



**Dissertation By
MOGBO,
ONYEDINMA
CHUKWUDUM**

**DEPARTMENT OF
PSYCHOLOGY
UNIVERSITY OF
NIGERIA, NSUKKA**

**Depressive Mood, Self-Concept, Locus of
Control and Adolescent Substance use in
Nigeria**

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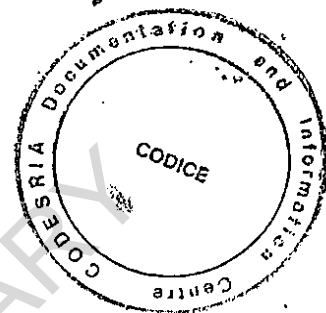
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DEPRESSIVE MOOD, SELF- CONCEPT, LOCUS OF CONTROL AND
ADOLESCENT SUBSTANCE USE IN NIGERIA.

BY

MOGBO, ONYEDINMA CHUKWUDUM
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IN

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UNIVERSITY OF NIGERIA, NSUKKA

MAY 1999

DEDICATION

TO ALL “DEPRIVED” CHILDREN AND ADOLESCENTS IN NIGERIA

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Mogbo Onyedinma

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ABSTRACT

This study investigated the relationship between depressive mood, Self-concept, Locus of control and adolescent Substance use in Nigeria. Using four instruments namely, The Center For Epidemiological Studies depression Scale, Ezeilo Semantic Differential Self-concept Scale, Norwick-Strickland Locus Of Control Scale and the Substance Use Inventory, the study which had five-hundred and thirty-six senior secondary school students (boys and girls) as participants found:

- a) a mild positive relationship (.23) between depressive mood and substance use
- b) a low positive relationship (.06) between self concept and adolescent substance use
- c) a low positive relationship (.107) between locus of control and adolescent substance use.

On the gender differences, the study found that;

- a) Males had a very low positive relationship (.002) between depressive mood, and self-concept compared to female participants who had a moderate positive relationship (.61)
- b) Male participants had a very low negative relationship (-0.01) compared to the females who had a mild positive relationship (0.204) between self-concept and adolescent substance use.
- c) Males had a moderate positive relationship (0.65) between locus of control and adolescent substance use compared to the females that had a mild correlation (0.26)

The locality differences found both commercial and educational participants had very low correlation (0.05 and 0.095 respectively) on depressive mood and substance use while relationship between self-concept and substance use showed a mild positive correlation (0.316) for the commercial city participants and low negative correlation (-0.12) for the Educational city participants. The results and implications of the findings are discussed and recommendations for further studies made.

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CHAPTER ONE

INTRODUCTION

Over the past decade, there has been a dramatic increase in the attention paid to adolescence (Eccles, Midgley, Wigfield, Buchanan, Reuman, Flanogen and Iver 1993). Few developmental periods are characterized by so many changes at so many different levels-changes due to pubertal development, social role redefinition, cognitive development, school transition and the emergence of sexuality.

Initially, puberty was considered the point of demarcation for the period of storm and stress known as adolescence, although in the pre-industrial societies, it is not always clear that the period exists (Schlegel and Barry 1991). However, in the contemporary industrialized societies, adolescence has come to be recognized as that period during which the individual moves from childhood towards maturity with problems and concerns brought about by physical, intellectual, and socio-emotional changes. Thus, it is characterized by changes in every aspect of individual development as well as in every social context. (Peterson, Kennedy and Sullivan 1991).

In the late 1960's though, it was believed that many adolescents transversed this period of life without significant psychological difficulties (Douvan and Adelson 1966). The belief was that such difficulties represented normal development, but research in the 1970's focusing on those youths with problems demonstrated that psychological difficulties tend to develop into serious psychiatric disorders in adulthood. (Rutter, Graham, Ghadwick and Yule 1976; Weiner and Delgaudio 1976). This represents difficulties in making positive transition to adulthood. These and other studies

demonstrated the inappropriateness of these beliefs about adolescence difficulties and pointed towards the need for assessment, diagnoses, prevention and treatment at this stage.

In an adult world, adolescents are "marginal persons." They are neither children nor adults. Consequently, they are too old for some activities and behaviours and too young for others (Gordon 1975). The image of adolescence as a time of storm and stress, intense moodiness and preoccupation with the self has therefore permeated both professional and lay perspectives on this developmental period. Reviews of research document these challenges of adolescent development, and have been described by many authors and theorists as a time of great conflict and crisis. Weidman (1988) views the development of adolescence as the time their identity assumes ego separation and individuation from parents and families of origin, a time of growing up and growing apart, of becoming more influenced by peers and less by family members.

In the same vein, Jessor (1987) in his description of adolescence opines that problem behaviour during this stage may be an instrumental effort to attain goals that are blocked or that seem otherwise unattainable. Thus, problem behaviour may be a way of attaining independence from parental authority and taking control of one's life. It may serve as an expression of opposition to the norms and values of society, may serve as a coping mechanism, and may also function to express solidarity with peers or to demonstrate identification with the youth culture. It may also serve to confirm personal identity.

One of the major problems of the adolescent is substance use. The number of adolescents using a variety of legal and illegal substances has increased in recent years. Reardon and Griffing (1993) who defined adolescence as involving the complex

interaction and interrelationship of physiological, psychological, social, cultural and economic factors opine that when the complexity involves substance use, the prediction of successful mastery of the period becomes even more difficult. Furthermore, Ackerman (1982) who views adolescence as a time of great conflicts and crisis posits that part of the adolescent emotional upheaval is a process of normal development. However, he continued, it becomes a serious crisis when a person feels powerless in coping with the situation. He further described those adolescents who feel powerless as "at risk" for chemical abuse. He described the "Haves" and the "Have-nots" as those who can and those who cannot cope with life's problems. The "Haves" possess the ability to establish positive primary relationships with others-the ability to achieve emotional intimacy. The "Have-nots" exhibit low self-esteem and are thus unable to establish primary relationships with others. Also the "Have-nots" are at risk and need support systems if they are to survive.

