Office inspection and provided standard minimum rules. The complete

removal of prisons from local authorities was effected in 1865 by an Act of Parliament. The Prisons Act of 1877 provided for the assumption of ownership of all prisons by the state through the Home Office. A prison commission under the chairmanship of Sir Edmund de Cane took up the management and administration of all the prisons in England and Wales from April 1, 1878, when 113 prisons were taken over, 38 of which were immediately closed down. The system became uniform, the staff became a national service, cells were clean, food enough if unpleasant but work was hard and punitive.

The Gladstone Commission of 1895 made sweeping recommendations for humanizing the system. Unless work was abandoned and its place taken up by useful industries, which would be of value to both the prisoners and the state, lonely and strict segregation was reduced to short intervals of time and external influences were introduced into the prisons. Such influences included library facilities and visiting clergymen. The committee also recommended distinct separation of first offenders and reformatory training for prisoners under twenty one years of age.

With the opening of Wakefield Prison in 1923, a system of nominal earnings was introduced with the initial fund endowed by a voluntary organization. With the passage of time, the improvement and reformation have progressed to the extent that today the

primary aim of prison institutions according to Bottoms (1972) is to seek to deal more effectively with the penal and social problems of the inmates in order to try to enhance the institution's performance in its task of "curing" crime and preventing recidivism. Different types of models (e.g. Millieu therapies) are trying to move the establishment towards this greater efficiency in carrying out its main objective, for example, (Soudt, Messinger, Sheldon and Wilson, 1968 and Tollinton, 1966). Bottoms (1972) says that most of these models are expressly built upon a given theoretical consideration of the aetiology of criminal acts, and may be seen as experimental regimes in need of validation.

1.2 AMERICAN PRISON SYSTEM

Norval Morris (1974) asserts that prison in America started as a part of slave labour and therefore was modelled after the slave practices of ancient Rome, Egypt, China, India, Assyria and Babylon. With the end of slavery, imprisonment became a penal sanction and was extended to petty offenders, vagrants, alcoholics, the mentally ill, and professional beggars. At the early stages, the serious offenders other than the political criminal were not sent to prison as a punishment. Such people stayed in prison only briefly while awaiting trial. Such criminals when convicted were made to face other types of demeaning and more

painful corporal punishments. Included in the category of more demeaning and more painful forms of corporal punishment were ear cropping, nose cropping, the branding iron, and capital punishment. Prisons for criminals arose as a diversion from usual traditional forms of meaningful corporal punishment.

According to Jordan (1970), the prison in America is an invention of the Pennsylvania Quakers of the last decade of the eighteenth century, though one might also note the confining "people pen" put up by the Massachusetts pilgrims nearly two centuries earlier. In their "penitentiary", the Quakers planned to substitute the correctional specifics of isolation, repentance, and the uplifting effects of scriptural teachings and solitary Bible reading for the brutality and non-reformation of capital and corporal punishments. Thus the three treatments - removal from corrupting peers, time for sober reflection and self-examination, the guidance of biblical precepts proposed by the Quakers were similar to the work of British reformers who believed that solitary confinement would give the prisoner an opportunity for repentance and self-correction as it did the early monks. However, the efficiency of these measures for the many offenders who found their way to the prisons remained equivocal.

In 1790 a prison built on the cellular pattern was opened in the Walnut Street Jail of Philadelphia as the "penitentiary" for

the Commonwealth of Pennsylvania. In 1796, Newgate started off as the penitentiary for the state of New York, modelled on the Walnut Street Jail but taking its name from an earlier English institution serving a different class of people (civil and criminal debtors and those awaiting trial or punishment).

The American prison style not only grew and expanded but came to be exported to the outside world, and was accepted internationally much like the tobacco and like the tobacco too, had its good and adverse consequences. Morris (1974) observed that the Pennsylvania Quaker prison was a gift born of benevolence not malevolence, of philanthropy not punitiveness so that its most significant lesson lies in the realisation of the fact that benevolent intentions do not necessarily produce beneficent results.

1.3 REFORMS OF AMERICAN PRISONS

Morris (1974) observed that contemporary Quakers in the American Friends service realised that the ugly and unpleasant condition in the American prison developed out of an eighteenth century reform proposed by their ideological forebears. The situation was abhorred by both Quakers and non-Quakers alike and their concerted effort saw the rapid growth of abolitionist and/or reform movement spearheaded by such men as John Bartlow Martin and Jessica Mitford. Abundant literature was produced by

eminent scholars to throw light into the horror that was the American prison system.

In response, national crime commissions were set up and their findings and recommendations ushered in swift changes. Among the more recent of such commissions was the 1973 commission which strongly recommended the construction of separate new institutions for adult and juvenile offenders, a proposal also recommended by the National Council on crime and delinquency. The American equivalent of the British John Howard in the prison reform movement was Justice James E. Doyle who stated that:

"In many respects, the institution of prison in America is as intolerable within the United States as was the institution of slavery, equally brutalizing to all involved, equally toxic to the social system, equally subversive of the brotherhood of man, even more costly by some standard, and probably less rational". (Morris, N (1972), pp. 548-549)

The 1973 national commission, the National Advisory Commission on Criminal Justice Standards and Goals, recommended that "the institution should be the last resort for correctional problems" (Correction Task Force, p.2), gave their reason to include failure to reduce crime, success in punishing but not in deterring, providing only a temporary protection to the community, changing the offender but mostly for the worse, and concluded that "the prison has persisted, partly because a civilized nation could neither turn back

to the barbarism of an earlier time not find a satisfactory alternative". This and various other actions by eminent scholars, commentators, vocal prisoners and private observers called for a definite and swift change that would bring about new and improved forms of imprisonment.

Norval Morris (1974) believed that three paths led to the improvement in prison conditions in America. First, the excesses of the criminal law were modified. Second, there was an alternative imprisonment for those members of society who would otherwise be sent to prison; they should be channelled to other mechanism of social control. Third, placing increased reliance on community-based corrections. All three steps resulted in reducing the number of persons sent to the prisons which in turn reduced the squalor and increased the utility of available facilities.

1.4 NIGERIAN PRISON SYSTEM: PRE-COLONIAL ERA

The idea of imprisonment as a means of punishing offenders is not foreign to many Nigerian societies. Before the advent of British Government in the nineteenth century, these communities like any other societies had assumed the responsibility of putting away the deviant citizen and of preventing him from doing further harm. Among the Tivs, there is an indication of an awareness of

imprisonment for the offender in the tradition whereby he had to concur to a sentence of imprisonment as an admission of his guilt. Elsewhere physical evidence still bear testimony to the existence of prisons. The Ogboni House among the Yoruba served as a sort of prison for the state among certain sub-ethnic groups. For the Edo, the 'Ewedo' was the place not only for keeping those to be sold, but also those offenders who had to be put away for some time. In 1902, Sir Frederick Lugard recorded the existence of prisons among the Fulani who used these buildings not only for incarcerating offenders as a form of punishment, but also for keeping those who were sentenced to death.

In fact, until the advent of the British, justice was dispensed by family and/or clan heads and offenders were accordingly punished either by way of fines, restitution, or merely apology by word of mouth either directly by the offender or indirectly through his representatives who would normally be relatives and/or close friends but definitely older than the offender himself. In some cases confession of guilt was regarded as punishment itself.

In general, the prevalent practice that could be likened to imprisonment before the onset of British rule was ostracism by which the offender was shut out from society for some period of time, the length of time depending on the gravity of the offence. In extreme

and unusual cases the offender could be banished from the community either for life or for a given interval of time depending again on the nature of the crime.

Another form of 'imprisonment' that was in practice before the dawn of British administration was sentencing an offender to free labour for the local chief for a specified number of days per week and for over a period of time. The practice was later adopted by the British administrators, thus making it possible for prisoners to serve their term from their own homes.

Much of the above description applied mostly to parts of southern Nigeria, the so-called southern oil protectorates. In pre-colonial Northern Nigeria, dispensation of justice was based on the Koran and the teachings of Prophet Mohammed. Unlike their Southern brethren, the Northerners inflicted more tangible corporal punishment ranging from flogging to stoning to death depending on the gravity of the offence and the relevant Koranic interpretation.

1.5 NIGERIAN PRISON SYSTEM: COLONIAL AND POST COLONIAL PERIOD

The prison system in Nigeria, as known today, is a legacy of colonial times. Most of the communities in pre-colonial Nigeria, and indeed, Africa, knew little, if anything like the modern day prison. Although early European incursions into the territories of

the communities that constitute modern Nigeria may have established facilities having some of the characteristics of prisons today, the legal history of prisons in Nigeria starts with the colonial period.

It was, however, in Lagos, that the evolution of an organised prison system under the British administration first began. The first known law on prisons in Nigeria was the 'Prisons Ordinance of 1876 enacted four years after the establishment in 1872, of the Broad Street Prison, the first modern prison established in colonial Nigeria and designed to accommodate 300 prisoners. This ordinance regulated much of the colonial prison system until the amalgamation, in 1914, of Northern and Southern Nigeria. In addition to the 1876 Ordinance, the "Native Courts Proclamation of 1900" started the development of Native Authority Prisons. This proclamation, whose application was initially restricted to Northern Nigeria, but was later extended to all parts of the country in 1906.

Subsequent to the Amalgamation, the 'prisons ordinance of 1916' was enacted. According to its short title, the purpose of this ordinance was "to provide for the establishment of prisons and for regulating the government thereof". Also in 1916, a 'Native Authority Ordinance' empowering Native Authorities, among other things to establish and maintain their own prisons. These were the principal legislations governing prisons in Nigeria until

independence in 1960, when the 'Prisons Ordinance No. 41 of 1960' came into force. The only innovation introduced by this ordinance into the pre-1960 position was the creation of certain offences in relation to prison security. The dual prison system persisted until 1966 when, following the 'Gobir Report on Prison Unification', the then Federal Military Government took over the management of Native Authority Prisons.

Subsequently, in 1968, the University of Iagos, under the inspiration of Professor Taslim Olawale Elias, its Dean of Law and Federal Attorney-General and Commissioner of Justice, hosted a conference on the Nigerian prison system. This conference spawned a series of developments leading, in 1971, to the publication, by the Federal Government, of a white paper titled "A Statement of Federal Government's Policy on the Re-organization of the Prison Service and the Integration of the Federal, Local Government, and Native Administration Prisons". And on April 10, 1972 the Prisons Act, No. 9 of 1972, was promulgated. According to the Explanatory Note to the Act:

"The Act revises and replaces the Prisons Act, 1960 in order to implement certain of the proposals contained in the 1971 White Paper entitled: "A statement of Federal Government Policy on the Re-organization of the Prison Service and the Integration of the Federal, Local Government, and Native Administration Prisons".

The Prisons Act, 1972, is the principal law governing the prison system in Nigeria today. Under this Act, provision is made for subsidiary legislations, foremost among which are the 'Prisons Regulations and the Prisons Standing Orders'. Juvenile penal facilities, better known as borstals and remand homes which come under the administrative and operational structure of the prisons, are regulated by the "Borstals and Remand Centres Act of 1961". Together, these form the core of prisons laws in Nigeria. These pieces of legislations are supplemented by several other laws which affect the prisons system to varying degrees. All these laws have their basis in the 1979 Constitution of the Federal Republic of Nigeria.

The 1972 Prisons Act is a lean document of 20 sections and 2 schedules designed to provide the institutional and functional framework of the Nigerian prison system. It places the prisons under the supervision of the Ministry of Internal Affairs. Direct operational charge and control, however, rests with the Director of Prisons, now Director-General.

Following some re-organization, in 1986, of the para-military services under the Ministry of Internal Affairs, the "Customs, Immigration, and Prisons Service Board (C.I.P.B.) Decree No. 14 of 1986" was promulgated giving birth to the Customs, Immigration,

and Prisons Service Board (C.I.P.B.). The functions of the Board under the Decree include the management and formulation of general policy for the three para-military services. The Board also has powers, among other things, to appoint and discipline all categories of staff, including Directors of each service, as well as to make regulations and standing orders for the para-military services.

The organizational structure, following the 1986 shake-up of the prison service, is now decentralised. Under the present structure, the Director is assisted by 5 Deputy-Directors in charge of divisions, namely, Administration and Finance, Inspectorate, Welfare, Medical and Commerce. The Deputy-Directors are in turn assisted by 11 Assistant directors at the Headquarters. In addition, the prison system is divided into 6 zones respectively, headed by 6 other Assistant Directors. A Controller of Prisons is in charge of each state. The Controllers are responsible to the Zonal Assistant Directors who are also Zonal Co-ordinators. Depending on its category, each prison unit is headed by an officer not below the rank of Superintendent and not above the rank of Assistant controller.

It should be noted that, there are 6 classes of prisons in Nigeria. These are: Maximum Security Prisons; Convict/Medium Security Prisons; District Prisons/Lock-ups; Open Prison; Borstal Institutions; and Prison Far Centres.

It would appear that this classification, determines the types of prisoners that any prison facility can hold. Condemned persons and lifers (i.e. persons serving terms of life imprisonment) as well as other top security prisoners can only be held in maximum security prisons. The convict/medium security prisons hold persons sentenced to terms not below 2 years. Lock-ups are generally meant for first and minor offenders. There are no open prisons properly so-called. The facility at Kakuri, Kaduna State, which bears the closest resemblance to an open prison, is a borstal institution.

At present, the Nigerian prison system consists of:

"132 prisons, 233 lock-ups, 9 mechanised farms, 5 poultry farms, 2 fish farms, 2 training schools, 1 borstal institution and the prisons staff college, Kakuri. With an average monthly population of between 54,150 and 58,000, its staff strength is about 22,000 (including non-uniformed workers)" (General Assembly Resolution 39/46 of December 10 1984).

1.6 REFORMS IN NIGERIAN PRISONS

As earlier indicated, Nigeria is a political child of its colonial master, Britain. Unfortunately, Nigeria seems to be reluctant to improve on what has been bequeathed her. Thus, the present day Nigerian prison is still no better than the early eighteenth or even mid-seventeenth century British prison.

There have been series of efforts over the years aimed at reforming the Nigerian prison but in the long run, the impact has not been felt in any way but in deterioration: decongestion by mass discharge by one government or the other, only to have their places taken up by twice the number discharged. Despite the Report and Recommendations of the Prison Advisers for the re-organization of the prison service and the decongestion of the federal, state and local administration prisons of 1969, and the Decree Number Nine of the Federal Military Government of 1972, the general condition of Nigerian prison system remains very much the same over the years if not actually getting worse. The 1984, 1985 and 1986 Nigerian Annual Prison Reports, acknowledge increase in death rates and attributed the astronomical rise in the death rate of prisoners to the following factors, prison congestion, very poor standard of sanitation, malnutrition arising from poor feeding, and lack of drugs for sick prisoners.

Another recent account (Okudo, 1983) of the prison system still reports of windowless cells as little dark holes in which men are left to either stand all the time or in the alternative, sit or lie on bare cold and dirty floors without beds, chairs, tables or even ordinary mat. He concluded by describing the system as a decadent, an archonistic system in need of urgent reform, especially in regard to the infrastructural facilities for its operation.

In an apt description of the prisoner in a Nigerian prison, the civil Liberties Organization (1990) in their book, 'Behind the Wall', described the Nigerian prisoner as one suffering from misery and privation, subdued and a human wreck, spiritually and physically broken. For the unlucky, this degrading state of existence terminates in death when brutal prison conditions finally wear through the fabric of their being, when the persistent teeth of drudge and hunger at last eat through their thread of life. For those, whose constitutions are sturdier and, thus, more able to withstand these mortal assaults on their minds and body, it ends in release into a society in which the stretch of misery and privation may be even longer and their sufferings certainly run deeper. They also claimed that from the moment he steps into the prison, whether as a convict or an Awaiting Trial Person (ATP), the prisoner is considered a thing beyond the fringe of humanity and consequently, of human treatment. He is beaten, robbed, harassed and visited with all kinds of indignities and outrages.

It may be recalled here that Nigeria became independent in 1960. It becomes obvious from the foregoing that our penal facilities have hardly been improved beyond the level at which our colonizers left them. It needs hardly be stated that the colonial criminal process, including the penal system, was

essentially repressive and geared towards intimidating and subjugating the indigenous populace. It is little wonder therefore that despite valiant pledges by both Civilian and Military regimes, our prison system still wears the stamp of the punitive legacy of its colonial heritage. In the explanatory memorandum to its "Draft Prisons Bill" presented to the National Assembly in 1983, the Nigerian Law Reform Commission disclosed that the dominant method of imprisonment in Nigeria has tended to be punitive rather than rehabilitative with prison officials being accused of sadistic tendencies over and above the already deteriorated amenities and structures making up the prison system. The consequences are not just grave, they are also fatal.

In its official policy on prisons, of 1972, the Federal Government ascribed the following roles, among others, to the Nigerian Prisons Service:

- (1) the identification of the sources of the anti-social behaviour of offenders.
- (2) the teaching and training of these offenders so that they become useful citizens in a free society.
- (3) keeping state custody of persons who are legally interned.

The prison service itself put its role in very succinct terms in its 1984 Annual Report: "As one of the security arms of government,

the Nigerian Prisons Service is charged with the responsibility of ensuring the safe custody of offenders, their reformation and rehabilitation".

These functions are sub-divisible into two categories: The first, clearly, would be the custodial; and the second, the reformatory and rehabilitative. According to Olowu, (1990) correctional practice in Nigeria today displays evidence of lack of clarity in objective and that some members of the public accuse the system of brutalising offenders while others allege that the system also cuddles the prisoners.

The Nigerian Law Reform Commission also discerns this lack of clarity when it stated that there seems to be no set-out philosophy for imprisonment and on how well the Nigerian prisons executes its reformation and rehabilitation objectives, the verdict of the Nigerian Law Reform Commission is unequivocal: "Imprisonment in Nigeria has so far proved to be relatively dysfunctional as evidenced by ample research".

It has been said that, the main purpose of imprisonment is to turn the offender into a better citizen. Abrahamsen (1960) argues that the prisons have proved a failure in this regard. He supports his view with the number of recidivists among offenders who have been imprisoned. Rebuilding an offender implied rehabilitating him so that he can function reasonably well in society and become a

useful and valuable person to himself, his family and the community. The primary considerations in dealing with an offender should be based on his particular personality make-up and the degree of danger he represents to himself and to society. Personality make-up is clearly within the informed domain of the clinical psychologist so that by application of his expert knowledge, offenders will be cautiously separated for effective treatment instead of the prevailing practice of indiscriminately dumping together in the same prison all types of offenders - murderers, robbers, kleptomaniacs, embezzlers, and rapists. As of now, there are no psychological services in the Nigeria prison. Only when a prisoner is manifestly psychotic, is he taken to psychiatric institutions to receive psychological attention.

1.7 CONSEQUENCES OF IMPRISONMENT AND IMPLICATION FOR THIS STUDY

According to Abrahamsen (1960), psychological studies show that a large number of prisoners are emotionally or mentally disturbed. Many of them commit crimes because of unconscious guilt feelings, which lead them to strive for punishment. Imprisonment without psychological treatment and investigation fulfils this very aim; thereby the law is unknowingly helping the offender to obtain gratification for his unhealthy needs; it becomes a pattern, and when this type of offender is released, he does something wrong again for which

he has guilt feelings, so he commits another crime, back to prison and punishment - a vicious cycle.

While Harris (1959) worries about the unhappiness emanating from being cut-off from normal human contact through imprisonment, it is equally pertinent to think of how this unhappiness will not make the individual very much negatively different from his usual self as well as from the rest of the people he will eventually interact with in the general society. Such considerations will necessarily take into account the psychological variables of his circumstances, that is imprisonment.

Writing about psychological survival, Cohen and Taylor (1972a) observed that the men they studied showed the inadequacies of the literature on the experience of imprisonment and the psychologist's concern with specific sensory rather than general psychological problems. They came to the conclusion that studying prisoners in a given establishment is not merely looking at the various ways in which men generally react to an extreme situation, a situation which breaks and alienates their normal lives so as to make difficult such every day events as time, friendship, privacy, identity, and self-consciousness. Apart from ageing and physical deterioration discussed by Cohen and Taylor (1972a) there is also psychological deterioration which mars to a large measure the life of the individual prisoner and with it, the life of society to some extent.

According to Goffman (1957), prisons do not look for cultural victory, rather they effectively create and sustain a particular kind of tension for the inmate and upon entrance. The prisoner is systematically and intentionally dehumanized. He is led, into a series of abasements, degradations, humiliations, and profanations of self. His personal identity equipment is removed as well as other possessions with which the inmate may have identified himself. As a substitute for what has been taken away, institutional materials for example, white shorts and shirt, and a number is given and printed on his shirt. In brief, standardized defacement occurs and in addition, separateness from fellow inmates is significantly encouraged in many areas of activity, and tasks are prescribed that are "infra dignatem". Also, family, occupational, and educational career lines are removed and a stigmatized status is submitted. Sources of fantasy materials which may have meant momentary releases from stress for the inmate for example access to wife or girlfriends is denied. Many channels of communication with the outside world are restricted or closed-off completely. Verbal discrediting occurs in many forms as a matter of course. Expressive signs of respect for the staff are coercively and continuously demanded. And the effects of each of these conditions is multiplied when inmates are made to witness the mortification of their fellow inmates.

Prisoners often face further ill-treatment after interrogation, sentencing or confinement. Torture and ill-treatment also used as punishments, sometimes additional to prison sentences. According to Amnesty International (1984), some practices that are not in themselves prohibited by international standards may nevertheless cause concern in particular circumstances, for example, Solitary Confinement or other isolation in itself is not generally regarded as a cruel or inhuman treatment or punishment. However, Amnesty International raised the issue of prolonged isolation from other prisoners with officials of the Federal Republic of Germany, in the belief that it had caused mental and physical harm to prisoners' health and constituted a cruel, inhuman or degrading treatment or punishment. Consideration of the age, sex and state of health of the prisoner be weighed as well as the duration of a particular treatment or punishment, its known or likely physical or mental effects on the prisoner, and the deliberateness of the act as evidenced by such things discrimination, shown toward particular prisoners. Reduction of diet, denial of adequate medical care whether deliberately or by negligence, forcible feeding, compulsory labour and numerous other undesirable forms of treatment or punishment may be rendered cruel, inhuman or degrading by the circumstances in which they are imposed.

Torture means degradation: Insults, sexual threats or assaults, forcible eating one's excrement, humiliation of ones family. Torture often means breaking down under extreme pressure and severe pain.

Torture has its own slangs, for example Chilean former detainees described several of the terms used: "el quirofano", lie on a table for long periods with the upper half of the body unsupported, making it a great strain to keep the whole body horizontal= "La parrilla", the grill, a metal bed to which the victim is strapped while being given electric shocks; "La banera", the bath, holding the victim's head under water almost to the point of drowning; "paude arara", parrots perch, suspension head-down from a horizontal pole placed under the knees, with the wrists bound to the ankles; and "el telefono", blows with the palms of the hands on both ears simultaneously. A released prisoner held by Zaire's internal security service in 1982, reported that prisoners were made to drink their urine, "Le petit dejeuner", and then beaten systematically on the shoulders, "Le dejeuner".

The immediate and long-term effects of such intense physical and psychological abuse are oppressive and very stressful and this raises the issue of stress in prison population.

The hypothesis that emotional stress is closely linked with the onset of physical and mental illness has been sufficiently supported by the literature in clinical and epidemiological studies. The concept

of stress is elusive because it is poorly defined, though it is a concept which familiar to both layman and professional alike. A cursory survey of the available scientific literature reveals that studies on stress as a dependent variable for study, describing it in terms of a person's response to disturbing or noxious environment, the second approach describes stress in terms of the stimulus characteristics of those disturbing or noxious environments. The third views stress as the reflection of a lack of 'fit' between the person and his environment. It is seen as an intervening variable between the stimulus and response (Cox, 1978).

Hans Selye (1956) defined stress as the non-specific (physiological) response of the body to any demand made upon it. McGrath (1976) has proposed a similar definition by suggesting that there is a potential for experiencing stress when a situation is presenting a demand which threatens to exceed the capabilities and resources for meeting it and when it is important that the person meets that demand. Lazarus (1976) seems to have the same opinion when he says stress occurs when there are demands on the person which tax or exceed the persons adjustive resources. Howarth (1978) sees stress, as any influence which disturbs the natural equilibrium of the body and includes within its reference physical injury, exposure, deprivation, all kinds of disease and emotional disturbance.

Stress, Cox (1978) has argued can only be sensibly defined as a perceptual phenomenon arising from a comparison between the demand on the person and his ability to cope. An imbalance in this mechanism, when coping is important, gives rise to the experience of stress response.

The conditions and consequences of imprisonment can be viewed in terms of excessive demands made on the prisoners by their prison environments. However, there is agreement over the possible causes of stress and over its probable effects. Stress causes changes in physiological state which may be excessive and some may be damaging due to prolonged stress as a result of exposure to period of confinement or captivity and imprisonment. One of the research leads in stress/illness studies is that of life events. Life event which refers to significant changes occurring in a person's life time, have been associated with stressful life experiences that exacerbate physical and mental illnesses, (Holmes and Rahe, 1967, Dohrenwend and Dohrenwend, 1974, Rabkin and Struening, 1976, Machanic, 1976, Rahe and Lind, 1971).

These physical and mental changes involve emotions, motivations, and cognitions. Under stress, we feel anxious, depressed, irritable. We experience changes in our appetite for food and may gain or lose large amounts of weight. Cognitive changes occur as well: we have

difficulty concentrating, lose our ability to think clearly, and find that our thoughts keep returning to the source of the stress.

Imprisonment contributes to the loss of resources, diminishes adaptive capacity and complicates previously existing deficits. The lost resources can be categorised as: (1) Physical: health, strength and appearance; (2) Physiological: cognitive and emotional; (3) Social: Family, friends associates, avocations, prestige, social status, respect, utility and personal acceptability; (4) Economic: Property, income or gainful occupation. Loss of any of these resources is capable of evoking grief or depression.

Few prisoners have the psychological composition to survive the hardships of imprisonment in Nigeria without a permanent psycho-emotional scar. Those who manage to leave our prisons alive, walk out from the prisons into a society that is neither prepared to forgive nor forget. Prisoners in Nigeria are punished in prison for having committed crimes against the society and, when they leave the prisons, society also punishes them for having ever been imprisoned.

Much of the history of prison and psychology has often queried the effect that confinement in prison might have on the prisoners mental health and sanity. William Baly (1952), who worked at a Mill Bank prisons as Medical Officer in the 1950's had no doubt

about the increasing risk of insanity that attends imprisonment. He found that prisoners of any considerable degree of imbecility or dullness of intellect will certainly be rendered actual insane or idiotic by a few months of imprisonment. Baly (1950) recommends the greater involvement of experts with good knowledge of the management and peculiarities of mental-health problems in the penal system. These experts no doubt include clinical psychologists and psychiatrists. It is rather unfortunate that the quantity of research work on prisoners mental health has not been impressive. The reason may be because early researchers did not regard the mental health of prison inmates as constituting any problem in the process of treatment and management of criminal behaviour. Researchers in the penal system have recently discovered that one of the greatest problems in Nigerian prison management is the frequent re-admission of inmates to the prison, the reason which many cannot account for, but speculate that, it has to do with the prisoners personality make-up.

It is however, hoped, that the present study will not only throw more light on the fate of prisoners but also help penologists to think more seriously about the mental well-being of prison inmates and what effective roles and services psychologists should provide in the Nigeria prison services.

1.8 STATEMENT OF PROBLEM

According to Cressy (1961), society expects penal institutions to serve four major functions: (1) to isolate offenders, preventing harm to the community, (2) to punish so that law breakers are sorry for their deeds, (3) to reduce the likelihood of future crime and (4) to rehabilitate by transforming criminals into productive citizens. How well do prisons serve these functions?

The criminal justice system in Nigeria emphasises punishment and isolation and appears to be good at confining people. Escapes from penal institutions are rare. Within the prison, the attempt to perform duties necessary for the accomplishment of these functions - reformation, incapacitation, retribution and deterrence - results in conflict. When reformation is expected to be induced by treatment rather than by purposive infliction of pain, the condition which led to prisoner's crimes can be determined and the inmates are introduced to the social, educational, technical and psychological schemes which are considered important to their reformation. The conditions, viewed as helpful to reformation through treatment, almost never include the physical infliction of suffering. Restrictions on freedom within the prisons are a measure of treatment which are imposed much more effectively for the achievement of retribution and deterrence.

In determining the extent to which rehabilitation is achieved, the ultimate deciding factor is the rate of recidivism. But the extent to which that objective is achieved by each of the tools of rehabilitation can be known by a separate examination of each of these tools. Thus, the role of discipline is determined by considering the nature and effectiveness of discipline and the role of the treatment of inmates can be determined by considering the general attitude of the prison staff towards prisoners.

The Nigeria's prison department standing order, (1961), regulation 47 of the prisons regulation, provides that "where a is found guilty of an offence against prison discipline following hearing and decision of the charge otherwise than on oath, the punishment inflicted is: (a) Solitary confinement in a refractory or solitary cell for any term not exceeding six days or; (b) reduction of diet for a period not exceeding six days or; (c) forfeiture of remission of sentence; or (d) whipping with a cane or any two of the above punishments in aggravated cases".

The extent to which rehabilitation is achieved by these disciplinary measures is known by evaluating the effect they have on the prisoner's state of mind during his confinement in prison and after his release.

To what extent, then does keeping in solitary confinement in a refractory or cell, reduction of diet, forfeiture of remission,

whipping or the thought by the prisoner of any of these punishments make him lead a good and useful life as a member of the community after his release? Before any of these punishments can serve the purpose of rehabilitation, it must be accepted by prisoner himself. As Zilbourg has clearly stated,

"the acceptance of suffering in order to reform is psychologically and sociologically different from the desire of a criminal to suffer on the ground that he seeks suffering and desires satisfaction from it".

The acceptance of suffering or punishment in this context by a prisoner involves his readiness to regard it as a necessary tool for a change of behaviour to enable him to reject his anti-social act and conform to the acceptable social behaviour outside the prison walls. In other words, there must be present in the prisoner a will towards reformation, resocialization and rehabilitation.

According to Adedokun (1968), a Professor of criminal law and criminology at the University of Lagos, and one of Nigeria's foremost authorities on the subject, deterrence has been the main objective of Nigerian courts in their sentencing practice, accounting for 57% of the sentences imposed by them. Nigerian courts have persisted on this inclination despite overwhelming evidence that deterrence is unsupportable by scientific evidence.

Imprisonment is undisputably, the most popular sentence imposed by Nigerian courts. Research studies estimate that 73.5 per cent of all criminal convictions in Nigeria end in Imprisonment. This excludes those persons whose population is put at 16 per cent of our serving convict population, who end up as prisoners because of their inability to pay fines imposed as criminal sentence, (Civil Liberty Organization, 1991).

According to Adeyemi (1968), imprisonment since 1962, has become the most frequently used method of disposing criminals by Nigerian courts. It seems today that the courts have developed a tremendous amount of faith in imprisonment. So far, they do not seem to have realized that imprisonment has not exhibited any greater degree of efficacy as deterrent or as a reformatory machinery than probation or fine.

Rather, prisons are probably adept at making people miserable. Also, prisoners manifest psychological disorders and physical illness. In addition to giving up the right to direct their own lives, prisoners relinquish safety and security, (Bowker, 1982, Johnson and Toch, 1982). Bullying, beating, homosexual, rape, torture and even murder are not rare events in a typical prison where inmates gamble and traffic in drugs, smuggle and steal from one another. Also punishing are the monotony and loneliness of a life without useful work, contact

with members of the opposite sex, or warm relationships. Upon release, ex-convicts go on paying for crimes by being barred from a range of occupations (Banks, Shestakofsky, and Carson, 1975).

More than 99 per cent of prison inmates leave prison eventually (Glasser, 1964), so it is important to ask whether prisons rehabilitate them and reduce further crime. One of the indices of the success or failure of the prison system to achieve its penological objective is the rate of recidivism. Recidivist is a technical term used to describe a person who, is a habitual offender and who has been to prison more than once.

According to Civil Liberties Organization, in their Book-Behind the walls - recidivism figures in Nigeria are unacceptably high. Official estimates by the prisons service put the rate of recidivism at 46 per cent while independent researchers claim that it is as high as between 50-60 per cent - this puts a question mark on the efficacy of the imprisonment in Nigeria as a deterrent and corrective prescription for crime. Not only does prison not seem to deter, it may even encourage illegal activities by embedding individuals within a community of anti-social models, subjecting them to a social system that reward violence and compassion, (Zimbardo, 1972).

A term of imprisonment in Nigeria usually leaves the ex-prisoner devastated to be able to live a fully re-integrated life again. In

addition to the physical and psychological torture he suffered in prison, the ex-prisoner usually discovers on discharge, that he is ill-equipped by the treatment programme in prison to look after himself on discharge. Almost invariably he is regarded as a social outcast. An ideal prison treatment programme should produce in the ex-prisoner a revulsion for imprisonment.

When however, ex-prisoners have a strong need for another prison term, it is evident that something is wrong with the prison treatment, with the ex-prisoners, and with the capacity and willingness of society to re-absorb them and re-integrate them into a normal social life.

In their book, *Behind the Walls*, the Civil Liberties Organization (1991) asserted that perhaps more than any other person in the world, the Nigerian prisoner faces an acute problem of maintaining his sanity. This is because, from the moment he steps into the confines of a prison, whether as a convict or an Awaiting Trial Person (A.T.P), the prisoner is considered a 'thing' beyond the fringe of humanity and consequently of human treatment. He is beaten, robbed, harrassed, and visited with all kinds of indignities and outrages. McCorkle and Korn (1954) described the prison population as a social group made up of custodial and professional employees, habitual petty thieves, one time offenders, gangsters, professional racketeers, psychotics,

pre-psychotics, neurotics and psychopaths, all living under extreme conditions of physical and psychological compression.

Towing the same line, in a paper he presented at the Nigeria Medical Association Conference,, Grange (1967), observed that the prison is a fertile ground for the practice of psychiatry. There is no psychiatrist or (clinical psychologist) practicing full-time in any of our (Nigerian) prisons. The main psychological disorders one sees in prisons daily are psychosis, schizophrenia, psychopathy, mania and manic depression. Meaningful job training, education, counselling and the like are uncommon in penal institutions (Chaneles, 1976, Martinson, 1974). Prisons with as many as 1,500 inmates are likely to have two psychologists, if that many (Brodsky, 1982) whose duties are usually of social worker. The sorts of practices employed in the name of rehabilitation are, in reality, often faintly disguised punishments, (isolation, removal of privileges for misbehaviour) (Lerman, 1975).

One may ask why do we have these psychological disorders in prisons as pointed out by some research studies? Do we attribute these problems to the prison environment or to the criminal themselves? In other words how stressful is the prison environments or what type of personality fo the criminals have? Are they different from normal people? If yes, why put these people in prison every time they commit

crime, rather than solve their problem using psychological methods? What types of psychological disorders are found in prison communities? And in what pattern? Which is more prevalent? How do these psychological disorders affect the prison population in terms of sex differences? What psychological treatment intervention can help cope with their problems?

In finding answers to the above questions, the study attempts to investigate some psychosocial factors determining psychological disorders among prison inmates in Nigeria. Psychological factors to be considered in this study are gender differences, duration, i.e. period of confinement stress and personality variables, e.g. neuroticism, extraversion-introversion and psychoticism. It is also important to this study to initiate a psychological intervention among prison inmates in Nigeria. According to Bukstel and Kilman (1980) a small percentage of prisoners do improve, yet most appear to stagnate or deteriorate. Crowded, punishment-oriented, custodial settings (the norm) are regularly associated with negative outcomes. (Ignatieff, 1978, Rothman, 1980; Sarri, 1981 Smith 1982). Turning offenders away from crime, social scientists reason, requires nurturing their potentials for new type of life. They need to acquire job skills, along with opportunities to work coping capabilities so that personal problems can be handled without resorting to violence and ties to people and institutions that support lawfulness.

It is rather unfortunate that there is paucity of research in the area of prisons and psychopathology. There is also no empirical verification carried out on how psychological disorders affect the prison inmates in Nigeria and types of psychological disorders in prison population and what psychosocial variables are implicated in psychological disorders. Also, there is paucity of research in the area of treatment intervention amongst prison inmates in Nigeria.

Thus, the need for some reliable data in assessing psychosocial factors determining psychological disorders and initiating treatment intervention amongst prison inmates in Nigeria is of very importance. This study is a partial fulfilment of this need.

1.9 STUDY OBJECTIVES

The primary concerns and objectives of the study are summarized as follows:

- (a) The present study seeks to examine and identify through assessment, some psychosocial factors determining psychological disorders among prison inmates in Nigeria. It is postulated that some of these psychological disorders are prevalent in prison population and therefore interfere with the basic aim of correction and effective adjustment for which prison institutions are established.
- (b) It also seeks to empirically document treatment intervention using psychological methods for prisoners to help them cope and adjust

to normal life and to also alleviate their psychological problems, thereby making imprisonment more meaningful to both the prisoners and the society by the attainment of a better and more useful life.

- (c) To investigate whether there is a difference in sex in the occurrence of psychological disorders in prison population.
- (d) To investigate through assessment of prison conditions and how these conditions affect the prison inmates psychologically.
- (e) To also determine the distribution pattern of psychological disorders amongst prison inmates.
- (f) Another objective of this study is to find out the most prevalent of these psychological disorders among the prison population.
- (g) This study will also help identify the reasons for the anti-social behaviours of offenders and this would help in teaching and training them to become useful citizens in the free society.
- (h) Finally, and more importantly, the study hopes to contribute to the growing literature on prison conditions in Nigeria; initiate empirical examination of prison inmates' psychological disorders in Nigeria, and the validation of Prison Stress Questionnaire (P.S.Q) among other clinical instrumentals used in this study - the Awaritefe Psychological Index, (A.P.I), the Eysenck Personality Questionnaire (E.P.Q) and the Middle-Sex Hospital

(M.H.Q) now known as the Crown Crisp Experiential Index.

1.10 RELEVANCE OF STUDY

This study has both clinical and theoretical relevance. There is a dearth of research generally in the area of the mental health status of prisoners. The few studies available have serious weaknesses, (e.g Odejide, 1981, Lambò, 1960a). They lack experimentation. Only few psychologists have carried out researches in prison populations, e.g Adelola 1992). Unfortunately, the focus of these research studies border on prison administration and management. Only few studies, (e.g. Anaeke 1986, Akinnawo, 1993) have been done on psychological disorders. Even these studies are limited in scope, hence they can not be said to be externally valid.

Despite the clamour for the reformation of prisoners by the mass media, Non-governmental Organizations (NGOs) and the general public, both at the national and international level, prisoners still fail to live and function at an acceptable level in the community, besides majority suffer psychological disorders and many return to prison.

But unfortunately, little or no verification has been carried out on why this is so - why they return to prison and cannot function well in the society - could it be the abnormality in their personality characteristics in forms of psychological disorders or personality

variables? The answers to the above questions will help the researcher to also know and implement treatment intervention for these people, rather than the prison authorities, putting them in prisons, where they teach others about crime thereby increasing crime rate and rate of recidivism.

To avoid the vicious circle of turning in prisoners, the present study should throw some light on some psychosocial factors implicated in psychological disorders and how these affects the prison population and also to help develop the prison Stress Questionnaire (P.S.Q) for use in Nigeria among researchers and students.

If some of these psychological disorders are found in prison population, it would then be necessary to introduce effective treatment intervention. This also means that it might be possible to recommend on the basis of the results of the study (at the assessment and treatment phases) a more successful ultimate prevention and treatment outcome.

The study will also provide for the need of prison psychologists, specifically clinical psychologists and psychiatrists or prison doctors to work together in order to help in improving the mental health of the prison population so that imprisonment should be more meaningful and total.

The study will help clinical psychologists and psychiatrists know in advance (or identify) prisoners that would need further rehabilitation

therapy during or after discharge.

The study will also help to educate the public, prison authorities and immediate family members to have a favourable attitude towards prisoners and ex-convicts and to acquire helpful social skills that would help them cope with the stresses and challenges of life without being weighed down by them and turning them to hopeless and helpless persons.

Recently, psychology has been moving away from using intermittent psychodynamic theories and models of behaviour as the basis of assessment, prediction and even diagnosis, and it has begun to focus on descriptive aspects of emotion, thinking and behaviour as well as on adaptation of test instruments in order to assess and predict behaviour. Clinical psychologists have also started to consider cultural differences in the effectiveness of therapy. Rather than apply western models rigidly, such as psychoanalysis (Freud 1954) researchers have begun to effect therapeutic change in combinations.

Therefore, the study hopes to improve on the applicability and relevance of some theories in prison environment, for example, isolation/deprivation theories, personality theories (Eysenck theory on personality and crime) and more importantly the psychological intervention theories relevant for modifying deviant behaviour by ingeniously adopting an eclectic approach appropriate for prisoners so as to make the therapeutic

intervention more sensible and meaningful in an effort to change neurotic and pathological attitudes of criminals.

In this chapter, the general characteristics, forms and rationale for the use of punishments, various conditions of prisons and reforms in America prisons, British Penal System and Nigeria prison system were critically examined. Discussed briefly was the psychological consequences and implications for our prison inmates as these conditions were observed to be stressful. The ultimate outcome of this unhealthy conditions, it was noted would make prisoners experience psychological disorders. The statement of the problem identified gender differences, duration, that is, period of confinement, prison stress and personality variables, for example, psychoticism, neuroticism and introversion-extraversion as the psychosocial factors of interest to the study and their implication for psychological intervention among prisoners. The aims of the study and their consequences for clinical and theoretical application were also discussed.

In chapter Two, some social psychological theories, will be reviewed. These will include deprivation/isolation theories, personality theories, psychological intervention theories and socio-cultural theories. The details of their relevance shall be the central theme of the next chapter.

CHAPTER TWO

THEORETICAL FRAMEWORK AND REVIEW OF RELEVANT LITERATURE

2.1 THEORETICAL BACKGROUND

The subject matter of psychosocial variables, psychopathology and psychotherapy are inherently diverse and complex. The complexity becomes enormous when an attempt is made to implicate some variables to explain relationship with theories in a complex environment like the prison and with complex people in prisons, which is why we must not narrow our choice of one approach to one level or one theory. Each of the theory reviewed here has a legitimate and potentially fruitful contribution to make to this study. What should be clear, however, is that a theory is not "reality", that it is not an inevitable or predetermined representation of the objective world, rather, theories are merely optional instruments utilized in the early stages of knowledge. They serve to organize experience in a logical manner, and function as explanatory propositions by which experiences may be analyzed or inferences about them may be drawn. It is necessary to recognize, therefore, that, different concepts and theories may co-exist as alternative approaches to the same basic problem.

This chapter is an overview of the major theoretical approaches regarding psychosocial factors in this study. These include, gender differences, duration, i.e. period in confinement, prison stress and personality variables (e.g. extraversion-introversion, neuroticism, and psychoticism), and their relationship with psychopathology among prisoners. Theoretical approaches also include theories on psychological intervention. The literature therefore emphasises empirical studies that provide valid support or refutation for these theories. Basically, the same content appear in textbooks on theories of clinical, social and general psychology. For the purpose of this thesis, theoretical position have been used to provide explanations for prisoners, their experiences, and psychological intervention for prisoners, many authors do not make that explanation.

2.1.1. GENDER THORIES

The past ten years have witnessed a growing interest among psychologists in the comparative male - female vulnerability to several stressful life circumstances that have been implicated in the development of psychopathology. Three major explanations have been suggested: differential vulnerability hypothesis, differential exposure hypothesis and social role theory.

Proponents of the differential vulnerability hypothesis have tried to explain male - female vulnerability to psychopathology. Underlying

these explanation is the assumption that, given exposure to similar life stresses and strains, women are more likely than men to manifest symptoms of psychopathology. Speculation about the sources of a heightened female vulnerability to psychopathology has focused on both contextual factors and features of feminine socialization that may render women more inclined than men to react to life difficulties with feelings of self-blame, (Ickes and Layden 1978) a sense of helplessness and hopelessness, (Brown and Harris, 1978; Makowsky, 1982).

The hypothesis on differential exposure focuses on the role that various work related strains play in contributing to excess levels of psychopathology among women in general and married women, in particular (Aneshensel, Ralph, Frerichs and Virginia 1981, Cleary and Mechanic, 1983). However, the work of Makowsky (1980, 1982) and Grey wolf, Ashley, and Reese (1982) raises questions as to whether such strains are the most salient risk factors for depression in the lives of women. These authors emphasises the etiological significance of a very different set of life strains that accrue to disproportionate number of women (current population reports, 1980a, b). These include strains related to the absence of a spouse, social isolation, chronic poverty, and poor health, all of which involve major resources deficits that have been linked to depression,

(Warheit 1979). While not insensitive to the link between such sources of strain or resource deficits and psychopathology, research that has emerged from the theoretical perspective of Gove and his associates, typically employs measure of spouse absence, incur deficits, or poor health in separate analyses (Radloff, 1975) or as classification variables (Gove and Mangione, 1983), rather than as important sources of life strain that may independently contribute to higher rates of psychopathological symptoms among women.

Although the social-role theory is frequently referred to as a sex-role theory (e.g. Rosenfield, 1980), the explanatory framework developed by Gove and Tudor (1972) clearly invokes sex-specific role - husband - wife, father - mother, worker - house - wife, - rather than the global male and female sex roles to account for sex differences in mental illness. Gove (1972) specifically claimed that it is the roles that women occupy, rather than some characteristics of women's generalized sex role, which make women more susceptible to mental illness. According to the social-role theory, the differences in rates of mental illness between men and women, derives from the higher rates of mental illness among married women, even though the married of both sexes have lower rates of mental illness than the unmarried (Gove, 1972, 1979, Gove and Tudor, 1973). Gove (1972), contend that the sex differential in mental illness is greater among

the married than the unmarried. These rates are seen as functions of the social roles typically occupied by men and women, with the roles of the married differing more than those of the unmarried. A key explanatory element in this orientation is the purported greater stress placed on married women, as compared with that placed on married men or the unmarried of both sexes, by extensive familiar role demands.

Empirical findings with respect to social-role theory have been mixed. Gove and Tudor (1973) has been criticized on methodological grounds. Radloff (1975) reports that marital status, employment status, and sex interact in their relationship to mental illness, but conclude that these social roles are inadequate to account for sex differences in mental illness. Fox (1980) presented results of three different national studies of untreated mental-illness which indicate that women are more likely to be mentally ill than men regardless of marital status. These findings therefore lead to the conclusion that the theory lacks internal validity.

However, Weissman and Klerman (1977) maintain that there is strong evidence that social role contributes to the vulnerability of women to mental illness. One way in which it might, they hypothesize, is in the discrimination against women inherent in their disadvantaged social status. Real social discrimination makes it difficult for women to achieve mastery by direct action and self assertion, and this leads

to legal and economic helplessness, dependency on others, low self-esteem, low aspirations, and ultimately mental illness. Beck and Greenberg (1974) also suggesting that the problems which typically trigger depression may be 'sex typed', point out that the absence of power to control one's own life is more commonly experienced by women than by men. Seligman (1975) believes that people are more likely to become depressed when they have learned that their actions will have no effect. The cause of depression is learned helplessness, or the belief that action is futile. Radloff and Monroe (1978) maintain that women learn helplessness from the feminine stereotype, the treatment of female children, the status of women in political and economic institutions, and the experience of being dominated at home.

Despite the plausibility of these hypotheses, few studies have investigated whether women are more vulnerable to psychopathology than men, given exposure to similar life difficulties and strains. Studies that do address this question have produced mixed results, some suggesting a greater female vulnerability to depression in the face of interpersonal problems and difficulties (Kessler and McLeod, 1984; Newmann 1985); others pointing to a greater male vulnerability to depression in relation to problems with the breadwinner role, including job stresses and strains, (Radloff and Rae, 1981).

Others pointing to income losses (Kessler and McLeod, 1984). Thus, while these findings suggest some support for the hypothesis that women may be more vulnerable than men to symptoms of mental illness, such a vulnerability appears to be largely specific to interpersonal strains. Such findings suggest the importance of verifying gender differences in deprived environment like the prison and furthermore, intergrate this male - female vulnerability with personality disorders. This study attempts to examine this relationship.

2.1.2 SENSORY AND SOCIAL DEPRIVATION (ISOLATION) THEORIES

There are many types of psychological deprivations and these include oral deprivation, deprivation of mothering, dependency deprivation, sensory deprivation and social deprivation, (isolation). Of importance to this study are the social deprivation (isolation) and sensory deprivation. They are interrelated: social isolation is often accompanied by a reduction of, or monotony in, the external stimulation impinging on the individual. The individual subjected to severe conflict or frustration, long-continued vigilance, uncertainty, deprivation or threat may not be able to perceive a ready escape route; the result is a state of stress. Deprivation of affection and unchangeable social isolation or threatened drastic loss of self esteem are all psychologically stressful. According to Rosen and Gregory

(1966) under conditions of isolation, normal individuals will develop psychopathological reactions.

Inadequate sensory stimulation and social deprivation have been investigated, (Heron 1961, Suedfeld, 1981). The effects of a carefully controlled decrease in variation of the sensory environment were reported by Heron, Bexton and Hebb (1953) in which college students were paid twenty dollars a day to do nothing but remain lying down on a comfortable bed with eyes, ears and hands shielded to minimize perception of their environment. The conditions were relaxed only to permit a subject to eat or go to the toilet. Most subjects could endure the experiment for only two or three days; the upper limit was six days. Among the effects noted were a significant decrease in the ability to solve problems and persistent vivid visual imagery or hallucinations.

Interest in the consequences of social isolation was strongly aroused during the Korean war in an attempt to understand the effectiveness of communist techniques of brain washing, extortion of false confession, and indoctrination, (Lifton 1961). Faber, Harlow and West (1957) claimed that the techniques employed in brain washing largely consist of the production of debility, dependency and dread. These were produced by the combined effects of physical pain and injury, malnutrition disease, sleep deprivation,

isolation, inability to satisfy the demands of interrogation and actual or implied threats of death, pain, non-repatriation, deformity, permanent disability and harm to loved ones at home.

Some studies on isolation (Bryd 1938, and Ritter 1954) have also demonstrated that living alone in the polar night, isolated in a small hut for weeks or months on end are experiences that involve both absence of human contact and monotony in sensory stimulation. There are numerous accounts of abnormal perception, cognition, affect and motor behaviour among persons who have endured long periods of relative isolation at sea. From examining these accounts, it appears that individuals who survive in groups, even as small as two or three, are less apt to manifest signs of severe psychopathology than those who survive singly, and that those who survive singly almost invariably show evidence of psychopathology.

According to Rosen and Gregory (1966), the individual in prolonged solitary confinement attempts to compensate for the loss of human relationships by imagining that he has companions whom he converses, plays or fights and with time, he becomes increasingly withdrawn into his inner world of fantasy and may have a great difficulty in re-establishing his contact when removed from isolation. Rosen and Gregory (1966) claimed that the underlying mechanism of such disturbances seems to be a tendency to project mental activity outward.

Mental processes that are usually governed and bound by reality, turn to fantasies and then to hallucinations and delusions. Subjective thought processes are superimposed on and confused with inanimate matter. Imagination absorbs more and more of the energy that normally is expended in interaction with the environment.

Sensory deprivation procedures not only reduce sensations, they also confine subjects and eliminate social contacts. Studies in sensory reduction, confinement and social isolation can all contribute therefore to behavioural changes although most of the studies are strict experimental conditions. Also studies on social isolation are also limited in scope. Some studies are based on strict experimentation, (for example Heron, Bexton and Rebb, 1953) while others on subjective report (Ritter, 1954) and some experiments use voluntary participants, (e.g. Heron et al 1953, Byrd, 1938).

Also, isolation is one component among these stress inducing biological and psychological factors. However, research is under way to separate the influences of these three variables, (Zubek, Bayer and Shepard, 1969; Zuckerman, 1969). Theories of social sensory deprivation will be adapted to the prison environment but with caution. Although the prison environment approximates a socially and sensory deprived environment, and social and family support are withdrawn from the inmates, it should be noted that isolation is

one component among these stress-inducing biological and psychological factors and that the mutual relationships among the three variables of (1) the degree of stress (brought about by frustration, deprivation, uncertainty, conflict or any other sufficient condition), (2) the degree of personality stability and (3) the resulting type of psychopathology should also be considered.

However, individual vulnerability to precipitating psychological stresses depends on the degree of personality instability. In turn, personality instability is affected by the psychological predisposition established early in the life of the individual. A single psychological determinant may have both short range precipitating and long-range predisposing effects, therefore psychopathological behaviour results from learning under conditions of frustrations, conflict and deprivation. If all other variables such as heredity were to be held constant, then the more stressful these conditions were, the more severe the subsequent psychopathological would be and finally lasting psychopathology is less likely to result from a single traumatic event than from prolonged stress. This conclusion has implication for periods in confinement, that is duration, that the longer the prison sentences the more likely that individual will manifest psychopathological behaviour.

2.1.3 STRESS THEORIES

Various theories on stress have been proposed and have been classified under three perspectives: (1) Psychophysiological perspective

(2) Stress viewed from the stimulus perspective (3) Stress from an interactional perspective.

PSYCHOPHYSIOLOGICAL STRESS THEORY

This approach is based on the work of the physiologist Selye (1956) who considers stress to be a psychophysiological state. The theory indicates that stress response is a built-in mechanism which comes into play whenever demands are placed on individuals and therefore is a defence reaction which has a protective and adaptive function. In this definition "any demand" does not specify the conditions that are necessary to activate the stress mechanism and the non-specific response. The focus of Selye (1956), is on stress response rather than on its stimulus nature.

Selye (1976) identified three phases of General Adaptational Syndrome, namely: the alarm reaction; the stage of resistance; and the stage of exhaustion. Each stage is characterized by different physiological changes depending on the nature of the stress.

The alarm reaction (also known as the emergency reaction) consists of psychological changes which mark the individual's first response to a stressor. A stressor could be loss of a loved one, financial constraints, loss of employment or imprisonment. The alarm reaction is characterized by various bodily and biochemical changes that present with the same general form regardless of the

exact nature of the stressor. Selye (1976) contends that there is similarity in general symptoms of individuals suffering from various illnesses. The individuals concerned appear to give the history of symptoms such as fever, headache, loss of appetite and aching muscles and joints. There is that general feeling of inertial/lethargy.

During the alarm reaction, the anterior pituitary gland secretes adrenocorticotrophic hormone (ACTH), which triggers the adrenal cortex to secrete additional hormones as discussed below.

The initial alarm reaction evidenced by an increase in sympathetic-adrenomedullary activity, and adrenocortical activity while the stage of resistance (2nd stage) is associated with an increase in adrenocortical activity.

Within the sympathetic - adrenomedullary system, the adrenal glands release the neurotransmitter substance acetylcholine which in turn causes the release of the two major catecholamines (adrenaline and to a lesser extent, noradrenaline). The function of adrenaline is that it produces an increase in blood pressure and mobilize the glycogen, found in the body tissues. In an emergency situation, it enables the vessels on the surface of the skin to become vasoconstricted in order to minimize bleeding and is also responsible for adrenaline release. In emergency situations, it releases fatty

acids into the blood stream, which help to generate increased energy. The way the body responds to stress is similar to what happens in anger and fear.

The sympathetic system operates in combination with catecholamine secretions of the adrenal medulla, which together produce what has become known as the emergency alarm reaction. The sympathetic nervous system prepares the organism for fight or flight (Cannon, 1929); speeds up the rate, strength and regularity of the heart beat; and releases glucose. The blood supply from the skin is directed to the brain and the muscles; the pupils dilate, and the bronchi dilate.

The parasympathetic division of the autonomic nervous system dominates in relaxation and recuperation situations; heart rate slows down and the sweat glands are inhibited; blood glucose level drops, and the blood is directed towards the skin.

The adrenal medulla is activated when an individual is angry, and adrenaline and noradrenalines are released. These two hormones mimic the sympathetic autonomic nervous system (ANS). With the release of these hormones, the heart beats faster and sweating can occur. The difference between physiological changes which take place during fear and anger is in the way these hormones are released. In fear, the release of adrenaline predominates whereas

noradrenaline will be released more in angry situation.

Urinary catecholamines can be measured and have proved very useful as an indicator of stress response in a number of laboratory and real-life situations using simulations and field studies reported by Frankenhauser and Risler (1970).

Self-reported stress individuals has been found to correlate significantly with amount of catecholamine excretion found in subjects who experiences situations of tranquility. Some studies using male persons subjected to a variety of stressors have revealed that urinary catecholamine secretions serve as a useful indication of emotional arousal in active and passive states (Frankenhauser and Risler, 1970).

The output of ACTH is regulated by corticotropin releasing factor (CRF) from the cerebral cortex which is secreted into the pituitary portal blood vessels by the hypothalamins and it controls the activity of the adrenal cortex.

The removal of adrenal cortex will result in death. The adrenal cortex can be affected considerably if an organism is subjected to any form of stress. The adrenal cortex produces both androgens and oestrogens (sex hormones in males and females respectively but very little is known about their exact functions in relation to stress (Dobson, 1982).

The cortisol and corticosterone help the organism to resist all kinds of stress, including psychological stress. The glucocorticoids protect the organism from stress. The way an individual responds to stressful events is therefore largely determined by neuromuscular and hormonal activities.

If the stress continues, the alarm reaction is followed by a stage of resistance during which the physiological changes that occurred during the first stage are inhibited. It will be recalled that this is the second phase of the general adaptation syndrome. The individual appears to develop a resistance to the specific stressor that stimulated the alarm reaction. Those symptoms which the organism experienced during the alarm reaction stage disappear despite the fact that the stimulation continues.

With prolonged exposure to the injurious stressor, a point is reached where the individual can no longer maintain its resistance. The stage of exhaustion is reached with this prolonged stressor during which the organism gets to the state that the anterior pituitary and the adrenal cortex lose their capacity to secrete hormones, and the organism can no longer adapt to the stress. What then happens is that the symptoms of the alarm reaction then begins to manifest, and the stressor continues, death may occur. However, it appears that individuals do not wait for this stage of

total exhaustion to be reached before the stress is relieved.

This perspective has been criticized on the basis that Selye (1956) did extensive work on laboratory-controlled physical stimuli such as cold or electric shock but human stress is much more complex. This approach of Selye to stress ignores the role that the individual experiencing the stress can play in the extent of stress response. Secondly, the perception of the stressor can determine the extent of stress response. As a result of this gap, the interactionist perspective can explain stress in a more detailed manner. Equally the role of learning as a modifying factor in stress perception and reaction is not considered in the Selye theory.

STRESS AS A STIMULUS

Stress conceived as a stimulus has been used to describe situations characterized as new, sudden or unexpected. Stress as stimulus concept has triggered very active research on possible connections between stress and bodily illness. Meyers (1951) argued that certain alterations of life circumstances, such as changes of habitat, births, deaths, and new jobs, have a potent influence on the balance between health and illness. In the case of psychosocial stress, the individuals sense danger or recognize damage and must act to protect themselves against this or to overcome the damage.

Rahe (1968) determined whether changes in a person's life could be statistically correlated with the onset of illness. The psychosomatic medicine movement has long before associated certain internal psychological conflicts with predispositions to particular disease (e.g, asthma, duodenal ulcers, ulcerative colitis). The hypothesis that emerges from the results of life events research is that it is possible to make predictions about stress and susceptibility to a much wider array of disease (infections, neoplasms) by determining the magnitude of critical life changes taking place within a limited span of time.

Holmes and Rahe (1967) using the Social Readjustment Rating Scale (SRRS) determined the relationship between a clustering of life changes and onset and severity of illness. They discovered a strong relationship between major health changes and life crisis. Each life change (as a stimulus) has a fixed numerical value; thus, the more the events presumably require a shift in the usual mode of living, the greater the risk of illness. The above approach using the SRRS was more concerned with establishing statistical correlates between observable events than with studying the process by which such pathological changes occur. It was not made clear whether those who developed illness were indeed more stressed than those who remained healthy. Also, it is not ascertained

whether or not these subjects shared certain personality or physiological traits.

Holmes and Masuda (1974) theorized that life change events, by evoking adaptive efforts by the human organism that are faulty in kind and duration, lower 'bodily resistance' and enhance the probability of disease occurrence. This theory presumes that demanding life events must necessarily evoke faulty adaptive efforts which lead to pathogenic physiological change. While some researchers accept this hypothesis, others have been critical of it (Cleary 1974, Rabkin and Struening, 1976).

The argument put forward by many critics is that life events theory ignores all intervening reactive variables, including coping responses, anticipatory reactions and longitudinal difficulties of the individual. They suggest that an understanding of a life event's impact must take into account the physical susceptibility of the individual, the meaning of the social changes, the person's ability to cope with variety of stress, personality and the individual's social network, ethnic and class background, and cultural assumptions.

AN INTERACTIONAL PERSPECTIVE

According to the interactional perspective, stress can be defined in terms of the results of interaction between events and people.

Thus, interaction is not only personal responses to stress, stimuli must be assumed if we are to fully understand stress and stressed people. Temporal sequences need to be measured by assessing and reassessing both situations and people. The formulations of the interactional perspective imply, amongst other things, that what becomes a stressor is not determined solely by the nature of the situation or by the individual and his dispositions. Stress responses are a product of the vulnerability of the individual and the stress provocation of the situation. For the person, the occurrence of stress is determined by the individual's vulnerability, defined in terms of physiological dispositions, perceptual-cognitive appraisals and coping competence (Zubin and Spring, 1977). In the continuous person-situation interaction process, an important aspect of an individual's prones to react with stress is the functioning of his perceptual-cognitive system in selecting and appraising environmental information.

Many psychologists, sociologist and anthropologist have for long emphasized the importance of considering the meaning of the environment, in terms of how it is perceived, interpreted, and cognitively represented in the minds of individuals (Angyl, 1949; Bowers 1973). According to Thomas Theorem (Merton, 1957; Thomas, 1928), "If men define

situations as real, they are real in consequences". The perceived environment approach has important consequences for personality theories that attempt to explain social behaviour. This approach is particularly important in interactional personality theory.

Lazarus (1976) emphasized in his research that the cognitive appraisal of a stressful situation is the important factor underlying stress response. The interaction model of stress and anxiety (Endler, (1975, 1980) defines stress as a situational variable, the perception of which variable, is influenced by the individual's predisposition to react to stress with increased anxiety . The perception of stress (threat) in turn mediates increases in the anxiety states. It is necessary, therefore, for research on stress and anxiety to consider persons, situations, and the multidimensionality of the constructs. A schematic representation of the interaction model of stress and anxiety as proposed by Endler (1975) is shown in Fig. 2.1

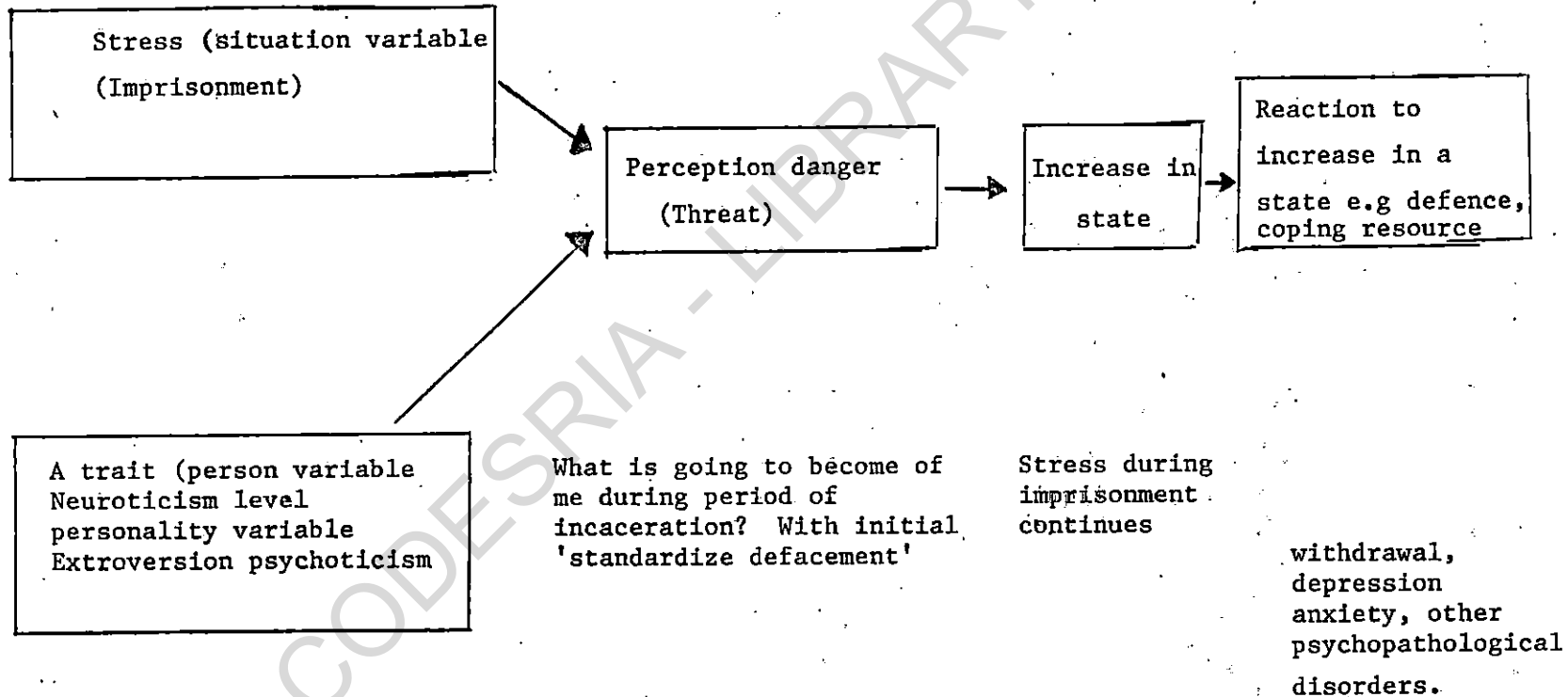


Fig. 2.1 Stress and the anxiety process.

Source: Golden, Berger and Brezitz (1982) Handbook of Stress: Theoretical and Clinical Aspects. New York: free Press.

Fig. 2:1 demonstrates that maladjusted behaviour is a learned response to stress. It shows that when people are placed in prisons with its attendant problems of dehumanization, hunger, deprivation (socially and emotionally) and these situational variables combine with the individual's personality variable, which may be stable or unstable affect the cognitive patterns of the prisoner; particularly in such threatened environment, increases the individual; behavioural state which consequently leads to psychopathology.

The implication of this model for research on psychological disorders and imprisonment is that individuals who are high on stress scores are prone to report higher levels of psychological disorders during imprisonment.

Another basic assumption made by Mandler (1964) is that most (but not necessarily all) psychologically stressful situations are the result of interruption. Stressors are interruptions, but not all interruptions are stressors. From the above, it should be noted that stress is not just a simple resultant mechanism or stimulus. Stress would appear to be a complex phenomenon, multifactorial in origin and effect and it cannot be adequately explained or conceptualized by a single unifying principle, concept or theory. The approach to stress has to be from various angles in view of its heterogeneity.

LAZARUS' COGNITIVE MODEL OF STRESS

Lazarus (1975a) is of the opinion that Selye's experiments might not have been physical stress, (heat, cold, shock) per se but, rather, the animals used for his experiment perceived that they were in trouble. The suggestion here is that, the GAS will not occur unless the animal perceives the stimulus as dangerous. The importance of psychological, rather than physical factor in assessing and organism's reaction to stressful stimulation has been shown by Mason (1975). Stress is seen to be defined exclusively by situations because the capacity of any situation to produce stress depends on the characteristics of individuals. In short, imprisonment may be stressful to one individual and not to the next. Before a stimulus is regarded as being stressful, the individual's perception of that event must be taken into account.

Lazarus (1966, 1975a, 1975b) developed a model of stress in which he suggests that a stress reaction follows only when an individual appraises his current situation as stressful.

Speisman, Mordkoff, and Davison, (1964) exposed subjects to a film that depicted some very crude genital operations carried out as part of male initiation rites in an Australian tribe. The authors reckoned that of the threat and physiological stress reactions depended on the appraisal of threat, and if the beliefs produced by the stimulus

events could be altered, the psychophysiological stress reactions would be reduced. The result of the research showed that the psychological stress response to the film was significantly lower for the defense-oriented denial and intellectualization group. The subjects in the study were able to overcome the physiological effects that would normally occur to such a stimulus.

Another study was by Lazarus, Opton, Normicks, Rankin (1955) in which they exposed subjects to a film of an accident in which the fingers of an operator were lacerated, another cut-off his middle finger, and a bystander was killed after a plank of wood was driven through his mid section. Half of the subjects were provided with a denial orientation (the events were not really happening and the blood was simply a liquid being squeezed by the actors). The other half of the subjects validation framework (the events were described as real, but the emphasis was placed on the educational value of the film with respect to safety). The control group were not given any special instruction. In line with the result of the first study cited above, the denial and intellectualization frameworks were effective in reducing the degree of physiological arousal to the film that occurred.

These studies show that appraisals underlie the actual experience of threat. Stress reactions, then reflect, to an extent, the success or failure of coping mechanism. This model is shown in Fig. 2.2.

1. Appraisal

2. Coping

3. Outcome

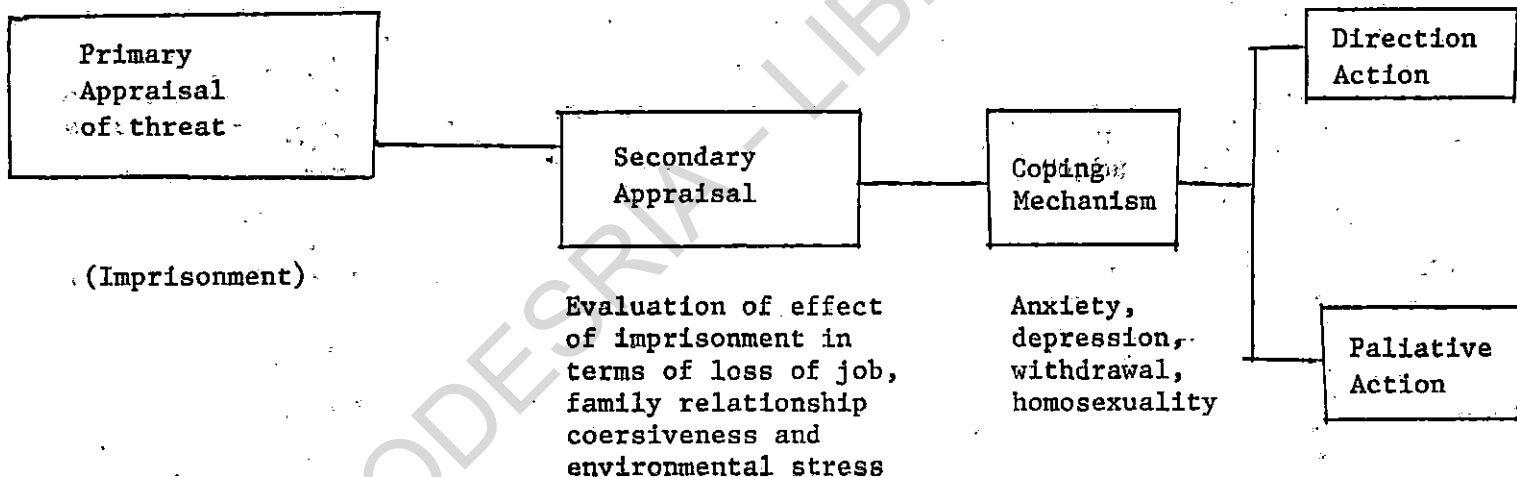


Figure 2.2 A schematic representation of Lazarus cognitive Model of Stress

Source: Bakal, D.A. (1979) Psychology and Medicine, Bristol J.W. Arrowsmith Ltd.

The stress reaction begins when an individual perceives some important motive or value being threatened. According to Lazarus (1976) "the appraisal of threat is not a simple perception of the elements of situation, but a judgement, an inference in which the data are assimilated to a constellation of ideas and expectations". The same stimulus event will be perceived as threatening by some individuals and not by any other individual. If the stimulus event is perceived as threatening, an individual then engages in secondary appraisal. New coping mechanisms are activated that determine the nature of the final response outcome. Primary appraisal is concerned mainly with an evaluation of the situation while secondary appraisal is concerned with an evaluation of the consequences of actions taken to minimize the threat.

Primary appraisal alone cannot provide the complete understanding of the possible outcomes associated with the perception of an event as stressful. Secondary appraisal is related to the coping strategies used by an individual. The individual can use emotional responses as a form of coping indicating the importance of appraisal at all levels of stress reaction.

2.1.4 PERSONALITY THEORY: THEORY OF PERSONALITY AND CRIMINAL BEHAVIOUR (EYSENCK, 1967).

According to Professor Eysenck (1967), it is a common observation that all human (and animal) behaviour is phenotypic, and that such behaviour is produced by the interplay of genotype and environment; in the field of criminal conduct the last fifty years have been an ever increasing stress on environmental conditions conducive to crime, and an ever-increasing interest in genetic causes predisposing certain individuals to behave in an antisocial fashion.

In a publication (Eysenck, 1970a) the literature has been reviewed in some detail as far as the evidence for genotype determination of criminal conduct is concerned, and the conclusion was drawn that the facts supported neither a purely hereditarian nor a purely environmentalist, but rather an interactionist theory, ~~that is, theory,~~ that is a view combining hereditary and environmental factors. Such theory he says is not very helpful unless we can specify with some precision, on the one hand the environmental conditions which predispose a person to crime and on the other hand the inherited personality traits which predispose a person to succumb to temptation. The complexity of the situation may be even greater than that; also it is possible that certain personality types interact with certain

environmental conditions. It may even be suggested that different personality/condition combinations given rise to different types of crime, or at least anti-social conduct.

According to Eysenck (1970a), a psychological theory explaining criminal or antisocial behaviour and personality, was adumbrated to the effect that:

- (1) Propensity to crime is universal, but is held in check in most cases by what Eysenck calls conscience;
- (2) this conscience was essentially a generalized set of conditioned responses built up during childhood and adolescence, according to the rules of Pavlovian conditioning;
- (3) this conscience might be expected to be under-developed either through failure of social and family conditions to provide the proper means of developing it, or through innate weakness in the person concerned of the mechanism involved in the elaboration of conditioned responses;
- (4) It was further postulated that extraverted people tended, under certain stated conditions, to condition less well than introverted ones, thus making them ceteris paribus more likely to behave in an antisocial fashion, and that;
- (5) high degrees of anxiety or neuroticism tended to act as a drive strongly reinforcing the extraverted or introverted tendencies favouring or disfavouring anti-social conduct.

From this chain of argument, it was deduced that antisocial conduct, particularly crime, would be found more frequently in people whose personality placed them in the high extraversion/high neuroticism quadrant, and, a number of empirical studies were quoted to support this deduction.

In Eysenck's general system of personality description the factors of extraversion and introversion are supplemented by another factor, orthogonal to the other two, and also of general applicability to normal samples, that is, that of psychoticism (Eysenck, 1952, 1970b). This concept has some similarity to the view that benign psychoses may arise from unspecific vulnerability (Welmer and Stromgren, 1958) and (Eysenck, 1970c). The nature of this psychoticism factor may be conveyed briefly by the list of traits characterising it (that is, having high loadings); (1) Solitary; not caring for other people (2) Trouble-some; not fitting in (3) Cruel; inhumane (4) Lack of feeling; insensitive (5) Sensation-seeking; "arousal jag" (6) Hostile to others; aggressive (7) liking for odd, unusual things (8) Disregard for anger; foolhardy. (9) making fools of other people; upsetting them.

According to Eysenck (1970c), there are two reasons for believing that psychoticism may in addition to E and N, be implicated in the traits enumerated above resemble rather closely those often

exhibited by criminals. It is not suggested that all criminals are characterised as such but merely that a certain proportion of what are often considered the most difficult, inveterate and incurable criminals seem to match in their personality characteristics the above description. Another reason, which is stronger and in many ways more convincing one, lies in the often repeated psychiatric observation that psychosis (particularly schizophrenia) and criminality have a particular close connection or that psychosis share certain important features with criminality, implying of course that all (or even a large proportion) of criminals are in fact psychotic although not in the strict psychiatric sense, he then proposed in his hypothesis that the scores on a questionnaire measure of psychoticism would be raised in a sample of criminals as compared with a sample of normals, matched with them on sex, and age. Thus criminals would theoretically emerge as a high E, high N, and high P.

In summary, the basic elements of his theory runs as follows:

- (1) Socialization is achieved through conditioning.
- (2) Extraverts tend to condition poorly and therefore poorly socialised.
- (3) Neurotics are high on factors of emotionality of anxiety.
- (4) This anxiety acts as a self-reinforcing drive.
- (5) Therefore, poorly socialised neurotics (neurotic extraverts) will tend to engage more frequently in antisocial behaviour

than non-neurotics.

- (6) Finally, that psychoticism may in addition to E and N, be implicated in the causation of criminality, therefore criminals would be those who have high E, high N and high P.

However, Eysenck theory of personality and criminal behaviour also, vaguely explains the relationship of personality types and psychopathology.

According to Eysenck and Eysenck (1970), the Greek physician, Galen put forward the view that there were four main types of temperaments the melancholic, the choleric, the sanguine and the phlegmatic - which were linked by Galen to four classical types of temperaments with the secretions of the body. Later, Wilhelm Wundt the famous German psychologist posited that melancholics and the choleric were alike in showing rather weak emotional reaction. Consequently, he posited the existence of another dimension or continuum of strong as opposed to weak emotionality, thus, a person might be assigned any position from one extreme through the centre to other extreme on either of these two dimensions which produced his temperaments. For example, if one was extremely strong in emotions and also extremely changeable, then he might be called a choleric; if he was rather weak and stable, he would be a phlegmatic and so forth. Extensive experimental work has confirmed the

essential accuracy of the outline bequeathed to psychology through Galen and Wundt. Today, these concepts are no longer referred to as strong emotion or weak emotion, but are called emotionality or neuroticism or stability, in the sense that the person who, according to Wundt, had strong emotions would tend to be a neurotic, unstable, emotional sort of person, whereas at the other end of this dimension, one would find the unemotional, stable, non-neurotic sort of person.

The other axis, according to Eysenck and Eysenck (1970) has been renamed and called extraversion and introversion in which observed traits through measurement are inter-correlated. The typical extravert is sociable, likes parties, has many friends, needs to have people to talk to, and does not like reading or studying by himself. He craves excitement, takes chances, acts on the spur of the moment, and is generally an impulsive individual. He is fond of practical jokes, always has a ready answer and generally likes change; he is carefree, easy going, optimistic, and likes to laugh and be merry. He prefers to keep moving and doing things, tends to be aggressive and loses his temper quickly; his feelings are not kept under tight control and he is not always a reliable person.

The typical introvert is a quite retiring sort of person, introspective, fond of books rather than people: he is reserved and reticent except with intimate friends. He tends to plan ahead,

looks before he leaps and distrusts the impulse of the moment. He does not like excitement, takes matters of every day life with proper seriousness, and likes a well-ordered mode of life. He keeps his feelings under close control, seldom behaves in an aggressive manner, and does not lose his temper easily. He is reliable, somewhat pessimistic, and places great value on ethical standards.

In his discussion, Eysenck (1977) went on, using the famous psychiatrist, Pierre Janet's argument to classify neurotic disorders into two main groups. One of these he called the psychasthenic group. In the psychasthenic group, is the anxiety states, the depressions, the phobic fears, the obsessive and compulsive habits; in the hysteric group we find a variety of personality disorder, histrionic behaviour, memory lapses, paralysis, blindness, and other apparently physical disorders having, however, no observable cause.

A third factor, which Eysenck and Eysenck (1970) later introduced is the P factor. According to Eysenck and Eysenck (1970) a person who scores high on the P factor and is not psychiatrically ill, will have the following characteristics:

(1) solitary, not caring for other people; (2) troublesome, not fitting in; (3) cruel, inhumane; (4) lack of feeling, insensitive;

(5) lacking in empathy; (6) sensation seeking; avid for strong sensory stimuli; (7) hostile to others; aggressive (8) liking for odd and unusual things; (9) disregard for dangers, fool hardy. (10) Likes to make fool of other people, and to upset them, and then concluded that in the three dimensional system of personality description created by the three major dimension of P, E, and N therefore, psychopaths and criminals would be expected to lie along a sausage-shaped area in the high P, long E, high E area; those who are situated near the P axis would be likely to be diagnosed as primary psychopaths, while those on the plane marked out by E and N but more remote from P, would be likely to be diagnosed as secondary psychopaths. Those in between or nearer to the origin (i.e. with less elevated scores on these three dimensions) would present considerable difficulties of diagnosis, and create the well-known problem of unreliability of psychiatric classification. When apply this theory to criminality Eysenck (1977) concluded that persons strong anti-social inclinations will have high P, high E and N scores.