In his own position, Kenniston (1968) differentiates between two basic types of college drug users- the "Seekers" and the "Heads". To him, the 'Seekers' are students who out of intellectual curiosity experiment with such drugs as Marihuana, LSD, Amphetamines and others. This type is said to be bright and involved in the educational process, of which drug use represents but an additional experience. Their involvement with the curriculum however, is defined and perceived by them as means for self-fulfillment rather than as a vehicle for occupational or social achievement. In contrast, the 'Heads' are alienated youths for which drugs further their alienation. Totally detached from any conventional ties, the entire educational process has little meaning to them and they become immersed in the drug culture. Based on these findings, Rosenthal, Nelson, and Drako (1986) believe

that adolescent development needs to be considered when discussing the use of various substances. For instance, Kandel and Logan (1984) found that the initiation of smoking, drinking and illicit drug use all peak at 16-18 years old. In Nigeria, earlier studies on alcohol use showed that the prevalence of problem drinking was low (Leighton 1963). However, recent epidemiological studies of drug abuse among students (Nevadamsky 1981; Pela and Ebie 1981; Mboşowo 1988; Onwuzurike 1988; Oshodin 1981; and Odejide 1989) and clinical survey of patients by Ifabumuyi and Ahmad (1982) have shown that alcoholism is becoming a problem.

Although the problem of substance use has been documented in the literature as a serious problem for the adolescent population, there is little conclusive evidence as to why some adolescents use it and others do not. Data seems to indicate that no single factor causes chemical dependence, but that numerous factors have been hypothesized as significant in the development of chemical dependence. These include genetic factors, influence of family, peers, culture, socioeconomic status and psychological factors (Svobodny 1982). Also Palton 1978 believes that any attempt to comprehend the origin of and influences on adolescent substance use cannot ignore the psychological factors involved. Kuna and Bande (1993) in their view see drugs as masks or outlets to individual adjustment problems. Such problems include depression, lack of self-image and confidence, grief, loneliness or breakdown in interpersonal competence. Resulting from a weakening of certain defense mechanisms, drug-taking behaviour is a manifestation of the addicts' strives towards obliterating stress and anxiety.

Several studies have shown that family dynamics are correlated with adolescent substance abuse. For instance, a child may get mixed messages about what is acceptable

behaviour, become confused, and turn to drugs for relief or as a sign of the family's needing help. Although drug abuse alone does not mean the family has problem, it may be a symptom of family pathology in which the adolescent gets attention by misbehaving (Legh and Petersen 1986). If the child is reinforced for bad behaviour and not reinforced for good behaviour, bad behaviour is more likely to develop. Under these circumstances, it would seem the adolescent drug use displaces other issues thereby enabling the family to avoid possible confrontation with the issues (Reilly 1975).

In terms of adolescent development, drug use can be both a response to and have an impact on a dysfunctional or vulnerable family system that is not weathering the transitional stage well. Bermingham and Sheely (1984) describe the following possible sequence: Hidden rules and poor communication patterns along with inconsistent parental involvement lead to effort on the part of the adolescent to make sense of events. The adolescent's perception often is distorted in response to incongruent or inconsistent messages. These distorted perceptions serve as data for other responses, which often are inappropriate from society's point of view but functional for the adolescent. Feedback from others to the responses is further distorted. By this time, the adolescent is confused and experiences a need for congruency. One possible response to this tension is substance use, which serves to ease the confusion and lessen the distress. The effect of the substances, however, further distorts perceptions; responses are again inappropriate, and feedback from the family and teachers become even more confusing.

In another vein, Rosenthal, Nelson and Drako (1986) believe that one of the major reasons for using substances by adolescents is to appear independent while remaining economically and psychologically dependent on the family, while Kandel and Davies

(1982) and Obot (1993) in their study found that illegal drugs such as alcohol and tobacco are strong precursors to illicit drug use.

AIM OF THE STUDY.

Based on the above evidence, it is the aim of the researcher to study three psychological correlates of adolescent substance usage, namely depressive mood, self-concept and locus of control; using secondary school students in Enugu and Anambra state of Nigeria. Given the current drive for intervention on the widespread and seemingly increasing use of substances by today's youths, the need for psychological explanation of adolescent substance usage is of pressing practical concern to the development and administration of primary prevention and treatment efforts in this area

CHAPTER TWO

REVIEW OF LITERATURE

This chapter reviews various related studies, both theoretical and empirical carried out on the variables of interest in this study: namely depressive mood, self-concept, locus of control and substance usage.

THEORETICAL MODELS OF ADOLESCENT DEPRESSION

Depression stands out among the psychological problems of adolescence, both for its impact on adjustment and its long-term effect on adult functioning.

Several approaches to the assessment and classification of adolescent psychopathology have been reflected in the literature on adolescent depression. Lesse (1974) introduced the term behavioural mask which is defined as including those manifestations of depressive disorders of any kind where the somatic symptoms are in the foreground, and the psychological ones in the background. A broader concept includes those psychopathological and behavioural manifestations, which do not correspond to the common description of depressive disorders.