Although Eysenck's theory of personality and criminality is a general learning and personality theory. Eysenck and Eysenck (1969) have devoted a great deal of time to using the theory to explain deviant behaviour, in particular, the explanation of certain types of mental illness and some types of criminality, and as already

suggested, Eysenck's theory is a biologically - based theory of criminal behaviour, hence the criminal bears the 'mark of Cain' and cannot help his propensities. As such, the theory would be incapable of accounting for the frequently noted discontinuities in criminal careers. Not every young offender becomes an adult criminal and it would be extremely tortuous to account for this in terms of constitutional changes (West 1969). The theory also fails to account for the perfectly adequate socialization of young offenders as far as their social habits e.g. playing by the rules of games and attitudes, loyalty to parents and peers, are concerned.

This evaluation is inclined to conclude from the evidence presented that Eysenck's theory of criminality as applied to the juvenile and of the criminal population is at present limited. Further, the usefulness of the theory is severely circumscribed by the limitations of the available tools. One cannot use them for differentiating any type of offenders for whom special treatment and handling measures are required.

This is not, however, to deny that there are some criminals whose behaviour can be directly attributed to deviant personality make-up. Nor is it to say that a theory based on learning would not be useful for explaining rigorously a great deal of criminal behaviour. But the learning paradigm used would need to give much greater weight to social factors than Eysenck's does.

However, a selective link between personality dimensions and social handicap may be established, most people actually working with criminals would confirm the primacy of social and environmental factors in the genesis of criminal behaviour. This neglected approach should be made, both in order to increase our understanding of the causes of crime (in so far as these are related to personality) and in order to obtain clues as to optimal methods of treatment of different types of criminal.

2.1.5 PERSONALITY THEORY: THEORY OF PERSONALITY AND PSYCHOPATHOLOGY (ROGERS, 1959)

Carl Rogers, the major American exponent of 'self theory' details this process of growth and indicates the points at which "breakdown and disorder" arise. Rogers contended that psychopathology occurs when the individual abandons his inherent potentials and feelings and adopts values that are imposed upon him by others. It is therefore important to examine this theory of personality as presented by Carl Rogers.

Carl R. Rogers (1959), theory of personality and pathology in sequence is based on ten propositions which are discussed below:

Proposition One: Postulated characteristics of the human infant.

He postulated that the individual during the period of infancy has

some attributes; the infant perceives his 'experience' as reality, his experience is his reality, as a consequence, therefore, he has greater potential 'awareness' of what reality is for him than does anyone else, since no one else can completely assume his 'internal frame of reference'. The child has an inherent tendency toward actualizing his organism and that he interacts with his reality in terms of his basic actualizing tendency. Thus, his behaviour is the goal directed attempt of the organism to satisfy the experienced needs for 'actualization in the reality' as perceived'. In this interaction he behaves as an organized whole, as a gestalt, engages in an organismic valueing process, valueing experience with reference to the actualizing tendency as a criterion. Experiences which are perceived as maintaining or enhancing the organism are valued positively. Those which are perceived as negating such maintenance or enhancement are valued negatively.

Preposition Two: The development of the self: In line with the tendency toward differentiation which is a part of the 'actualizing tendency, a portion of the individual's 'experience' become differentiated and 'symbolized' in an awareness may be described as 'self experience'. This representation in 'awareness' of being and functioning, becomes elaborated, through interaction with the environment, particularly the environment composed of significant others, into a 'concept of self, a perceptual object in his experimental field'.

Proposition Three: The Need for Positive Regard: As the awareness of the self emerges. The individual develops a "need for positive regard". This need is universal in human beings, and in the individual, is pervasive and persistent.

Proposition Four: The Development of the Need for Self Regard: The positive regard satisfaction or frustrations associated with any particular 'self-experience' or group of 'self-experiences' come to be 'experienced' by the individual independently of 'positive regard' transactions with social others 'positive regard experienced in this regard is termed self regard. Here, a need for self regard develops as a learned need developing out of the association of 'self-experiences' with the satisfaction or frustration of the need for positive regard. The individual thus, "come to experience positive regard or loss of positive regard independently of transactions with any social other. He becomes in a sense, his own significant social order. And like 'positive regard' which is experienced in relation to any particular self-experience or group of sex-experience is communicated to the total 'self-regard complex'.

Proposition Five: The development of conditions of growth: When 'self-experiences' of the individual are discriminated by significant others as being more or less worthy of positive regard,

then 'self-regard' becomes similarly selective; and when a self-experience is avoided (or sought) solely because it is less (or more) worthy of 'self-regard', the individual is said to have acquired a 'condition of worth', but if on the other hand, an individual should 'experience only unconditional positive regard, then no conditions of worth' would develop. 'Self-regard' would be unconditional, the needs for 'positive regard' and 'self-regard' would never be at variance with 'organismic evaluation', and the individual would continue to be 'psychologically adjusted' and would be fully functioning.

Proposition Six: The development of incongruence between self and experience: Because of the need for "self-regard, the individual 'perceives' his 'experiences' selectively, in terms of the 'conditions of worth' which have come to exist in him: 'Experiences which are in accord with his conditions of worth are perceived and symbolized accurately in awareness'. Experiences which run contrary to the conditions of worth are perceived selectively and distortedly as if in accord with the conditions of worth, or are in part or whole denied to awareness. Consequently, some experiences now occur in the organism which are not recognized as "self-experiences, are not accurately symbolized, and are not organized into the self-structure inaccurately symbolized form'. Thus, from the time of the first selective 'perception' in terms of 'conditions

of worth, the states of incongruence between self and experience, of psychological maladjustment and of vulnerability, exist to some degree.

Proposition Seven: The development of discrepancies in behaviour: As a consequence of the incongruence between self and experience described in proposition six, a similar incongruence arises in the behaviour of the individual; some behaviours are consistent with the 'self-concept' and maintain and actualize and enhance it. Such behaviours are 'accurately symbolized in awareness'. While some behaviours maintain, enhance, and actualize those aspects of the experience of the organism which are not assimilated into the 'self-structure', these behaviours are either unrecognized as 'self-experiences' or 'perceived' in distorted or selective fashion in such a way as to be congruent with the self.

Proposition Eight: The experience of threat and the process of defence: He further stated that "as the organism continues to experience an experience which is incongruent with the self-structure (and its incorporated conditions of worth, is sub-ceived as threatening). The essential nature of the threat is that if the 'experience' were accurately symbolized in awareness, the self concept would no longer be a consistent gestalt, the conditions of worth would be violated, and the need for self regard would be

frustrated. A state of anxiety would exist. The process of 'defense' is the reaction which prevents these events from occurring, 'this process consists of the selective perception or distortion of the experience and/or the denial to awareness of the experience in some portion thereof, thus keeping the total perception of the experience consistent with the individual's self-structure, and consistent with his conditions of worth'. The general consequences of the process of defense, aside from its preservation of the above consistencies, 'are a rigidity of perception, due to the necessity of distorting perceptions, an inaccurate perception of reality, due to distortion and omission of data and intensionality'.

Proposition Nine: The process of breakdown and disorganization: Up to this point the theory of personality which has been formulated applies to every individual in a lesser or greater degree. In this and the next propositions, certain processes are described which occur only when certain specified conditions are present.

According to Rogers, 'if the individual has a large or significant degree of incongruence between self and experience, and if a significant experience demonstrating this incongruence occurs, suddenly, or with a high degree of obviousness, the organism's process of defense is unable to operate successfully. As a result, anxiety is experienced as the incongruence is subceived. The

degree of anxiety is dependent upon the extent of the self structure which is threatened. The process of defense being unsuccessful, the experience is accurately symbolized in awareness, and the gestalt of the self-structure is broken by this experience of the incongruence in awareness. A state of disorganization results. In such a state of disorganization, the organism behaves at times in ways which are openly consistent with experiences which have hitherto been distorted or denied to awareness. At other times, the self may temporarily regain regnancy, and the organism may behave in ways consistent with it. Thus, in such a state of disorganization, the tension between the concept of self (with its included distorted perceptions) and the experiences which are not accurately symbolized or included in the concept of self, is expressed in a confused regnancy, first one and then the other supplying the "feedback" by which the organism regulates behaviour.

Proposition Ten: The Process of Reintegration: This last proposition is simply a theory of therapy and emphasises the process of reintegration and restoration of personality, a process which moves in the direction of increasing the congruence between self and experience.

According to Rogers, "in order for the process of defense to be reversed - for a customarily threatening experience to be accurately symbolized in awareness and assimilated into the self-structure, certain conditions must exist. There must be a decrease in the condition of worth, and an increase in unconditional self-regard. The communicated unconditional positive regard of a significant other is one way of achieving these conditions and in order for the unconditional positive regard to be communicated, it must exist in a context of 'empathic' understanding and when the individual perceives such unconditional positive regard, existing conditions of worth are weakened or dissolved. Another consequence is the increase in his own unconditional positive self-regard. When the individual perceives such unconditional positive regard through empathy by a significant other, according to Rogers, threat is reduced, the process of defense is reversed and experiences customarily threatening are accurately symbolized and integrated into self concept.

The theory revolves around the self, in line with self actualization, self maintenance, self-enhancement and experience all based on phenomenological field and congruence. The basic principle is the establishment of self structure and the experience that one has about himself. Roger's theory of personality understandably anchored on individualism of American culture and

this may be too circumscribed to respond to the needs of other groups and cultures. These differences in cultures undoubtedly suggest that the theory should not be applied to the prison environment without appropriate modifications made from their individual and peculiar definitions of reality. Rogers (1959) affirms that at the time the theory was being formulated, there was bound to be an amount of known and unknown error and mistaken inferences; therefore the theory should not be regarded as a closed and finished one. However, the self and therapeutic condition of Rogers are not enough for the Nigerian client, particularly prisons. They are necessary only in actually modified ways but not sufficient on the forms or relationship and insight, for example, the therapist must be directive and active in helping the client solve his problems. Insight is not enough in a culture where action demonstrates and indicates verbal intention and feelings. The theory has a general relevance to this study from two perspectives: (1) as a personality theory and (2) as a therapeutic theory for change.

2.1.5 SOCIO CULTURAL THEORIES OF PSYCHOPATHOLOGY

Why do mental disorders occur? Socio-cultural theorists believes that the social environment is primary and that many of the components we observe in our patients merely reflect the operation of social influences, cultural mores and styles, as well

simple economics. For the purpose of this study, Leighton (1963) Gruenberg's(1967) theories will be reviewed. Leighton's theory of social cultural integration and disintergration emphasises aetiology and development of psychopathology, while Gruenberg's theory of social-break-down syndrome focuses on pathological pattern of psychopathology.

Alexander H. Leighton, (1963) outlined seven propositions based on empirical research explaining his theory - "Relationship of socio cultural integration and Disintegration to Mental Health". The proposition are of relevance and are discussed below.

Proposition One: Events during the entire course of life have potential for precipitating psychiatric disorder.

Proposition Two: Psychiatric symptoms, once they have emerged, generally become a part of the individual's personality structure, and it is not often that they disappear entirely.

Proposition Three: The social and psychological disability resulting from symptoms, on the other hand does fluctuate markedly, from none or minimal to severe.

Proposition Four: Contemporary socio cultural processes and situations can produce a high level of disability or conversely, can markedly reduce the level of disability due to psychiatric

symptoms.

Proposition Five: The sociocultural that tend most to foster symptoms and disability are those that place the individual at a disadvantage in terms of love, guides to decision making, having a place in the social system, maintaining a degree of self-determination, and feeling respect for what he is and does.

Proposition Six: Because of the above, a certain minimal degree of integration in a sociocultural system is a necessary condition for the mental health of the constituent member.

Proposition Seven: Sociocultural disintegration is largely responsible for the high prevalence of psychiatric disorder in lower socio-economic groups in situations of cross-cultural conflict, and in rapidly changing societies, such as those in underdeveloped countries.

According to the first proposition, if one defines the phenomena in accordance with psychiatric symptoms and disability, then it appears that disorder can be evoked by life experiences at virtually any age. This does not deny that the difficulty emerges and postulates that this can be, and often is a response to life experiences.

The second, third and fourth propositions accept the view that personality is an emergent, and state that many kinds of

symptom pattern become an integral and enduring part of the whole. Such, however, does not constitute disorder. Thus, one person may have a chronic tendency to anxiety, another to hypochondriachal preoccupations, still another to wary suspiciousness, and so on, without any of this amounting to disorder. At times, however (and this can be in response to experiences) the symptom patterns flower forth in disabilities that interfere with work and the fulfilment of every day social roles.

The fifth proposition outlines the kinds of experiences proposed as most likely to produce manifest disorder. With the sixth and seventh propositions, the issue of social process comes to focus. In his theory of the bee and the hive - "looking at the bee and his experiences to looking at the hive", Leighton, predicted that "if the hive fails markedly in its functions as a hive, there will be an increase in the prevalence of psychiatric disorders among the bees".

According to him, in a city or village, any given individual has the opportunity of participating in several different societal systems. Depending on circumstances, this can be a stress or a resource: the systems in which he participates may have a disjunctive impact on him because of conflicting demands, even though each system is itself, integrated or he may be able to

escape the stress of one disintegrated system by withdrawal and participating in others. He identified poverty as a necessary factor underlying psychiatric disorders and that "failure of social prerequisites - disintegration - is a common, but not inevitable accompaniment of poverty". The relationships expressed thus: poverty is a condition of risk with respect to the development of social disintegration; social disintegration in turn is a condition of risk with respect to the emergence of psychiatric disorders.

According to Leighton, the picture is similar in the matter of cultural change; cultural change he states does not of itself produce an increase of psychiatric disorder in populations, but it may and often does produce social-disintegration which then operates so as to increase psychiatric disorder. These are the ideas contained in proposition seven.

This matter of relating social process and psychological disorders is of considerable theoretical interest. It has also, practical implications particularly in the Nigerian society, especially in the study of sub-communities like the prisons.

Gruenberg (1967) in his theory of socio breakdown syndrome (S.B.S.) defined it as the deterioration in social functioning associated with mental disorders which can be prevented both by less harmful responses to these disorders and by changed community

attitudes towards the mentally ill and their treatment.

He claimed that people with different psychotic disorders exhibit similar disturbances of social functioning. New patient-care arrangements almost eliminated the worst patterns of disordered social functioning and halved the frequency with which new chronic cases start. As a result, two types of symptoms were inferred. These include the direct consequences of mental disorder and the secondary complications whose appearance and continuation depend on circumstances and are apparently preventable. Those secondary manifestations which are mainly prevented by using the best known systems of care, he called the social-breakdown syndrome.

Manifestations: According to Gruenberg (1967) S.B.S. covers a wide range of overt disturbed behaviour-withdrawal, self-neglect, dangerous behaviour, shouting, self-harm, failure to work, and failure to enjoy recreation being the main manifestations. Either troublesome behaviour or functional performance deficit may predominate. Troublesome manifestations occur with or without functional loss. Severity ranges widely.

Course: Most S.B.S. episodes, he states, last but a few weeks, some a few months and only rarely do episodes last for years.

Onset is sometimes insidious, the course is characterized with inactivity, the end being production of vegetatives. More commonly,

onset occurs in a single, explosive leap, beginning with violent behaviour or the sudden termination of all ordinary social roles, often accompanied by a confused or clouded state; spontaneous remission often occurs in days or weeks. Some cases progress for a while and then arrest for a long period at a particular stage, which is sometimes followed by recovery. Some cases pursue a remitting course and that first episodes and relapses show similar patterns.

Occurrence: According to Gruenberg (1967) S.B.S. cases are found in psychiatric inpatients and in people in need of hospital admission. The syndrome, he says begins outside hospitals.

Pathogenesis: The pathogenesis of S.B.S. was described in seven steps leading to the chronically deteriorated picture formerly seen in the backwards of mental hospitals. Since S.B.S. describes the way in which the relationship between a person and his social environment breaks down, the syndrome then seems to emerge as a result of a spiralling crescendo of interactions between the patient and his people in his immediate environment. The seven steps mentioned are discussed briefly below:

The Push: This he says is common in ordinary life, consisting of a discrepancy between what a person can do and what he is

expected to do. These discrepancies are generally transient: they are eliminated by a change in performance, by escaping from the demanding environment, by a change in environmental demands, or by an "expectation" which relieves the individual of the responsibility for the discrepancy.

Heightened Suggestibility: When the discrepancy persists, the individual on whom the demand is being placed is held responsible for the failure to perform as demanded. On this point the individual and those making the demand must be in agreement, which if otherwise, the individual whom the demand is being made is suspected. A diffuse uncertainty regarding his own nature and value system develops in relationship to environmental pressures which produces hesitancy or impulsiveness (or both). His increased sense of uncertainty about himself, his values, and customary ways of dealing with life produce a readiness to consider new ways of looking at things, new ways of looking at himself. This, he says, is the pre-condition for constructive changes in attitude and behaviour, which, when the environment is suitable, leads to corrective modifications. But a special danger is created when the individual accepts that the environment's expectations are appropriate but cannot modify his behaviour in the expected way. A common way to deny that the expectations

are appropriate is to conclude that those making the demands on the individual have misunderstood his true nature-- they are asking something appropriate, but they are asking it of the wrong kind of person. He decides that for this task, he is too young, too old, too short, too tall, too blind, too crippled, or too ignorant to be expected to do what was asked. The failing individual's sense of responsibility for his failure to comply with the demand is relieved. When the discrepancy between environmental demand and individual performance is not terminated, the individual takes an unsatisfactory step to rectify the situation which serves only to arouse fears of resentment, further putting him out of gear with the people around him. This produces an increased need to modify his behaviour to satisfy increasingly urgent demands. But his response to this still more tense situation has the opposite effect, resulting in still more misunderstanding and hostility. This process of action-reaction, reaction to the reaction, and reaction to that, goes on either towards an explosion and social extension of the individual, or to his progressive withdrawal from interaction, and hence from his usual roles and functions.

Labelling: He is then labelled as "not quite right", leading to a vague or rejecting "diagnosis" such as "schizophrenic" or "psychotic"

or just plain "mentally ill" and to the recommendation that he be admitted to hospital.

Extrusion: According to Gruenberg admission to hospital can itself contribute to the further development of S.B.S. and that the most damaging is the formal commitment, with the petitioning mechanism through which those closest to the failing individual join the community establishment to engage in labelling process.

Institutionalization: That an overly sheltering hospital environment can further encourage the process of S.B.S. pathogenesis. Like doing things he couldn't cope with at the community level from where he was taken and doing nothing at all in the hospital setting except what he is told to do (or, of course, to try to run away). Whatever the patient's behaviour, no one expresses surprise. He is called 'sick' and is told that he must be cared for. Thus, he is morally relieved of responsibility for his failure at the price of being identified as having a condition which makes his own impulses, thoughts, and speech largely irrelevant to any practical activities of life.

Compliance and Isolation: Gruenberg also states that the S.B.S. progresses another step when the patient, while still viewing himself as "different" from the other patients, complies with the

hospital's rules of accepted behaviour to stay out of trouble. He becomes isolated from his former ties. The family is told that every thing necessary will be done by the staff; visiting is restricted to a few hours; staff members familiar with the patient's case will probably be unavailable to the family.

Identification: Next, the patient comes to identify with fellow patients, anticipates staff demands, "fit in" and become a "good patient". Sometimes he fits into one of the available rebellions roles for which the hospital is equally prepared. In time, whatever his former capacities were, his ability to carry out ordinary social exchanges and work tasks decreases and becomes awkward from disuse. The end of this process, he says, is most readily seen in the mental hospital's chronic wards.

There is little doubt that socio cultural theories reviewed above represents a marked departure in orientation from the psychoanalytic and behavioral schools. No longer are the individuals patient's behaviours, self concept, or defense mechanisms the point of focus, rather it is the community and the cultural setting that has taken the centre stage, believing in the wider social forces which shape the patient's life and which, in turn, he also shapes. The 'clinical model' is no longer important, having been supplanted by the 'public health model' and with it

has come a shift towards preventive programs, therapeutic hospitals communities, crisis intervention therapies, social - action research etc.

Relating social processes and psychological process is of considerable theoretical interest. It has also practical applications because with this approach, persons who are at risk are easily identified for and placed for treatment, but this is not without its problem. Socio cultural theorists only identify the environment as the causative factor in mental illness, believing that the individual is a product of his environment. It, therefore follows that, identifying a persons problem, the environment from which the individual comes from should be a starting point for such assessment. A very serious neglect of this approach is the non-recognition of personality factors that may be associated with the individual concerned which is why there is an inherent danger in looking at the environment - social forces for practical purposes in intervention. This evaluation does not intend to remove the positive contribution of socio-cultural orientations because in certain social settings, for example, in the prisons, the social process may be too threatening or aversive to the extent that the prisoner begins to react negatively with grave negative consequences. This process of mortification process will be discussed below. However,

socio cultural theories do not put emphasis on personality variables, the basic content of the theories will suffice to serve as a general guide for this study. This study also attempts to merge these variables in appraising prison situation, this of course, many authors have not attempted.

2.1.7 THEORY OF THE INMATE WORLD AND DEVELOPMENT OF PATHOLOGY - ERVING GOFFMAN (1958)

According to Goffman (1958), total institutions, which he defined as social establishments - buildings or plants in which activity of a particular kind regularly goes on, and has encompassing tendencies. These institutions are established based on their goals, which he classified into five groupings. Those established to care for persons thought to be both incapable and harmless, for example, orphanages. Those organised to care for persons thought to be at once incapable of looking after themselves and a threat to the community, even if an unintended one, for example, mental hospitals; those established to protect the community against what are thought to be intentional dangers to it, for example, prisons; those established to pursue some technical task and justifying themselves only on these instrumental grounds; for example, army barracks, and lastly, those established or designed as retreats from the world or as training stations for

example, monasteries. The institution of interest, is the prison.

Goffman clarified some existing systems in total institutions. Essential to this study are the mortification processes, privilege system and adaptation alignments.

According to Goffman (1958), it is characteristic of inmates that come to the institution as members, already full-fledged, of a 'home world', that is a way of life and a round of activities taken for granted up to the point of admission to the institution. That total institution for example, the prisons, do not look for cultural victory, instead, they effectively create and sustain a particular kind of tension between the home world and the institutional world and use this persistent tension as strategic leverage in the management of men. The full meaning for the inmate of being "in" or "on the inside" does not exist apart from the special meaning to him of "getting out" or "getting on the outside". The recruit comes into the institution with a self and with attachments to support which had allowed this self to survive. Upon entrance, he is immediately stripped of his wonted supports, and his self is systematically, if unintentionally, mortified.

In the accurate language of some of our oldest total institutions, he is led into a series of absements, degradations, humiliations and profanations of self. He begins, in other words, some radical

shifts in his moral career, a career laying out the progressive changes that occur in the beliefs that he has concerning himself and significant others. Personal identity equipment is removed as well as other possessions with which the inmate may have identified himself, there typically being a system of non-accessible storage from which the inmate can only re-obtain his effects should he leave the institution. As a substitute for what has been taken away, institutional materials are provided. In brief, standardized defacement will occur. In addition, ego-invested separatedness from fellow inmates is significantly diminished in many areas of activity and tasks are prescribed that are infra dignitatem. Family, occupational, and educational career lines are closed off, and a stigmatized status is submitted. Sources of fantasy materials which may have meant momentary releases from stress in the individuals environment are denied. Many channels of communication with the outside are restricted or cut off completely. Verbal abuse occur in many forms as a matter of course. Expressive signs of respect for the staff are coercively and continuously demanded and the effect of each of these conditions is multiplied by having to witness the mortification of ones fellow inmates.

While the process of mortification is in progress, the inmate begins to receive formal and informal instruction on what is termed

"the privilege system". In so far as the inmate's self has been unsettled a little by the stripping action of the institution, it is largely around this framework that pressures are exerted, making for a reorganization of self. Some of these privilege system, include the house rules - a relatively explicit and formal set of prescriptions and proscriptions which lay out the main requirements of inmate conduct. These are held out in exchange for obedience to staff in action and spirit, and punishments are designated as the consequences of breaking the rules, these punishments are of an order more severe than anything encountered by the inmate in his home environment. More important as a reorganizing influence is the "fraternalization process" - the process through which socially distant persons find themselves developing mutual support and common 'counter-mores' in opposition to a system that has forced them into intimacy and into a single, equalitarian community of fate. Thus, the new recruit comes to know the staff popular misconceptions of the character of the inmates and then comes to find that most of his fellows have all the properties of ordinary decent human beings and that the stereotypes associated with their condition or offense are not a reasonable ground for judgement of inmates.

Since the inmates are persons who are accused by staff and society of having committed some kind of a crime against society, then the new inmate, even though sometimes in fact guiltless, may come to share the guilty feelings of his fellows and, thereafter, their well-elaborated defenses against these feelings. A sense of common injustice and a sense of bitterness against the outside world tends to develop, marking an important movement in the inmate's moral career. This response to feel guilt and massive deprivation is clearly discussed by Richard McCleery (1953) where he claimed that by their reasoning, after an offender has been subjected to unfair or excessive punishment and treatment more degrading than that prescribed by law, he comes to justify his act which he could not have justified when he committed it. He decides to "get even" for his unjust treatment in prison and takes reprisals through further crime at the first opportunity. With that decision he becomes a criminal.

The mortifying processes and the privilege system discussed above, represent the conditions that the inmate must adapt to in some way, but however pressing, these conditions allow for different ways of meeting them. The inmate will employ different lines of adaptation or tacks at different phases in his moral career and may even fluctuate between different tacks at the same time.

First there is the process of situational withdrawal. The inmate withdraws apparent attention from everything except events immediately around his body and sees these in a perspective not employed by others present. This drastic curtailment of involvement in interactional events is best known in prison as "prison psychosis" or "acute depersonalization". Second, there is the rebellious line; the inmate intentionally challenges institution by flagrantly refusing to cooperate with staff in almost any way. The result is a constantly communicated intransigency and sometimes high rebel morale. Third, another standard alignment is the one he calls "colonization".

According to Goffman, the sampling of the outside world provided by the establishment is taken by the inmate as the whole, and a stable, relatively contented existence is built up out of the maximum satisfactions procurable within the institution, however, such inmates are often accused by his fellow inmates of "having found a home" or of "never having had it so good". Fourth, another mode of adaptation is "conversion". The inmate appears to take over completely the official or staff view of himself and tries to act out the role of the perfect inmate. While the colonized inmate builds as much of a free community as possible for himself by using the limited facilities available, the convert takes a more disciplined, moralistic, monochromatic line, presenting himself as someone whose

institutional enthusiasm is always at the disposal of the staff and, finally, few inmates take the fact of what they call "playing it cool"; this involves a somewhat opportunistic combination of secondary adjustments, conversion, colonization and loyalty to the inmate group, so that in the particular circumstances the inmate will have a maximum of eventually getting out physically and psychologically undamaged. Typically, the inmate will support the counter-mores when he is with fellow inmates and be silent to them on how tactable he acts when he is alone in the presence of staff.

Goffman concluded by saying that, "there are circumstances in which the home world of the inmate was such, in fact as to "immunize" him against the bleak world on the inside, and for such persons, no particular scheme of adaptation needs be carried far.. Thus, some lower-class persons who have lived all their previous life in orphanages, reformatories, and jails tend to see the prison as just another total institution to which it is possible to apply the adaptive techniques learned and perfected in other total institutions. "Play it cool" represents for such person, not a shift, in their moral career, but an alignment that is already second nature.

Goffman, (1958) has aptly described the characteristics of prison institutions. Nigerian prisons are no exemption. In their book 'Behind the wall', the civil liberty organisation (1991) claimed that the

moment a prisoner is taken into the prison yard, whether as a convict or not, he or she is considered 'a thing' beyond the fringe of humanity and, consequently, of humane treatment. He is beaten, robbed, harrassed and visited with all kinds of indignities and outrages. Civil Liberties Organisation (1991) described the 'reception' as follows:

"Once inside the prison cell, the hand cuffs are removed from the wrists of the inmate. Generally, the bored warders withdraw and lock the cell pad locks without a word to the inmates of the cell. But sometimes they tell them 'give him V.I.P treatment, meaning , beating and maltreatment more violent than usual. This treatment is seen as transition from a free man to being a prisoner; and usually consist in his humiliation and the violation of his person and his sense of self-dignity".

What conclusion do we derive from this? Nigeria Penal System claim to be concerned with rehabilitation, that is, with resetting the inmates self-regulatory mechanisms so that he will maintain the standards of the establishment of his own accord after he leaves the setting. Infact, it seem this claim is seldom realized and even when permanent alteration occurs, these changes are often not of the kind intended by the staff and even the society.

The implication of this theory for this study directly borders on the need for establishing psychological intervention for the inmates.

to help them bring about a behaviour change necessary for their mental health. Such theories are very relevant in designing treatment packages for the inmates, this is because it produces easy identification of stress and conflicts among inmates. These implications impinges on the need to discuss psychological intervention theories for prison inmates. Two theoretical view points focusing on the ecobehavioural perspectives and group psychotherapy will be discussed below.

2.1.8 PSYCHOLOGICAL INTERVENTIONS: ECOBEHAVIOURAL PERSPECTIVE.

The ecobehavioural perspective is a synthesis of the conceptual frameworks of behaviour analysis and ecological psychology. While behaviour analysts or behaviourist hold that a target behaviour can be evoked by manipulating its contingencies, ecological psychologists suggest the necessity to focus on the broader ecosystem, setting or environment in which the behaviour occurs. The term "ecology" is central to the ecobehavioural perspective (Rogers-Warren and Warren, 1977). Two definition of ecology have been proffered. The first definition refers to ecology as a system of intrapersonal behaviour. An individual is thus viewed as demonstrating a complex of interrelated behaviours in which changes in one behaviour may result in changes in other behaviours. And the behaviour change might either be positive or negative (Roger-Warren and Warren, 1977). For example,

if a child is punished for non-compliance, other behaviours, such as temper tantrum, use of abusive language, and aggressive behaviour may be provoked. A positive behaviour correlation may show that positive verbal and non-verbal interactions may be elicited if sharing is positively rewarded in preschool child (Rogers-Warren and Warren 1977).

The second aspect of ecology focuses on the individual within the physical and contingency milieu. Here, it is believed that the arrangement of setting influences the individual's behaviour. Environmental rearrangement is regarded as being supportive of behaviour change when it is paired with contingency-based intervention. These two views of ecology share a common base - both are person-centred analyses of behaviour - and characterize ecobehavioural psychology. Behaviourists analyse behaviour by understanding its contingencies; ecological psychologists (e.g Barker, 1968) analyse behaviour by understanding organism - environment interdependencies; but ecobehavioural psychologists analyse behaviour by studying behaviour - environment relationships and the properties of settings. Proponents of the ecobehavioural school include Rogers-Warren (1977), Warren (1977) and Willems (1974).

Ecobehavioural psychology evolved out of the need to eradicate the shortcomings of behaviourism have been articulated by Holman (1977) and these include the following: that behaviour modification

procedures that work some of the time are not consistently effective for all subjects; that a procedure may be effective for a limited period, but ineffective over time; that a procedure established under continued laboratory conditions may work in such a controlled setting, but may fail to generalise to a more natural setting; and that a procedure may work to achieve a particular goal but may be accompanied by unexpected, unwelcomed side effects.

Ecological psychology is developed on the premise that behaviour can only be understood by studying the setting in which it occurs (Barker, 1968; Gump, 1971). This notion demands that subject specific variables be set aside, and that other more general concepts of psychological theory, such as personality traits of self esteem, aggression, anxiety etc, be replaced by units that are descriptive and empirically based in the notion of the "setting" (Hölmán, 1977). Setting, in the ecological senses has been defined as a unit of the external world which is naturally occurring (not experimental-imposed as in behaviourism), has temporal and spatial extent (not highly abstract as cognitive and perceptual processes), often possesses considerable durability (i.e not amenable to change) and is independent of any one individual's perception of it (Barker, 1968). It is implied from the ecological framework that all persons in a setting would behave in much the same way as determined by the variables.

There are two major limitations of this notion. First, ecological psychology does not recognise the importance of cognitive and perceptual processes of persons, and, therefore, does not accept the existence of individual differences. Second, it cannot proffer any meaningful change in behaviour since it is believed that the properties of a setting are highly durable, and as a result, the behaviour elicited by them also would be highly durable. Ecological psychology is therefore, merely descriptive and does not have any therapeutic goal.

Ecobehavioural analysis has goals that are different from those of ecological psychology, although it share some of the latter's methods. Ecobehavioural analysis seeks to change behaviours of particular persons by considering the intra personal eco-system personality, cognitive and perceptual processes - and the broader setting - environmental, demographic factors. Because it emphasizes behaviour change, ecobehavioural analysis share the goals of behaviour modification. It, however, does not share the methods of behaviourism - those of strict experimentation; non-recognition of cognitive and perceptual processes, and lack of consideration of the importance of natural setting variables in therapy.

In emphasising the difference between ecobehavioural psychology and ecological psychology as well as behaviourism, some methodological guidelines for ecobehavioural research have been outlined by Willems, (1977).

Firstly, the research should increase the number of behaviour categories. Measuring complex effects suggest monitoring of more than one behaviour. For instance, while researching on psychological disorders, other concomittant behaviours such as personality variables that may have direct relevance to psychological disorders should also be considered. Besides, a single aspect of psychological disorder should not be studied only. Other associated problems should be varied.

Secondly, the research should increase the number of groups of subjects as well as the sample size. This is because complex effects may occur in the behaviours of subjects other than the target sample. Thirdly, he should observe other dimensions of the target behaviour. This is because complex effects can show up in those other aspects. For example, one should wish to know if psychological disorders such as neurotic problems was caused by the harsh environment of the person or the person has been predisposed to suffer such psychological problems. Fourthly, he should increase the period of observation or data collection because complex effects sometimes show up only after some lapse of time.

Finally, he should increase the number of settings in which the observations are made, because complex effects may show up across different settings. The usefulness of these guidelines have been

demonstrated by Spyer, Sparber and Goldberg (1972).

Ecobehavioural psychology has two aspects - descriptive and therapeutic. The descriptive aspect derives from its ecological origin, and it involves monitoring the interactions of subjects and their environments. Unlike ecological psychology, however, it does not analyse mechanisms of environmental reactions to therapeutic intervention.

The therapeutic aspect shares the goals of behaviour modification which include upholding the strong scientific tradition of precise measurement and validation of therapeutic manipulations (Warren, 1977). It also shares the criteria of behaviour modification which include response rate, stimulus and responses generalization, response durability, stimulus and responses diversity and consumer satisfaction (Warren, 1977).

Perhaps, the most relevant ecobehavioural framework for explaining therapeutic change in prison inmates is the "planned-change model" proposed by Rogers-Warren (1977). The guidelines for this model are particularly useful for therapists intervening in a natural (non-contrived) settings. There are five guidelines in all. These include (1) identification of the target behaviour; (2) assessment of the physical setting; (3) evaluation of the contingency environment, (4) determination of environmental constraints on intervention, and (5) determination of environmental facilities for intervention.

Although this model was originally applied to understanding behaviour problems of children, it is being adapted in this thesis with group therapy which will be discussed below, to explain assessment of psychological disorders and treatment intervention among prison inmates in Nigeria.

2.1.9 PSYCHOLOGICAL INTERVENTION: GROUP PSYCHOTHERAPY

Group psychotherapy is a form of treatment in which carefully selected emotionally ill persons are placed into a group, for the purpose of helping one another, under the guidance of a professional therapist, effect personality change. Group therapies describe the broad range of treatments in which the group format is used. Group therapy is usually reserved for approaches in which the group interactions are the central focus of the therapy rather than being merely a physical or economic convenience. And by means of a variety of technical manoeuvres and theoretical constructs, the leader of the group uses the group interactions to bring about this change.

Group therapy has become popular since World War II, and is now widely practiced in a number of forms. Thus, group therapy has been used in a variety of settings, in hospital wards, out-patient psychiatric clinics, with parents of disturbed children, and in correctional institutions.

Typically, the groups consist of a small number of individuals ranging from 6 - 12, (which is the optimal number) who have similar problems. There is need, however, to differentiate group psychotherapy from the new groups such as encounter groups, T-groups and sensitivity training groups. The major difference is that only psychotherapy groups are composed of members who are suffering from a variety of similar mental deficiencies. The group psychotherapy offer treatments, and the goal of the group is the amelioration and correction of personality problems. On the other hand, T-group or the encounter groups are composed of normal adjusted people and the basic goal of such group is not psychotherapy but education, which is why it has been called therapy for normals.

In organizing a group therapy, the therapist would choose patients who are sufficiently advanced in their understanding of themselves to be able to perceive themselves as they will appear in the group setting. Homogeneity in educational background and intelligence is desirable but not imperative. The number of group members may range from 6-12. A balance of males and females in the group allows for an opportunity to project and to experience feelings in relation to both sexes. At the first session the members are introduced by their first names, and the purpose of the group discussion is clarified. In introducing the matter of group therapy

to all prospective members, the therapist may explain that he or she is organizing a group of patients for purposes of treatment. The length of a group therapy session is approximately 1½ to 2 hours. The frequency of meetings is one to two sessions weekly, with alternate sessions once weekly if desired and the best seating arrangement is in a circle. Also before the close of the first session, some therapists find it advisable to stress the confidential nature of meetings and to caution that each member is expected not to reveal to others the identity of the members and the subject matter discussed in the group.

According to Wender (1940), the premise of group psychotherapy is that the human individual is a "group animal", seeking a satisfying niche in his social setting; that he is a social product, whose inhibitions and repressions are motivated by the mores of the group; that difficulties in adjustment and failure to express his emotional troubles are the result of his inability to face the group and to find his place in it. He must repress his thinking and adapt to the demands of a complex group, and his failure to achieve this adaptation produces a neurosis or a psychosis. Place this individual who has failed in the more complex setting into a small group which is friendly to him and which is composed of others suffering from allied disturbances, and he will become enabled when he learns to understand the problems

of the others - to associate himself with them, to release his aggressive tendencies, his hates, his loves, and his wishes without accompanying sense of guilty. By working out his difficulties and achieving adjustment in the small group, he becomes able to face the large group (the world) and to handle his emotional problems, social or other, on a normal basis.

Wender's theoretical orientation for group psychotherapy was psychoanalysis. But as he pointed out, a group therapy approach involves a more active participation on the part of the therapist. The main factors in the group psychotherapy process were noted by Wender as being: (1) Intellectualization, or insight, (2) Patient to patient transference, (3) Catharsis, (4) Group interaction, which includes such phenomena as identification in the group and sharing of common experiences.

An account of one particular approach which has attained a great measure of popularity is the dynamic interactional theory. The theory, in simplistic terms, states that the personality of a person is mostly the product of one's interaction with other significant people. And that a person's psychological growth entails the development of a concept of the self which is based to a large extent on how he perceives the appraisal of himself by others. Therefore, the dynamic interactional theory presupposes that when an individual

fails to perceive him or herself positively within the group, such an individual will begin to manifest neurotic and personality problems which can only be adequately treated when such individual is placed in a group. In short, the theory provided a picture of how the small group process could be applied to the treatment of patients with neurotic and personality problems.

Yalom (1975) has contributed to the understanding of the usefulness of group methods by specifying "curative factors" that are believed to be common to diverse approaches. A consideration of these curative factors in group therapy will help us to know what group treatments offer.

1. **Imparting information:** In every therapy group there is ample access to information provided by the therapist and other group members: Group members then have an opportunity to receive suggestions, advice, or direct guidance from the group. Didactic instructions may be formally incorporated into the group or may arise from the dynamics of group life as the members interact and share experiences that are relevant to commonly held problems or concerns.

2. **Instilling hope:** Hope is an essential ingredient of any successful therapeutic approach. If there is no hope of a favourable treatment outcome, it is unlikely, that maximum benefit will be derived from therapy. Observing other group members who have coped successfully

with similar problems or dilemmas may be a potent source of inspiration. Contact with person who have improved is especially important in groups.

3. **Universality:** As group members share intimate feelings and disclosures, it may be comforting to learn that others share similar fears and concerns, have endured equally difficult situations, and have surmounted hurdles in life that some of the group members are only beginning to confront. The very knowledge that one is not alone in one's suffering and in one's struggles to cope effectively with life's challenges may be a source of relief as well as an impetus for change and growth.

4. **Altruism:** Patients often enter group treatment demoralized, unsure of themselves, and lacking in self esteem. But over the course of the group experience, members can learn a valuable lesson: that they can be of help and value to others. The contribution to the personal growth of other group members can lead to a greater sense of self-worth and a heightened awareness of personal resources.

5. **Interpersonal Learning:** The complex interplay of relationships and personalities which fashion the shape of the group affords an excellent context for learning about interpersonal relationships, social

skills, sensitivity to others, and conflict resolution.

6. **Imitative Behaviour:** Group members may acquire new behaviours by modelling desired and effective behaviours. Group members can learn from one another as well as the therapist.

7. **Corrective recapitulation of the primary family:** The group experience may offer the patient a unique opportunity to explore and resolve conflicts and problems related to family members which continue to be expressed in relationship outside the family context. Behaviours which may have been rewarded and even functional in the family of origin may come to be viewed as maladaptive and inappropriate in the context of the treatment group.

8. **Catharsis:** The open expression of feelings toward others is an essential part of the group process. Learning how to express feelings in an open, honest, and straight forward way may lead to closer bonds between group members and a greater sense of mutual trust and understanding.

9. **Group Cohesiveness:** Group cohesiveness is one of the primary curative factors. According to Yalom (1975) it is the sense of "groupness" that binds individuals together, serving much the same function as the relationship in individual therapy. In a tightly knit group where members feel close to one another and a sense of trust

exists, members may more freely take risks, accept feedback from one another, and experience a sense of self-esteem that derives from acceptance by the group. There is likely to be the free flow of feeling and interpersonal exchange which is so essential to the emergence of the other curative factors mentioned above.

In sum, a group situation provides several unique resources that can facilitate therapeutic change and growth and also help foster a sense of personal validation and self-worth.

The planned-changed model of the ecobehaviourally based intervention strategies have been usefully applied to modifying behaviour problems in children and adults. Its application to modifying psychological problems in prisons has not been reported. Also the use of group therapy in prisons have been reported with emphasis on classical or traditional group types, for example, psychodrama, didactic, activity groups therapy, ect. but the use of group coping skills instruction intervention in prisons has not been reported. The present study therefore seeks to identify relevant contents of the ecobehaviourally based intervention strategy and group therapy which are applicable to psychological problems in prisons. It is hoped that at the end of the study, a more meaningful treatment intervention for prisoners would have been established.

2.1.10 SUMMARY OF THE THEORETICAL BACKGROUND

In this study, about Ten broad theories considered important have been elaborately discussed. These theories specifically attended to the psychosocial variables considered in this research. These theories include, gender theories, deprivation theories, stress theories, personality theories, social-cultural theories, theory of the inmate world and psychological intervention theories.

Theories on gender difference in susceptibility to psychopathology were critically analysed from three perspectives; differential vulnerability hypothesis, differential exposure hypothesis and social-role theory and discrepancies among these views based on empirical data were provided. Deprivation theories, relevant to this study were the isolation (social) and sensory deprivation theories. The relevance of these theories, applicability to the prison environment were also discussed. Stress theories were critically viewed from four perspectives; psychophysiological, stress as a stimulus, an interactional perspective and the cognitive model. Eysenck theory of personality and criminal behaviour and Roger's theory of personality and psychopathology were reviewed under personality theories. Their relevance to personality variables and intervention were pointed out.

Other theories critically reviewed were the social-cultural theories with emphasis on Leighton's (1963) theory of socio-cultural intergration

and disintegration to mental health and Gruenberg (1967) theory of social break down syndrome and Goffman's (1938) theory of inmate world and development of psychopathology. Psychological intervention theories were viewed from the ecobehavioural perspective and group therapy. Their forms, characteristics and relevance to intervention were discussed.

Of these theories reviewed, gender, deprivation, stress, personality, and psychological intervention theories are considered the most adequate in explaining variables of this study; gender difference, duration (period in confinement) prison stress, personality factors (extraversion, neuroticism and psychoticism) and the psychological intervention. This is evident from the research data provided. The socio-cultural theories of Leighton (1967), Gruenberg (1967) were provided to show the process of aetiology, development and pathogenesis of psychopathology in a social-cultural set-up, which approximate the prison environment. Goffman's (1958) theory of the inmate world and the development of psychopathology was discussed to specifically give us a picture of the process of abuse in prisons. These psychological abuses, it was noted would have adverse psychological consequences on the inmates, and consequently a disturbance and therefore a need to design a psychological intervention strategy to help prisoners adjust. However, all the theories are

relevant, and, will appropriately be applied to relevant variables in this study.

The relevance of these theories, empirical data provided by different researchers will be the next focus of discussion on the review of relevant literature.

2.2 LITERATURE REVIEW

In explaining the possible psychological consequences of imprisonment, Abrahamsen (1960) says that a human being is always a product of his personality and the situation in which he lives. He notes that man is intimately connected with his environment and can only be understood on the basis of the environment and his own personality. According to him, the prisoner is not only a centre of action but also a centre of reaction, both manifestations being closely connected with his own field, that is the environment as a dynamic entity, resulting in a continuous reciprocal interplay. Abrahamsen (1960) explains that a person forms a functional relationship with his environment and the environment in turn acts in a functional relationship to him. The net result is that man is to a large extent tied to his environment. An individual lives in his environment as if he were in a magnetic field. Therefore, many of his psychological qualities and attributes are the results of this field.

The possibilities of interplay of gender, differences, prison stress, duration and personality factors and their implications for psychological disturbance and intervention are reviewed below.

2.2.1 GENDER DIFFERENCES AND PSYCHOLOGICAL DISORDERS

Although one of the most consistent findings in research on mental illness is its higher prevalence among women, the origins of this sex difference remain unclear. In an exhaustive review of the literature, Weissman and Klerman (1977) report sex ratios of depression ranging from 1:6 through 2:1 for community and patient populations in the United States between 1945 and 1970. Additional epidemiologic studies provide further documentation (Silverman, 1968; Levitt and Lubin, 1975; Radloff, 1975; Weissman and Myers, 1978; Frerichs, Aneshensel and Clark (1981) although Comstock and Helsing (1976) report that controlling for socio-demographic variables markedly reduces the sex difference. Three major explanations have been previously suggested, that it results from biological differences between the sexes; that it is social in origin; and that it is merely a measurement artifact. Some researchers have argued that there is evidence supporting the social origins of depression and the excess of symptomatology among women (Weissman and Klerman, 1977; Brown and Harris, 1978). Considerable empirical investigation

and debate have focused on the social-role theory, explicated by Gove and others (Gove, 1972, 1979; Gove and Tudor, 1973; Gove and Geerken, 1977), which utilizes the markedly different occupational and familiar roles of men and women to explain sex differences in mental illness.

Gove and Tudor (1973) cite the grouping of diverse and unrelated disorders in a residual category of mental illness as a major factor contributing to prior inconsistent results pertaining to sex differences in mental illness. They subsequently employed a specific definition of mental illness that encompasses two major diagnostic categories; neurotic disorder, and the functional psychoses. Both their operationalization of mental illness and the interpretation of their subsequent findings have been debated extensively (Dohrenwend and Dohrenwend, 1974, 1976, 1977, Gove and Tudor, 1977; Gove, 1979). The most salient point of this debate is the exclusion of personality disorders in which males have higher prevalence rates. As Rosenfield (1980) notes this debate has re-oriented the issue of the impact or importance of sex roles in mental health to focus on sex differences in mental illness and antisocial personality disorders.

In a study by Findlay-Jones and Burvill (1977, 1979) using the General Health Questionnaire, report that sex differences in

prevalence rates of minor psychiatric morbidity were frequently not significant, occasionally non-existent, and sometimes reversed. Rosenfield (1980) commented that evidence on this subject is mixed at best. Chrust and Jacob (1971) in their study, found that anxiety and depression are predominant when the perception of the female role is confused. This is because for a woman in a Nigerian society to commit a crime, the pressures towards deviance must be greater because the generally accepted role of a woman is one of conforming and submission.

Odejide (1979) reviewed the records of two thousand, one hundred and fifty-eight offenders committed for trial at the Ibadan magistrate courts between 1974 and 1975. A preponderance of males (95.5 per cent and young adults, 81 per cent, lesser than 40 years) was found in the population of the offenders. He found a decline in criminal offences as age increases. Although this study asserted that criminal offences are occasionally attributed to mental illness of the offender, it was obvious from the study that his objective was not to assess psychological disorders in prison population. The study is reviewed here because of the pattern of criminality as seen in sex and age differences.

In another study conducted at Agodi prison, Ibadan and Oko prison, Benin-City, using Awaritefe Psychological Index (API) on

90 prison inmates, Anakwe (1986) found that (a) depression was higher in prison population than the non-prison population (b) adolescent female prisoners were more depressed than their male counterparts and (c) that depression decreased with age.

In a similar study, Mgbemena (1983) investigated the psychological factors of imprisonment in Benin-City. Instruments used were the State-Trait Anxiety Inventory (STAI 1 and 2), Maudsley Personality Inventory (M.P.I) and Awaritefe Psychological Index (A.P.I). These were administered on 30 adult male and female prisoners. Subjects were matched for sex, age and socio-economic status. Mgbemena found that prisoners experienced high anxiety than non-prisoners group, anxiety was higher among young age group in the prisoners than the older group. Also females tend to experience more of anxiety and a higher level of general psychopathology among prisoner, group than the control; and finally, Nigerian prisoners tend to score higher on neuroticism and extraversion scales, than the control group.

With the literature reviewed above on sex differences, it is obvious that there are weaknesses and also a systematic pattern of observation on the excess of symptomatology in males or females is yet to emerge. Also one of the weaknesses of gender susceptibility, is that the explanatory framework has been clearly based on sex-specific roles - husband - wife, father - mother, worker-housewife. In this

study, however, sex differences is explained in terms of the global male and female differences in psychopathology. Another weakness is the lack of research in this area particularly in prison environment. The present study attempts to rekindle research in this area.

2.2.2 STRESS AND PSYCHOLOGICAL DISORDERS

Another psychological factor of importance to this study is stress as it relates to prison environment and imprisonment itself. In clinical psychiatry, the meaning of stressful life events before acute illness has been the subject of much thinking. Stressful life events are external events that make adaptive demands on an individual. Although studies have consistently found that such life events place adults at higher risks of clinical illness, the relation between stressful life event and mental illness is unclear (National Institute of Mental Health, 1985).

Stress has been defined as presence of life changes in the recent history of a person. For several years, there has been epidemiological interest in the role of stress as a precipitant of psychiatric illness. Paykel, Prusoff and Uhlenhuth (1971) evaluated a large group of depressed patients who were admitted to out-patients clinics, day hospitals, emergency treatment units and hospitals in-patient units.

They recorded life events which they divided into desirable and undesirable life events. Desirable events would be such things as engagement or marriage or promotion, whereas, undesirable events would be death of a family member, serious illness, and imprisonment. Undesirable events were related to the development of depression and other psychological disorders. If imprisonment has been observed to be undesirable and therefore stressful to the extent that it can predispose an individual to psychological problems, what about the prison environment and conditions of the prison environment itself?

Despite the Report and Recommendation of the Prison Advisers for the re-organization of the prison service and the decongestion of the federal, state and local administration prisons of 1969, and the Decree Number Nine of the Federal Military Government of 1972, the general condition of Nigeria prison system remains very much the same over the years, and deteriorating further. Okudo (1983) in a newspaper article gave an account of the prisons in Nigeria as windowless cells in which men are left to either stand all the time or in the alternative, sit or lie on bare cold and dirty floors without beds, chairs, tables or even ordinary mat. He described the prisons as decadent, anachronistic system in need of urgent reform.

Also, according to the Civil Liberties Organization (1991) in their book 'Behind the Walls' not only are the prison conditions

tutuous but highly congested. Prison congestion they say has consequences for the health of the inmates especially psychological and mental health.

Psychopathological consequences of prison confinement have been extensively described by German Clinicians (Glassian, 1986). Also in the united States of America, there have been several legal challenges of the use of solitary confinement based on allegation that it may have serious psychiatric consequences (Mualam 1982). A research by Glassian (1986) supports the above claim. In his study, he described psychiatric symptoms that appeared in 14 prison inmates exposed to periods of increased social isolation and sensory restriction in solitary confinement. Glassian indicates that these symptoms form a major, clinically distinguishable psychiatric syndrome.

Tennant and Kent (1986) studied a selected sample of Australian prisoners of war captured by the Japanese in 1942 and a sample of combatants from pacific theaters of war who were not captured. The prisoners were found to have significantly more anxiety and depressive neurosis and major affective illnesses than non-prisoners. Other researchers who have made use of similar sample of prisoners of war (P.O.W) are Ryn (1986). His study revealed that thousands of prisoners perished by suicide. The most common motives of suicide were found to be depressive reactions, anxiety, somatic illnesses, the

threat of death, loss of emotional support, and tortures. Also, a clinical interview, revealed that depression and anxiety disorders were predominant with the Australian prisoners of war, who were captured by the Japanese soldiers, over the 40 years period, following the second world war. Anderson, (1984), reported similar findings with airforce men during the World War II. Amnesty International (1986), all confirm the devastating psychological damage which results from conditions of prison confinement. In fact, emerging report on researches on prison confinement (e.g Paulus, Cox and McCain (1988) emphasise the utter helplessness and despair which tend to produce in the prisoner a physiological state that may result in death.

Paulus, Cox and McCain (1988) identified the prison environment and analyzed the records of four state prison systems. They discovered that the rates of death, suicide, disciplinary problems and psychiatric commitment were higher in prisons with higher population density than in prisons with fewer inmates, and that these rates go up as a prisoner's population increases. Moreover, the more inmates per cell (and therefore the less privacy each inmate has) the greater their problems. Even, blood pressure and complaints of illness were higher among inmate who lived under crowded prison conditions.

According to Amnesty International Report (1986) when a prisoner is confined, he experiences pain which is a signal that the body is being damaged or destroyed and the 'mind' needs a complete 'body'

for complete self-expression and damaging the 'mind' or distorting the mind brings about in the prisoner, profound depression, outbursts of rage, inability to work or adjust to society, anxiety, hypochondria, hysteria, phobias, emotional fatigue, obsessive-compulsive reactions, and that anxiety can also lead to stomach, heart and genito-urinary symptoms as well as tremors and sleep disturbance.

Amnesty International Report (1986) also claim that just as severe damage to one's physical system may lead to scare, so may mental illness have long term sequelae. That torture during imprisonment erodes one's psychological defences therefore, the mental systems with which one copes is overloaded and destroyed, thus leaving the prisoner an inability to cope with life problems. They reported a study conducted in the post-Korean war period in which latent anxieties were intensified by isolation, sensory deprivation, systematic exhaustion and manifestations of transient psychotic symptoms.

According to Ryn (1986) the sensory and perceptual deprivation characterizing prison confinement, produces in the prisoners, overwhelming physical and psychological discomfort. According to Adler (1927), this is because the variations in prison environment far outweigh the variations in the ordinary environment of the prison and as a result, psychological disequilibrium sets in because these prison variations are beyond the inmates usual adjustment

ability. Also, since the prison conditions are far beyond the ordinary every day life experiences of the prisoner with all the in-built punishment oriented measures, the prisoners easily succumb to psychological stress.

Other sources of distress identified in the prison is the physical characteristics of the environment of confinement. These include drab, featureless and non-aesthetic walls, scanty and poor quality furnishing, extremely small or large bare-floored rooms and the presence of bed bugs, body lice and various kinds of skin diseases (Civil Liberty Organization, 1991) sharing of facilities, such as beds or mats, bathrooms as well as the lack of privacy are all emotionally draining for the prison inmates.

Mgbemena (1983) also noted the stigma attached to imprisonment. In addition to this stigma, are inactivity, monotonous work schedule, restricted social interaction and movement and poor nutrition which he says are some of the humiliating conditions of imprisonment which imposes enormous psychological effects on prison inmates.

Cohen and Taylor (1972) agree that the psychological problem, for example depression, posed for people in prison have affinities with those which occur in other extreme environment. Identification of these factors as well as its effective management will make imprisonment more meaningful to both the individual and the society

and this will go a long way in making prison institution achieve the desired goals of rehabilitation and reformation for which they were established. Barton (1976) indicated that institutional neurosis has no single cause but suggests that many factors in the patient's environment are implicated. He further stated that the disorder is a reaction of the patient to find an escape from his environment and establish a way of life as trouble free and secure as possible.

Cochrane (1971) made direct comparison between the value system of a matched control group drawn from the general population. The instrument used to obtain an objective measure of the value systems of prisoners and non-prisoners was Rokeach Value Survey. It was observed that (a) there are important differences between the value system of prisoners and non-prisoners; (b) prisoners appeared to have shorter time perspectives and value those things which have immediate and personal relevance; (c) prisoners value the characteristics of 'wisdom' and 'self control' relatively high, possibly because they see these as lacking in their lives; (d) female prisoners exhibit a more 'masculine' value system than do non-female prisoners.

Garbin (1970) contended that as a result of the desocialization process which occurs in many prisons, the inmates become defined as a non-person. Using Tennessee self concept scale on 136 subjects,

Culbertso (1976) found that institutionalization results in depreciated self concept:

The psychological factors of imprisonment have also been studied by Abrams and Siegel (1978). Using the Eysenck Personality Inventory (E.P.I), the State-Trait Anxiety Inventory (S.T.A.I) and the Buss-Durkee Hostility Inventory (B.H.I) on a survey of sleep patterns and smoking habits on a total of 89 prisoners, the researchers identified anxiety, neuroticism, hostility and insomnia as a function and product of prison conditions. The study also applied transcendental meditation (T.M), and they were able to effect a significant reduction of these factors in comparison with a control group who were not exposed to the T.M treatment.

Roundtree and Faily (1980) identified increased aggression and rule violations in female prison population as the effects of imprisonment. These effects were however, reduced in the inmates by the introduction of educational programmes. In another study, Cordilia (1981) observes that men change when they are in prison but notes that these changes continue to affect them after they are released.

In their study on psychiatric morbidity in Nigerian prison, Makanjuola and Olaomo (1981) observed that unlike the developed countries, extensive facilities for psychiatric treatment do not exist in Nigeria despite the fact that mental disease is relatively common

among prisoners. The authors caution that based on their findings, it might be just the tip of the ice berg to discover that in an institution whose inmate population averaged about 500, 39 persons were seen in one year who had symptoms of severe psychiatric disorder. They argued that a good number of inmates with less severe psychiatric disorders and who generally made up a higher proportion of the mentally ill in the population would have gone undetected. They suggested that a more rigorous survey be carried out to determine the real incidence and prevalence of psychiatric disorders. It is in their view that among the many factors which might account for the apparently high psychiatric morbidity among Nigeria prisoners are incidence of cannabis abuse and imprisonment itself. They supported their claim with the observation made by some researchers in the field such as Topp (1979) who found that severe psychological stress that an individual may experience in prison results in psychological and psychiatric disorders. Also an association between personality disorder, criminality and psychiatric disorder was made by Makanjuola and Olaomo (1981): They claimed that personality disorder appears to predispose an individual to both criminal behaviour and psychiatric illness. These findings of Makanjuola and Olaomo (1981) have implications for this research to look into the personality factors of prison inmates in Nigeria and how this affect

their mental health. Thus the need to discuss personality factors and psychopathology of Nigerian prisoners is of importance.

2.2.3 PERSONALITY FACTORS AND PSYCHOLOGICAL DISORDERS

The theory of criminality advanced by Eysenck (1976) predicts that criminals equated for age and sex with normal controls, would show elevated scores on extraversion, neuroticism and psychoticism. These concepts were defined primarily in terms of empirical studies in which traits were inter-correlated and observed by means of ratings, self ratings or objective tests. The typical extravert according to Eysenck is sociable, likes parties, has many friends, needs to have people to talk to and does not like reading or studying by himself. He craves excitement, takes chances, acts on the spur of the moment and is generally an impulsive individual. He is fond of practical jokes, always has a ready answer, and generally likes changes; he is carefree, easy going, optimistic and likes to 'laugh and be merry'. He prefers to keep moving and doing things, tends to be aggressive and loses his temper quickly; his feelings are not kept under tight control and he is not always a reliable person. The typical introvert is a quite retiring sort of person, introspective, fond of books rather than people; he is reserved reticent except with intimate friends. He tends to plan ahead, 'look before he leaps' and distrusts the impulse of the moment. He does not like excitement,

takes matters of every day life with proper seriousness and likes a well ordered mode of life. He keeps his feelings under close control, seldom behaves in an aggressive manner and does not lose temper easily. He is reliable, somewhat pessimistic, and places great value on ethical standards. While on the P scale, a person who scores high will have the following traits: solitary, not caring for other people; troublesome, not-fitting-in; cruel inhumane; lack of feeling, insensitive; lacking empathy; sensation seeking, and for strong sensory stimuli; hostile to others; aggressive, liking for odd and usual things; disregard for dangers, foolhardy; likes to make fools of other people and to upset them.

Eysenck (1970) classified the introverts and extraverts into stable and unstable. The stable introverts and extraverts are the low scores, while the high scores are the unstable. The unstable introverts is moody, anxious, rigid, sober, pessimistic, reserved, unsociable and quite, while the unstable extravert is touchy, restless, aggressive, excitable, changeable, impulsive, optimistic and active. Therefore, when such people with the above unstable personality traits are placed in an extreme harsh environment, majority are bound to have psychological disorders because such individuals, in the first place are predisposed and already are at risk.

In a study by Eysenck and Eysenck (1977), using the Eysenck Personality Questionnaire (E.P.Q) on a 2,070 male prisoners and

2,442 male controls, prisoners had higher scores on all three dimensions than controls. In another study, Heskin, Bolton, Smith and Bannister (1974) demonstrated that imprisonment has measurable psychological effects on inmates. This study used batteries of standard psychological tests. They found evidence that hostility, particularly self-directed hostility, depression and introversion increased as a result of imprisonment. The sample consisted of 175 men who had served varying lengths of imprisonment during their careers. The tests used were Eysenck Personality Inventory (Form B), 16 personality factor question (16PF), Becks Depression Scale (BDS). The hostility and direction of hostility questionnaire and the 58-item femininity scale from the California Psychological Inventory (CPI). It was found after some pilot analysis that the variables abound in prison as a result of imprisonment.

Eysenck and Wibson (1985) in their study claimed that introverts are less affected by the boredom, lonesomeness and the monotonous pattern of life in confinement than extraverts.

lambo (1960a) identified 'malignant anxiety' as a syndrome associated with criminal conduct in Africans. According to him, malignant anxiety is a syndrome characterised by a protracted mental reaction to situational factors. Adverse social influences are preponderant.

According to Lambo (1960a), malignant anxiety is a progressive and crippling disorder (usually in the interpersonal sphere) but without the measurable or demonstrable deterioration or disintegration of the personality. In a series of 98 capital cases of malignant anxiety seen in Kenya, Eastern Nigeria and the Congo within 6 years, 51 (52 per cent) were certified 'sane' even though their psychological data and personal histories showed strong evidence of emotional instability and abnormal impulses. Other signs of maladaptation observed were in their day dream, outbursts of temper and irascibility.

In another study Odejide (19818) carried out a research on 53 mentally ill criminals at Lantoro Institution (an annex of Neuropsychiatric Hospital, Aro Abeokuta). He used the psychopathological Symptom Profile (PSP) Schedule. Among the 12 symptom clusters on the psychopathological system profile schedule, the paranoid schizophrenics scored mostly in the areas of delusions and disturbance of social behaviour. All the patients in this study suffered from clearly definable forms of major mental disorders, which were schizophrenia, epilepsy and organic psychosis. Among the schizophrenics, the paranoid types were the most prevalent. The study did not discuss in its methodology and procedure whether the criminally insane were referred from prisons or directly

from courts. If they were referred from prisons, it then means that the criminals now criminally insane were previously 'sane' before convicted.

Faulk (1976) provided a useful tabulation of eight reports regarding mental illness in prison population. diagnoses of 'psychosis' vary from 1.9 per cent to 12 per cent, neurosis from 2.2 per cent to 60 per cent, 'psychotic personality', from 8 per cent to 66 per cent, 'alcoholic' from 17 per cent to 55 per cent, and subnormal from 6 per cent to 45 per cent. He however, acknowledged that the high incidence of serious psychological disorders as represented by personality difficulties or mental illness was higher than most other surveys of prison populations in the United Kingdom.

Akinnawo (1992) surveyed the prevalence and correlates of psychopathological symptoms among 136 inmates of Ado-Ekiti prison. Using the Awaritefe Psychological Index (API) and Beck Depression Inventory (BDI), prevalence of symptoms range from 20.86 per cent (for depression) to 35.29 percent (for general mood disorder). For general psychopathology and general somatic disorder, the prevalence was 30.15 per cent and 27.21 per cent respectively. Age and duration of imprisonment were found to have significant effects on the level of manifested psychopathological symptoms of inmates. The study did not discuss the direction in

which age and duration were significant.

Guy, Platt, Werling and Bullock (1985) in their study of British Prisoners, with the exception of perceptual dysfunction and sexual problems, 84.1 per cent of the inmates obtained scores indicating the presence of at least one symptom of behaviour disorder. The largest proportion (25 per cent) of the sample were diagnosed in terms of substance abuse - alcohol dependence. Schizophrenia and substance abuse - drug dependence followed each with 11.5 per cent of the same group. Personality disorder accounted for 9.0 per cent of the group, the remaining categories accounted for 5 per cent or less. On the basis of psychiatric mental health status interview, 69 per cent of the group were recommended for treatment. Only 15.9 per cent of the inmate failed to be identified by at least one indicator. At the other extreme, 34 per cent of inmates were identified by all three indicators of psychiatric disturbance.

2.2.4 DURATION (PERIOD OF CONFINEMENT AND PSYCHOLOGICAL DISORDERS)

The fourth psychological variable considered in this study is duration, that is, the period of confinement. Banister (1983) conducted a research on long term prisoners. He administered a battery of cognitive psychomotor and personality tests. Results

of the tests indicated a high level of depression, need for affiliation and need for interpersonal relationship among the prisoners. The study also revealed that as the years passed by these needs decreased and were replaced by feelings of hopelessness, helplessness, hostility, introversion, negative self esteem, apathy and regression in behaviour.

In other studies, Agua and Allen (1983), Jacob (1984) carried out a psychological evaluation of psycho-physiological symptoms in prisoners referred to them at the first 3 months of confinement. Their findings revealed what they called 'shorttimes syndrome'. This is characterized by dizziness, headache, skin disorders and abdominal dysfunction. These feelings they added were replaced by increasing psychopathic difficulties, subjective, distress and defensiveness as their years in prison increased. However, these findings appear to have limited generalizability because only inmates previously referred for psychological evaluation were included as subjects.

Smith (1989) carried a study using small groups of subjects placed in short term isolation. The level of stress manifestations in these groups were also examined. The results showed that isolation led to interpersonal frictions, considerable irritability and hostility, negative moods, depression and feelings of loneliness.

even in the presence of others. Reduction in communication and socially oriented behaviour in the groups was reported. He also observed that the loss of information about the "outside world" influenced the functioning of the isolated group.

Laboratory studies of humans in confinement have been carried out, (e.g Heron 1961, Suedfeld, Heron, Bexton and Hebb, 1953). In these experiments, sensory inputs were deprived for days or weeks. Visual and auditory stimulation deprived or reduced. Results showed that, in all the experiments, subjects reported visual and or auditory hallucinations, delusions, thought disturbance and emotional disequilibrium, cognitive impairment, disorientation to time and space were also observed in the subjects.

In a similar contrived situation, Haimmes (1975) performed a space craft stimulation experiment in which subjects were confined in an aero space cubicle for 7 days. The subjects were given tests of learning, thinking and reasoning before and after the confinement. In the fall-out shelter experiment, subjects were confined in the shelter for 2 weeks. The subjects consisted of whole families of parents and children. They had enough food supplies throughout the period of confinement. Tests of verbal, reasoning, learning, memory, spatial, perception and logical reasoning were carried out before and after confinement. For the

isolation experiment, Aitman (1967) compared the spatial habits of pairs of men socially isolated in a small room for 10 days, with those of matched non-isolated groups. The results of the experiments showed that there were no remarkable changes in the behaviour of subjects, however, subjects complained of discomfort caused by inadequate toilet facilities, inadequate space and insufficient warm clothing material; individuation also increased. It should be noted from this study (Aitman 1967) that the complaints of subjects in isolation were all on the facilities that prisoners are not privileged with.

However, studies based on laboratory experiments have their own faults and therefore have limitations. The situations are contrived and try to approximate that of prison environment and besides the period of confinement was too short when compared to that of prison confinement. It then follows that people when isolated and deprived socially and emotionally, for longer periods and in actual prison situation, would suffer more psychological disturbances. Although, laboratory studies (Weybrew 1981, Multin and Gunderson 1986), using longer period of confinement reported in their subjects memory disturbance, difficulty in concentrating, deterioration in subjects affective behaviour, depression, feelings of loneliness and boredom increased with time. Personal motivation and group morals

declined after 10 days of confinement. Levels of tolerance and social interaction deteriorated and subjects kept more to themselves, were more critical of others and were easily irritated. Somatic complaints such as headaches, soreness of muscles and difficulty in falling or staying asleep were also reported.

Cohen and Taylor (1981) carried out a study in which subjects serving over 10 years in a maximum security prison. Verbal interviews and case histories were method used in their study. Result of their study showed that long term confinement had much adverse effects on the subjects than the controls. Subjects of long term confinement showed greater evidence of need for affiliation and need for interpersonal relationship than the non-confined control group. But these needs decreased as the years passed by and feelings of hopelessness, negative self esteem, apathy and regression in behaviour increased. Cognitive impairment, disorientation in time and poorer psychomotor performance were observed years after their confinement.

2.2.5 CRITICAL REVIEW OF LITERATURE

The review of Literature in this present study underlines the importance of psycho-social factors as causative factors of psychological disturbances and its implication for psychological intervention among prisoners in Nigeria. Four psychosocial factors - sex

differences, duration, personality types and stress have been implicated in the above Literature so far reviewed. The literature covered Laboratory, field, survey and clinical researches that have been conducted to examine these variables. Their direct relevance as causative factors in psychological disorders among prisoners have been demonstrated. Studies cited above have shown that prison environment is harsh and harsh enough to bring about psychological disorders.

Results obtained so far have not been quite consistent particularly with the gender difference in susceptibility to psychological disorders, although females have been found to be more vulnerable to psychological disorders than males, research studies (Findlay Jones and Burvill 1977, 1979; Rosenfeld 1980) have indicated otherwise. The theoretical position which succinctly provide the explanation for high prevalent rate among women are differential vulnerability hypothesis and differential exposure hypothesis discussed under gender theories.

Also, a more consistent pattern on duration, i.e. period in confinement is yet to emerge. Some authors (e.g. Smith 1989) have used subject put in isolation in an experiment and found the effects of depression; loneliness and negative moods, while others using actual prisoners serving over 10 years manifesting more psychological

disturbances. No attempt, has been made to actually determine between short, medium and long periods in confinement. Beside, some research studies (e.g Smith 1989) were done with normal subjects and in experimental contrived situations. Although the theoretical positions (isolation and stress theories) provide full explanation, that people who are isolated for a long time or exposed to prolonged stress would definitely manifest severe psychopathology, (Rosen and Gregory, 1966).

Thus, there is empirical evidence that isolation when prolonged not only increases anxiety, also decreases the ability to concentrate and produce bizarre hallucinations but also increase suggestibility. It is then expected that prisoners who have been confined to prison environment for a long time would manifest psychological disorders.

On personality variables, personality disorders (Odejide 1981), extraversion (Eysenck and Wibson 1955) and high stress on the neuroticism, Psychoticism and extraversion scales (Eysenck and Eysenck 1977) have been implicated in criminal behaviour and mental illness. Although research has been carried out in this area, the use of personality as a concept has been confusing (e.g Faulk 1976 - used the concept psychotic personality and Lambo, 1960a - malignant anxiety personality). Nonetheless, there is a theoretical support provided by Eysenck, 1970a, that persons who score high on trait factors such as psychoticism, extraversion and neuroticism, will

likely commit crimes and manifest a higher psychological disturbance when they are matched with normals. Also, the prison environment, has been established as stressful and therefore can precipitate adverse psychological consequences.

Adelola's, (1988) study of living conditions of inmates in Nigerian prisons suggest the possibility of poor mental health status. Also Mba (1989) condemned the mental and physical torture and the alarming mortality rate in Nigerian prisons.

In an experiment Zimbardo (1973) claimed that the prisons as they are currently structured is destructive and that certain facets are dehumanizing. He concluded with the following remarks:

(1) that offenders are treated alike without regard for individual needs, past strengths and weaknesses (2) long lists of petty, arbitrary rules degrades dignity, destroy trust, and render genuine communication unlikely; (3) the expression of feelings is dangerous; those who succumb are apt be labelled potential informers and/or targets for rape; being callous also minimizes suffering; (4) in an all-male prison, power and control come through cunning and superior physical strength. Offenders strive for an image of 'tough animal': fearless, powerful, unfeeling and self indulgent; (5) when people are idle and time creeps, they loose perspective; (6) they overact to minor happenings and fail to plan for major ones; and (7) with few choices to make one's sense of self direction and, with it

the responsibility for one's life are stripped away.

James Gregory, Jone and Rundell (1980) concluded that, 33 per cent of 446 inmates he surveyed in need of mental health treatment. A total of 35 per cent were recommended for 'a level of treatment above a minimum amount of crisis intervention for minor emotional problems' and 10 per cent need medication. A primary diagnosis of substance abuse was made in 25 per cent of the inmates and 5 per cent were diagnosed as schizophrenics.

According to Zimardo (1973) a small percentage of prisoners do improve, yet most appear to stagnate or deteriorate. Crowded, punishment-oriented, custodial settings (the norm) are regularly associated with negative outcome (Bukstel and Kilman, 1980; Ignatieff, 1978; Rothman, 1980; Sarri, 1981; Smith 1982).

The literature reviewed so far predominantly reveal that prison confinement and psychological disorders are associated. In view of the fact that the aim of prison confinement is to keep under custody, individuals, perceived as threats by the society, so that they are rehabilitated and reformed as productive and useful citizens, it is necessary to ensure that psychological strategies are designed on the treatment of these offenders so that they do not deteriorate in their mental health.

There have been research efforts investigating the therapeutic efficacy of group therapy as a psychological intervention strategy in

the treatment of psychological disorders arising from various human conditions (Lindsay, 1986).

White, Jim and Keenan (1990) investigated the effect of group therapy on the management of people with generalised anxiety (free-floating) disorder, aged 18 to 54 years. "Stress control" booklets, baseline diaries, pre-treatment questionnaires were utilized. The therapy package allowed 30 individuals to attend. Results were quite impressive and the therapeutic effort had significant effect on all the participants. Nzewi (1990) also found peer modelling in group therapy as an effective technique for handling adolescent interpersonal problems.

Robert (1991) also describes an empirically based group therapy model for adult survivors of childhood incest. Fifty-three female incest victims (age 9-48 years) referred to as rape crises centre served as subjects. Instruments used to evaluate intervention included: intake assessment questionnaire concerning demography, family history, medical and psychosocial status, symptomatology and self-reported functioning; standard and short versions of the Becks Depression Inventory (BDI) (a 42 item self assessment scale), a group Dynamic Evaluation Scale and a client satisfaction questionnaires. Subjects registered improvements in self assessment with group therapy and reported significant reductions in levels of depression. Reduced

level of depression were maintained 6 months after termination of intervention.

Lindsay, Gamssen and Hood (1987) designed a study to test the relative effectiveness of cognitive behaviours of therapy, anxiety management training and treatment by benzodiazepines against a waiting list control. Measures were taken on both the process and outcome of treatment. Results showed that psychological intervention through group therapy had a more reliable and sustained positive effects without adverse drug reactions than the drugs.

According to Max Rosenbaum (1976) earliest group treatment techniques used in state mental hospitals consisted of groups of patients organized with a leader presenting the material that was to be used for guided discussion. This, he says, is a directive-didactic approach and is still used in many hospitals. The stress in verbal-intellectual and the technique is very applicable to regressed, psychotic patients in hospital settings. The emphasis is upon conditioning and pedagogy and the technique is also helpful in prisons, where group members evidence marked social distortion patterns. This techniques is also used with paroled convicts or juvenile offenders in penal institutions.

In another study, Igboegwu (1988) investigated the efficacy of group therapy in the managements of stress among prison inmates. The study utilised the Multiple Affect Adjective Checklist (MAACL),

Adjective Checklist (ACL) psychopathic deviant scale (PDS) of the Minnesota Multiphasic Personality Inventory (MMPI) and psychophysiological Symptoms Checklist (PSC) on the 90 all-male subjects. Results indicated a significant changes in 9 out of the 10 stress measures of the experimental group while the placebo condition produced 4 significant changes in the 10 measures of stress. The study, however, found an overall superior efficacy of group therapy in stress reduction. While this study has a positive direction for research, generalizing its findings must be done with caution because of its methodology and faulty statistical analysis.

Bednar and Kaul (1978) reviewed the group therapy literature and concluded that group therapy seems to help people to attain more positive and perhaps more healthy evaluations of themselves than no treatment and placebo treatments. Further, in some circumstances, group therapies have been found to be more effective than other psychological treatments with which they have been compared.

However, Bednar and Kaul (1978) caution against accepting the conclusion that group therapy "works" without heeding the following qualification: not all groups have uniformly positive and beneficial results. This observation appears to be warranted. Data provided by Lieberman, Yalom, and Miles (1973) regarding the experiences

of over 200 Stanford University students who participated in ten different types of group therapy (psychodrama, Gestalt therapy, NTL-T-Group, psychoanalytically oriented groups etc) suggests that very desperate reactions may be elicited by group therapy. At least in terms of the subjects self-report of attitudes, self-concepts, and social values, a high degree of gains were experienced by a third of the group participants. But just as groups apparently stimulated positive changes in some individuals, in others, negative, and even harmful effects were experienced as a result of their group participation. Eight per cent of the participants were considered to be "psychiatric casualties". Their very negative reactions ranged from psychotic episodes to experiences of great discomfort and distress. Clearly negative but less serious problems were reported by another 11 per cent of the sample studied. Thus participants in group therapy do not uniformly experience positive benefits from their group experience. They concluded by saying that with adequately screened clientele and with a trained and competent therapist, group therapy may be a remarkable and effective means of maximising services to a wide variety of people in need of help.

Recent research suggests that psychological interventions involving structured training in the use of specific coping skills may help patients adjust to the psychosocial disruption of cancer and

stress induced psychological problems. Progressive muscle relaxation plus guided imagery (Burish and Lyles 1981; Lyles, Bruish, Krozley, and Oldham, 1982). self instruction plus problem-solving has been shown to reduce patient's emotional distress compared with a no treatment control group (Weisman, Worden and Sobel, 1980). An intervention programme providing both educational (e.g, relaxation training) and supportive counseling services ameliorated some patients' problems and helps diminish negative effect (Gordon, Freidenbergs, Diller, Hibbard, Wolf, Levin, Lipkins, Ezrachi and Lucido, 1980).

Group coping skills instruction as a treatment intervention emphasizes adjustment and prevention. Goldenberg (1977) notes that prevention focuses on whole community and with a concern to reducing the incidence (number of new cases) of psychological disorders and prevalence (total number of existing cases) and an effort to locate vulnerable individuals who because of genetic background, unique personal experiences or exposure to excessive environmental stresses, are thought to have high potential for developing abnormal behaviour or (serious abnormal behaviour).

Studies reviewed above have confirmed the existence of psychological disorders in the prison community and also confirmed is the fact that imprisonment does affect the individual, especially, the mental health of the prisoner. Also, studies on group therapy

have been reviewed. Most studies, (e.g. Lindsay et al, 1987a Bednar and Kaul, 1978, Lieberman et al, 1973) revealed that group psychotherapy can be a better treatment option than individual psychotherapy and sometimes drug treatment, although some researchers believe otherwise.