The literature suggests that depression in adolescents may be masked by other symptoms and appears disguised as other disorders especially antisocial and hostile behaviour (Glaser 1967). Some of the antisocial and hostile behaviours stem from feeling of helplessness and confusion about establishing one's sex role. Also the combination of sexual anxieties, especially the first awareness of sexual feelings- of feeling alone, of being ashamed of one's school performance, or of some other failures, and the feeling of

not really being cared for seem to be important factors in other depression. Among the most depressed adolescents are those who have recurrent trouble in schools, at home and with peers, or those who have very tenuous family relationship and then suffer the trauma of severe family disintegration from divorce or death of a parent.

According to Lopez-Ibor (1991), masked depression and depressive equivalents have received many other names in the literature, which include vegetative depression, masked unrecognized depression, incomplete depression, cryptic depressive states and monosymptomatic depression.

In their own classification of depression, Angold 1988; Cantwell and Baker 1991; Compas, Ey and Grant 1992 delineated three types, namely depressive mood, depressive syndrome and clinical depression. Each approach reflects different assumptions about the nature of psychopathology, serves different purposes and reflects a different level of depressive phenomena.

Depressive Mood: Everyone experiences periods of sadness or unhappy mood at various points in his or her life. These periods of depressed mood may occur in response to many situations, such as the loss of a significant relationship or failure on an important task. They may last for a brief or extended period of time; they may be associated with no other problems or many problems. Research on depressed mood has been concerned with depression as a symptom and refers to the presence of sadness, unhappiness, or blue feelings for an unspecified period of time. No assumptions are made about the presence or absence of other symptoms. Depressed mood is typically measured through adolescent's self-reports of their emotions, either through measures specifically concerned with mood or through items checklist of depressive symptoms.

Depressive Syndromes: Multivariate empirical approaches to the assessment of adolescent psychopathology, including depression have shown that aspect of depression is associated with many other problems. (Achenbach, 1991). Depression is viewed as a constellation of behaviours and emotions that have been found statistically to occur together in an interpretable pattern at a rate that exceeds chance, without implying any particular model for the nature or cause of these associated symptoms. This approach has identified a syndrome of complaints that include both anxiety and depression and is based on symptoms such as feels lonely; cries; fears doing bad things; feels the need to be perfect; feels unloved; believes others are out to get at him or her, feels worthless, nervous, fearful, guilty self conscious, suspicious or sad and worries.

The constellation of symptoms has been reliably identified in reports of adolescents, their parents and their teachers. Scores on this syndrome are strongly related (average $r = .51$) to seven other problem syndromes identified by this approach; withdrawn, somatic complaints, social problems, thought problem, attention problems, delinquent behaviours, self destruction and aggressive behaviour (Achenbach 1991).

Clinical Depression: There are two major diagnostic models typically used to diagnose clinical depression: the categorization of mental disorders developed by the American Psychiatric Association (1987) and the method developed by the World Health Organization (1990). The APA (1987) method bases the diagnosis of disorders on a review of the presence, duration, and severity of sets of symptoms. This approach not only assumes that depression includes the presence of an identifiable syndrome of associated symptoms but also assumes that these symptoms are associated with

significant levels of current distress or disability and with increased risk of impairment in the individual's current functioning.

Under depressive disorders, adolescents may be diagnosed as experiencing major depressive disorders (MDD) a dysthymic disorder or both. To meet the criteria for MDD, the adolescent must have experienced five or more of the following symptoms for at least a two-week period at a level that differs from previous functioning:

- A. depressed mood or irritable mood most of the day
- B. psychomotor agitation or retardation
- C. decreased interest in pleasurable activities
- D. changes in weight or perhaps failure to make necessary weight gains in adolescence
- E. sleep problems
- F. feeling of worthlessness or abnormal amounts of guilt
- G. fatigue or loss of energy
- H. reduced concentration and decision making ability
- I. Repeated ideation attempts or plans of suicide.

A dysthymic disorder is diagnosed when the adolescent has had a period of at least one year in which he or she has shown depressed or irritable mood every day without more than two symptom free month. In addition, dysthymic disorder requires the presence of at least two of the following symptoms-

- a. eating problem
- b. sleeping problems
- c. lack of energy
- d. low self esteem

- e. reduced concentration or decision making ability and
- f. Feelings of hopelessness.

Integrated Approaches: Although considerable overlap exists in the classification of depressive mood and depressive syndrome, only depressed mood and low self-esteem or feelings of worthlessness link the first two approaches with a clinical diagnoses of depression. Four other symptoms are common to the two of the approaches: loneliness, guilt, suicidal ideation, and emotional sensitivity. A clinical diagnosis of depression is unique in that it also requires somatic problems such as sleep and appetite problems, psychomotor problems and fatigue. (Petersen et al 1993)

Empirical studies of the correspondence among the three approaches have used diagnostic interviews to assign diagnostic and statistical manual of mental disorders (DSM III) diagnoses and questionnaires or checklists to assess depressive mood or syndromes (Edelbrock and Costello 1988; Garrison, Addy, McKeown and Waller 1991). According to these studies, measures of depressed mood and syndrome identify large numbers of adolescents who do not meet diagnostic criteria for a diagnosis of MDD or DY. Thus, adolescents with clinical depressive disorders may represent a subgroup of a larger population of adolescents who are experiencing a depressive mood or syndrome.

These various classifications reveal the extent to which researchers have carried out studies on the various categorization of the concept of depression. It thus confirms the extent to which the disorder has permeated the various segments of the society and the need for further understanding of the concept. In the following sections, some of the

various theories that have been used in explaining the causes of depression will be considered.

THE PSYCHOANALYTIC VIEW OF DEPRESSION

Early psychoanalysts became interested in the etiology of depression. Perhaps the most pivotal figure in any study of depression is Abraham (1953), whose paper was the first to use psychoanalytic principles to describe depression. This paper however limited itself to manifestations of anger rooted in psychotic depression, but all the same interested Freud 1963 who then published his classic on depression "Mourning and Melancholia" the following year. This paper tries to differentiate grief from Melancholia or depression. According to Freud, with the loss of an object there is a grief reaction (mourning) characterized by withdrawal of interest in the world, a loss of the capacity to love inhibition of all activities, and a painful dejection. In melancholia, however, there is in addition to the above characteristics, a fall in self-esteem. In the process of mourning Freud continued, the 'Psych' operates on a conscious level to separate the individual from the lost object. Eventually, there is complete separation, thus ending the grief reaction. This reaction can occur because there is no ambivalence towards the object.

In melancholia, or depression, there is ambivalence so that in addition to or in place of the conscious loss, there is an unconscious one. As a result, the 'Psych' cannot separate from the object, and instead regress to an earlier developed stage, the oral phase at which point it incorporates the ambivalent object into the ego structure. One part of the ego splits off (the conscience) and it is this part that heaps abuse and criticism on the

incorporated object, thus turning condemnation on the self. When the id impulse (rage) turns up the self, the result is suicide.

Depression, then involves three hypothetical areas of the 'psych' notably the ego, which incorporates the ambivalently held object; the super ego (conscience) which condemns the incorporated object, and the id which may turn the impulse of rage upon the incorporated object and destroy it (suicide).

Another psychoanalyst, Edward Birbring(1961), viewed depression in a different light. He noted depressive states in people where he could not find an object loss either real or unconscious. As a result of this observation, he conceived of depression as an affective state involving only the ego. This concept is based on some assumptions.

... All people have certain aspirations in their ego, which establishes self-esteem. These aspirations include the wish to be worthy, loved and appreciated; the wish to be strong, superior and secure; and the wish to be good and loving. Should there be interference with the wish to be good and loving, the feeling of being evil arises. Should there be interference with the wish to be strong, superior and secure, the feeling of being victimized arises. Should there be interference with the wish to be worthy, loved and appreciated, the feeling of being a failure arises.

When the ego feels that it is evil, being victimized, and/or a failure, it believes itself helpless and unable to live up to the aspirations which create self-esteem. When it can no longer live up to these aspirations, there is feeling or state of depression. This view then assumes that there is no conflict in three areas of the 'psych', only a tension existing in the ego itself.

In summary then, Birbring defines depression as the emotional correlates of a partial or complete collapse of the self-esteem of the ego. Depression, according to him represents an effective state, which indicates an ego condition of helplessness and inhibition of function.

It is obvious from these various theories that considerable confusion has arisen in the literature from the use of the term depression to refer to all levels of depressive phenomena. According to Pertersen, Compass, Brooks-Gunn, Stemmler, Ey and Grant (1993) greater clarity can be achieved by specifying the kind of depression that is being discussed. For example, the study of depressed mood during adolescence has emerged from developmental research in which depressive emotions are studied along with other features of adolescent development. The depressive syndrome approach assumes that depression and other syndromes reflect the co-occurrence of behaviours and emotions as quantitative deviations from the norm. The clinical approach is based on assumptions of a disease model of psychopathology.

The Learning Explanation

Behaviourists also see the separation or loss of a significant other as important in depression. However, behaviourists tend to see the cause as reduced reinforcement rather than as the unstable concept of fixation or symbolic grief. When a loved one is lost, an accustomed level of reinforcement (whether affection, companionship, pleasure, material goods, or services) is immediately withdrawn. No longer can one obtain the support or encouragement of the lost person. When this happens, one's level of activity (talking, expressing ideas, working, joking, and engagement in sports, going out of the town or whatever) is significantly diminished because an important source of reinforcement has

disappeared. Thus, much behaviorist view depression as a product of inadequate or insufficient reinforces in a person's life, leading to a reduced frequency of behaviour that previously reinforced.

As the period of reduced activity (resulting from reduced reinforcement) continues, the person labels he or she "depressed". If the new lower level of activity causes others to show sympathy, the depressed person may remain inactive and chronically "depressed". By being sympathetic about the incident (Loss), friends, relatives and even strangers may be reinforcing the depressive's current state of inactivity. (This reinforcement for a lower activity level is known as secondary gain). The depression tends to deepen and the person disengages still further from the environment and reduces further the chance of obtaining positive reinforcement from normal activity.

Depression has been associated both with low levels of self-reinforcement and with reductions in environmental reinforcement (Heibs 1983). In other words, when people get less reinforcement from the environment and do not reinforce themselves, they become prone to depression. Depressives may lack the skills required to replace lost environmental reinforcement. This behavioural concept of depression covers many situations that may elicit depression (such as failure, loss, and change in job status, rejection and desertion).

COGNITIVE EXPLANATIONS

Some psychologists believe that low self-esteem is the key to depressive reactions. All of us have both negative and positive feelings about what we see as our 'Self'. We like or value certain things about ourselves, and dislike other things. Some people, especially

depressed ones have a general negative self-concept. Such people perceive themselves as inept, unworthy and incomplete, regardless of reality. If they do succeed at anything, they are likely to dismiss it as pure luck or to forecast eventual failure. Hence a cognitive interpretation of oneself as unworthy may lead to a host of thinking patterns that reflect self-criticism and exaggerated idea of duty and responsibility.