While the above observations are true, findings of these research studies from which the observations are made are inferred or descriptive in nature. Only a few authors (e.g Akinnawo, 1993, Mgbemena 1983) have carried out empirical work on prison population. The few studies that have carried out empirical work have one shortcoming or the other, such as faulty methodology. Based on the faulty nature of methodological approaches of these studies, they can be said to lack generalizability. Also, inferred results cannot be free from the sentiments and emotions of the researcher which will no doubt distort the objectivity of such research findings. In addition to the above problems in the literature reviewed; some of the studies (Odejide, 1981) only studied a particular area, in other words data collection could not be said to have accurate representation of the people being studied. Also, only a handful of experiments have been directed at systematically evaluating psychological factors determining psychopathology and at the same time establishing intervention for prisoners in Nigeria. Perhaps this need for

empirical psychological research on the problem in Nigeria is causing the most glaring gap in our knowledge of prison confinement. There is also a dearth of research in the area of treatment intervention among prison population which was why few studies concerning treatment intervention in Nigeria were reviewed. Therefore there is a need to empirically document studies relevant in this area. This present study attempts to bridge the gap by empirically assessing some psychosocial factors and how these factors are implicated in psychological disorders among prison inmates in Nigeria. The study aims at establishing empirically derived treatment intervention among prison inmates in Nigeria. The study will document with hard core data on the levels of psychological disorders and personality differences between the prisoners and control from the general population.

2.2.6 HYPOTHESES

1. Long prison timers would report higher level of psychological disorders than other categories of prisoners.
2. High stressed prisoners would report high levels of psychological disorders than prisoners who are low on stress.
3. Female prisoners will report high levels of psychological disorders than male prisoners.

4. Long term female prisoners who are highly stressed will report more psychological disorders than short term male prisoners who are low on stress.
5. Prisoners who are high on the psychoticism (P) scale will report more neurotic disorders than low scorers.
6. Prisoners who are high on the Extraversion (E) dimension will report more neurotic disorders than those who are low on the same dimension.
7. Prisoners who are emotionally unstable (high N scorers) will experience more neurotic disorders than those who are relatively stable emotionally (low N scorers).
8. High PEN (Psychoticism, Extraversion and Neuroticism) scorers will report more neurotic disorders than low PEN scorers.
9. Prisoners receiving group coping skills instruction intervention would evidence significantly less psychological disorders and greater adjustment than prisoners assigned to the not treatment control group.

2.2.7 OPERATIONAL DEFINITION OF TERMS

Assessment: Within the framework of psychological research and theory building, it is defined as the scientific study of individual and group differences through psychological measurement. It has the advantages of advancing our general knowledge of behaviour (abnormal or normal),

environmental contingencies and how overall results shed light on some general fact or behavioural law which is reflected in the behaviour of people in the experiment. Essentially, such an analysis, involves a full specification of treatment target. In research, assessment are included to allow for the testing of variables under study and specific hypotheses about both normal behaviour and psychological dyfunctions and are designed to provide new information that will increase our understanding of human functioning.

Psychosocial: The term psychosocial has wide range of meanings. of its most common definition is that it is a concept "applied to phenomena in the individual having a social bearing in origin" (Wallerstein, 1976). In this general sense, it also incorporates personality to the "social stimulus value" of the individual. It is regarded as the reaction of other individuals to the subjects, i.e the way others perceive the person. Allport (1937) also suggested a biophysical definition. This definition roots personality in the qualities of a person. This definition describes personality as having an organic aspect as well as a perceived aspect. More importantly, Allport emphasised that personality should be described as 'specific qualities of a person that are susceptible to objective description and measurement. The term psychosocial therefore

includes such concepts as duration (different periods of confinement), stress, sex differences and personality factors, both in the biosocial and biophysical definitions.

Stress: refers to the composite score of prison inmates on the Idemudia's prison stress scale (IPSS) made up of six subscales: (1) social, marital and family support, (2) housing, health and sanitary facilities, (3) disciplinary measures, (4) quality and quantity of food, (5) activity and tasks and (6) psychological factors.

Psychological Disorders: refers to a composite scores obtained by prisoners and non-prisoners on the Awaritefe Psychological Index (API) and the Crown and Crisp Experiential Index (CCEI). The CCEI has six sub scales: (1) free-floating anxiety. (A); (2) phobic anxiety (P); (3) obsessive compulsive traits and symptoms (O); (4) somatic symptoms of anxiety or psychosomatic complaints (S); (4) depressive symptoms (D), and (6) hysteria or hysterical personality traits (H).

Prison: Prison is a place of confinement; a special public building for the safekeeping of persons in legal custody. Prisons are usually equipped for the reception of persons who by legal process are convicted to it for safe custody while awaiting trial or for punishment and separation of offenders. Another purpose of prison is both punitive and reformatory

aimed at rehabilitating the prisoner. Prison as used in this study refers to all medium prisons.

Imprisonment: The act of committing a person to prison. Thus, the term is interchangeable with prisonization.

Prison Inmate: One who is legally convicted and confined in a prison, by virtue of an order of arrest, through a commitment warrant signed by a law officer or a state official as a result of infraction of the laws of the society.

The term prison inmate is interchangeable with a wide range of terms that border on prison crime and offences. These terms include prisoner, inmate, offender and criminal.

Psychoticism (P) dimension is measure of personality and the subjects scores on the EPQ (Eysenck Personality Questionnaire) indicates the extent to which the individual is high on P scale or having benign psychosis which can predispose an individual to the development of psychiatric abnormalities and criminal behaviour.

Extraversion-Introversion (E) dimension is a measure of personality and the subjects score on the EPQ indicates the extent to which the individual is high or low on E scale. The typical extrovert is sociable and has many friends. He is fond of excitement and tends to be impulsive and take chances. He jokes a lot and

needs to talk to other people. The typical introvert on the other hand score low on E, is quite, introspective and reserved. He tends to plan his actions and generally serious minded.

Neuroticism (N) is a measure of personality and the subject score on the EPQ indicates the extent to which the individual is high on neuroticism or emotionally stable.

Duration - as used in this study refers to different periods of confinement in prison. There are 3 categories: short, middle and long durations. Prisoners on short duration were those who had stayed in prison under 12 months, middle duration, for those between 13 - 24 months, and long duration for those who have stayed above 24 months.

Sex: two categories: male and female.

Psychological (Treatment) Intervention - refers to a planned interpersonal interaction between the therapist (author) and selected inmates, aimed at providing all members in the group the kind of environment that will help reduce all inhibitions and ego defences in them in order that they willingly give expression to all their problems to the group so that through working together in the group, possible solutions may be found for such problems. Treatment intervention emphasizes teaching and rehearsal of cognitive, behavioural and affective coping strategies on a group format.

CHAPTER THREE

METHODOLOGY

This thesis is based on a two-study approach; study one, which is the assessment of prisoners and study two which is the intervention for prisoners. Methodological presentation will follow APA Format on two-in-one study report.

3.1 STUDY ONE

3.1.1 DESIGN

This study employed a Two-3-way Factorial Design. Three independent variable - sex, stress and duration - yielding a 2 x 2 x 3 factorial analysis design was used to investigate the role of sex, stress and duration of imprisonment on psychological disorders of prison inmates in Nigeria.

Three other variables, psychoticism, extraversion and neuroticism were also used as independent variables and yielded another 2 x 2 x 2 factorial analysis of variance design.

Sex was introduced at two levels - male and female; stress at two levels (high stress and low stress) and duration at three levels; (high, medium and low duration).

Also, on the personality variables, psychoticism at two levels: (high and low scorers), extraversion at two levels high (extraverts)

and low (introverts), and neuroticism also at two levels: high (neurotic) and low (emotionally stable). Dependent variable in this study is psychological disorders measured by total score of each respondent on the Awaritefe Psychological Index and the Middlesex Questionnaire (now Crown and Crisp Experiential Index).

3.1.2 INSTRUMENT AND MEASURES

Four major instruments were used in this study. These were contained along with other measures in a booklet, tagged Personality Inventory Questionnaire, (PIQ). (see Appendix I). The PIQ has five sections:

- Section A: Social demographic variables.
- Section B: Idemudia prison stress scale (IPSS).
- Section C: Eysenck Personality Questionnaire (EPQ).
- Section D: Awaritefe Psychological Index (API) Form C.
- Section E: Crown Crisp Experiential Index (CCEI) (formerly known as Middlesex Hospital Questionnaire).

3.1.2.1 IDEMUDIA PRISON STRESS SCALE (IPSS)

This instrument was designed by the researcher for this study. The author constructed a 50-item simple short phrases drawn up from the pilot study and review of literature. The scale was pretested on a sample of 40 prisoners in Agodi prison whose ages

ranged from 20-49 years.

Responses to the items were coded on a four-point Likert type, scale, ranging from 'no difficulty' to 'extreme difficulty'. These were assigned the scale value of 0 (no difficulty), 1 (little difficulty), 2 (moderate difficulty) and 3 (extreme difficulty). Items were selected in such a way that, stress in prison was measured in subscales: social support, marital and family support, housing, health and sanitary facilities, disciplinary measures, quality and quantity of food, activity and tasks and psychological factors.

Psychometric properties of this scale were determined. Item analysis using the item remainder correlation technique (with Kuder-Richardson formula, K.R 20) revealed 31 internally consistent items with coefficient alpha of 0.91. Split half reliability of the scale was $r = 0.8$; content validity was used to determine validity of the scale since the 31 items selected were based on responses of prison inmates and also factor analysed. Face validity was also built into the scale as the items were made of simple, short phrases and very easy to understand. Some of the items were listed by the prisoners themselves on areas where they have problems.

To establish convergent validity for the Idemudia Prison Stress scale, scores were compared for forty prisoners at Agodi prison, Ibadan. They were administered the IPSS and Life Experiences

Survey, designed by Sarason, Johnson and Siegel (1978). The Life Experiences Survey (LES) is a 57-item self report measure and allows respondents to indicate events they have experienced during the past year. The scale has two parts, one and two. Only section one was used because it is designed for all respondents and contains a list of 47 specific events. The events listed in this section refer to life changes common to individuals in a wide variety of situations. Many of the items were based on existing life stress measures.

Validity Coefficient was $r = 0.39$ and 0.41 , $P < 0.01$, for LPSS and LES respectively. The correlations between the two scales was moderately low but however, suggests a convergent validity for both stress scales.

3.1.2.2 PERSONALITY MEASURE

Section C consists of items on psychoticism, extraversion and neuroticism dimensions of Eysenck Personality Questionnaire (EPQ) which was utilized to measure personality traits (Eysenck and Eysenck, 1975). The Eysenck Personality Questionnaire (EPQ), a forced-choice 90-item instrument was used to measure certain personality dimensions namely, extraversion - introversion (E), neuroticism (N) and psychoticism (P). The items on the EPQ are answered yes or No according to the applicability (or otherwise)

of each item to the respondent. Yes was scored 1 and No was scored 0. The Lie Scale measures a tendency of some subjects to fake good or dissimulate. According to Eysenck and Eysenck the scale also measures some stable personality factor connected with social naivete or orthodoxy.

The typical extravert was a high score on E scale. He is sociable and has many friends. He is fond of excitement and tends to be impulsive and take chances. He jokes a lot and needs to talk to other people. The typical introvert on the other hand scores low on E, is quite, introspective and reserved. He tends to plan his actions and is generally serious minded. The term neuroticism (N) or emotionality refers to the stability - instability dimension of personality. The typical high N scorer is given to worrying and moodiness. He is generally anxious although he may suffer from depressive episodes. He sleeps badly and tends to suffer from psychosomatic complaints. He has an excessive emotional reaction to stimuli and has difficulty regaining his equilibrium after an emotionally arousing experience.

A pre-test of the scale was carried out on some Nigerian prisoners, at Agodi Prison, Ibadan. Split half reliability obtained for this sample was 0.80, 0.79, 0.81 and 0.30 for each of the scales P, E, N and L respectively. This indicates that the scales were

highly reliable for use in this culture. The internal consistency was high (alpha coefficient of 0.90 (P), 0.91 (E), 0.89 (N) and 0.40 (L)). Concurrent validity was established for N (Awaritefe and Kadiri 1981) on Nigerian subjects by correlating the scores on State Trait Anxiety Inventory (STAI) of Spielberger, Gorsuch, Lushene (1970) and neuroticism scale. The neuroticism scale, N, positively and significantly correlated with X-1 and X-2 (STAI X-1, $r = 0.51$, $P < .01$; STAI X-2, $r = 0.920$, $P < .01$). N is a trait measure and so is X-2; N correlated more with X-2 than with X-1, a state measure.

Osinowo (1994) also validated the EPQ among young adults in Nigeria. To determine validity and reliability of the EPQ, all the items were factor analysed using principal component analysis with varimax rotation. All the items had high item loadings of at least .4, therefore, all the items were retained. Also, internal consistency of the scales were high, Cronbach coefficient alpha for (P), 0.81, (E), 0.72, (N), 0.83 and (L) 0.76. Split-half also ranged from 0.99 for all the scales,

The scale has previously been standardized for Nigerian subjects, (Jegade 1980) and between British and Nigerian subjects, (Eysenck, Adelaja and Eysenck, 1977); Eysenck, et al, (1977) claimed that EPQ is in general, applicable in Nigeria, thus further, justifying the instrument for use in Nigeria.

3.1.2.3 AWARITEFE PSYCHOLOGICAL INDEX (API)

Section D of the personality inventory questionnaire contained the Awaritefe psychological index. The API was developed by

Professor Alfred Awaritefe, a clinical psychologist with the Department of Mental Health, University of Benin Teaching Hospital, Benin, over a five year period. Its development involved two thousand, three hundred and eighteen subjects. Of this number, one thousand and one represented psychiatric patients of varied descriptions attending the Neuropsychiatric Hospital in Benin. The remaining one thousand three hundred and seventeen were normal subjects to whom the API was administered. The instrument is of clinical importance as a measure of general psychopathology based on a three point scale of Yes, No, and '?' (Question mark) implying that the respondent is undecided; with scale values of 2, 0, 1 respectively. The instrument has three forms A, B, C. Only Form C was used in this study which contains 51 items. API (Form C) measures general psychopathology in the following areas: sleep, intellect, perception, heat, sensation of movement, mood, speech, motor, behaviour, activity, head, alimentary tract and general somatic.

The API (Form C) has been reported to correlate significantly with the MPI on the N scale ($.49, P < .005$). Also concurrent validity was established (Awaritefe, 1982, and Imade T, 1986) on Nigerian subjects by correlating the scores on State Trait Anxiety Inventory (STAI) of Spielberger Gorsuch and Lushene (1970), and Maudsley personality inventory (MPI) by Eysenck (1959). A significant

relationship was found between API (Form C) and MPI (N) for males (.42, $P < .01$), API and MPI (N) (.51, $P < .01$), API and STAI (.44, $P < .01$), API and STAI x-2, (.41, $P < .01$).

A pretest of the scale was carried out on Nigerian prisoners. Split half reliability obtained for this sample was 0.89; indicating that the scale was highly reliable for use. Awaritefe (1982) reported the following consistency reliability (alpha coefficient = $K-R_{20}$) of the API as .81. The retest reliability coefficient for both boys and girls combined was .85, for girls alone .86 and for boys only .80.

The instrument have been used among prisoners, (Mgbemena, 1983, and Akinawo, 1992).

The API has several advantages prominent among these is that it is based on the cultural experiences of Nigerians and so seen to be relevant. In other words, it has face validity. The items are also in 'short phrases' and easy to understand and easy to score.

The instrument according to Awaritefe (1982) is useful in the following ways:

1. The appraisal of the level of severity of general psychopathology at a given point in time.
2. The assessment of the effect of therapeutic

intervention.

3. The study of incidence rate of psychiatric morbidity in the general population.

3.1.2.4 THE CROWN CRISP EXPERIENTIAL INDEX (CCEI)

Section E of the personality Inventory Questionnaire contained the Middlesex Hospital Questionnaire (MHQ) now known as the Crown Crisp Experiential Index developed by Crown and Crisp in 1966 for the rapid quantification of psychoneurotic traits and symptomatology in a clinical interview - psychiatric or psychological. It consists of six subscales of neurotic symptoms and traits, each having eight items. The subscales are:

1. Free floating anxiety (A)
2. Phobic anxiety (P)
3. Obsessive-compulsive traits and symptoms (O)
4. Somatic symptoms of anxiety or psychosomatic complaints (S)
5. Depressive symptoms (D)
6. Hysteria or hysterical personality traits (H)

Various evaluative studies have been carried out on the Crown Crisp Experiential index and they have generally attested to its validity and usefulness in differentiating normals from neurotic persons, while the subscales are known to discriminate satisfactorily

between the various diagnostic subcategories of psychoneurosis (McKaracher; Loughnane, and Watson, 1968; Cockett, 1969; Ryle and Lunghi, 1969; Crown, Duncan, Howell, 1970; Crisp and Priest, 1971, Young, Fenton and Lader, 1971; Wolkland and Forest, 1972; Olley and McAllister, 1974, Mavissakalian and Michelson, 1981). It has also been extensively used in Ghana (Lemptey, 1973) and in India (Prabhu, 1972 and Gada, 1981).

The instrument has been validated and standardized for Nigeria by Ihezue and Kumaraswamy, 1983. Validity of the instrument was tested by administering it to 40 neurotic patients (20 males, 20 females) at the outpatient clinic, University of Nigeria Teaching Hospital (UNTH). Reliability was calculated by the split-half method from the scores of normal level of significance ($P < 0.01$) (see Table 3.1).

Reliability was calculated by the split-half method (Spearman Brown formula). Alpha coefficient was 0.68 for total score. Reliability coefficient for scale A (0.78), P (0.45), O (0.66), S (0.97), D (0.61), and H (0.59).

A pretest of the scale was carried out on Nigerian prisoners at Agodi Prison, Ibadan. Split half reliability obtained for this sample was 0.80. This indicates, the scale was highly reliable for use.

Table 3.1: Standardization and Validity of CCEI by Ihezue and Kumaraswamy

| Scale | Normals N = 200 Mean | SD | Neurotics N = 40 Mean | SD | t-values | P value less than |
|----------------|----------------------------|-------|-----------------------------|-------|----------|----------------------|
| A | 4.30 | 2.67 | 7.68 | 3.50 | 5.69 | 0.01 |
| P | 6.27 | 2.44 | 9.50 | 3.20 | 6.09 | 0.01 |
| O | 7.54 | 2.79 | 8.87 | 3.26 | 2.42 | 0.01 |
| S | 5.51 | 2.67 | 7.37 | 3.47 | 3.20 | 0.01 |
| D | 5.02 | 2.60 | 6.42 | 2.63 | 3.10 | 0.01 |
| H | 7.65 | 3.16 | 9.98 | 3.30 | 4.16 | 0.01 |
| Total Score | 36.29 | 10.55 | 49.82 | 14.92 | 5.45 | 0.01 |

Source: Ihezue, U.H. and Kumaraswamy, N. (1983) The Crown Crisp Experiential Index in Nigeria - A Standardization and Validity Study. *Nig. Journal of Clinical Psychology*, Vol. 2, No. 1, pp. 65-94.

3.1.3 SUBJECTS

The subjects in the present study were 150 convicted prisoners and 150 non-prisoners from the general population. The prisoners were randomly selected from four medium prisons in Nigeria. A stratified random sampling was used to select Kaduna Prison, Kaduna State, Agodi Prison, Ibadan, Oyo State, Enugu Prison, Enugu State, and Oko Prison, Benin-City. The non-prisoners were randomly drawn from the general population.

The reason for using 150 non prisoner group was to assess and compare their scores on psychopathology and personality characteristics, to determine empirically whether prisoners differ from non-prisoners, (see Appendix 2). Another reason, was to enable the author use the joint prisoner and control mean scores to be able to obtain optimal dividing points. Participants in this study did so on a voluntary basis.

Among the one hundred and fifty prisoners, 92 were males representing (61.3 per cent) and 58 (38.7 per cent) were females. The mean age was 27.8 years (SD = 7.1) with ages ranging from 15 - 54 years. Sixty-eight of the prisoners (45.3 per cent) were single, 77 (51.3 per cent) were married, only 1 (0.7 per cent) was divorced and 4 (2.7 per cent) were separated. Sixty-three, (42.0 per cent) of the prisoners were illiterate, that is, with no

formal education, 28 (18.7 per cent) had primary education, 45 (30.0 per cent) had secondary education while 14 (9.3 per cent) had post-secondary education. Sixty-nine, (46.0 per cent) of them were from monogamous homes, and 81 (54.0 per cent) came from polygamous families. The occupations of subjects ranged from unemployment to public salaried job and private employment. For the non-prisoner group, 94 (62.7 per cent) were males and 56 (37.3 per cent) were females. Mean age was 22.87 years (SD = 4.52) with ages ranging from 16 to 49 years. Their levels of education ranged from no formal education to post secondary education. Also occupation ranged from unemployment to public salaried jobs and private employment. All subjects who agreed that, they have been in prison before were eliminated from this group to avoid the contaminating effects these may have on the group comparison data.

3.1.4 PROCEDURE

The Personality Inventory Questionnaire (PIQ) was administered to prisoners in each of the sampled institutions. These include, Kaduna, Agodi, Enugu and Oko Prisons (Benin City).

Groups of prisoners were attended to at different times. Each group was seated in a room provided by the prison authorities and each subject was given a copy of the PIQ. Subjects were instructed

to fill the questionnaire as accurately as possible. They were also advised not to write their names or any other identification mark on the questionnaire so as to ensure confidentiality of the response given. Also, although warders were posted at the various venues during assessment, the researcher sought the permission of the prison authorities to make them stay far from the prisoners. This was done to eliminate the fear of coercion or intimidation on the part of the prisoners so that it will not affect responses. The PIQ required on the average 45 minutes to complete. Badly filled forms were rejected. Only well filled forms were utilized on this study. A total of 300 PIQ were collected (150 for prison subjects and 150 from the general population) which were used for this study. 150 prison subjects were randomly selected from four medium prisons in Nigeria. Psychotic prisoners were excluded from the study. Also excluded were ATPs (Awaiting trial persons). For all the prisons used in this study, the same procedure was adopted. A room or the welfare's department office was made use of and prisoners selected came in one after the other to fill their questionnaire. For those who had problems interpreting some items, the author clarified for them. Each prisoner completed Sections A, B, C, D, and E of the PIQ. Section B, Idemudia prison stress scale (IPSS) was omitted for the non-prisoner group. Eysenck and Eysenck, the three personality

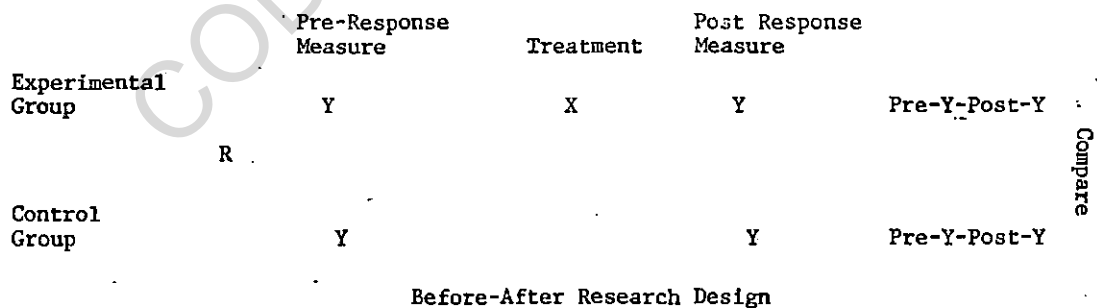
variables of P, E and N are independent, and their effect should be combined to produce the best prediction. Therefore, groups were divided into 'high' and 'low' scorers on each variable, using the joint prisoner and control mean scores to obtain optimal dividing points. A score of 1 was assigned to low scorers and 2 to higher scorers on all the three personality variables.

3.2 STUDY TWO (PSYCHOLOGICAL INTERVENTION)

3.2.1 DESIGN

The design for the intervention phase was the pretest-post-test control group design (Cambell and Stanley, 1963) or Before-After Research Design (Christensen, 1988). Figure 3.1 depicts this design. This design is a good experimental design and has been referred to as 'True experimental design or classical design'.

Fig. 3.1



Source: Christense, B.L. (1988) . Experimental Methodology (Fourth Ed), Allyn and Bacon Inc, Boston.

In this design, subjects were randomly assigned to groups and then pretested on the dependent variable (psychological disorders). The independent variable (Group Coping Skills Instruction) was administered to the experimental group; and the experimental and control groups were post-tested on the dependent variable (psychological disorders). The differences between the pre- and post scores for the experimental and control groups were then tested statistically to assess the effect of the independent variable.

3.2.2 INSTRUMENTS AND MEASURES

Two main instruments were used in this study. These were the Awaritefe psychological index (API) Form C and the Crown Crisp Experiential Index (CCEI) formerly known as the Middlesex Hospital Questionnaire. Their psychometric properties have been discussed in study 1.

3.2.3 SUBJECTS

Twenty-four prisoners were involved. Twelve prisoners (6 males, 6 females) were randomly selected for the experimental group and 12 prisoners (6 males, 6 females) were randomly assigned to the control group. Prisoners represented a variety of personality types and psychological problems. Prisoners who participated in this study were all prisoners serving above two years and all were convicted prisoners. Age of subjects for experimental group ranged from 22-38 years. Mean age

was 29.5. Age of subjects for the control ranged from 23-39 years, with a mean age of 30.1. Subjects had a minimum of primary education and could either speak good English or pidgin English.

3.2.4 PROCEDURE

3.2.4.1 ASSESSMENT

All assessments were conducted at pretest and at the 6-month post-test. Assessment was done at the prison yard of Agodi prison. The choice of Agodi prison were proximity factor and convenience. Adequate rapport was established with subjects before psychological assessment. Awaiting trial persons (ATPS) were excluded from my study. Only convicted prisoners were used. Subjects completed the Awaritefe Psychological Index (API) and the Crown Crisp Experiential Index (CCEI). Psychometric properties have been discussed previously.

3.2.4.2 EXPERIMENTAL CONDITIONS

Two separate groups experimental (prisoners on the group coping skills instruction condition) and control (prisoners in the no treatment group) were formed between November 1993 and April 1994. Each group met once a week session for 6 months. A session was agreed to be 90 minutes. A total of 20 sessions were conducted. Four sessions could not be conducted due to the peculiar nature of

the prison environment and disturbing political situation in Nigeria. All therapies were conducted on Thursdays 10.00 am. All group sessions were conducted by the researcher. The researcher has a minimum of three years experience of clinical practice.

Experimental group: Prisoners in this group were introduced to the group coping skills instruction. The group coping skills instruction emphasized teaching and rehearsal of cognitive, behavioural and affective coping strategies. One of many different instructional modules was presented each week. The group instructor (researcher) presented a general rationale and introduction to each new topic area and then described specific coping techniques relevant to each topic area. A variety of structured exercises were used to demonstrate how the various skills could be implemented in common prison situations. Behavioural strategies included (a) homework assignments (b) goal-setting (c) self-monitoring (d) behavioural rehearsal and role playing and (e) feedback and coaching. Behavioural rehearsal of specific skills was used to give each group member an opportunity to practice the coping techniques and receive feedback during the sessions. The importance of frequent practice of these skills was emphasized at the end of each session. To facilitate practice, prisoners were provided with written materials that summarized and highlighted each of the concepts and skills presented. The five

coping skills module areas were (a) relaxation and stress management (b) communication and assertion (c) problem solving and constructive thinking (d) feelings management (e) pleasant activity planning. Group sessions were aimed at letting patients discuss feelings, concerns and problems. The group leader served as a facilitator pointing out common themes underlying individual problems (e.g. helplessness, sense of loss of control, sadness) and encouraging participation by all group members.

No-Treatment Control: Prisoners assigned to this condition completed the structured interview and the paper-and-pencil measures at pre and post assessment periods but received no psychological intervention. Controls were informed that they could participate in ongoing service programme after the 6-month assessment.

3.2.4.3 THERAPEUTIC CRITERION

According to Christensen (1988) this refers to the clinical significance or value of the treatment effect for the subject. Therefore, a treatment credibility was carried out among treatment subjects. All intervention prisoners were instructed to complete a brief 10-item anonymous form evaluating (a) feelings regarding the adequacy of the group in meeting various needs, (b) overall level of satisfaction with the group content and process and (c) satisfaction with the

group leader. These ratings were made on a 5-point scale, and were used to examine whether patients in the intervention conditions were satisfied with the treatment received and whether the group leader was perceived as equally satisfactory in the intervention condition (see Appendix 3).

As Appendix 3 indicates, all group members rated high the value of the group experience along all dimensions. Only two dimensions were not well rated. These were the use of non-prisoners (welfare officers) and involvement of others (warders). The reason may be that, with their presence, it was impossible for self disclosure. This hostile or unfriendly attitude was particularly directed at the warders.

Skills 'home' practice records: Prisoners in the coping skills condition rated on a 4-point scale the frequency with which they practiced the specific skills taught in the treatment session. The major purpose of these records was to assess whether prisoners were using the targeted skills in their natural environments.

3.2.4.4 GROUP PROCESS

The group process was conducted with an interactional, interpersonal "here and now" approach as described by Yalom (1975). Thus, the focus of the group was on expression of affect, reality

issues and immediate problems and concerns on environmental past history. The therapist attempted to discourage intellectualization, superficiality, and rationalization as much as possible, i.e. to focus on affect rather than semantics. The group norms that became established encouraged honesty and support with occasional limit-setting by either group members or the therapist. Other group norms encouraged were continuous attendance, confidentiality, honesty and futility of self-deception; self-investigation; how do I bring about that which I experience, responsibility for behaviour, past-present future linkage of experience, therapy task diligence, tolerance for uncomfortableness, immediacy of affective expression, consequences of psychological problem behaviour, futility of manipulation, control of impulses and choice involved. Each of the moves is introduced only when therapy material appropriate to its advancement emerges. For example, in the beginning stages, the honesty, confidentiality, continuous attendance and self-investigation mores are put forth. With the introduction of each, the prisoners are told that they must adhere to them if they are to continue in therapy. The rationale for adherence to mores is that the prisoners do themselves a disservice if they continue in therapy while unwillingly to do what is required for change to occur. They are also told that this decision rests with them. They have a choice, either to work for

change and freedom or to remain static and enslaved to their psychological and personality problems.

The intervention program described below as mentioned earlier on combines cognitive restructuring, behavioural and affective coping strategies, teaching, presentation of didactic material, home-work assignments and group process in an attempt to overcome the psychological disorders and personality deficits identified with the prisoners.

Topics discussed were either leader or group generated. The specific format of group sessions varied depending upon content and purpose. However, a general procedure was followed weekly. Each session began with a 10-15 minute of relaxation practice and followed by 15-20 minute didactic introduction to the content area under consideration. Content was presented by therapist, group leaders or group participants. Identified were common dilemmas in the content areas, factors potentially influencing individual adjustment and new ways of coping with the experience of a psychological problem or personality problem due to imprisonment. After the content was presented, the remainder of the group time was devoted to group discussion, problem-solving, role rehearsal. As an example of didactic content and home work assignments an outline of weeks four and five is presented in Appendix 4 and 5.

Attention is given below to the intervention procedures implemented in the treatment program. The procedures are outlined and presented as if somehow operating in a state of mutual exclusion. This is due to the limits of written expression and for the benefit of clarity. In practice there is interaction among the intervention approaches in that affective, cognitive and behavioural functioning are interrelated and the timing of several intervention procedures coincide.

Group effect: In addition to the specific intervention procedures being discussed, a major variable influencing outcome may be labelled group effect. The following discussion is an attempt to identify some aspects of group effect; (e.g. the catalytic effect, vicarious learning and social reinforcement) which are assumed to have contributed to treatment outcomes. First a catalytic effect was observed in the group as individual participants began to share experiences, the consequences of which was the realization of similarity. The sense of being faced with the possibility or certainty of some degree of psychological problem due to personality or prison condition demanded basic psychological readjustments. Participants realized their commonality with others who, like themselves, were confronted with the pervasive changes and accommodation inherent in attempting such major readjustments functioned to provide positive

adaptive models to several group members. For example, a sense of community developed as group members began to verbalize their feelings of alienation, isolation and irrationality. As specific personal experiences of embarrassment and of rejection were shared or criminal escapades members became aware of their similarities and were able to focus their energies on constructive problem solving. Secondly, the prisoner/intervention group, with its problem-solving focus and extensive discussion time, was designed to promote vicarious learning. Many groups participants maintained strong negative self evaluation based on changed physical abilities and possible wide mood swings. Personal disclosure by participants who were attempting to continue to live meaningful and full lives offered constructive ways of viewing self in relation to the crime committed, imprisonment itself, and consequences of this imprisonment in their mental health. The intervention program was structured so as to provide group members with responsibilities which focused on their capabilities rather than their disabilities.

Third, participants as well as group leaders, functioned as social reinforcers for other participants. The group was structured to allow each participant numerous opportunities to receive the attention of others. There were frequent expressions of peer understanding and support. The home work assignments were

designed and implemented for individual presentations of the assignments and for group response. For example, in the 12th week, group members had been asked to use specific communication skills in an interaction with an authority figure (e.g. warder).

The following week, each group member shared his experience and received feedback from the group. Feedback included support for attempts to complete the assignment, suggestions as to alternative approaches and recognition for "success".

Cognitive Restructuring: A short introductory lecture was provided outlining RET's A-B-C method of viewing human psychological functioning and its disturbances. Starting with C (the upsetting emotional consequence, perhaps feelings of worthlessness, anxiety, depression or psychosomatic complaints) and moving to A (the activating experience), group members were shown that between A and C, there is the intervening variable which Ellis labels B (the individual's belief system). The belief system may be rational or irrational, but either case provides the basis for the connection between A and C through internal dialogue. The method for training participants to the identification of irrational assumptions was based upon an analysis of Ellis' (1962) typical irrational beliefs. Understanding these tenets of rational judgement was considered requisites for corrective mediation and resulting behaviour change. Group

discussion and home work assignments were used to facilitate understanding.

After the ground work was laid and group members began to understand how irrational internal dialogues precipitated emotional disturbance, the participant could use his emotional reactions as 'cues' to consider the question, "What am I telling myself about the situation that might be irrational?" As with any new skill; there was an initial period of awkwardness and a pervasive sense of artificiality. With continued practice, however, the new response pattern of rational self-appraisal became habituated. To be optimally effective as an intervention technique, cognitive-restructuring was combined with the emission of specific behaviours which were incompatible with the irrational belief system. In this treatment program, group members were required to emit behaviours which were incompatible with their sense of isolation, negative self image, and sense of powerlessness over self and environment. Although the acquisition of problem-solving skills was programmed into the homework assignment, the usefulness of the procedures was occasionally demonstrated in the group sessions themselves.

Modeling and Behaviour Rehearsal: As problems were specified and desirable courses of action identified, participants frequently

communicated an inability to perform action leading to problem solution. To facilitate the participants' incorporation of the desired behavioural action/response, specified behaviours were modeled by the researcher assuming the role of the participant whose problem was under consideration. That participants assumed the role of interaction while remaining group members either played significant others in the situation or observed the interaction. The modeling role playing situation was repeated more than once depending on the type of behaviour being considered. The roles were switched to allow the participant an opportunity to begin practicing the desired behaviour. This procedure reinforced the participants in a skilled development, shaped the participants into more sophisticated skill performance and supported generalization of the skill.

After completion of behaviour rehearsal, the participants discussed the anticipated consequences of the newly incorporated skill. Group members provided further reinforcement to the participant in training through positive verbal feedback and encouragement to try the skill in vivo. For example, group members rehearsed various ways of responding to others perceived negative response (e.g. avoidance, rejection, ridicule, blame) to their problems. Individuals would report to the group their efforts to practice these responses in vivo. These attempts would frequently stimulate others

to initiate their own efforts.

Home Work Assignments: While skill development and practice are legitimately accomplished in the group, the goal of intervention is the performance of the behaviour in its natural context. The promotion of behaviour transfer and generalization was accomplished through home work assignments. This procedure has been found to be most efficacious with educational and skill building treatment approaches in which the individual practices new behaviours and attitudes (Shelton and Ackerman, 1974). Consistent with Rose (1974), the home work assignments were designed and implemented as follows:

- (1) Assignments were highly specific. Participants were aware of the exact actions/responses to be displayed; the conditions under which the behaviours were to be performed, and the appropriate alternatives should the appropriate condition fail to occur.
- (2) Assignments were realistic and supportive of reasonable change. The possibility of success was high and yet, the assignments were challenging.
- (3) Participants made a verbal commitment in the presence of peers to attempt performance of the assignment.

- (4) Participants reported to the group their attempts to carry out the assignment. Monitoring of the change effort by the group provided an opportunity for positive reinforcement for trying to implement the behaviour. This procedure provided an opportunity to evaluate the behavioural response against the reality of natural circumstances (for prisoners who were going out of the prison environment for one reason or the other) and the prison community itself. The outcome of such an evaluation at times led to a slight modification of the behavioural response. Thus, reporting to the group was an effective way to gain corrective input.

During the first three sessions of group therapy, a non-directive approach was adopted by the therapist. The first directions were, "Let us discuss the problems that are responsible for our being here". The therapist (researcher) taught and educated participants on different subjects concerning, imprisonment, crime, police attitude, prison condition, implications for mental health, etc.

The reasons that the prisoners gave for being in their present situations ranged from 'voices' instructing them to commit crimes and beat people, or someone in their environment was trying to destroy them by sending evil spirits into their lives, some complaining

about the 'world' generally, the people, the government, immediate family members, etc. After the third session, three points became evident. Firstly, the patients attributed causes of problems to outside forces. They blamed relatives, friends, juju, etc. Secondly, when they discussed their personal beings, it was in relation to physical problems such as headaches, thinness (loss of weight), bad eye sight, weakness, etc. Thirdly, all communication was hierarchical towards the researcher whom they referred to as ōga (master).

At the beginning of the fourth session, the researcher was more directive. The instructions were:

We are here to help each other. Each of us can share your problems with your mates. I can not help you alone. I want you to look at each other, listen to each other, think seriously about yourself and help each other find the answer that is within you.

In subsequent sessions, a prisoner would look at the researcher, make some eye contact with other participants and then back to the therapist and the researcher will reinforce each behaviour and cues emitted by participants. At the middle of the 6th session, one prisoner who had emerged as the leader said,

"What responsibility can we all take for your problems, we can't just be saying someone else is to blame or that we are in prison, or the warder did that. Let us ask ourselves, why we have committed crimes and others outside (the good people) did not commit crimes".

At that point, the dialogue moved from physical complaints to more emotional and personal level. For example, one prisoner said:

I have spent all my life serving people. My dad died when I was six. I was sent to live with an uncle. He beat me and I ran away. I started selling akara at the market. How can a man be selling akara. I ran away. I got a job at a place. I started feeding and clothing myself and girl friend. I sent money to my mother. Money is not always enough. My friends come, then later I bought cannabis.... anything to give me peace of mind.

On such occasion, the researcher uses an open ended approach. For example, "Has anyone else had a similar experience?" "How do you feel about this statement?", etc.

3.3 ANALYSIS OF DATA

A number of statistical techniques was used to analyse the data collected for this study. The data were analysed separately for study I (Assessment) and Study II (Treatment Intervention). Statistical techniques used include, means, standard deviations, frequencies, the Turkey Honestly Significant Difference Test (HSD), Percentages, t-test, Stepwise multiple regression, multiple correlations, Analysis of Variance (for unequal number) and Analysis of covariance.

To test the difference in psychological disorders and personality differences between the prison population and the general population, t-tests was computed between the two groups (Appendix 2).

To also test the hypotheses which were set out to examine the psychosocial factors determining psychological disorders among prison inmates in Nigeria, a series of 3-way analysis of variance (ANOVA)

were computed. A $2 \times 2 \times 3$ and $2 \times 2 \times 2$ factorial analysis of variance were computed for sex, stress and duration and personality variables (P.E.N.) respectively. The rationale for using the two-3-way ANOVA was that these statistical techniques enabled us to examine the influence of two or more independent variables simultaneously, asking not only about the individual effects of each variable separately, but also about the internal effects of two or more independent variables.

In order to explore the significant difference between means, multiple comparisons of the means were carried out using the Turkey Honestly Significant Difference Test (HSD) for groups with equal number using .05 level of significance. The HSD is a posteriori test or post hoc test, therefore F must be significant in order to use it. This test is designed to compare all possible pairs of means while maintaining the type 1 error for making the complete set of comparison at alpha.

Study 1 employed a $2 \times 2 \times 3$ ANOVA to test hypotheses 1, 2, 3, and 4. The independent variables in this analysis were sex (male and female), stress (high and low), and duration (short timers, medium timers and long timers) while a $2 \times 2 \times 2$ ANOVA was used to test hypothesis 5, 6, 7, and 8. The independent variables were psychoticism (high and low), Extraversion (high

and low) and Neuroticism (high and low).