One major cognitive theory has been advanced by Beck (1976). According to this theory, depression is a primary disturbance in thinking rather than a basic disturbance in mood. How you structure and interpret your experiences determines your affective states. Depression, the theory continues operates from a 'primary triad' which consists of negative views of one, one's present experiences, and the future. Four errors in logic typify this negative schema (A schema is a pattern of thinking or a cognitive set that determines a person's reactions and responses), which leads to depression and is characteristic of depressives.

- 1 Arbitrary Inference: The depressive tends to draw conclusions that are not supported by evidence. For example, a woman may conclude that "people dislike me" just because no one speaks to her on the bus or in the lecture room. In such a case, the woman draws erroneous conclusions from the available evidence. Thus, depressives are apparently unwilling or unable to see other more probable explanations.
- 2 Selective Abstraction: The depressive takes a minor incident or detail out of context, and the incidents on which the depressive focuses tend to be trivial. The depressive who is corrected for a minor aspect of his or her work takes the correction as a sign of his or her incompetence or inadequacy- even when the supervisor's overall feedback is highly positive.

- 3 Overgeneralization: A depressive tends to draw a sweeping conclusion about his or her ability, performance or worth from one single experience or incident. For example, a person who is laid off the job because of budgetary cuts may conclude that he or she is worthless.
- 4 Magnification and minimization: The depressive tends to exaggerate (magnify) limitations and difficulties, while playing down (minimizing) accomplishments, achievements, and capabilities. Asked to evaluate his or her strength and weakness, the depressed patient lists shortcomings or unsuccessful attempts endlessly but finds it almost impossible to name any achievements.

All four of these cognitive processes can be seen as result or causes of low self-esteem, which makes the person expect failure and engage in self-criticism that is to unrelated reality. People with low self-esteem must have experienced much disapproval in the past from significant others, such as parents. Their parents or significant others may have responded to them by punishing failures and not rewarding success or by holding unrealistically high expectation or standards that they could not meet.

Learned helplessness: A unique and interesting view of depression is that it is learned helplessness. Seligman (1975) propounded this cognitive learning theory. Its basic assumption is that cognition and feelings of helplessness are learned. When you see that your actions continually have very little effect on the environment, you develop an expectation of being helpless. When this expectation is borne out in settings that may not be controllable, passivity and finally depression may result. Your susceptibility to depression, then, depends on your experience with controlling the environment.

EVALUATING THE CAUSATION THEORIES

The theories of depression presented above explain certain aspects of the disturbance, but all have weaknesses. From the psychoanalytic perspective, loss and separation provoke a depressive reaction. But what determines the extent and severity of depression? Fixation at the oral stage, dependency, and symbolic loss are psychoanalytic concepts that are difficult to test. The psychoanalytic assumption that depression may simply be hostility turned inward on the self seems open to question. When some depressed patients experienced success on experimental tasks, their self-esteem and optimism increased (Beck 1974). If depression is hostility turned inward, why should success alleviate some of its symptoms? As was noted earlier, Beck's idea that the tendency to think in negative terms help produce depression, cannot show that a cognitive disturbance precedes depression. Maybe a depressed mood or affect causes a negative mind set.

Lewinsohn's behavioural theory and Seligman's learned helplessness theory are well grounded in research findings. Lewinsohn's work has mainly shown a relationship between depression and inadequate positive reinforcement. But do these low rates actually cause depression? More research is needed. Seligman has shown that learned helplessness can lead to depressive behaviour. However, this model explains only certain kinds of depression-reactions to uncontrollable environmental stress. All three of these theories have strengths and weaknesses. In terms of explaining depression however, no one theory is better than the other.

EMPIRICAL REVIEW

The literature suggests that depression in adolescents may be masked by other disorders. Glaser (1967) in his findings considered delinquency to be one of the manifestations of masked depression while Lesse (1974) posits that masked depression take the form of antisocial behaviors, fugues, small robberies, school phobia or learning difficulties in childhood, and are consequences of individual ways of elaborating the experience of a long-lasting depressive mood which cannot be interpreted in another way. Carls and Cantwell (1980) in their study of 102 (one hundred and two) children and adolescents concluded that in some children with antisocial and aggressive behaviors, a depressive disorder coexists and that this picture sometimes overshadows the depression.

Writers like Brandes (1971) have noted that drugs, alcoholism, promiscuous and delinquent behaviors may be depressive equivalents. They went further to posit that the extent to which substances are used to mask depression and feelings of worthlessness and loneliness can only be guessed at from the frequency with which these young addicts describe the feelings which precede their hunger for relief from such desperate feelings.

Studies conducted on normal population of college or high school students have found that increased depression is related to the heavy use of illicit substances. In a study by Pathon and Kandel (1978), of the four psychological factors examined in a representative sample of New York State secondary schools (N-8206) two of the factors, depressive mood and normlessness showed positive relationship with the use of illicit substances while social isolation and self-esteem were negative. In addition, Hogan (1970) after comparing the early personality profiles of college students who subsequently became frequent marihuana users as compared to those who remained non users, found frequent users to be more insecure in their personal identity, anxious, in conflict with other people and erratic in moods. Non users on the other hand were found to be more responsible and rule abiding, even though they tended to be more narrow in their interest and inflexible.

The study used 148 college students with the aid of the California Psychological Inventory (CPI) and a biographical questionnaire concerning the use of marihuana.