The 2nd design (Study II) employed a pretest-post test control group design. The statistical techniques used was t-test for independent groups and the Analysis of Covariance (ANCOVA) for hypothesis.

ANCOVA is a form of analysis of variance that tests the significance of the difference between means of final experimental data by taking into account and adjusting initial differences in the data. That is, ANCOVA analyzes the differences between experimental groups on Y after taking into account either initial difference in the Y measures or differences in some pertinent independent variable.

The analysis of covariance has numerous uses:

- (1) To increase precision in randomized experiments. In such application, the covariate X (pre-assessment of psychological disorders) is a measurement, taken on each experimental unit before the treatments (psychological intervention) are applied, that predicts to some degree the final response Y (post assessment) on the unit;
- (2) To adjust for sources of bias in observational studies;
- (3) To throw light on the nature of treatment effects in randomized experiments; and

(4) To study regressions in multiple classifications.

The stepwise multiple regression was computed so as to identify variables that are most crucial or relevant to psychological disorders among prison inmates. The relevance of this was the implication it has for treatment intervention. For example, psychoticism, extraversion, quality and quantity of food, social and family support were found to be statistically significant and were factors contributing more to psychological disturbances of prisoners. These variables were introduced and extensively discussed under teaching and education, utilized in the Group coping skills instruction. All statistical analyses carried out in this research used the statistical package for the social sciences (SPSS) computer programming.

CHAPTER. FOUR

RESULTS

This chapter presents several results of the hypotheses tested. For all hypotheses testing, the minimum level of significance was .05. The results are divided into two sections: (a) Results for psychosocial factors determining psychological disorders among prison inmates, and (b) Results for psychological intervention. The first part utilizes a 2 x 2 x 3 and a 2 x 2 x 2 ANOVA while the second part utilized t-tests and an ANCOVA technique. The presentation of the results of the hypotheses tested would be in order of the sequence in which they appeared in the statement of hypotheses in Chapter Two.

4.1 (A) PSYCHOSOCIAL FACTORS DETERMINING PSYCHOLOGICAL DISORDERS AMONG PRISON INMATES

Hypothesis one which predicted that long timers, that is, prisoners who have spent longer terms of prison sentence, would report high level of psychological disorders than other categories of prisoners, was investigated by a 2 x 2 x 3 ANOVA. The results revealed a significant main effect on duration, $F(2,138) = 55575.521$, $P < .001$ for general psychopathology and also a significant main effect on duration, $F(2,138) = 266.023$, $P < .001$ for neurotic

disorders (see Table 4.1).

Table 4.1: Summary of A-Three-Way Analysis of Variance as Determined by Duration, Stress and Sex for Psychological Disorders (General Psychopathology and Neurotic Disorders)

| | SOURCE | SS | Df | MS | F | P |
|-------------------------|--------------|------------|-----|------------|---------|------|
| General-Psychopathology | Duration (A) | 111151.042 | 2 | 55575.521 | 291.779 | .001 |
| | Stress (B) | 18.562 | 1 | 18.562 | .097 | NS |
| | Sex (C) | 329.225 | 1 | 329.225 | 1.728 | NS |
| | A & B | 782.552 | 2 | 391.276 | 2.054 | |
| | A & C | 125.720 | 2 | 62.860 | .330 | |
| | B & C | 60.969 | 1 | 60.969 | .320 | |
| | A & B & C | 136.757 | 2 | 68.378 | .359 | NS |
| | Error | 26285.071 | 138 | 190.472 | - | |
| Neurotic-disorders | A | 371613.547 | 2 | 185806.773 | 266.023 | .001 |
| | B | 17.036 | 1 | 17.036 | .024 | |
| | C | 2490.752 | 1 | 2490.752 | 3.566 | |
| | A & B | 2075.893 | 2 | 1037.546 | 1.486 | |
| | A & C | 2385.101 | 2 | 1192.550 | 1.707 | |
| | B & C | 1.560 | 1 | 1.560 | .002 | |
| | A & B & C | 380.846 | 2 | 190.423 | .273 | NS |
| | Error | 96387.745 | 138 | 698.462 | - | |

Further analysis in multiple comparisons of the means, (see Table 4.2) using the Turkey Honesty Significant Difference (HSD) to see the direction of prediction for duration showed that, those who stayed longer in prisons (\bar{X} 92.6) reported more of general psychopathology, than medium timers, (\bar{X} 79.3) and consequently than those spending short duration, (\bar{X} 14.3). Also, those medium timers, (\bar{X} 79.3) reported more symptoms than short timers (\bar{X} 14.3). Result for neurotic disorders also showed a similar direction, that long timers (\bar{X} 208.9) reported more of neurotic disorders than medium timers (\bar{X} 190.0) and consequently than short timers, (\bar{X} 66.0).

Table 4.2 Mean Ratings on Psychological Disorders (General Psychopathology and Neurotic Disorders) as Determined by Duration

| PSYCHOLOGICAL DISORDERS | DURATION | \bar{X} | |
|-------------------------|----------|-----------|---|
| General Psychopathology | Long | 92.6 | a |
| | Medium | 79.3 | b |
| | Short | 14.3 | c |
| Neurotic disorders | Long | 202.9 | |
| | Medium | 190.0 | |
| | Short | 66.0 | |

Means with different letters differ significantly from each other at the .05 level of significance.

These results showed that, the longer a person stays in prison, the more he suffers from psychological disorders. In other words, longer terms in prisons has adverse psychological effects on the prisoner. These outcomes adequately supported the prediction of hypothesis one that long term prisoners will suffer more psychological disorders than other categories of prisoners serving different sentences. The implication of this result also showed that the longer one stays in prison, the more adverse effect it has on the mental health of the prisoner.

Hypothesis two, which stated that high stressed prisoners would report more psychological disorders than prisoners who are low on stress did not show a significant main effect for stress on both general psychopathology and neurotic disorders respectively, and as a result, the hypothesis was not supported. Although prisoners reported more stress (\bar{X} 74.8) than low stress (\bar{X} 34.1), the stress factor did not reach a statistical significant level.

However, inter-correlations of subscales and total score of Idemudia Prison Stress Scale (IPSS) (Appendix 6) with measures of psychological disorders (API) for general psychopathology and crown crisp experimental index, neurotic subscales and total score) revealed a high correlation of .68 to .93. Level of significant correlation was $P < .001$. This means, although the stress variable

did not reach a statistical significant level, the study has demonstrated a high correlation between prison stress and psychological disorders.

Hypothesis three which assumed that female prisoners would report higher levels of psychological disorders than male prisoners was not supported. In other words, there was no significant main effect for sex on both general psychopathology and neurotic disorders respectively. The result showed that maleness or femaleness has nothing to do with psychological disorders experienced by prison inmates. However, when the three variables were cross-tabulated, it was found that holding sex constant for male, (Table 4.3a) a higher proportion of prisoners having high stress were also long term prisoners (42.4 per cent V 35.9 per cent V 21.7 per cent).

Table 4.3a: Cross-Tabulation of Duration, Stress and Sex, Sex is held Constant for Male

| Sex = Male | | | |
|-----------------|------------|-------------|--------------|
| | LOW STRESS | HIGH STRESS | R(TOTAL) |
| STRESS | 1.00 | 2.00 | |
| Short duration | 9 | 11 | 20 (21.7) |
| Medium duration | 1 | 32 | 33 (35.9) |
| Long duration | 2 | 37 | 39 (42.4) |
| (Column Total) | 12 | 80 | 92 |

In Table 4.3b, a similar pattern is observed when sex is held constant for females except a larger percentage of females having high stress where also, those serving medium sentences.

Table 4.3b: Cross-Tabulations of Duration, Stress and Sex
Sex is held constant for female

Sex = Female

| STRESS | LOW STRESS | HIGH STRESS | R(TOTAL) |
|-----------------|--------------|--------------|---------------|
| Short duration | 8 | 8 | 16 (27.6) |
| Medium duration | 1 | 25 | 26 (44.8) |
| Long duration | 2 | 14 | 16 (27.6) |
| Column Total | 11 (19.0) | 47 (81.0) | 58 (100.0) |

Hypothesis four expected interaction between sex, stress and duration. The hypothesis assumed that long term female prisoners and who are highly stressed will report more psychological disorders than short term male prisoners who are low on stress. Contrary to the researchers expectations, there was no significant difference at the three way interaction levels, thus the hypothesis was not supported.

Hypotheses five, six, seven and eight were tested with a 2 x 2 x 2 ANOVA. Hypothesis five which predicted that prisoners who had high scores on the psychoticism scale would report more neurotic disorders than prisoners who were low scorers was supported in the predicted direction, $F(1,142) = 457.8, P < .001$. The detailed analysis is presented in Table 4.4 below.

Table 4.4: 2 x 2 x 2 ANOVA Summary Table Showing Neurotic Disorders As Determined by Psychoticism, Extraversion and Neuroticism

| SOURCE | SS | DF | MS | F | P |
|---------------------|------------|-----|------------|---------|-------|
| Psychoticism (P) | 147681.964 | 1 | 147681.964 | 457.875 | .0001 |
| Extraversion (E) | 9351.289 | 1 | 9351.289 | 28.933 | .0001 |
| Neuroticism (N) | 148.460 | 1 | 148.460 | .460 | NS |
| P & E | 4783.790 | 1 | 4783.790 | 14.832 | .001 |
| P & N | 577.826 | 1 | 577.826 | 1.791 | |
| E & N | 236.599 | 1 | 236.599 | .734 | |
| P & E & N | 4761.927 | 1 | 4761.927 | 14.764 | .001 |
| | 45800.340 | 142 | 322.538 | - | |

Table 4.4 indicates two main effects; a main effect of psychoticism which shows that prisoners who are high on psychoticism, are more psychologically impaired ($\bar{X} = 203.6$) than prisoners who indicated less psychoticism, ($\bar{X} = 68.4$), $F(1,142) = 457.88$, $P < .0001$ and a significant main effect of Extraversion, $F(1,142) = 28.93$, $P < .001$, which indicates that prisoners who are extraverts are more psychologically impaired ($\bar{X} = 201.7$) than prisoners who are introverts, ($\bar{X} = 90.3$).

Thus, the sixth hypothesis which predicted that prisoners who are high on the E dimension would report more neurotic disorders than those who scored low on the same dimension was supported and confirmed in the predicted direction.

Hypothesis seven which was generated on the assumption that prisoners who are emotionally unstable (high N scores) would experience more for neurotic disorder than those who are relatively stable emotionally (low N scores) was not statistically significant.

A perusal of Table 4.4 also indicates one significant interaction effect of P and E, $F(1,142) = 14.83$, $P < .001$, and a significant 3-way interaction of P X E X N, $F(1,142) = 14.76$, $P < .001$, thus, hypothesis eight which stated that high PEN (Psychoticism, Extraversion and Neuroticism) scorers would report more psychological disorders than low PEN scorers was supported.

A detailed inspection of the cell means for significant interaction effect on psychoticism, extraversion, and neuroticism for psychological disorder showed that high PEN scorers ($\bar{X} = 203.6$; $\bar{X} = 201.7$; $\bar{X} = 183.8$) were more psychologically impaired than low PEN scorers ($\bar{X} = 68.4$; $\bar{X} = 90.3$; $\bar{X} = 153.0$).

A post hoc analytic comparison of these means using Turkey's Honestly Significance Test (HSD) revealed significant difference between the means at $P < .05$, $df = 5$, $HSD = 12.8$ (see Table 4.5 below).

Table 4.5 Summary of Difference Between Pairs of Means Indicating Source of Interaction Between Psychoticism, Extraversion and Neuroticism on Psychological Disorder

| | \bar{X} PEN (LLL) | \bar{X} PEN (HHH) | \bar{X} PEN (LHL) | \bar{X} PEN (HLH) | \bar{X} PEN (HHL) | \bar{X} PEN (LLH) |
|---------------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|
| \bar{X} PEN (LLL) | - | 202.8 | 100.3 | 194.0 | 207.6 | .0 |
| \bar{X} PEN (HHH) | | - | 202.8 | 0 | 0 | 202.8 |
| \bar{X} PEN (LHL) | | | - | 194.0 | 207.6 | 100.8 |
| \bar{X} PEN (HLH) | | | | - | 0 | 194.0 |
| \bar{X} PEN (HHL) | | | | | - | 207.6 |
| \bar{X} PEN (LLH) | | | | | | - |

Where L = Low, H = High, P = Psychoticism, E = Extraversion, N = Neuroticism.
 $P < .05$, (i.e. Mean difference 12.8 using HSD test. HSD revealed a significant difference between the means at $P < .05$, $df = 5$, $HSD = 12.8$).

The results above on Table 4.5, showed that prisoners with high P, high E and high N, were more adversely affected psychologically, i.e. they reported more psychological symptoms than other category of prisoners with personality combinations.

4.2(b) PSYCHOLOGICAL (TREATMENT) INTERVENTION:

Hypothesis nine which employed a pre test - post test control group design utilized a t-test for independent groups for comparing scores between experimental and control groups and a one treatment analysis of covariance. Hypothesis nine which stated that prisoners receiving group coping skills instruction intervention would evidence significantly less psychological disorders and greater adjustment than prisoners assigned to the no treatment control group was supported, $t = (22) = 18.92, P < .001$ for general psychopathology, and $t = (22) = 11.97, P < .001$ for neurotic disorders. Gain scores for sub scales on neurotic disorders also showed that prisoners in the experimental group evidenced significant adjustment than the prisoners in the control group on all neurotic subscales: $t = (22) = 13.66, P < .001$ subscale A; $t = (22) = 4.98, P < .001$, subscale P; $t = (22), 11.77, P < .001$, subscale O; $t = (22), 9.75, P < .001$, subscale SS; $t = (22) = 5.86, P < .001$, subscale D and $t = (22) = 14.75, P < .001$, subscale H (see Table 4.6).

Table 4.6: Independent t-test showing means and standard deviations of prisoners in Experimental and control groups on psychological disorder (general psychopathology and neurotic disorders)

| | EXPERIMENTAL | | | CONTROL | | | P |
|-------------------------------|--------------|------|----|-----------|------|---------|-------|
| | \bar{X} | SD | Df | \bar{X} | SD | t Value | |
| General Psychopathology (API) | 5.000 | 7.74 | | 70.33 | 9.12 | 18.92 | .0001 |
| Neurotic disorders subscales | | | 22 | | | | |
| Free floating (A) | 16.66 | 5.25 | | 24.75 | 5.25 | 13.66 | .001 |
| Phobia (P) | .5833 | 6.02 | | 10.33 | 4.61 | 4.98 | .001 |
| Obs. & C. (O) | .6667 | 3.14 | | 22.33 | 5.54 | 11.77 | .001 |
| Psycho (SS) | .9167 | 2.35 | | 19.25 | 6.07 | 9.75 | .001 |
| Depression (D) | 2.4167 | 5.97 | | 18.33 | 7.26 | 5.86 | .001 |
| Hysteria (H) | 1.5833 | 3.34 | | 23.16 | 3.81 | 14.75 | .001 |

A perusal of Table 4.7 also revealed a significant main effect, for prisoners in experimental group and control group, $F(1,21) = 791.37$, $P < .0001$, on general psychopathology and a significant main effect for both groups on neurotic disorders, $F(1,21) = 1044.657$, $P < .0001$.

Table 4.7: Summary of a one treatment Analysis of Covariance showing the effects of treatment intervention and prisoners adjustment on general psychopathology and neurotic disorders

| | SOURCE OF VARIATION | SS | Df | MS | F | P |
|------------------------------|--|-----------|----|-----------|----------|-------|
| General - Psychopathology | Pre test (Covariate API) | 48.216 | 1 | 48.216 | 1.638ns | ns |
| | Main effect (Group Treatment) | 23299.463 | 1 | 23299.463 | 791.372* | .0001 |
| | Error | 618.279 | 21 | 29.442 | | |
| | Total | 23965.958 | 23 | 1041.998 | | |
| Neurotic- Disorders | Pre test (Covariate (CCEI) Total) | 103.476 | 1 | 103.476 | 1.408 | ns |
| | Main effect (Group Treatment) | 76760.788 | 1 | 76760.788 | 1044.656 | .001 |
| | Error | 1543.069 | 21 | 73.479 | | |
| | Total | 78407.333 | 23 | 33409.014 | | |

The above results indicate that prisoners exposed to the group coping skills intervention programme showed greater adjustment and reported less symptoms (\bar{X} 12.58) than the control, (\bar{X} 24.50) for general psychopathology and a similar adjustment on neurotic disorder for prisoners in the experimental group (\bar{X} 72.75) than the controls

($\bar{X} = 185.72$). The marked increase in adjustment was demonstrated even when the pre test scores of both groups were used as the covariate so as to remove the effects of pretesting and sensitization.

The results above showed that there was a significant difference between experimental and control group due to group coping skills instruction introduced to the prisoners to help them cope with the prison conditions and also to alleviate their psychological problems which the prisoners are experiencing. Thus hypothesis nine which stated that prisoners receiving group coping skills instruction intervention would evidence significantly less psychological disorders and greater adjustment than prisoners assigned to the no treatment control group was confirmed.

CHAPTER FIVE

DISCUSSION AND CONCLUSIONS

5.1 DISCUSSION

The psychosocial variables investigated in this study were duration (different periods of confinement in prison), stress, sex and personality variables (psychoticism, extraversion and neuroticism). The independent variable for the psychological intervention phase was treatment (Group coping skills instruction). Except for stress, sex and neuroticism factors, all other variables were highly significant. In other words, in this study, nine hypotheses were tested. Hypotheses 1-8 were tested in study one while hypothesis 9 was tested on the psychological (treatment) intervention. Hypotheses 1, 5, 6, 8 and 9 were highly significant while hypotheses 2, 3, 4 and 7 were not supported. Overall, several findings have been implicated in this study and their results have been presented in chapter four. The discussion of the results are presented below:

PSYCHOSOCIAL VARIABLES AND PSYCHOLOGICAL DISORDERS

Hypothesis 1 which predicted that long timers, that is, prisoners who have spent longer terms of prison sentence, would report

high level of psychological disorders than other category of prisoners was highly significant and fully supported. The result suggests that the longer one stays in prison, the more adverse effect imprisonment has on his mental and psychological well-being. From the results in chapter four, Table 4.2 showed that, the longer the prison sentence, the higher the mean score for both psychological disorders. These results are in line with the sensory and social deprivation (isolation) theories which claimed that social isolation or deprivation when prolonged, not only increases the inability to concentrate and produces bizarre hallucination, but also agreed that deprivation of affection and unchangable social isolation or threatened drastic loss of self esteem could be very stressful to lead to psychopathology.

This result corroborate the findings of Bannister (1983) who found that as the years passed by, prisoners suffer from feelings hopelessness, helplessness, hostility, introversion, negative self-esteem, apathy and regression in behaviour. Also, Aqua and Allen (1983) and Jacob (1984) revealed in their separate studies that prisoners of their first three months of confinement, suffer from dizziness, headache, skin-disorders and abdominal dyfunctions which they referred to as 'short timers syndrome'. These feelings, they added are replaced by increasing psychopathological difficulties, subjective distress and defensiveness as their years in prison increases. In

his theory of the inmate world and development of pathology, Erving Goffman (1958) noted that the prisoner, upon entrance to the prison, the prisoners is led into a series of abasements, degradations, humiliations and profanations of self. Also family occupational and educational career are closed off and a stigmatized status is submitted. Verbal occur in many forms as a matter of course. Expressive signs of respect for the staff are coersively and continuously demanded and the effect of these conditions is multiplied by having to witness the mortification of one's fellow inmates. As a result, the inmate, even though sometimes infact guiltless, may come to share the guilty feelings of his fellows and, thereafter, begins to manifest their well elaborated defenses against these feelings.

Carl Rogers (1959) in his theory of personality and psychopathology asserted that at this stage of the prisoners life, where the prisoner cannot develop the need for self regard and conditions of growth, then the prisoner now develops an incongruence between the self and experience and also further development of incongruence in behaviour and therefore, experience of psychological maladjustment and of vulnerability exist to some degree in the prisoner, In his proposition eight and nine of his theory, Rogers (1959) asserted that due to further experience of the organism (long confinement),

an experience which is incongruent with the self-structure, particularly if significant experience demonstrating these incongruences occurs, the organism's process of defense is unable to operate successfully, as a result, anxiety is experienced as the incongruence is subceived, therefore, a state of disorganization results. In such a state of disorganization, the prisoner behaves at times in ways which are openly consistent with experiences which have hitherto been distorted or denied to awareness. At other times, the self may temporarily regain regnancy, and the organism may behave in ways consistent with it. Thus, in such a state of disorganization, the tension between the concept of self (with its included distorted perceptions) and the experiences which are not accurately symbolized or included in the concept of self, are expressed in a confused regnancy.

This finding also corroborates the work of Cohen and Taylor (1981) with prisoners serving over 10 years in a maximum security prison. They found that long term confinement had much adverse effects on the subjects and these people showed greater evidence of need for affiliation and need for interpersonal relationship and that these needs decreased as the years increases and feelings of hopelessness, negative self esteem, apathy and regression in behaviour increased with the years. Also, cognitive impairment

disorientation in time and poorer psychomotor performance were observed years after their confinement. This finding has serious implication for prisoners mental health and Nigerian penal system where the issue of parole or probation is not operational. Probation and parole are procedures for release of convicted criminals or adjudicated delinquents on a conditional basis in order to assist them in pursuing a non-criminal life, with the proviso that they may be committed or returned to a correctional institution if the behaviour after release, fails to meet standards of the penal authority. If granted by an administrative Agency such as the prison staff, to someone who already has served part of a term of confinement, this release is usually called 'parole' in the United States and "License" in Britain. In Nigeria, 'suspended sentence' is often used in respect of the former term.

Hypothesis two which stated that high stressed prisoners would report more of psychological disorders than prisoners who are low on stress was not supported. The result of the second hypothesis shed some doubts on previously cited findings (Topp, 1979; Okudo, 1983; Adler, 1972). Contrary to the researcher's expectations, there was no significant main effect of stress on psychological disorders.

Topp (1979) claimed that the severe psychological stress that an individual may experience in prison would results in psychological

and psychiatric disorders. Okudo (1983) gave an account of the prisons in Nigeria as windowless cells in which men are left to either stand all the time or in the alternative, sit or lie on bare cold and dirty floors without beds, chairs, tables or even ordinary mat. These he says are stressful enough to precipitate any psychological disorders in prisoners. Adler (1927) then went further to claim that, because of the peculiar nature of the prison environment, the variation of the prison environment then outweighs the variation of the ordinary environment and psychological disequilibrium sets in because these prison variations are beyond the inmates usual adjustment ability. Also, since the prison conditions are far beyond the ordinary everyday life experiences of the prisoner with all the in-built punishment oriented measures, the prisoner easily succumbs to psychological stress.

Various explanations could be said to be responsible for why this hypothesis was not supported: First, is the statistics used to test the hypothesis. When subscales and total score of the Idemudia prison stress questionnaire (IPSS) were intercorrelated with psychological disorders, correlations ranged from .68 to .93, indicating that there is high correlation between prison stress and psychological disorders. Also a display of means also show a higher percentage of high stress over low stress (74.86 V 34.13). However,

when stress was categorized into high and low, and was considered along other variables under study, a significant main effect was not obtained. Second, in continuation with the above argument, it can be argued that when prison stress is considered, the problem of categorizing stress into high or low does not count, this is because as far as the prisoner is concerned, prison confinement and its attendant negative condition are stressful enough to bring about negative psychological consequences. Third, with exception of Topp (1979), who claimed that psychological stress experienced in prison would result in psychological and psychiatric disorders. Others researchers (Okudo, 1983; Ryn, 1986; Amnesty International, 1986; Adler, 1927; Cohen and Taylor, 1972; Barton, 1976; Cochrane, 1971; Garbin, 1970; Abrams and Siegel, 1978; Roundtree and Faily, 1980; Mankanjuola and Olaomo, 1981) did not categorically state or measure stress on psychological disorders as carried out in this study. This implication of this, is that, due to paucity of research concerning prison stress and psychological disorders, a lot of inferences were made by these researchers concerning prison conditions which were assumed to be stressful. As a result, no valid empirical data has been documented as reference to warrant conclusive statements. Although, a significant interaction was not obtained for stress and psychological disorders, high intercorrelation

of stress scales and psychological disorders showed to an extent the role of stress in psychological disorders. However, a re-examination of the data and further research by other researchers will be necessary to sort out these discrepancies.

Hypothesis three predicted that male prisoners will report high levels of psychological disorders than female prisoners was not supported. There was no significant main effect for sex on psychological disorders. This result is contrary to the findings of earlier researchers (Weissman and Klerman, 1977; Silverman, 1968; Levitt and Lubin, 1975) who found excess symptomatology in women. This finding did not also support the social-role theory propounded by Gove, 1972, 1979; Gove and Tudor, 1973; Gove and Geerken, 1977, the differential vulnerability hypothesis and differential exposure hypothesis which claimed that, given the same stressful situations, women will be more vulnerable to psychopathology than men. However, other researchers, Findlay-Jones and Burvill (1977, 1979) have reported that sex differences in prevalence rates of psychiatric morbidity were frequently not significant, occasionally non-existent and sometimes reversed while Rosenfield (1980) commented that evidence on this sex differences is mixed at best. There is a continuous need for research in the area of gender differences particularly in psychopathology so that a systematic pattern of observation on the excess

of symptomatology in males or females to emerge.

Hypothesis four which stated that long term female prisoners who are highly stressed will report more psychological disorders than short term male prisoners who are low on stress was not supported. When the three variables - Duration stress and sex were cross tabulated, females who had high stress had higher percentage than males (see Tables 4.3a and 4.3b above). The differences was not high enough to reach an acceptable level of significance. Although an observation of interest in Table 4.3b showed that females on medium sentences had higher stress than short and long timers.

Hypothesis five which stated prisoners who are high on the psychoticism (P) scale will report more neurotic disorders than low scorers, was fully supported and confirmed. The results supports Eysenck's theory of personality and criminal behaviour in which he stated that psychoticism (benign psychosis) may arise from unspecific vulnerability and that psychosis share certain important features with criminality implying of course that all (or even a large proportion) of criminals are infact psychotic but not in the strict psychiatric sense (Eysenck, 1952, 1970b, 1970c). The result also supports previous studies (Eysenck, 1976, 1977; Lambo, 1960, Faulk, 1976) in which prisoners with High P i.e. prisoners with

troublesome behaviour, cruel, inhumane, lack of feeling, insensitive, lacking empathy, hostile to others aggressive, foolhardy, etc. When placed in such a prison environment are more likely to be more affected than low-P scorers.

Hypothesis six stated that prisoners who are high on the Extraversion (E) dimension will report more neurotic disorder than those who are low on the same dimension. This hypothesis was confirmed. Extraverts (High E scorers) reported more neurotic symptoms than introverts. This finding also supports Eysenck's theory of crime and personality in which he stated that extraverted people tended, under certain situations to condition less well than introverted ones, thus making them ceteris paribus more likely to behave in an anti-social fashion because extraverts tend to condition poorly and therefore poorly socialized and these people are more likely to suffer from neurotic disorders because they fall into the famous psychiatrist, Pierre Janet's classification: the psychasthenic group (anxiety states, the depressives, the phobic fears, the obsessive and compulsive habits). The result also corresponds with earlier researchers, (Eysenck, 1976, 1977). Eysenck and Wilson (1985) also found that introverts are less affected by the boredom, lonesomeness and the monotonous pattern of life in confinement than extraverts.

Hypothesis seven which stated that prisoners who are emotionally unstable (higher scorers) will experience more neurotic disorders than those who are relatively stable emotionally (Low N scorers) was not supported. The importance of hypothesis seven is discussed in hypothesis eight.

Hypothesis eight predicted that High PEN (psychoticism, extraversion and neuroticism) scorers will report more neurotic disorders than Low PEN scorers. Hypothesis 8 was supported in the predicted direction. This result supports the theory of crime and personality advanced by Eysenck (1976) which predicted that criminal equated for age and sex with normal controls would show elevated scores on psychoticism, extraversion and neuroticism. According to the theory (and in fact), the three personality variables are independent, and their effects should be carried to produce the best prediction (Eysenck, 1977). This result also supports previous cited studies (Eysenck, 1977, 1976; Bannister, Smith, Heskin and Bolton 1973). It is important to note that Eysenck's studies focused on criminality (crime causation). This finding not only confirms that prisoners commit crimes because of personality variables, also the study showed that prisoners with elevated scores on this three personality variables showed or reported more psychological disorders. In other words, people

who commit crimes do so because they are unhealthy psychologically and as such find themselves committing crimes. This finding has serious implication for assessment and treatment (medical and psychological). Even here it is clear already that personality differences must be taken into account if we are to make a useful prescriptive attempt to rehabilitate prisoners.

We need only note here that the effects of punishment tend to be extremely variable and unpredictable. Punishment may produce the desired end, that is the elimination of a certain type of conduct, but on the other hand, it may have exactly the opposite effect, stamping in the undesirable conduct even more strongly than before and making it a stereotyped pattern. Sometimes punishment may have no effect at all, one way or the other, and it is not even possible to say that strong and weak punishments differ in their effects in any predictable way. It is not surprising, therefore, that empirical studies of the effects of punishment on criminals have led to more confusion, so that no positive statements of any kind can be made. It is suggested that a recidivist with many crimes behind him, and no prospect of any change in his pattern of behaviour, very closely resembles the frustrated rat with its stereotyped behaviour pattern, self-punishing and maladaptive as it may be. By repeatedly sending him to prison and punishing

him for each criminal episode, society merely stamps in this type of conduct and does nothing to convert him into a useful law-abiding citizen.

As earlier discussed in Chapter 1 and 2, there are essentially three purposes of punishment. First is vengeance. The criminal has offended society, he must be punished and made to feel on his own body the evil effects of what he has done. A second purpose is protection of the law-abiding public. What better method of protecting the public from the ravages of a criminal than by locking him up, thus making it impossible for him to commit crimes, at least while he is incarcerated? The third aim is that of deterrence, for the criminal himself and the general public. There have been aims and methods of penal philosophy for the last two thousand years. Perhaps it would not be too impertinent to say that very little improvement has taken place during this time. Our methods are still as primitive and as unsuccessful as they were in the days of socrates or in the days of the Roman Empire.

Samuel Butler, the English novelist, in his book 'Erewhon', he wrote, people and treated harshly, whereas those who committed crimes were sent to the doctor and given medicines to cure them of their diseases. Is there any reason to take this suggestion seriously and adopt a corrective, rather than deterrent point of view in relation to our criminals?

Hypothesis nine which predicted that prisoners receiving group coping skills instruction intervention would evidence significantly less psychological disorders and greater adjustment than prisoners assigned to the no treatment control group was fully supported and confirmed in the predicted direction. This finding supports results of previous studies, using progressive muscle relaxation plus guided imagery (Bruish and Lyles, 1981; Lyles et al 1982), self-instruction plus problem-solving training, (Weisman, Worden and Sobel, 1980), educational, e.g. relaxation training and supportive counselling services (Gordon et al 1980). Also Telch and Telch (1986) have used group coping skills instruction with cancer patients and found a consistent superiority of this eclectic treatment intervention over other therapies. This finding also supports previously cited findings on the efficacy and superiority of group therapy (Lindsay, 1986; White et al 1990; Nzewi, 1990; Robert, 1991; Lindsay et al 1987). The finding also lends support to the principles of ecobehavioural psychology (Rogers-Warren, 1977 and Warren, 1977) and the efficacy and usefulness of group methods by specifying curative factors in group therapy (Yalom, 1975).

It is also interesting that this finding corroborates Rogers (1959) theory of personality and pathology. Proposition ten of

his theory concerns the process of re-integration. It emphasizes re-integration and restoration of personality, a process which moves in the direction of increasing the congruence between self and experience. According to Rogers, in order for the process of defence to be reversed i.e, for a threatening experience to be accurately symbolized in awareness and assimilated into the self-structure, there must be a decrease in the condition of worth and an increase in unconditional self regard. The communicated positive regard of a significant other is one way of achieving these conditions and in order for the unconditional positive regard to be communicated, it must exist in a context of 'empathic' understanding (as demonstrated in the group therapy) and when the individual perceives such unconditional positive regard, existing conditions of worth are weakened or dissolved. Another consequence is the increase in his own unconditional positive self regard. When the individual perceives such unconditional positive regard through empathy by a significant other, according to Roger, threat is reduced, the process of defense is reversed and experiences customarily threatening are accurately symbolized and integrated into the self concept.

After treatment, prisoners reported less psychological disorders and greater adjustment than prisoners assigned to the control group. It is important to note here that the normal development of an

individual requires an emotionally warm 'home' atmosphere, with consistent patterns of control and punishment with the offence. When a child is punished too severely for an offence, he may exhibit what is called paradoxical reaction, which means that he behaves in exactly the opposite way from the desired pattern. Also, another way of looking at criminal behaviour is to examine motivation in the psychological sense. Is the criminal simply reacting and, therefore rejecting authority? Is he trying to compensate for his inadequacy, inner insufficiency or insecurity by wanting to unduly enrich himself by stealing? or could it be the prisoners psychological state, personality or emotional problems? These are questions which may point out the motivation of a criminal behaviour.

This study have been able to empirically document that prisoners generally tend to have a rather high level of emotionality. It would seem to follow that this emotionality would potentiate the anti-social habits which they have developed to such an extent that they would find it far more difficult than normal, non-emotional, people to supplement these with a proper set of habits. Punishment, presumably by greatly increasing the degree of emotion present, would therefore, have a negative rather than a positive effect; it would lead to still greater rigidity in the reactions of the

prisoner, rather than leading to any kind of change. There have also been several clinical experiments, in which patients have been matched for the particular neurotic disorder of which they were complaining, and then assigned to by the toss of a coin to either behaviour therapy or psychotherapy (Eysenck and Rachman, 1964). Their progress was then noted, and it was demonstrated, at a high level of statistical significance, that those who received behaviour therapy recovered more quickly and more thoroughly than did those receiving psychotherapy. We may take this and the finding of this study as support for the possibility of treating criminals and delinquency disorders.

According to McCorkle, the following summarizes our understanding of the principles of any form of psychological treatment (1) That the person must somehow be brought to an awareness that his difficulties are related to motive and patterns of perception within himself. He attempts to account for these difficulties by blaming a hostile or unfavourable human environment analysed as deriving at least in part from a natural human tendency to avoid guilt and self-rejection. He must be assisted in the gaining of an awareness and a motivation for the taking of present initiative toward change or growth within himself and he must be shown the fruitlessness of evading this responsibility by futile attempts

to change merely his environment; (2) This assistance toward understanding comes about through some relationship with the therapist (or therapeutic situation) in which the individual actually attempts to make faulty modes of perception and behaviour work. Repeated demonstrations of this failure may be necessary before he is able to abandon them; and (3) Finally, the individual must be provided with opportunities for the learning, testing, fixating of newer, more effective modes of perceiving and relating to his human environment. As these new patterns emerge and are found rewarding in terms of increased success in relations with the self or others, they tend to become more and more established in the individual's total pattern of adjustment.

These views find startling support from John McVicar (1974), an escapee from a maximum security prison. According to him, by ignoring the emotional sources of crime and the psychological consequences of imprisonment, and accepting the law's conventional categories of wickedness or greed as the cause, imprisonment fails to impinge on the criminal, nor does it end there, through lack of understanding, the authorities allow the criminal when imprisoned to create a mirror of the society which he recognizes and emphasizes that the criminal or prisoner can't be deterred or punished into reform; nor can be persuaded into it by permissiveness

or kindness. According to McVicar (1974), there is only one method of reforming the confirmed criminal or prisoner, and no matter how repugnant, to many this method he identified as thought reform. Also, Eysenck (1977) also believes that reformation can only be done by attacking the structure of belief which inspires the criminals behaviour, his criminal code, and the ideology which sustains him.

5.2 CONCLUSION

From this study, the following conclusions are drawn:

- (1) That prisoners are different from the general population on measures of personality and psychological disorders.
- (2) The longer one stays in prison, the more adverse and psychological effect, imprisonment has on him. Also, that short prison sentences (i.e. below 12 months) is better than medium and long prison sentences because prisoners serving short sentences do not manifest or suffer marked psychological disturbances.
- (3) There is a relationship between prison stress and psychological disorders although this did not reach an acceptable level of statistical significance.
- (4) That males and females react equally to imprisonment as gender differences did not reach an acceptable level of significance.

- (5) Prisoners who have benign psychosis (high on psychoticism) reported more psychological disorder than prisoners low on same dimension.
- (6) Extraverted prisoners (High E scorers) manifested more psychological disorder than introverted prisoners (Low E scores).
- (7) Neuroticism when considered separately did not reach a significant level but very significant when considered with psychoticism and extraversion.
- (8) There were significant interaction effects between psychoticism and extraversion.
- (9) There were also significant interaction effects between psychoticism, extraversion and neuroticism.
- (10) The psychological (treatment) intervention utilized group coping skills instruction intervention. There was significant main effect for group (experimental and control) on psychological disorder. This means the treatment method adopted helped the prisoners to attain greater adjustment than the no-treatment group.
- (11) The best treatment method applicable to prisoners is adopting an eclectic therapeutic style.

5.3 Implications:

This study has demonstrated that prisoners differ from the general population on personality dimensions and manifestations of psychological disorders. It was on this premise that this study started. Also, this study has shown that imprisonment is a period of stress and can bring about negative outcomes in the prisoners, but the extent to which prisoners reported psychological disorders depend on a number of psychological variables. For instance, duration (period of sentence) was found to be an important variable in determining psychological disorders.

This finding supports previously cited researchers who have worked with prisoners serving long prison sentences. Today, it is very worrisome to observe that Nigeria does not recognize the practice of probation or parole. This observation makes this finding, perhaps the most disturbing finding in the study. The granting of probation or parole seems to suggest that the state has no particular interest in punishing the offender but is keen on his attaining some social adjustment to live a crime-free life. Most jurisdictions, however, prescribe a minimum term of imprisonment before parole may start, and some Judges often require that a jail term precede probation. Argument for this practice holds the

view that initial 'sampling' of prison life and punishment prevents the released prisoner from violating the conditions of probation.

Revocation of parole or probation takes place if the released person is convicted of a fresh crime, or if he commits serious or repeated violations of the law. What is the use in sending offenders to prison for long periods if it cannot be meaningful? We see therefore the futility of punishment on the prisoner, rather than improve him for the better, it generates psychological disturbances and which further generates more crimes and thus hardens him for the worse. Thus, instead of emphasizing punishment and revenge in prisons, penologists should encourage and in fact stimulate exemplary conduct and corrective rehabilitation.

In rebuilding an offender, it is pertinent to take into account the dual nature of man, that man is both constructive and destructive. As Abrahamsen (1960) observes, when a person becomes a criminal, it does not necessarily follow that destructiveness permeates him. The society has the responsibility of bringing out the good in everyone, including the offending prisoner. And this good in the individual cannot be extracted by regressive and unhealthy punitive retaliation that ultimately mars the psychological well-being of the prisoner.

Although imprisonment can alter behaviour in a negative direction, the extent of psychological disturbance depends on

personality variables. The result that showed a significant interaction between P and E and between P E and N indicated that personality variable is a strong factor which determines the level of psychological disturbance in prisoners. For example, a person who is high on P, has benign psychotic traits. In other words, a prisoner high on P is one who is not caring for other people, troublesome, inhumane, insensitive, hostile, aggressive, disregard for danger and also high on E, meaning he is impulsive, needs change, aggressive and loses temper and very unreliable.

These type of persons with personality types may have been exhibiting one form of psychological disturbance or the other. And when such people are again placed in prison environment, they are further more affected with negative psychological outcomes. This study has also demonstrated that when the three personality variables - psychoticism, extraversion and neuroticism - are combined, a complete personality set emerges that can easily predispose individuals to crime and manifest psychological disturbance. A significant interaction effect of N with P and E, further showed that prisoners already manifest, however, latent psychological disturbance of emotionality. Thus, the person would tend to be a neurotic, unstable emotional sort of person. The neurotic disorders we have been talking about so far are essentially ones

which disturb the individual who is suffering from them. A person who experiences strong anxiety depressive tendencies, or obsessive-compulsive reactions, phobias, hysteria or hysterical behaviour and has psychosomatic complaints, is very upset and worried by these experiences. The implication of this finding has two interpretations. First, that people who commit crime do so because they are sick. Second, that when these people are placed in prisons, and because of the extreme experiences in the prison, and because of the nature of prisons, they are then more at 'risk' and as such, are further predisposed to experience psychological disturbances than their counterparts who do not manifest these traits.