Research has also found that eating disorders and substance abuse frequently co-occur with depression. (Rivinus; et al. 1984). Similarly, extreme weight and eating concern co-vary with a depressed mood. At least in girls, a poor body image may lead to eating disorders and then to depression. Studies have also shown elevated depression with medical illness (Fitzpatric, Fuji, Shragg, Rice, Morgan and Felice 1990). This relationship could however be interpreted as stress and anxiety of medical illness causing the depression. It may also be possible that depression may make one vulnerable to medical illness.

Depression may also cause other problems through its effect on interpersonal functioning (Hammen 1991). Deficits in interpersonal functioning are thought to produce poor relationships between parents and child as well as between romantic partners. These findings seem to reveal the range of disorders that could be linked to depressive disorders. Whether depression causes these problems or the other disorder causes these problems remains to be clarified.

GENDER AND DEPRESSION

Evidence seems to suggest that increase in depressive disorders and mood are greater for girls than for boys during adolescent years (Gotlib and Hamman 1992). The gender difference that emerges by age 14-15 (puberty) appears to persist into adulthood. Many scholars have considered whether the gender difference is a true difference in depression or whether it can be explained by artifacts such as different styles of responding to questions and differences in openness. These examinations have concluded that the gender differences appear to be a true difference in the experience of depression. For instance, men and women may have different response styles in which men distract

themselves, whereas women ruminate on their depressed mood and therefore amplify it. (Nolen-Hoeksema 1987). Also sex role socialization in early adolescence related to biological changes of puberty that has heightened an identity with ones gender, is thought to produce the observed change in these gender differences by mid-adolescence.

Another explanation for increased experience of depression among girls is that girls experience more challenges in early adolescence (Petersen, Sarigiani and Kennedy 1991). For example, girls are more likely than boys to go through puberty before or during the transition to secondary school. In addition, several studies have reported that parental divorce is more likely for girls than for boys in early adolescence (Block, Block and Gjerde 1986; Petersen, Sarigiani, and Kennedy 1991). Both less effective coping styles and more challenges may increase the likelihood of depression among girls.

These various studies have shown the extent of research that has been done toward understanding the causes of depressive disorder. It thus seems that depression is a major concern to society. It is surprising however that not much work has been done in this area by Nigerian scholars. It is believed therefore that the present research work would aid in enriching the pool of research on depression and help in better understanding of the concept especially from the African perspective.

The next section of this literature review would consider the second variable in this study which is self-concept. Both theoretical and empirical findings will be discussed to help increase our understanding of the concept.

DEFINING THE SELF-CONCEPT.

Theories of Self-Concept.

According to Dusek (1987), no other psychological construct has received the theoretical and empirical attention that has been directed toward the self-concept. More than any other single aspect of adolescent development, the self-concept and related

construct such as self-esteem, and identity have been addressed within the context of the adolescent years. This no doubt influenced the definition of adolescence by Erickson (1959; 1968) as a time when the individual faces a crisis with regard to identity development, and therefore as a critical period with regard to coming to grips with the issue of whom or what we are. The self-concept is not of significance to adolescents alone, but is an important aspect in human personality in general which makes it a topic of extreme importance in many diverse areas.

Different people have tried to define the concept of self. For William James (1890), the self was simply an object, like any other. In this sense, the self is whatever the individual feels belongs to the self, including the material self and the social self. James's material self referred to the individual's possession including the body. He referred to this as 'ME' aspect of the self. James' social self was concerned with the views the individual felt others held about him. This aspect of the self he referred as "I" self. There was also an effective component associated with the self, the positive or negative views the individual held about the self. In more modern parlance, this is called the self-esteem.

Another person that has defined self-concept is Mead (1934). He defined the self as that which was meant by the Pronoun I, Me, Mine. From this perspective, the self was all those feeling the individual had about the self. These feelings arise and develop from social interactions with others and from the individuals concern about how others react to him or her. By learning to view the self as others do, individuals learn to predict how others will react to them. As a result, the self-concept comes to regulate the individual's different behavior, particularly those that are social in nature.

Phenomenologists Snygg and Combs (1949) present a more contemporary definition of the self. They view the self-concept in terms of personality structures. For the researchers, the self-concept is the nucleus of the personality on individuals' constellation of traits and values. The self-concept, then, is viewed as basically stable, changing only

somewhat as the individual's personality traits and structures change.

Mccandless (1970) viewed the self-concept as learned perception, subject to environmental rewards and punishments as well as cognitive evaluations. As positive reinforcements to the individual are increased, the self grows in esteem. The converse also is true. The self-concept is learned from experience with success and failures; their experiences help the individual become aware of the limits of his or her competency, which is critical in self-concept development. This awareness depends on cognitive evaluation. From Mccandless's perspective then, one might well expect changes in the self-concept as a result of perceived changes in competencies.

Erickson (1959; 1963) prefer to use the term identity, as opposed to self-concept in describing one's self-structure. Identity is a self developed, internal and ever-changing organization of one's attitude and beliefs. It helps one identify one's uniqueness, as well as similarity to others. Identity provides a sense of continuity of the self over time and a sense of integration of the self. During adolescence, the confluence of physical, cognitive, and social aspects of development allow one to construct this identity.

A social interaction theorist like Kinch (1961) views the concept of self as the organization of qualities that the individual attributes to himself. He goes on to posit that what the brain is for the organism, the self is for personality. It is the integrating and directing forces toward various forms of interaction with persons and objects, thus, he believes that the individual's conception of himself emerges from social interaction and in turn guides or influences the behavior of that individual.

From the psychoanalytic perspective, they view self-concept as an abstraction of the essential and distinguishing characteristics of the self that differentiates an individual's 'selfhood' from the environment and from selves. It goes ahead to say that in the course of development, various evaluative attitudes, values, aspirations, motive and obligations become associated with the self-concept. The organized system of interrelated self.

attitudes, self motives and self values that result may be called the 'ego'. Psychoanalytic theorist Symonds (1961) also distinguished between the self and the ego; the former being the object which the later perceives.

Trait and factor psychology defines the self as the aggregate or composites of the individual's typical reaction patterns such as dominance, cooperativeness and introversion (Guilford 1959). These different definitions seem to have several implications for self-concept theorizing. One is that there may be more than one type of self-concept. Strange (1957) for example, has suggested that there are four basic self-concept. The first is simply the global self concept, an individual's perception of abilities, roles, and self worth. The second is a transitory self-concept, subject to momentary fluctuations due to success or failure, for example. The third is the social self-concept, the individual's perception of how others view him or herself with regard to social competencies. This self-concept represents the individual's view of the self within the social system of the society. Finally, there is the ideal self-concept, which represents the individuals view of the ideal self, the individuals view of how he or she would ideally like to be. It may be realistic, reflecting an accurate view of competencies, or it may be unrealistically high or low, reflecting unrealistic assessment of competencies. Too high an ideal self-concept may lead to frustration because competencies don't measure up to expectations, and too low an ideal self-concept may lead to self degenerations, and an unwillingness to attempt to attain goals that would otherwise be within the individuals reach. What is desirable is an appropriate match between the ideal and real self-concept, so that the individual has a positive and appropriate view of the self.

The division of the global self-concept into component self-concepts seem to have merit. Wylie (1961) has noted that most researchers have dealt only with global measures of self-concept. However she pointed out that there is no evidence to support the contention that the self-concept is unitary and global. Rather, she contends that there are

multiple self-concepts, largely determined by situational contexts. Hence by examining the impact of some influences on more specific aspects of the self-concept, we are better able to determine if the influence is actually related to aspects of self-concept development.

A second implication of current theorizing is that the self-concept serves several functions. McCandless (1970) viewed the self-concept as having four major functions: self evaluation; self-actualization; (striving to reach ones highest potential); determine whether behavior will be inner or outer-directed; and predicting the activities in which one will engage. As McCandless views it, the self-concept has motivational function that steers people into choosing lifestyles and behaviors that combine maximum chances of success with maximum rewards. Moreover, the self-concept directs one to engage in behavior that is socially sanctioned and to seek out social situations and deal with conflicts in ways consistent with the self-concept. An example of the latter may be found in discussions of the relationship between the self-concept and vocational development, choices in latter being guided by the former. We might well expect then, to find the self-concept related to many facets of development.

In summary therefore, having looked at the various ways people have viewed this concept, I will personally define it as the exact way an individual thinks and feels he or she is.

DEVELOPMENTAL TRENDS IN SELF- CONCEPT AND IDENTITY

Describing developmental trends in self-concept and identity has been a major concern of researchers. A number of theoreticians most notably Erickson (1969) have suggested

that the self-concept undergoes significant change during the adolescent years. For Erickson, this aspect of development was represented by the identity versus identity diffusion crisis. For Anna Freud (1958) it was represented by a reoccurrence of the oedipal situation following the latency period. However conceptualized, the general perspective is that adolescent represents a time when our views of ourselves can be expected to change substantially. In other words, these theoreticians argue that self-concept development is not stable from childhood to adolescence.

The impetus for these expected changes lies primarily in biological change. The physiological and physical changes of puberty are suggested as the causes of self-concept and identity change. Because our bodies change physically, we are forced to re-evaluate ourselves. Our physical competencies change as well, forcing us to consider these aspects of our self-perception. Our cognition competencies change too, during the early adolescent years, which may cause us to evaluate ourselves differently, thereby causing a change in self-concept. In addition, changes in peer relations and interactions with parents increase in independence striving, and the like, may cause us to change our self-concept. To the degree that physical, cognitive social and interpersonal relational behaviors are related to self-concept and identity, then, we might well expect measures of self-concept and identity to reveal changes during the adolescent years.

SELF-CONCEPT AND ADOLESCENCE: REVIEW OF EMPIRICAL WORK

Most researchers and professionals who have given consideration to the self-concept in relation to adolescent drug abuse agree that the self-concept of a drug user is low.

Cohen (1977) states that "many adolescents drug abusers are found to have a low self-esteem and a low estimate of their own worth." Wright (1977) cites "poor self image" as one of the reasons for drug abuse while Wishnie (1977) states that the drug abuser's

fragile sense of self-esteem is always hanging in the balance.

Despite the consensus among clinicians and researchers that the self-concept of adolescent drug abusers is low, little research has been done to differentiate further their self-concept in terms of associated or possible contributing factors. One such factor is the type of drug abused by the adolescent (depressant, non depressant or hallucinogenic), since different types of drug have different physiological and psychological effects, and their use might be expected to relate in different ways to the adolescents self-concept. Research by Milkman and Frosch (1973) indicates that this may be true. Use of amphetamines by the 20-30 year old white males in their study was found to be associated with an inflated sense of self-worth, whereas heroin use was related to a contemptuous view of self. They further stated that findings such as these, if substantiated by further research, have important implications both for our understanding of the dynamics of drug abuse and for the treatment of adolescent drug abusers.

Ahlgren, Norem, Hochhauser and Garvin (1982) studied 625 5th and 6th graders regarding previous and current smoking activity, parents smoking and four dimensions of self-esteem and a variety of attitudes towards school. Participants were administered the Self-Appraisal Inventory, School Sentiment Index, and the Minnesota School Affect assessment. Results showed that the participants were more likely to begin smoking if they had parents providing a smoking model, had low self esteem (especially with respect to family and school context), disliked school and feared failure.