Potentially, if personality factor is predictive, this could be assessed in advance by clinical psychologists at the court, police custody before sentencing or even at the prisons after sentencing. It would appear reasonable to follow up cases of prisoners with high P, E and N. In doing this, it will be possible to monitor their psychological disturbance level and type of disturbance, severity and this will offer prompt psychological treatment as an adjunct to other medical services offered, if any, to such prisoners. This practice will also not only be of value to the courts and police, but also help to decongest the prisons. It will also have far

reaching implications for decision making (sentencing) at the courts and also enlighten police and prison warder's attitude during custodial keeping or remand in police cells or at the prison.

This study has also demonstrated that psychological (treatment) intervention is of course the best alternative. This is because when an intervention method was introduced, there was a significant difference between the experimental group (who received the treatment) and the control group (who did not receive any treatment).

The study has also provided a practical and objective method of measuring psychological stress in prisons, using the Idemudia prison stress scale. This would be valuable as an aid in identifying those areas in prisons that are most likely to cause stress and on which treatment intervention may be based.

5.4 THERAPEUTIC AND OTHER RECOMMENDATIONS FOR USE IN PRISONS

The current programmes for prisoners in Nigeria utterly neglect psychotherapy or psychological counseling as an important tool for modifying psychological and deviant behaviour. The omission of this important factor which psychologists, psychiatrists and other mental health practitioners elsewhere in the modern world have recognized as very essential in understanding the motives of

maladjusted persons, may account for the unimpressive achievement in the struggle against crime in the society. In order to provide a comprehensive mental health care for the prisoner, his or her social, physical and psychological well-being must be adequately taken care of by health planners including clinical psychologists.

To this end therefore, and on the basis of this study, the following are recommended:

It is recommended that full-fledged psychological services should be instituted at the various prisons in Nigeria. In prisons where this is not feasible, psychological services should be merged with the welfare department as a temporary measure. The psychological services should include periodic assessment of personality and prison situations/conditions, and daily or weekly intervention programs. The present researcher recommends an Eclectic Approach (as adopted in this study) to psychological intervention. This will help therapist to ingeniously weave our own cultural belief-system, life-style and values into the existing western psychological artifacts as the need arises, so as to make the therapeutic intervention more sensible and meaningful in the efforts to change neurotic and pathological attitudes of criminals in our midst. Various intervention strategies should be embarked upon and the choice of specific types of treatment would depend on the problem.

The group coping skills instruction was utilized in this study. It is an eclectic approach. It is based on group format. It combined, relaxation and stress management, problem-solving focus (skills-teaching), didactic teaching, rehearsal of cognitive, behavioural and affective coping strategies. A major hypothesis is that a central core of cognitive problem-solving processes mediate adjustment. Improving these cognitive processes through learning, teaching, role-playing, etc. should promote behavioural adjustment. Major components of the group coping skills instruction intervention have earlier been discussed in chapter 3. This mode of treatment intervention employed in this study is recommended to be used among prisoners after carrying out a comprehensive assessment of each prisoner.

The Nigerian prisons services does not run after - care counselling for its "graduates". There is also no formidable private initiative in this area. This is one of the reasons for the high recidivism in Nigeria. A good after care programme should involve the government, religious and other non-governmental organizations in a concerted effort. In its Draft Prisons (After care services) Bill of 1983, the Nigerian Law Reform Commission proposed the creation of a National After Care Board to work with and co-ordinate the activities of after care committees to be

established in all states of the federation, as well as the Federal Capital Territory, Abuja. As outlined in section 3 of that draft bill, the functions of the national Board were to:

- "1 (a) Formulate policies for the easy re-intergration into the society of discharged prisoners;
- (b) Serve as a forum for the guidance and counselling of prisoners prior to and upon discharge from prison and with the consent of the prisoner, to supervise him after his discharge for a period not normally exceeding the further period he would have remained in the prison had he not been granted remission of sentence of release on parole, and, in the case of a person entitled neither to parole nor remission of sentence, for such period as may be necessary in the circumstances of the case;
- (c) provide every discharged prisoner with necessary clothing and such money as may be required for travelling and out of pocket expenses in respect of the journey from the place of imprisonment to the intended place of abode;
- (d) provide any prisoner with tools of trade or such assistance or otherwise, as may be necessary and practicable in each case and, where practicable, give all such

- assistance in the securing of jobs as may be appropriate.
- (e) in any manner whatsoever, either upon reference to it from the Director-General of prisons or on its own motion, assist the welfare department of the prisons in the preparation of prisoners for a crime-free existence in the society upon their discharge from prison;
 - (f) set up and supreintend after-care committes in all the States and in the Federal Capitla Territory; and
 - (g) perform, all such other functions as may be incidental to, or reasonable necessary for, the purpose of this Act".

This proposals today, as when they were made, deserve positive attention. An after care scheme must be complemented by a sincere committment demonstrated in a clear policy orientation to that end, on the part of government, to assist the prisoner in the difficult task of post-prison adjustment. The author, therefore, strongly suggest that institutionalized discrimination and all other state supported obstacles, particularly in the areas of employment and social security benefit which inhibit this adjustment process should be abrogated.

Since the prisoner is the focal point of prison administration, his welfare, therefore, deserves substantial prominence in the scheme

of prison reforms. In order to safeguard and promote the prisoners' welfare, we call for a humane prison system. This humanness will be achieved through:

- (1) Updating the infrastructural and physical facilities used by the prisons;
- (2) Modernizing sanitary facilities in our prisons;
- (3) Expanding avenues for meaningful prison labour and reaction through the proper management of prison workshop, farms and adult education classes;
- (4) Improving on the quality and quantity of food presently given to prisoners;
- (5) Making the prisons more inward-looking in their sourcing of basic needs like staff and prisoners' uniforms, food, footwears, and crafts. In this connection, prison farms and workshops should be expanded to assume some minimal commercial orientation;
- (6) Improving medical services in our prisons. To this end, more medical and para-medical staff should be employed and, the supply of basic drugs should be regularised;

- (7) There should be a scheme of proper classification of prisoners. The modalities for this was worked out in the 1975 Report and recommendation on the classification of prisoners. That report should be implemented.
- (8) All these are possible only with improved funding for the prisons. The present level of funding needs to be significantly improved upon.
- (9) Meanwhile, the prisons service should evolve more efficient management techniques so as to conserve its scarce resources. For example, the contractor system of basic procurements should be dispensed with and replaced with either direct purchase by prisoners supervised by prisons officials, or ad hoc tender arrangements.
- (10) Of course, it may be necessary to build new prison facilities. Constructing new prisons should not take priority over the other suggestions made above. In face, new prisons will have meaning only if and after most of the above suggestions have been implemented.

- (11) Finally, prison reforms will be facilitated by a responsive and understanding public attitude towards prisons and their inmates. In Nigeria, however, the reverse is the case. The prisoner ordinarily, deserves empathy, not rejection, for it is only through such accommodation that he may properly be re-integrated with minimum discomfort into normal social life. Society must give the discharged prisoner a chance to prove that the prison is not the end of civilization. This is possible only if we empathize with them.

5.5 LIMITATIONS OF THE STUDY

- (1) Although the researcher identified some psycho-social factors with psychological disturbances and also initiated treatment program among prisoners in Nigeria, the study did not follow the present prisoners studied after discharge to monitor psychosocial factors in after-care release.
- (2) Due to the priority placed on security in prisons, use of family support members in therapy was not allowed, although this factor played a statistical significant role in stress. It could only be discussed during therapy.

- (3) Uneducated prisoners were excluded from therapy, only those literate in English or 'pidgin' English were allowed for therapy. This is because the researcher do not understand Yoruba.
- (4) The role of occupational status and age determining psychological disorders was not studied.

5.6 SUGGESTIONS FOR FURTHER STUDIES

- (1) Future researchers should investigate prisoners therapeutic outcome and after discharge.
- (2) Other researcher should endeavour to examine physiological indices of stress during imprisonment and relate them to other psychosocial variables.
- (3) Also researchers should in the future screen prisoners for psychological disorders, using the psychological instruments for this study.
- (4) Subsequent researchers should study Awaiting Trial Persons (ATP), these are prisoners yet to be convicted and are remanded in prisons. Different penal policies apply to them. They are not allowed to wear uniforms, the prison authority is not actually responsible to them. They are allowed outside their cells one hour daily.

Also, maximum and minimum prisons should be studied.

- (5) Other types of therapeutic interventions should be examined in accordance with the type of prisoner, prison or problem being examined. This would form a standpoint for designing new and potentially more effective treatment methods, for prisoners in Nigeria.

CODESRIA - LIBRARY

REFERENCES

- Abrahamsen, N. (1960) The Psychology of Crime. New York; Columbia University Press.
- Abrams A. and Siegel, L.M. (1978) The Transidential meditation programme and reformation at Folsom State Prison. A cross-valuation study. Journal of Criminal Justice and Behaviour; 5(1) 3-20.
- Adedokun, A. (1968) Cited in Civil Liberty Organization (1991) Behind the Walls: A report on Prison Condition in Nigeria and the Nigerian Prison System. Lagos. C.L.O Publications.
- Adeola, I.O.A. (1988) Living Conditions of inmates of Ado-Ekiti Prison. Unpublished Seminar paper Faculty of the Social Sciences, Ondo State University
- Adelola, I.O.A. (1992) Personnel Management in Ado-Ekiti prisons. African Journal of Sociology 1, 1-11.
- Adeyemi, A.A (1968) Sentences of imprisonment, objectives, trends and efficiency. In Ellias T.O. 8eds) The Prison System in Nigeria. Offset Process, University of Lagos Library.
- Adler, H.M. (1927) Biological and Pathological aspects of behaviour disorders. American Journal of Psychology, 7, 507-515.
- Agua, B. and Allen, T.E. (1983) The effect of parole notification on somatic symptoms in Federal prisons. Corrective Psychiatry, 14, 61-67.
- Aitman, B. (1967) Cited Mgbemena, N.J. (1983) Psychological factors of imprisonment. Unpublished M.Sc dissertation. Benin. University of Benin.
- Akinnawo, E.O. (1993) Prevalence of Psychopathological symptoms in a Nigeria prison. Psychopathologie De Africaine XXV, (1) 93-104.
- Allport, G.W. (1937) Personality: A psychological interpretation. Holt, Reinehart and Winston.

- Amitai Etzioni (1964) Complex Organisation: A sociological Reader; New York: Holt Rinehart and Winston Inc.
- Amnesty International (1984) Torture in the eighties An Amnesty International Report. Pitman Press, united Kingdom.
- Amnesty International (1986) Voices for freedom. An Amnesty International Anthology. United Kingdom. David Areen Ltd.
- Anaekwe, C.H. (1988) Prison environment and depression among Prisoners: a case study of Benin and Ibadan prisons. Unpublished B.sc Project, University of Ibadan.
- Anastasi Anne (1976) Psychological testing (4th ed) Macmillan New York: Publisher Co. Inc.
- Aneshensel, C.S. Frerichs, R.R; Clark, V.A (1981) Family Roles and Sex differences in Depression. Journal of Health and Social Behaviour, 22, 379-393.
- Anderson. R.C. (1984) The motivation of the Flyer and his reactions to the stresses of flight. Journal of Aviation Medicine 18, 18-30.
- Angyal, A. (1949) Foundation of Science of Personality. Cambridge; Harvard Universtiy Press.
- Arn, I. and Theorell, T. (1989) Psychodrama group therapy for patients with fuction gastro-intestinal disorders. American Journal of Psychotherapy, 51(3), 11-16.
- Asuni, T. (1969) Homicide in Western Nigeria. British Journal of Psychiatry 115, 1105.
- Asuni, T. (1967) Nigeria experiment in group psychotherapic. American Journal of Psychotherapic 21: 95-104.
- Asuni, T. (1962) Suicide in Western Nigeria. British Medical Journal of Psychiatry, 1: 33-44.
- Awaritefe, A. (1982) The Awaritefe Psychological Index. Nigerian Journal of Clinical Psychology, 1 (2) 42-51.

- Awaritefe, A.; Kadiri, A.U. (1981b) Validation of the STAI in Nigerian subjects. IRCS Medical Sciences, psychology and psychiatry: social and occupational Medicine, 9, 419-420.
- Ayllon, T, and Haughton, E. (1962) Control of the behaviour of schizophrenic patients by food. Journal of experiental and Analytical Behaviour, 5, 343-352.
- Baker, R.G. (1968) Ecological Psychology. Standford University Press.
- Baker, A.A and Lucas, E.C (1969) Some Hospital Admission Associated with Cannabis. lancet 1-148.
- Balint M (1957) The Doctor, his patient and the illness, New York: International University Press, PP. 18.
- Baly, W. (1952)) Cited in Mgbemena, N.J. (1983) Psychological Factors of imprisonment. Unpublished M.Sc. dissertation, University of Benin.
- Bandura, A, (1960) Relationship of Family patterns to child behaviour disorders. Progress report, U.S.P.H.I Research Grant M-1734. Stanford University.
- Bandura, A. and Walter, R.H. (1959) Adolescent Aggression. New York: Ronald.
- Bandura, A. and Walters, R.H. (1963) Social Learning and Personality development. New York: Holt Rinehart and Winston Inc.
- Bannister, P.A. (1983) Cited in Akinawo E.O. (1993) prevalence of psychological symptoms in a Nigerian prison. Psychopathologie de Africaine XXVI, 93-104.
- Bannister, P.A.; Heskin, K.J.; Bolton, N. and Smith, F.V (1974) A study of the variables related to the selection of long term prisoners for parole. British Journal of Criminology 14. 359-368.
- Banister, P.A.; Smith, F.V.; Heskin, K.J. and Bolton, N (1973) Psychological correlates of long term imprisonment, 1;

- Cognitive variables. British Journal of Criminology 13, 312-323.
- Banks, H.C., Shestakofsky, S.R. and Carson, G. (1975) Civil disabilities of ex-offenders. A team project report sponsored by the Jay Hay Whitney Foundation.
- Barton, R. (1976) Institutional Neurosis. Johnwright and Sons Ltd.
- Beck, A. and Greenberg, R. (1974) Cognitive therapy with depressed women. In violet f, and vasanti, B(ed.) women in therapy. New York: Brunner-Mazel.
- Beck, A. (1970) Cognitive therapy: Nature and relation to behaviour therapy. Behaviour Therapy 1, 184-200.
- Bedner, R.L. and Kaul, T.J. (1978) Experimental group research. Current perspectives. In S.L. Garfield and Bergin, A.E. (eds.) Handbook of Psychotherapy and Behaviour Change, (2nd ED) New York; Wiley.
- Belknap, I. (1956) Human Problems of a State Mental Hospital. New York: McGraw-Hill.
- Bellak L. (1964) (ed) handbook of Community Psychiatry and Community Mental Health. New York, GRune and Stratton.
- Bettelheim B. (1943) Individual and mass behaviour in extreme situations. Journal of Abnormal and Social Psychology 38, 447-451.
- Bolton, N. Heskin, K.J. and Bannister, P.A. (1976) Prisoner Personality. A factor analytically derived structure. Journal of Personality and Social Psychology 23 (6) 14-20
- Bolton, N.; Smith, F.V.; Heskin, K.J. and Banister, P.A. (1976) psychological correlates of long term imprisonment, IV: a longitudinal analysis. British Journal Criminology 16, 38-47.

- Bottoms, A.E. (1972) Criminals Coming of Age. London: Heineman.
- Bowers, K.S. (1973) Situationism in Psychology: An Analysis and a Critique Psychological Review, 80, 307-336.
- Bowker, L.H. (1982) Victimization and victims in American correctional institutions. IN R. Johnson and H. Toch (eds.) The Pains of Imprisonment pp. 63-76. Beverly Hills. Sage.
- Brodsky, S. (1982) Intervention models for mental health services in jails. Crimes and delinquency issues (NIMH) No. 82-118 1, pp. 126-148.
- Brown, V. and Geis, F.L. (1984) Turning lead into gold. Journal of Personality and Social Psychology 46, 811-824.
- Brown, W. and Harris, T. (1978) Social origins of depression: A study of psychiatric disorder in women. New York Free Press.
- Bukstel, L.H. and Kilmann, P.R. (1980) Psychological effects of imprisonment on confined individuals Psychological Bulletin 88, 469-493.
- Burish, T.G. and Lyles, J.N. (1981) Effectiveness of relaxation training in reducing adverse reactions to chemotherapy. Journal of Behavioural Medicine, 4, 65-78.
- Byrd, F. (1938) Alone. New York: G.P Pitman's Sons.
- Cambell, D.T. and Stanley J.C. (1963) Experimental and Quasi-Experimental Designs for Research. Chicago; R and McNally and Company.
- Cannon, W.B. (1929) The James-Lange theory of emotions. A critical examination and an alternative theory. American Journal of Psychology 39, 106-124.
- Chaneles, S. (1976) Prisoners can be rehabilitated psychology Today 129-134.

- Christensen, B.L. (1988) Experimental Methodology (4th ed) Boston Allyn and Bacon Inc.
- Chryst and Jacob (1971) cited in Anaeke : C.H. (1986) Prison Environment and Depression among Prisoners: A Case Study of Benin and Ibadan Prisons. Unpublished B.Sc. Project Ibadan. University of Ibadan.
- Civil Liberty Organization (1991). Behind the Walls: A report on prison condition in Nigeria and the Nigerian prison system, Lagos: CLO Publications.
- Cleary, P.J. (1974) Life events and disease. A review of methodology and findings in reports from the laboratory for clinical stress research (Stockholm) 3: 1-50.
- Cleary, P.O. and Mechanic, D. (1983) Sex differences Psychological Distress among married people: Journal of Health and Social Behaviour. 24, 111-121.
- Clemmer, D. (1958) The Prison Community, New York: Holt.
- Coates, R.B. (1981) Community-based services for juvenile delinquents. Journal of Social Issues. 3, 4-10.
- Cochrane, A. (1971) Life stresses and psychological consequences: The Social Psychology of Psychological Problems. London. Johnwiley.
- Cockett, R. (1969) A short diagnostic self-rating scale in the pre-adult remand setting. British Journal of Psychiatry 11, 1141-50.
- Cohen, S. and Taylor, L. (1972) psychological survival. The experience of long term imprisonment. Corrective Psychiatry, 14, 70.
- Cohen, S. and Taylor, L. (1981) Psychological survival. The experience of long term imprisonment. Harmondsworth, Penguin Book Ltd.
- Comstock, G.W. and Helsing, K.J. (1976) Symptoms of depression in two communities. Psychological Medicine 6. 551-563.
- Cordilia, A.T. (1981) The makeup of a prison inmate: Prison as a way of life. Unpublished pH.D Thesis, Southern Illinois University.

- Cornier, N.M.G.; Morf, G., and Merserau, G. (1969) Psychiatric services in penal institutions. Legal Medical 40, 939-943.
- Cox (1978) Stress. Hong Kong, McMillian Ltd.
- Cressey, O. (1961) Cited in Golfman, E. (1961) Asylums Garden City. New York: Doubleday.
- Crisp, A.H.; and Priest, R.G. (1971) Psycho-neurotic profiles in middle age. A study of persons aged 40-65 registered with a general practioner. British Journal of Psychiatry, 199, 385-92.
- Crown, S. and Crisp, A.H. (1966) A short clinical diagnostic self-rating scale for psycho-neurotic patients. The Middlesex Hospital Questionnaire (M.H.Q) British Journal of Psychiatry 112, 917-23.
- Crown, S.; Duncan, K.P. and Howell, R.W. (1970) Further Evaluation of the Hospital Questionnaire. British Journal of Psychiatry, 116, 33-37.
- Current Population Reports (1980a) A statistical portrait of women in the United states: 1978 special series. p. 23, No 100.
- Current Population Reports (1980b) Characteristics of the population below the poverty level; 1978 consumer income series. p. 60, No 124.
- Culbertso S. (1976) cited in Cox (1978) Stress Hong King Macmillian Ltd.
- Diloreto, A.O. (1971) Comparative Psychotherapy: An experimental analysis. Chicago: Aldine-Atherton.
- Dobson, C.B. (1982) Stress: The Hidden Adversary. England: M.T.P. Press Ltd.
- Dohrenwend, B.P. and Dohrenwend, B.S. (1977) Reply to Gove and Tudor's comment on sex differences in psychiatric disorders. American Journal of Sociology 82, 1447-1459

- Dohrenwend, B.P. and Dohrenwend, B.S. (1976) Sex differences in psychiatric disorders. American Journal of Sociology 81, 1336-1345.
- Dohrenwend, B.S., and Dohrenwend, B.P. (1974) (eds) Stressful life events: their nature and effects. New York Wiley.
- Dollard John (1945) Exploration on morale factors among combat air crewmen; memorandum to research branch, information and education division, psychological service centre.
- Dollard, J. and Miller, N.E. (1950) Personality and Psychotherapy. McGraw-Hill Book Company.
- Dornbush S.M. (1955) The Military Academy as an assimilating institution. Social Forces 33, pp. 318-324.
- Dunham, H.W. and Weinberg, S.K. (1960) The Culture of the State Mental Hospital. Detroit: Wayne State University Press.
- East, W.N. and Hubert, W.H.B. (1939) The Psychological Treatment of Crime. London:
- Ellis, A. (1973b) Humanistic Psychotherapy: The Rational Emotional Therapy. New York: Julian Press.
- Ellis, A. (1962) Reason and emotion in psychotherapy. New York: Lyle Stuart.
- Endler, N.S. (1980) Person situation interaction and anxiety. In I.K. Kutash and L.S. Schlesinger (eds) Handbook on stress and anxiety: contemporary knowledge theory and treatment. San Francisco: Jossey-Bass.
- Endler, N.S. and Apersons (1975) Situation interaction model of anxiety. In C.D. Spielberger and I.G. Sarason (eds) Stress and Anxiety, Washington D.C. Hemisphere.
- Erikson, E.H. (1965) Childhood and Society: Middlesex, England: Penguin Books Ltd.

- Erikson E (1959) Growth and Crises, Psychological issues (ed) by G.S. Klyin International Universities Press, pp. 54-94.
- Erikson, E.H. (1968) Identify Youth in Crises. Faber and Faber.
- Erikson, E.H. (1964) Insight and Responsibility. New York Norton.
- Erikson, E.H. (1950) Symposium on the Healthy Personality: Supplement 11; Problems of infancy and childhood. Transaction of Forth conference. In E. Senn, (ed.) New York: Josiah, Macy Jr Foundation.
- Eysenck H.J. (1970b) A dimensional system of psychodiagnosis. In A.R. Mahrep (ed) Genetic factors in Schizophrenic Springfield: C.C. Thomas.
- Eysenck, H.J. (1955a) A dynamic theory of anxiety and hysteria. Journal Mental Science, 101: 28-32.
- Eysenck, H.J. (1970c) An experimental and genetic model of schizophrenia In A.R. Naylor (ed) Genetic factions in Schizophrenia. Springfield C.C., Thomas
- Eysenck, H.J. (1955b) Cortical inhibition. Figural after - effect and theory of personality. Journal of Abnormal Social Psychology 28, 101-105.
- Eysenck, H.J. (1967) The biological basis of personality. Springfield C.C. Thomas.
- Eysenck, H.J. (1970) Crime and Personality (2nd ed) London: Paladin.
- Eysenck, H.J. (1976) crime and Personality (3rd ed) London: Routledge Kegan Paul.
- Eysenck, H.J. (1947) Dimesion of Personality. London; Routledge.
- Eysenck, H.J. (1964) (ed) Experimens in Motivation. Oxford: Pergamon Press.

- Eysenck, H.J. (1959) learning theory and behaviour therapy. Journal of mental Science, 105, 61-75 (In Eysenck, 1960a).
- Eysenck, H.J. (1959) Manual of the Maudsley Personality Inventory, London: University of London Press.
- Eysenck, H.J. and Eysenck Sybil ^{R.G.} (1964) The manual of the Eysenck Personality Inventory, London: University Press.
- Eysenck, H.J. and Eysenck Sybil B.G. (1975) Manual of the Eysenck Personality Questionnaire, London: Hodder and Strughton.
- Eysenck, H.J. and Eysenck, B.G. (1973) The Personality of female prisoners. British Journal of Psychiatry 122, 693-698.
- Eysenck, Sybil B.G. and Eysenck, H.J. (1971) A comparative study of criminals and match controls on three dimensions of personality. British Journal of Social and Clinical Psychology, 10, 362-366.
- Eysenck, Sybil B.G. and Eysenck, H.J. (1970) Crime and Personality: An empirical test of the three-factor theory. British Journal of Criminology, 70, 225-239.
- Eysenck, Sybil B.G. and Eysenck, H.J. (1977) Personality differences between Prisoner and controls. Psychological Report 4, 1023-1028.
- Eysenck, H.J. and Rachman, J. (1964) The causes and cures of neurosis. Routledge. London.
- Eysenck, Sybil B.G; Adelaja, O; and Eysenck H.J (1977) A comparative study of personality in Nigeria and English Subjects. Journal of Social Psychology, 102, 171-178.
- Eysenck, Sybil, B.G. and Eysenck, H.J. (1969) Scores on the three personality : an empirical test of the three factor theory British Journal Criminology , 10 (3) 225-239.

- Faber, N. (1971) I almost considered the prisoners as cattle life, pp. 82-83.
- Farber, I.E. Harlow, H.F., and West, L.J. (1957) Brain Washing condition DDD (delibility, dependency and dread). Sociometry, 20, 271-281.
- Faulk, M. (1976) A psychiatric study of serving sentence in Wischester prison. Medical Science and Law, 16, 244-251.
- Federal Military Government (1972) Prison Decree NO 9; Lagos Government Press.
- Fenichel, O. (1945) The Psychoanalytic Theory of Neurosis. New york. Norton.
- Findlay-Jones, R.A. and Burvil P.W. (1977) The prevalence of minor psychiatric morbidity in the community. Psychological Medicine 7, 475-489.
- Findlay-Jones, R.A and Burvill P.W. (1979) Women, work and minor psychiatric morbidity. Social Psychiatry 14: 53-57.
- Fox, J.W. (1980) Gove's specific sex role theory of mental illness: A research note. Journal of Health and Social Behaviour 21, 260-267.
- Frank, C.M. (1956) Conditioning and personality: A study of normal and neurotic subjects. Journal of Abnormal and Social Psychology 52, 143-148.
- Frankenhaiser, M. and Rissler, A (1970) Cathecolomine output during relaxation and anticipation. Perception Motor Skill, 30, 475-482.
- Frankle, V.E (1962) Man's search for meaning; an introduction to logotherapy: Boston, Beacon Press.
- Frankle, V.E. (1970) Meaningless men: A challenge to psychologist. Psychological Africana, 13, 87-95.

- Frerichs, R.R.; Aneshensel, C.S. and Clark, V.A (1982) Prevalence of depression in Los Angeles country. American Journal of Epidemiology 691-699.
- Freud, A. (1951) The contributions of psychoanalysis to genetic psychology. American Journal of Orthopsychiatry, XXI.
- Freud, S. (1959) Collected Papers of Sigmund Freud. Basic Books Inc. Ernest Jones (ed).
- Freud, S. (1954) The Origins of Psychoanalysis, NY: Basic Books.
- Gada, M.T. (1981) Standardisation of Gujarati version of the Middlesex Hospital Questionnaire. Indian Journal of Psychiatry, 23(2), 146-51.
- Garbin, O.C. (1970) Cited in Myers D.G. (1983) psychology (2nd ed) New York. Worth Publisher, Inc.
- Gerfinkel Harold (1956) conditions of successful degradation ceremonies: American Journal of Sociology 61, 420-424.
- Glasser, D. (1964) The effectiveness of a Prison and Parole System; New York: Bobb Merrill, Holt.
- Glassian, S. (1986) Psychopathological effect of solitary confinement. American Journal of Psychiatry 140(11) 1450-1454.
- Goffman, E. (1961) Asylums, new York; Anchor Books.
- Goffman, E. (1961) Essays on the social situations of mental patients and other inmates. Pelican Books.
- Goffman, E. (1958) The inmate world in characteristics of total institution: Introduction symposium on Preventive and social psychiatry. U.S. Government Printing Office pp. 43-49.
- Goffman, E. The inmate world theories of psychopathology and personality (ed.) by Million, T. Sanders Company, London, pp. 422-428.

- Goffman, E. (1961) The moral career of the mental patient in Assylum: New York: Anchor Books.
- Goldenberg, H. (1977) Abnormal Psychology: A Social Community Approach Monterey, California: Brooks Cole.
- Goldfried, M.R.; Decentaceo, E.T. and Weinberg, L. (1974) Systematic restructuring as a self control technique. Behaviour Therapy 5, 247-254.
- Goldfried, M.R. and Goldfried, A.P. (1975) Cognitive change methods. In F. Kanfer and A Goldstein (eds) Helping people Change. New York: Pergamon Press Inc.
- Gordon, W.A.; Freidenbergs I.; Diller, L.; Hibbard M.; Wolf, C.; Levin, L. Lipkins, R. Ezrachi, O. and Lucido, D. (1980) Efficacy of psychosocial intervention with cancer patients. Journal of consultancy and Clinial Psychosocial, 48.
- Gore, S.L. and Mangicne T.W. (1983) Social Roles, sex Roles and Psychological Distress: addictive and interactive models of sex differences. Journal of Health and social Behaviour, 24, 300-312.
- Gove, W.R. (1979) Sex differences in the epidemiology of mental disorders - evidence and explanations. Gender and Disordered Behaviour. New York: Brunner/ Mazel.
- Gove, W.R. (1972) The relationship between sex roles marital status and mental illness. Social Forces 51 34-44
- Gove, W.R. and Geerken M.R. (1977) The effect of children and employment on the mental health of married men and women. Social Forces 56(1) 66-76.
- Gove, W.R. and Tudor, J.F. (1973) Adult sex roles and mental illness. American Journal of Sociology 78(4), 812-35.
- Gove, W.R. and Tudor J.F. (1977) Sex differences in mental illness: A comment on Dohrenwend and Dohrewend. American Journal of Sociology 82(6), 1327-36.

- Grange, J.J. (1967) The prison administration: A paper presented at the 1967, Nigeria Medical Association's Conference. Lagos.
- Greywolf, E., Ashlay, P. and Reese, M.F. (1982). Physical Health issues. In Belle D. (ed) Lives in stress: women and Depression. Beverly Hills: Sage.
- Grinker, R.R. and Spiegel, J.P. (1945a) Men Under Stress. New York: Blakiston.
- Grinker, R.R. and Spiegel, J.P. (1945b) War neurosis. New York. Blakiston.
- Gruenberg Ernest M. (1969) From practice to theory community mental - Health services and the nature of psychoses? Abbreviated version of address delivered at the Annual Meeting of the Royal Medico - Psychological Association in Plymouth on July 10, 1986. Reprinted from the Lancet, 5, 721-724.
- Gruenberg, E.M, (1967) Theory of Sociobreak down Syndrome: American Journal of Psychology 123, 12-24
- Gump, P.V. (1971) Milieu environment and behaviour. Design and Environment. 49, 10-20.
- Gunn, J., Robertson, G., Dell, S. and Way, C. (1978) Psychiatric aspects of imprisonment. London: Academic Press.
- Guy, E. Platt, J.J Werling, I.Z. and Bullock, S. (1985) Mental health status of prisoner in suban jail. Criminal Justice and Behaviour, 12(1), 29-53.
- Haimmes, C. (1975) Cited in Igboegwu (1988) Reduction of Stress in Prison inmates through antogenic relaxation. Unpublished M.Sc Thesis. Lagos: University of Lagos.
- Harris, W.O. (1959) Forward in Barton, R., Institutional Neurosis Wright Bristol.

- Heron, W.; Bexton, W.H. and Hebb, D.D. (1953) Cognitive effects of a decreased variation in the sensory environment. American Psychologist, 4, 366-370.
- Heron, W. (1961) Cognitive and Physiological effects of perceptual isolation. In Solomon et al (ed.) sensory deprivation, Cambridge, Mass Howard University.
- Hassler Alfred (1954) Diary of a self made convict, Herry Regnery, Chicago pp. 74. and 117.
- Heskin, K.J.; Bolton, N.; Smith, F.V. and Banister, P.A. (1973) Psychological correlates of long term imprisonment III attitudinal. British Journal of Criminology 14, 150-157.
- Holman, J. (1977) The moral risk and high cost of ecological concern in applied behaviour analysis. In Warren, A. and Warren, S.F. (eds) Ecological Perspectives in Behaviour Analysis. Baltimore: University Park Press 63-999.
- Hollingworth, H.L. (1930) Abnormal Psychology. New York, Ronald.
- Holmes, J.H. and Masuda, M. (1974) Life change and illness susceptibility. In Dohrenwend, B.S and Dohrenwend B.P. (eds) Stressed Life Event: New York; Willey.
- Holmes, T.H. and Rahe, R.H. (1967) The social readjustment rating scale. Journal Psychosomatic Research 11: 213-218.
- Horney, K. (1936) Culture and Neurosis. American Social Review 1: 221-230.
- Horney, K. (1950) Neurosis and human growth. New York: Norton.
- Howarth, C.I. (1978) Environmental stress in the uses of psychology. In Howarth C.I. and Gillham, W.C. (ed.) Allen and Unwin.

- Hurley, O. (1985) Arresting delinquency. Psychology Today, pp. 62-68.
- Ickes, W. and Hayden, M.A. (1978) Attributional Styles In Harvey J. (ed.) New Directions in Attributions.
- Igboegwu, C.I. (1988) Reduction of stress in prison inmates through autogenic relaxation. Unpublished M.Sc. thesis, Department of Psychology. University of Lagos.
- Ignatieff, M.A. (1978) just measure of pain. New York: pantheon.
- Ihezue, U.H.; Kumaraswamy, N. (1983) The crown crisp experimental index in Nigeria. A standardization and validity study. Nigeria Journal of Clinical Psychology. 2(1), 65-74.
- Iketuonye, A.I. (1987) George Kelly: In A. Uba (ed.) Theories of Personality. Ibadan Claverianum Press.
- Imade, T. (1986) A validation study of the Awaritefe psychological index Nigerian Journal of Clinical Psychology. 5, 1 & 2, 41-46.
- Jacob, J.R. (1984) Psychopathology as a function of time with institutionalized male offenders. (Doctoral Dissertation, University of Northern Colorado). Dissertation Abstracts International 34, 5481B.
- James, J.F., Gregory, D., Jone, B.K. and Rundell, O.H. (1980) Psychiatric morbidity in prisons. Hospital and Community Psychiatry 31, 675-677.
- Jegade, R.O. (1980) Nigerian University students characteristics as measured by Eysenck personality questionnaire. Africa Journal of Medical Science 9, 129-133.
- Jegade, R.G. (1979b) Personality characteristics of a sample of University Freshmen and fresh women. D.M. Thesis, University of Ibadan, an unpublished D.M. thesis. Universtiy of Ibadan.

- Johnson, R. and Toch, H. (eds) (1982) The pains of imprisonment. Beverly Hills, Sage.
- Jordan, P.D. (1970) Frontier Law and order; Ten Essays. Lincoln: University of Nebraska Press.
- Journard, S.M. (1971) Self disclosure: An experimental analysis of the transparent self. New York: John Willey and Sons.
- Jung, C.G. (1923) Psychological Types. New York: Harcourt, Brace.
- Kangas, J.A. (1971) Self disclosure: An experimental analysis of the treatment self. New York: John Willey and Sons.
- Kelly, G.A. (1955) The psychology of personal constructs. New York.
- Kerlinger, F.N. (1964) Foundation of behavioural research: Educational and Psychological Enquiry. London: Holt Rinehart and Winston Inc.
- Kessler, R.C. and Mcleod J. W. (1984) Sex differences in vulnerability to undesirable life events. American Sociological Review. 49, 620-631.
- Kety, S.S. (1960) Recent biochemical theories of schizophrenia. In Jackson (ed) The Etiology of Schizophrenia. New York, Basic Books.
- Laing, R.D. (1960) The Divided Self; Penguin Book and Tavistock Publications Ltd.
- Lambo, T.A. (1960a) Malignant anxiety: A syndrome associated with criminal conduct in Africans. Journal of Mental Science 108, 256-264.
- Lambo, T.A. (1962) Survey of displaced and detribalized people in Yoruba country. Cited in Journal of Mental Science 108, 257-64.

- Lamprey, J.J. (1973) A comparative assessment of psycho-neurotic symptoms in group of nurses in Accra. Proceedings of the Pan African Psychiatric workshop on the neurosis in Africa.
- Lazarus, R.S. (1975a) A cognitively oriented psychologist looks at Biofeedback. American Psychologist 30, 553-561.
- Lazarus, R.S. (1976) Patterns of adjustment. New York McGraw-Hill.
- Lazarus, R.S. (1966) Psychological stress and coping process. N.Y. McGraw-Hill Book Company.
- Lazarus, R.S. (1975b) The self-regulation of emotion. In Lavis, L. (ed) Emotions their parameters and measurement. New York, Review.
- Lazarus, R.S. Opton, E.M; Normicks M.S. and Rankin, N.O (1965) The principle of short-circuiting of threat, further evidence. Journal of Personality 33, 620-635.
- Lehram, N.S. (1961) Do our hospitals help make acute schizophrenia chronic? Disorder Neru System 22, 489-493.
- Leighton, A.H. (1966) Psychiatric disorder and social environment: an outline for a frame of reference In Bergen B.J. and Thomas, C.S. (eds) Issues and Problems in Social Psychiatry. A book of readings Springfield. III. Charles C. Thomas. pp. 155-197.
- Leighton, A.H. (1968) Relationship of socio-cultural integration and disintegration to mental health In Zubia, I and Freyhan E. Social Psychiatry New York: Corune and Statton pp. 1-7.
- Leighton, D.C. et al (1963) The character of danger. New York: Basic Books. x

- Lemert Edwin M. (1951) Social Psychology. New York McGraw Hill.
- Lerman, P. (1975) Community treatment and social control Chicago. University of Chicago.
- Levitt, E.E. and Lubin, B. (1975) Depression concept controversies and some new facts. New York; Springer.
- Lieberman, M.A.; Yalon, I.D. and Miles, M.B. (1973) Encounter groups; first facts. New York: Basic Books.
- Lifton, R.J. (1961) Thought Reform and Psychology of Totalism.
- Lindsay, R. (1986) Cited in Igboegwu (1988) Reduction of Stress in prison inmates through autogenic relaxation. Unpublished M.Sc. thesis. Lagos University of Lagos.
- Lindsay, W.R.; Gamsu, C.V.; Hood, E.M. (1987) A controlled trial of treatment for generalized anxiety. British Journal of Clinical Psychology, 1, 3-5.
- Lowenstein, L.F. (1979) Are there and should there be alternative to present forms of sentencing and imprisonment. Journal of Criminal Law, 171, 20-26.
- Lyles, J.N.; Burish, T.G.; Krozley, M.G. and Oldman, R.K. (1982) Efficacy of relaxation training and guided imagery in reducing the aversiveness of cancer chemotherapy. Journal of Consulting and Clinical Psychology 50, 509-524.
- Maclay, W.S. (1962) Control of mental disorders. American Public Health Association.
- Makanjuola, R.O.A. and Olaomo, M.A. (1981) Psychiatric morbidity in Nigerian prison. Nigerian Medical Journal 5, 111-120.
- Makowsky, V.P. (1980) Stress and the Mental Health of women: A discussion of Research and issues. In Guttentag, M Salasin, D and Belle, D, (ed) New York: Academic Press.

- Makowsky V.P. (1982) Sources of stress: Events or conditions: In-Belle, D. (ed.) Lives in stress: Women and Depression. Beverly Hills: Sage Publications.
- Malawi: Prison conditions, cruel punishment and detention without trial CAI index: AFR 36/03/92.
- Martinson, R. (1974) What work? Questions and answers about prison reform. Public Interest 35, 22-54.
- Mason, J.W. (1975) Historical view of the stressfield. Part II. Journal of Human Stress 1, (2)
- Mauissakalian, M. and Michelson, L. (1981) The Middlesex Hospital Questionnaire: A validity study with American Psychiatric patients. British Journal of Psychiatry 139, 336-40.
- Mayer-Gross, Slater, and Roth (1969) Textbook of Psychiatry (3rd ed.), p. 262.
- Mba, J. (1989) Living in hell; life in Nigeria prison is nasty, brutish inhuman. Newswatch, June 19. pp. 20-24.
- McCleery R. (1953) The strange journey. University of North Carolina Extension Bulletin, 34, 24.
- McLord, W.M. (1982) The Psychopath and Milieu Therapy. New York: Academic Press.
- McCorkle, L.W. and Koran, R. (1954) Resocialization withiwalls. The Annals of the American Academy of Political and Social Science 293, 88-98.
- Mcgrath, J.E. (1976) Stress and behaviour in organization. In Handbook of Industrial and Organizational Psychology (ed.) M.D. Dunnette. Chicago: McNally College Publishing Co.
- Mckarracher, D.W.; Loughnane, T, and Watson, R.A. (1968) Self mutilation in female psychopaths. British Journal of Psychiatry, 114: 829.
- McReynolds, P., Acker, Mary and Daily, J. (1959) On the effects of perceptual enhancement on certain schizophrenic symptoms. Research Report (1) V.A. Apolo Aito.

- McVicar, J. (1974) McVicar by himself. An autobiography cited in Eysenck, H.J. (1977) Crime and Personality: Paladen.
- Mechanic, D. (1976) Stress, illness and behaviour. Journal of Human Stress, 6, 295-300.
- Meichenbaum, D.H. (1974) Cognitive behaviour modification Morristown, N.J. General Learning Press.
- Meichenbaum, D.H. (1972) Cognitive modification of test anxiety college student. Journal of Counselling and Clinical Psychology, 39, 320-380
- Mendler, G. (1964) The interruption of behaviour In: D Levine (ed.) Nebraska Symposium on Motivation.
- Merton, R.K. (1957) Social structure and anomie. In R.K. Merton (ed.) Social theory and social structure (2nd edition) Gebenron, Illinois. Free Press.
- Meyer, A. (1951) The life chart and the obligation of specifying positive data in psychopathological diagnosis. In E.E. Winters (ed.) The Collected Papers Adolf Meyer, Vol. 3, Medical Teaching Baltimore: John Hopkins.
- Meyers, J. (1986) Future research in mental disease. Paper presented at the annual meeting of the American Sociological problems. John Wiley, London.
- Mgbemena, N.J. (1983) Psychological factors of imprisonment. Unpublished M.Sc. dissertation. Benin. University of Benin.
- Miller, N.E. (1950) Learnable drives and rewards. In S. Stevens (ed.) Handbook of Experimental Psychology. Wiley, New York.
- Morris, N. (1974) The future of imprisonment. Chicago. The Universtiy of Chicago Press.
- Mualam D. (1976) Cited in Morris N.(1974) The future of imprisonment. Chicago. The Universtiy of Chicago Press.

- Multin C. and Gunderson (1986) Cited in Akinawo E.O. (1993) prevalence of psychopathology symptoms in a Nigeria prison Psychopathology de Africaine XXV, 1, 93-104
- Myers, D.G. (1983) Psychology (2nd ed.) New York. Worth Publishers Inc.
- NewMann, J.P. (1982) Sex differences in Depression: A test of Alternative Explanations for the greater vulnerability women to Drepression. Unpublished Ph.D Thesis, Madison: University of Wisconsin.
- Nigerian Law Reform Commission (1983) After care services (Bill of 1983) Section 13(1) Draft Bill.
- Nigerian Prison Services Annual Report (1984) pp. 5-6..
- Nigerian Prison Services Annual Report (1985) pp. 47-48.
- Nigerian Prison Services Annual Report (1986) pp. 69-72:
- Nweze, A (1984) Current development in stress and illness research: A selected review in Medicine and Psychology. Nigerian Journal of Behaviour Psychotherapy 18, 150-153.
- Odejide, A.O. (1981) Some clinical aspects of criminology: A study of criminal psychiatric patients at the Lantoro Psychiatric Institution. Acta psychiat. scand. 63, 208-224.
- Odejide, A.O. (1980) Criminal justice and psychiatry: A study of the pattern of criminality in Ibadan division. African Journal of Medical Science, 8, 41-44
- Odejide, A.O. (1979) Cited in Odejide, A.O. (1981). Some clinical aspects of criminology. A study of criminal psychiatric patients at the Lantoro Psychiatric Institution. Acta Psychiatric Scand. 63, 208-224.
- Odejide, A.O. and Toyé, S.A. (1976) A survey of the inmates of a remand home in Ibadan. Nigerian Journal of Paediatrics, 3 (2), 52-56.
- Okudo (1983) The ugly face of Nigeria's penal system: Enugu Star Publishers.

- Okulitch, P.V. and Vanfleet, F.M. (1976) The treatment of offenders in a penitentiary - hospital setting A behavioural point of view. Canadian Journal of Criminology and Corrections, 18(3) 238-246.
- Olatawura, M.O. (1975) Psychotherapy for the Nigeria patient: aspects of problems involved. Psychotherapy Psychosomatic 25, 259-266.
- Olley, M. and M.C. Allister, H. (1974) A comment on treatment analogues for phobic anxiety state. Psychological Medicine, 4, 463-9.
- Olowu, E.U. (1990) Justice, Punishment and Training Correction of Offenders in Nigerian Prisons; Policy options. Paper presented at the National Seminar on Prison reforms in Nigeria, Lagos.
- Onwuzurike, C.A. (1989) Criminal and delinquent behaviour: Techniques of crime control and prevention. In Peltzer, K and Ebigbo, P. (ed.) Clinical Psychology in Africa. Enugu Chuku Printing Company Ltd
- Osinowo, H.O (1994) Cross validation of the Eysenck Personality Questionnaire in Nigeria young adults. Issues in Health Psychology. 2, 5-11.
- Paulaus, P.B; Cox, V.C. and McCain, D. (1988) Prison Crowding: A Psychological Perspective, New York: Springer-Verlag
- Paykel, E.S.; Prasoff, B.A. and Ulenhuth, E.H. (1971) Stressful life events. Archives of General Psychology 25, 344-347.
- Peterson, M.A. and Braiker, H.B. Polich, S.M. (1981) Who Commits Crimes. Cambridges M.A. Oelgeschlager Gunn and Hain.
- Philips, D.P. (1980) Deterrent effect of capital punishment. American Journal of Sociology, 3, 139-148.
- Prabhu, G.G. (1972) Clinical utility of the Middlesex Hospital Questionnaire in India. Indian Journal of Psychiatry 15, 127-133.

Price, R.H. and Lynn, S.I. (1981) Abnormal Psychology in the Human Context. Homewood Illinois: The Dorsey Press.

Prisons Reports and Recommendation (1969) Reports and recommendation of the prison. Advisers for reorganization of the prison service and the decongestion of the Federal, Local Government and native administration prisons. Lagos: Government Press.

Rabkin, J.G. and Struening, E.L. (1976) Life events, stress and illness. Science, 194, 1013-1020.

Radloff, L.S. (1975) Sex differences in depression: The effects of occupation and marital status. Sex Roles 1: 249-265.

Radloff, L.S. and Monroe, M.K. (1978) Sex differences in helplessness-with implications for depression. In Hausen L.S. and Rapasa R.S (ed.) Career development and Counseling of women. Springfield, Illinois: Charles C. Thomas.

Radloff, L.S. and Rae, D.S. (1981) Components of the Sex Differences in Depression. In Simmons R.G. and Greenwich, C.T (ed.) Research in Community and Mental Health. J.S.I. Press.

Rahe, R.H. (1968) Life-change measurement as predictor of illness. In Proceeding of the Royal Society of Medicine 61, 1124-1126.

Rahe, R.H. and Lind, E. (1971) Psychosocial factor and sudden cardiac death. A pilot study. Journal of Psychosomatic Research 15, 19-21.

Ritter, C (1954) Woman in the Polar Night. New York: E.P. Dutton and Co.

Roberts, L. and Lie, G. (1991) A group therapy approach to the treatment of incest. Journal of Group Therapy 39, 337-353.

- Rogers, C.R. (1959) A therapy of therapy, personality and interpersonal relationship as developed in client centred framework in psychology: In S.Koch (ed.) A Study of a science, 3, 221-331.
- Rogers-Warren, A. (1977) Planned change: Ecobehavioural based intervention. In Rogers-Warren, A.; and Warren, S.F. (eds) Ecological Perspectives in Behaviour Analysis. Baltimore: University Park Press, 197-210.
- Rogers-Warren, A. and Warren, S.F. (eds) (1977) Ecological Perspectives in Behaviour Analysis. Baltimore: University Park Press.
- Rollo May (1960) Existential Psychology (ed) The American Orthopsychiatric Association, Inc.
- Rose, S.D. (1974) A behavioural approval to the treatment of patients. In J. Thomas (ed.) Behaviour modification procedure: A source book Chicago, Illinois: Aldine Publishing Co.
- Rosen, E. and Gregory J., (1966) Abnormal Psychology. United Kingdom. W.B. Sanders Company.
- Rosenbaum M. (1987) Cited in White, A, Jim, P, Keeman, C (1990) Stress control: pilot study of large group therapy for generalized anxiety disorder. Journal of behaviour psychotherapy, 18, 143-146.
- Rosenfield, S. (1980) Sex differences in depression: Do women always have higher rates? Journal of Health and Social Behaviour 21, 33-42.
- Rothman, D. (1980) Conscience and convenience, Boston: Little, Brown.
- Roundtre, G.A. and Faily, A. (1980) The impact of educational programmes on acts of aggression and rule violations in a female prison population. Corrective and Social Psychiatry and Journal of Behaviour Technology, Methods and Therapy, 26(3), 144-145.

- Ryckman, R.M. (1978) Theories of Personality. New York: D. Van Nostrand Company.
- Ryle, A. and Lunghi, M.E. (1969) The measurement of relevant change after psychotherapy: Use of repertory grid testing. British Journal of Psychiatry, 115, 1297-1304.
- Ryn, Z. (1986) Suicides in the Nazi concentration camps. suicide - Life - Threat Behaviour 16, 419-433.
- Sabshin M. (1966) Theoretical model in community and social psychiatry. In Roberts, I., Halleek, S. and Web, M.B. (eds) Community Psychiatry, Madison: The University of Wisconsin Press.
- Sannon, L.W. Research described by Herbert, W. (1982) Scared Crooked Science News 122, 167.
- Sarason, I.G; Johnson, J.H; and Siegel, J.M. (1978) Assessing the impact of life changes: development of the life experiences survey. Journal of Consulting and Clinical Psychology, 46, 937-946.
- Sarri, R. (1981) The effectiveness paradox Journal of Sociological Issues 37(3), 34-50.
- Scheff Thomas J. (1963) The role of the mentally ill and the dynamics of mental disorder. Sociometry; 26. 436-440.
- Seligman, M.E.P (1975) Helplessness on Depression, Development and Death. Sanfrancisco: W.N. Freeman.
- Selye, H. (1956) The general adaptation syndrome and the disease of adaptation. Journal of Endocrinology 6, 117-124.
- Selye, H. (1976) The stress of life (2nd ed.) New York: McGraw-Hill.
- Shelton, J.L. and Ackerman, J.M. (1974) Homework in Counselling and Psychotherapy. Springfield, Illinois.
- Silverman, C. (1968) The epidemiology of depression. Baltimore: Johns Hopkins Press.

- Skinner, B.F. (1956) Theory and treatment of the psychoses: Washington University Studies, pp. 77-99.
- Smith, D. (1989) Attributional information processing: A response time model of causal subtraction. Journal of Personality and Social Psychology, 37, 1723-1731.
- Smith, O. (1982) Trends in counselling and psychotherapy. American Psychologie 37, 802-809.
- Snedecor G.W. and Cochran G.W. (1978) Statistical Methods. The Iowa State University Press Ames, Iowa USA.
- Soudt, E.; Messinger, S.; Sheldon, L. and Wilson, T.P. (1968) C-unit: search for community in prison. New York: Russel Sage Foundation.
- Speisman, J.C., Lazarus, R.S.; Mordkoff, A.M. and Davison, L.A. (1964) The experimental reduction of stress based on ego defense theory. Journal of Abnormal and Social Psychology 68, 367-380.
- Spielberger, C.D.; Gorsuch, R.L. and Lushene, R. (1979) STAI manual of the STAI-TRAIT anxiety inventory. Palo Alto, Calif: Consulting Psychologists Press.
- Spyker, J.M.; Sparber, S.B. and Goldberger, A.M. (1972) Subtle consequences of methylmercury exposure: Behavioural deviation in off-spring of treated mothers. Science 177, 621-623.
- Sykes, G.M. (1958) The society of captives: A study of the maximum security prison. Cited in the New Encyclopaedia Britanica V. 14 Benton Publishers.
- Tait, W.D. (1926) Crime and its causes. Journal of Abnormal and Social Psychology 21, 234-239.
- Telch, C.F. and Telch, M.J. (1986) Group coping skills instruction and supportive group therapy for cancer patients: A comparison of strategies. Journal of Consulting and Clinical Psychology 54, (6) 802-808.

- Tenant, C. and Kent, G. (1986) Clinical psychiatric illness in prisoners of war of the Japanese: Forty years after release. Journal of Psychological Medicine, 16(4), 833-839.
- Thayer, W.N. (1925) The criminal and the Napanech plan Journal of Criminal Law and Criminology, 16, 278-289.
- Thomas, W.I. (1928) The Child in America. New York: Knopf.
- Thompson, S.C. (1981) Will it hurt less if I can control it? A complex answer to a simple question. Psychological Bulletin 90, 89-101.
- Tollington, H.P. (1966) People in Grendon prison, British Journal of Criminology, 6, 39-48.
- Topp, D. (1979) Suicide in prison. British Journal of Psychiatry, 189, 27-27.
- Trexler, L.D., and Karst, T.O. (1972) Rational - emotive therapy, placebo and non-treatment effects on public speaking anxiety. Journal of Abnormal Psychology, 79, 60-67.
- Ullman Leonard P. and Krasner (1965) The psychological model: In Case Studies in Behaviour Modification. Holt Rinchart and Winston Inc.
- U.S. Bureau of Justice Statistics (1983 October) Report to the nation on crime and injustice. Washington, D.C. U.S Department of Justice.
- Wahler, R.G. (1975) Some structural aspects of deviant child behaviour. Journal of Applied Behaviour Analysis 8, 27-42.
- Wahler, R.G.; Beland, R.M; Coe, T.D. and larke, G.E. (1977) Social system analysis: Implementing an alternative behavioural model. In Roger-Warren, A, and Warren, S.F. (eds) Ecological Perspective in Behaviour Analysis. Baltimore: University of Park Press pp 211-228.
- Wahler; R.G.; House, A.E. and Stambaugh, E.E. (1976) II. Ecological assessment of child problem behaviour: A clinical package for home, school and institutional settings. New York: Pergamon.
- Wallerstein, E.P. (1976) A dictionary of psychology. Handsworth Middlesex: Penguin.

- Warheit, J. (1979) Life events, coping with stress and Depressive symptomatology American Journal of Psychiatry. 136, 502-507.
- Warren, S.F. (1977) A useful ecobehaviour perspective for applied behaviour analysis. In Rogers Warren, A. and Warren, S.F. (eds) Ecological Perspective in Behaviour Analysis. Baltimore: University Park, 173-196.
- Warren, R.A and Warren, S.F. (1977) (eds) Ecological Perspectives in Behaviour Analysis. Baltimore: University Park.
- Weissman, M.M. and Klerman, G.L. (1977) Sex differences and the epidemiology of depression. Archives of General Psychiatry 34, 98-111.
- Weissman, M.W. and Myers, J.K. (1978) Affective disorders in a U.S. urban community. Archive of General Psychiatry 35, 1304-1311.
- Welner, J. and Stromgen, E. (1958) Clinical and genetic studies on benign schizophrenic psychosis based on a follow-up. Acta. Psychiatric Neurol. Scand., 33, 377-415.
- Welsman, A.D.; Worden, J.W. and Sobel H.J. (1980) Psychosocial screening and intervention with cancer patients (Tech. Rep. No. 9 1979) Bethesda, Maryland: National Cancer Institute.
- Wender, L. (1940) Group psychotherapy: A study of its application. Psychiatric Quarterly, 14, 708-718.
- West, W.Y. (1969) Present conduct and future delinquency. London: Heineman.
- Weybrew F.(1981) Cited in Mgbeme na (1983) Psychological factors of imprisonment. Unpublished M.Sc dissertation . Benin University of Benin.
- White, R.W. (1948) The abnormal personality. New York. Ronald

- White, A.; Jim, P.; Keenam, C. (1990) Stress control: Pilot study of large group therapy for generalized anxiety disorder. Journal of Behaviour Psychotherapy 18, 143-146.
- Whiting, J.W.M. and Child, I.I (1953) Child training and personality. New Haven: Yale University press.
- Willems, E.P. (1974) Behavioural technology and behavioural ecology. Journal of Applied Behavioural Analysis 7, 151-165.
- Wolkind, A.B. and Forrest, M.T. (1972) Low back pain: A psychiatric investigation. Postgraduate Medical Journal, 48, 76-80.
- Wolpe J. (1958) Etiology of Human Neuroses: Psychotherapy by reciprocal inhibition. Stamford University Press pp. 83-84.
- Wolpe, J. (1953a) Learning theory and abnormal fixation. Psychological Review 60: 111-118.
- World Health Organisation (1978) Mental disorder: Glossary and guide to their classification in accordance with the Ninth Revision of the International Classification of Diseases. Geneva: World Health Organisation.
- Yalom, I. (1975) The theory and practice of group Psychotherapy. New York: Basic Books.
- Young, H.T.P (1927) Observation on the prison psychoses. Journal of Mental Science 73, 80-95
- Young, J.P.R.; Fenton, G.W. and Lader, M.H. (1971) The inheritance of neurotic traits: A twin study of the Middlesex Hospital Questionnaire. British Journal of Psychiatry, 119, 393-398.
- Zimbardo, P.G. (1972) Pathology of imprisonment Society 9(4), 4-6.

- Zimbardo, P.G. (1973) The dehumanization of imprisonment
Unpublished M.Sc. dissertation.
- Zubek, J.P, Bayer, A. and Shepard, J.M. (1969) Relative
effects of prolonged social isolation and confinement:
Behavioural and EEC α changes. Journal of Abnormal
Psychology, 74, 625-631.
- Zubin, J. and Spring, B. (1977) Vulnerability: A new view
of schizophrenia. Journal of Abnormal Psychology
86, 103-126
- Zuckerman, M. (1969) Variables affecting deprivation results. In
J.P.L. Zubek (ed.) Sensory deprivation: Fifteen years
of research New York: Appleton

APPENDIX 1

DEPARTMENT OF PSYCHOLOGY
UNIVERSITY OF IBADAN, IBADAN

PERSONALITY INVENTORY QUESTIONNAIRE

This is a clinical survey. This personality inventory consists of five (5) Sections -- A, B, C, D and E. Each section has its own instructions. We would want to know what you think appropriate. There are no right or wrong answers. We are only interested in how you feel. It is important you answer every item. Please do not sign your name.

Section A

Sex: Male

Female

Age: _____

Occupational Status: _____

Marital Status: _____

Educational Level: _____

State of Origin: _____

Tribe (Ethnic) Origin: _____

Family Structure: Monogamy Polygamy

Inmate Status: Convict ATP

How Long Have You Been Here? _____

Section B

Dear respondent, everyday, we all experience varying degrees of difficulty with the following aspects of daily living. Please indicate by marking 'X' or '✓' on the appropriate column on how much difficulty or stress you have been experiencing with each item below.

| Social Support, Marital and Family Support | No Difficulty | A Little Difficulty | Moderate Difficulty | Extreme Difficulty |
|--|---------------|---------------------|---------------------|--------------------|
| Spouse | | | | |
| Quality of marriage | | | | |
| Family cohesion | | | | |
| Family neglect | | | | |
| Close r/ship with staff | | | | |
| Close r/ship with fellow inmates | | | | |
| Close r/ship with friends | | | | |
| <u>Housing, Health and Sanitary Facilities</u> | | | | |
| Adequate medical care | | | | |
| Living accommodation | | | | |
| Nature of environment | | | | |
| Clothing and bedding | | | | |
| Personal sanitary items | | | | |

| <u>Disciplinary Measures</u> | No Difficulty | A Little Difficulty | Moderate Difficulty | Extreme Difficulty |
|-------------------------------------|---------------|---------------------|---------------------|--------------------|
| Compulsory labour | | | | |
| Confinement/isolation | | | | |
| Torture | | | | |
| Humiliation (physical/verbal) | | | | |
| Hostility | | | | |
| Discrimination | | | | |
| <u>Quality and Quantity of Food</u> | | | | |
| Reduction of diet | | | | |
| Forcible feeding | | | | |
| Hunger | | | | |
| <u>Activity and Tasks</u> | | | | |
| Recreations | | | | |
| Boredom/loneliness | | | | |
| Prison utilities | | | | |
| Information service e.g. library | | | | |
| Religious activities | | | | |
| Money | | | | |

| Psychological Factors | No Difficulty | A Little Difficulty | Moderate Difficulty | Extreme Difficulty |
|------------------------------|--------------------------|--------------------------------|--------------------------------|-------------------------------|
| Insecurity | | | | |
| Self confidence | | | | |
| Self concept | | | | |
| Ill-health | | | | |

CODESRIA - LIBRARY

Section C

Instructions

Please answer each question by putting a circle around the "YES" or the "NO" following the question. There are no right or wrong answers, and no trick questions. Work quickly and do not think too long about the exact meaning of the questions.

Please remember to answer each question.

- | | | |
|---|-----|----|
| 1. Do you have many different hobbies? | Yes | No |
| 2. Do you stop to think things over before doing anything | Yes | No |
| 3. Does your mood often go up and down | Yes | No |
| 4. Have you ever taken the praise for something you knew someone else had really done? | Yes | No |
| 5. Are You a talkative person? | Yes | No |
| 6. Would being in debt worry you? | Yes | No |
| 7. Do you ever feel "just miserable" for no reason? | Yes | No |
| 8. Were you ever greedy by helping yourself to more than your share of anything? | Yes | No |
| 9. Do you lock up your house carefully at night? | Yes | No |
| 10. Are you rather lively? | Yes | No |
| 11. Would it upset you a lot to see a child or an animal suffer? | Yes | No |
| 12. Do you often worry about things you should not have done or said? | Yes | No |
| 13. If you say you will do something, do you always keep your promise no matter how inconvenient it might be? | Yes | No |
| 14. Can you usually let yourself go and enjoy yourself in a lively party? | Yes | No |
| 15. Are you an irritable person? | Yes | No |

- | | | |
|--|-----|----|
| 16. Have you ever blamed someone for doing something you knew was really your fault? | Yes | No |
| 17. Do you enjoy meeting new people? | Yes | No |
| 18. Do you believe insurance schemes are a good idea? | Yes | No |
| 19. Are your feelings easily hurt? | Yes | No |
| 20. Are all your habits good and desirable ones? | Yes | No |
| 21. Do you tend to keep in the background on social occasions? | Yes | No |
| 22. Would you take drugs which may have strange or dangerous effects? | Yes | No |
| 23. Do you often feel "fed-up"? | Yes | No |
| 24. Have you ever taken anything (even a pin or button) that belonged to someone else? | Yes | No |
| 25. Do you like going out a lot? | Yes | No |
| 26. Do you enjoy hurting people you love? | Yes | No |
| 27. Are you often troubled about feelings of guilt? | Yes | No |
| 28. Do you sometimes talk about things you know nothing about? | Yes | No |
| 29. Do you prefer meeting people? | Yes | No |
| 30. Do you have enemies who want to harm you? | Yes | No |
| 31. Would you call yourself a nervous person? | Yes | No |
| 32. Do you have many friends? | Yes | No |
| 33. Do you enjoy practical jokes that can sometimes really hurt people? | Yes | No |
| 34. Are you a worrier? | Yes | No |
| 35. As a child did you do as you were told immediately and without grumbling? | Yes | No |

- | | | |
|--|-----|----|
| 36. Would you call yourself happy-go-lucky? | Yes | No |
| 37. Do good manners and cleanliness matter much to you | Yes | No |
| 38. Do you worry about awful things that might happen | Yes | No |
| 39. Have you ever broken or lost something belonging to someone else? | Yes | No |
| 40. Do you usually take the initiative in making new friends? | Yes | No |
| 41. Would you call yourself tense or "highly-strung"? | Yes | No |
| 42. Are you mostly quiet when you are with other people? | Yes | No |
| 43. Do you think marriage is old-fashioned and should be done away with? | Yes | No |
| 44. Do you sometimes boast a little? | Yes | No |
| 45. Can you easily get some life into a rather dull party? | Yes | No |
| 46. Do people who drive carefully annoy you? | Yes | No |
| 47. Do you worry about your health? | Yes | No |
| 48. Have you ever said anything bad or nasty about anyone? | Yes | No |
| 49. Do you like telling jokes and funny stories to your friends? | Yes | No |
| 50. Do most things taste the same to you? | Yes | No |
| 51. As a child were you ever cheeky to your parents? | Yes | No |
| 52. Do you like mixing with people? | Yes | No |
| 53. Does it worry you if you know there are mistakes in your work? | Yes | No |

- | | | | |
|-----|--|-----|----|
| 54. | Do you suffer from sleeplessness | Yes | No |
| 55. | Do you always wash before a meal? | Yes | No |
| 56. | Do you nearly always have a "ready answer" when people talk to you? | Yes | No |
| 57. | Do you like to arrive at appointments in plenty of time? | Yes | No |
| 58. | Have you often felt listless and tired for no reason? | Yes | No |
| 59. | Have you ever cheated at a game? | Yes | No |
| 60. | Do you like doing things in which you have to act quickly? | Yes | No |
| 61. | Is (or was) your mother a good woman? | Yes | No |
| 62. | Do you often feel life is very dull? | Yes | No |
| 63. | Have you ever taken advantage of someone? | Yes | No |
| 64. | Do you often take on more activities than you have time for? | Yes | No |
| 65. | Are there several people who keep trying to avoid you? | Yes | No |
| 66. | Do you worry a lot about your looks? | Yes | No |
| 67. | Do you think people spend too much time safeguarding their future with savings and insurances? | Yes | No |
| 68. | Have you ever wished that you were dead? | Yes | No |
| 69. | Would you dodge paying taxes if you were sure you could never be found out? | Yes | No |
| 70. | Can you get a party going? | Yes | No |
| 71. | Do you try not to be rude to people? | Yes | No |
| 72. | Do you worry too long after an embarrassing experience? | Yes | No |

- | | | | |
|-----|--|-----|----|
| 73. | Have you ever insisted on having your own way? | Yes | No |
| 74. | When you catch a train do you often arrive at the last minute? | Yes | No |
| 75. | Do you suffer from "nerves"? | Yes | No |
| 76. | Do your friendships break up easily without it being your fault? | Yes | No |
| 77. | Do you often feel lonely? | Yes | No |
| 78. | Do you always practice what you preach? | Yes | No |
| 79. | Do you sometimes like teaching animals? | Yes | No |
| 80. | Are you easily hurt when people find fault with you or the work you do? | Yes | No |
| 81. | Have you ever been late for an appointment or work? | Yes | No |
| 82. | Do you like plenty of bustle and excitement around you? | Yes | No |
| 83. | Would you like other people to be afraid of you? | Yes | No |
| 84. | Are you sometimes babbling over with energy and sometimes very sluggish? | Yes | No |
| 85. | Do you sometimes put off until tomorrow what you ought to do today? | Yes | No |
| 86. | Do other people think of you as being very lively? | Yes | No |
| 87. | Do people tell you a lot of lies? | Yes | No |
| 88. | Are you touchy about some things? | Yes | No |
| 89. | Are you always willing to admit it when you have made a mistake? | Yes | No |
| 90. | Would you feel very sorry for an animal caught in a trap? | Yes | No |

Section D

Instructions

Since the past seven days have you done or felt the following things? Please, answer by ticking the "yes" or the "no". If you are not sure or cannot decide, tick the "?". Except otherwise stated, all the questions refer to the past seven days.

| | | | |
|---|-----|----|---|
| 1. Drowsiness (always feeling sleepy) | Yes | No | ? |
| 2. Sleeping too much (unwanted sleep) | Yes | No | ? |
| 3. Frightful or bad dreams | Yes | No | ? |
| 4. Wake up too early and cannot sleep again | Yes | No | ? |
| 5. Poor sleep (sleep not deep enough) | Yes | No | ? |
| 6. Always thinking | Yes | No | ? |
| 7. Thought block (words don't come to me) | Yes | No | ? |
| 8. Forget easily | Yes | No | ? |
| 9. Cannot concentrate | Yes | No | ? |
| 10. Suddenly confused | Yes | No | ? |
| 11. Feel persecuted (people are after me) | Yes | No | ? |
| 12. Cannot see well in the night | Yes | No | ? |
| 13. Heat in the head | Yes | No | ? |
| 14. Heat all over the body | Yes | No | ? |
| 15. Biting feeling (sensation) in the head | Yes | No | ? |
| 16. Feel something moving in the ear | Yes | No | ? |
| 17. Feel something crawling in the head | Yes | No | ? |
| 18. Feel sad | Yes | No | ? |
| 19. Easily annoyed | Yes | No | ? |

| | | | |
|--|-----|----|---|
| 20. Feel life is not worth-living | Yes | No | ? |
| 21. No longer enjoy the things I used to | Yes | No | ? |
| 22. Nervous (before my seniors or authority figures) | Yes | No | ? |
| 23. Tense (tight) | Yes | No | ? |
| 24. Dull, not lively | Yes | No | ? |
| 25. No interest | Yes | No | ? |
| 26. Tearful (weeping) | Yes | No | ? |
| 27. Fearful (afraid) | Yes | No | ? |
| 28. Feel lazy to get up from bed in the morning | Yes | No | ? |
| 29. Restless (cannot sit quietly in one place for a long time) | Yes | No | ? |
| 30. Worried | Yes | No | ? |
| 31. Shyness | Yes | No | ? |
| 32. Excessive talking | Yes | No | ? |
| 33. Talking to self | Yes | No | ? |
| 34. Slowed speech | Yes | No | ? |
| 35. Gazing into space | Yes | No | ? |
| 36. Use abusive or sharp language | Yes | No | ? |
| 37. Frequent headaches | Yes | No | ? |
| 38. Pain in the head | Yes | No | ? |
| 39. Coldness of the head | Yes | No | ? |
| 40. Heaviness of the head | Yes | No | ? |
| 41. Knocking sensation in the head | Yes | No | ? |

| | | | |
|--|-----|----|---|
| 42. Pain in the neck | Yes | No | ? |
| 43. Poor appetite | Yes | No | ? |
| 44. Stomach is turning (not comfortable) | Yes | No | ? |
| 45. Loss of weight | Yes | No | ? |
| 46. Weakness (tiredness) | Yes | No | ? |
| 47. Pain in the chest | Yes | No | ? |
| 48. Heart beating fast or jumping | Yes | No | ? |
| 49. Feeling dizzy (eyes turning) | Yes | No | ? |
| 50. Sweating very much | Yes | No | ? |
| 51. Pain in the eyes | Yes | No | ? |
| 51. Pain in the eyes | Yes | No | ? |

Section E

Instruction

Please read the following statements and indicate the one which best applies to you by ticking X or in the appropriate box using the following: 1. Never, 2. Rarely, 3. Sometime, 4. Often, 5. Most of the time.

| | 1 Never | 2 Rarely | 3 Sometime | 4 Often | 5 Most of the time |
|---|------------|-------------|---------------|------------|--------------------------|
| 1. Do you often feel upset for no obvious reason? | | | | | |
| 2. Have you felt as though you might faint? | | | | | |
| 3. Do you feel uneasy and restless? | | | | | |
| 4. Do you sometimes feel panicky? | | | | | |
| 5. Would you say you were a worrying person? | | | | | |
| 6. Do you feel tense inside | | | | | |
| 7. Have you ever had the feeling you were unable to cope? | | | | | |
| 8. Do you have bad dreams which upset you when you wake up? | | | | | |
| 9. Do you have an unreasonable fear of being in enclosed spaces? | | | | | |
| 10. Do you find yourself worrying about getting some incurable illness? | | | | | |
| 11. Do you feel more relaxed indoors? | | | | | |
| 12. Do you feel uneasy travelling on buses? | | | | | |
| 13. Do you dislike going out alone? | | | | | |
| 14. Do you worry unnecessarily when relatives are late home? | | | | | |

| | 1 Never | 2 Rarely | 3 Sometime | 4 Often | 5 Most of the time |
|--|------------|-------------|---------------|------------|--------------------------|
| 15. Are you scared of heights? | | | | | |
| 16. Do you feel panicky in crowds? | | | | | |
| 17. Do people ever say you are too careful about doing the right thing? | | | | | |
| 18. Do you think that cleanliness is the most important goal in your life? | | | | | |
| 19. Do you find that silly thoughts keep recurring in your mind? | | | | | |
| 20. Are you happiest when you are working? | | | | | |
| 21. Are you a perfectionists | | | | | |
| 22. Do you have to check things to an unnecessary extent? | | | | | |
| 23. Does it irritate you if your normal routine is disturbed? | | | | | |
| 24. Do you find yourself worrying unreasonably? | | | | | |
| 25. Are you troubled by dizziness or shortness of breath? | | | | | |
| 26. Do you often feel sick or have indigestion? | | | | | |
| 27. Do you sometimes feel tingling or pecking sensations? | | | | | |
| 28. Has your appetite got less recently? | | | | | |

| | 1 Never | 2 Rarely | 3 Sometime | 4 Often | 5 Most of the time |
|--|------------|-------------|---------------|------------|--------------------------|
| 29. Do you feel unduly tired or exhausted? | | | | | |
| 30. Can you get off to sleep all right at the moment? | | | | | |
| 31. Do you oft n suffer from excessive sweating and fluttering of the heart? | | | | | |
| 32. Has your sexual interest altered? | | | | | |
| 33. Can you think as quickly as you used to? | | | | | |
| 34. Do you feel that life is too much effort? | | | | | |
| 35. Do you regret much of your past behaviour? | | | | | |
| 36. Do you wake unusually early in the morning? | | | | | |
| 37. Do you experience long periods of sadness? | | | | | |
| 38. Do you have to make a special effort to face up to a crisis or difficulty? | | | | | |
| 39. Do you find yourself needing to cry? | | | | | |
| 40. Have you lost your ability to feel sympathy for other people? | | | | | |
| 41. Are your opinions easily influenced? | | | | | |

| | 1 Never | 2 Rarely | 3 Sometime | 4 Often | 5 Most of time |
|---|------------|-------------|---------------|------------|----------------------|
| 42. Have you, at any time in your life, enjoyed acting? | | | | | |
| 43. Are you normally an excessively emotional person? | | | | | |
| 44. Do you enjoy being the center of attention? | | | | | |
| 45. Do you find that you take advantage of circumstances for your own ends? | | | | | |
| 46. Do you often spend a lot of money on clothes? | | | | | |
| 47. Do you enjoy dramatic situations? | | | | | |
| 48. Do you sometimes find yourself posing or pretending? | | | | | |

APPENDIX 2

Independent t-test showing means and SDS of prisoners
and non-prisoners on personality and psychopathology

| Personality | Prisoners | | df | Non-Prisoners | | t-value | P |
|---------------------------|-----------|-------|-----|---------------|-------|---------|----------|
| | Means | SD | | Mean | SD | | |
| Psychoticism (P) | 17.02 | 6.17 | 298 | 5.06 | 3.96 | 46.00 | P < .001 |
| Extroversion (E) | 16.37 | 5.26 | | 12.57 | 3.90 | 15.3 | P < .001 |
| Neuroticism (N) | 17.29 | 5.17 | | 10.77 | 4.31 | 26.08 | P < .001 |
| Lie Scale (L) | 4.60 | 5.17 | | 9.45 | 4.06 | 19.55 | P < .001 |
| Psychological Disorders | | | | | | | |
| Psychopathology (API) | 68.61 | 34.00 | | 22.37 | 16.03 | 79.72 | P < .001 |
| Neurotic Disorders (CCEI) | | | | | | | |
| Free Floating Anxiety | 27.24 | 10.63 | | 17.33 | 4.68 | 30.9 | P < .001 |
| Phobia | 27.66 | 10.63 | | 19.27 | 4.99 | 26.05 | P < .001 |
| Obsession | 28.07 | 10.67 | | 23.13 | 4.99 | 15.34 | P < .001 |
| Psychosomatic | 28.19 | 10.92 | | 16.35 | 5.45 | 35.87 | P < .001 |
| Depression | 28.05 | 10.75 | | 19.78 | 5.37 | 21.2 | P < .001 |
| Hysteria | 28.36 | 10.83 | | 21.26 | 5.28 | 21.71 | P < .001 |
| CCEI (Total) | 167.57 | 63.53 | | 117.13 | 30.96 | 63.85 | P < .001 |

APPENDIX 3

Prisoner's Evaluation of Treatment Outcome and Usefulness

| Areas Evaluated | Rating by Group Members* | | | | Number of Participants | | |
|--|--------------------------|------------------|---------|----------------------|------------------------|-----|----|
| | Not all Helpful | Not very Helpful | Neutral | Helpful Very Helpful | | | |
| 1. Group homework assessment | | | 45% | 56% | 12 | | |
| 2. Individual homework assignments | | | 11% | 33% | 56% | 12 | |
| 3. The use of non-prisoners (welfare officers) | | 20% | 22% | 44% | 14 | 12 | |
| 4. Presentations by group members | | | 33% | 67% | | 12 | |
| 5. Involvement of others e.g warders | 18% | 20% | | 9% | | 12 | |
| 6. Meeting format | | | 11% | 89% | | 12 | |
| 7. Contribution (input) of group leader | | | 11% | 89% | | 12 | |
| 8. Contribution (input) of group members | | | 22% | 33% | 44% | 12 | |
| 9. The size of the group in relation to: | | | | | | | |
| (a) Your willingness to self disclosure | | | 11% | 22% | 22% | 33% | 12 |
| (b) Your ability to have input | | | 11% | 78% | 11% | 12 | |

* Each group member rated the usefulness of each component of the intervention program. The results indicate the percentage of group members who rated the experience in a particular category.

APPENDIX 4

A Two Week Sample Outline of Group Meeting Content and Homework Assignments

Week 4

Content Areas

1. Discussion and review of last week's home work assignment.
2. A didactic presentation was given on various relaxation techniques using imagery, diaphragmatic breathing, as a possible means of pain and anxiety control.
3. Group practice of several specific exercises was undertaken, and was followed by a discussion of their potential usefulness for individual group members.

Homework Assignment

Group participants were asked to select one of the relaxation exercises and apply it when he/she became aware of the onset of anxiety, tension, pain or fear. Group members were asked to record the results of both their ability to recognize the onset of the above and the impact of relaxation.

APPENDIX 5

Week 5

Content Areas

1. A discussion on futility of manipulation.
2. Reports on last week observations on group members on warders' attitude, church activities and lessons learnt.
3. Group discussion.

Homework Assignment

An ongoing concern of group members was the poor general attitude of other prisoners not participating in group therapy.

New ways of coping, were identified to deal with the problem.

Members were asked to report on paper various observations.

Members were also asked to continue to practice relaxation technique and report areas of problems.

APPENDIX 6

Inter-Correlations of IPSS and Psychological Disorders

| | API (Total Score) | Free floating anxiety | Phobia | Assess- ment Compa- rism | Psycho- somatic | Depre- ssion | Hyste- ria | CCEI Total |
|---------------------------------|-------------------------|-----------------------------|--------|-----------------------------------|--------------------|-----------------|---------------|---------------|
| IPSS | | A | P | C | S | D | H | T |
| Social and family support | .92 | .92 | .91 | .92 | .92 | .91 | .92 | .93 |
| Housing and sanitary facilities | .90 | .89 | .89 | .87 | .88 | .87 | .87 | .89 |
| Disciplinary measures | .87 | .84 | .85 | .85 | .85 | .83 | .84 | .86 |
| Quality and quantity of food | .72 | .70 | .68 | .67 | .68 | .66 | .65 | .68 |
| Activity and Task | .90 | .87 | .88 | .87 | .86 | .84 | .86 | .88 |
| Psycho-logical factors | .90 | .88 | .88 | .87 | .87 | .86 | .87 | .89 |
| Total IPSS | .93 | .92 | .91 | .91 | .91 | .90 | .90 | .92 |