In a related research, Alston and Williams (1982) studied the relationship between father absence and self-concept, using 35 9th-grade black adolescent boys of lower socio-economic status, twenty-one of whom were from father present homes and fourteen from father absent homes. They were administered the Self-Appraisal Inventory and the Personal Background data sheet in addition to the Socio-economic status and G.P.A which were also assessed. The result showed that a significant positive relationship

existed between father presence and self-esteem. Participants whose fathers were present also exhibited more stability in peer relationship and scholastic endeavors than those whose fathers were absent. This finding therefore seems to posit that a father-son relationship facilitated the adoption of an adequate self-concept by participants who were able to model after their fathers and were in addition, given training by them.

Similarly, in a study on psychological resources and cigarette smoking in adolescents, Penny and Robinson (1986) tested the hypothesis that adolescents who were less able to cope with change would be more likely to smoke cigarettes. Participants were 138 matched pairs of smoking and non smoking adolescents in their second to fourth year in secondary school. Results suggest that some participants smoked in order to alleviate the stress engendered by the adjustment demands of this period and that those with fewer coping resources were more likely to use cigarettes. An examination of the relationship between psychological resources and cigarette use indicated that participants who smoked had lower self-esteem, a more external locus of control orientation and a higher level of trait anxiety, compared with those who did not smoke. Findings suggest that smoking performs a stress management function for those adolescents with a low sense of personal effectiveness.

Also Geist and Borecki (1982) using 143 undergraduates had them complete the Social Avoidance and Distress (SAD) scale, Rotter Internal-External locus of control and the Janis-field Personality Questionnaire. His finding revealed that there were significant differences in locus of control and level of self esteem among participants rated as high, moderate or low in SAD. High SAD participants had significantly greater external Locus of Control and lower self-esteem than moderate or low SAD participants. Individuals who experienced social anxiety as opposed to those who are comfortable in social situations are more likely to feel that they have less control over the rewards in life, and experience positive self regard.

In a study using 101 participants, (49 boys and 52 girls aged 18), Shedler and Block (1990) studying those who had tried marijuana once or twice, a few times or once in a month found that experimenters are the psychologically healthiest within a group of participants, healthier than abstainers. In a related study using 100 female participants in a longitudinal study, Jones (1971) found that moderate drinkers of alcohol were psychologically healthier than either problem drinkers or abstainers. The study which was done with the aid of the California Q set and by behavior rating equally found that problem drinkers and abstainers (the extremes in the sample) have in common certain traits which suggest inadequate coping devices. Furthermore, the research found that moderate drinkers are more adaptive and socially skillful than abstainers. On yet another related study, Hogan, Mankind, Conway and Fox (1970) compared marijuana users with non users in a college population and found that users are more socially skilled, have a broader range of interest, more adventuresome, and more concerned with the feelings of others. The study which used a self report personality inventory equally found that non users were characterized as too deferential to external authority, narrow in their interest and over controlled. The trend of these various findings seems to give the impression that substance use has some positive sides to it, depending on the extent of use. These trend really makes the research on substance use even more interesting considering the level of negative impression associated with its use.

On the relationship of substance users with other people, Kandel (1973) studied a group of adolescents whose best friends either did or did not use psychoactive drugs. Among those teenagers whose parents used drugs but whose friends did not, only 17% were marijuana users. When parents did not use drugs but best friends did, 56% of the adolescents used marijuana. Writing in the same line, Sebald (1986) asked adolescents whether they would seek the advice of their parents or that of their peers on number of different issues. The result revealed that peers were more likely to be more influential

than parents on such issues as what styles to wear, and which clubs, social events, hobbies and other recreational activities to choose. By contrast, adolescents claimed they would depend more on their parents when the issues involved scholastic or occupational goals or their future oriented decision. This findings points to the fact that at the adolescent stage, the influence of peers is of great importance thus, pointing to the need for parents, caretakers and government in general to consider such factors in formulating various policies that affects these group of persons.

Coming nearer home, Jegede (1982) assessed the contribution of psychological, social, biological and physical variables to self-concept development in 552 secondary school girls and 828 boys (mean age 14.76) in Nigeria. Using the Piers-Harris children's self-concept scale and a 47-item general questionnaire as measuring scales, results showed that the following variables were significantly associated with self-concept; stability, age, sex, self-assessed health, physical maturity, quality of school attended, religion, and how active subjects were in religious matters. Findings also revealed that self-concept score increased from mean age 11 to 13, declined through age 17 and then rose.

These various studies reveal the relevance of self-concept to the general development of the adolescent. It is hoped that this present research would as well add to the number of literatures on self-concept development especially as it relates to drug use among adolescents in the Nigerian context. The next section of this review would consider the third variable of interest in the study, locus of control. The first section would consider the theoretical background while the second part would review empirical studies in relation to adolescents.

THE CONCEPT OF LOCUS OF CONTROL

The third major variable in this study is Locus of control. This is a personality dimension that was first described by Julian Rotter (1966), a prominent social learning

theorist in his concept of generalized expectancies. Rotter proposed that in a new situation, we base our expectancies of what will happen on general beliefs about our ability to influence events. Locus of control therefore is a generalized expectancy about the degree to which we control our outcomes. Individuals with an external locus of control believe that their successes and failures are governed by external factors such as fate, luck and chance. Externals feel that their outcomes are largely beyond their control, that they are pawns of fate.

In contrast, individuals with an internal locus of control believe that their successes and failures are determined by their actions and abilities (internals or personal factors). Internals consequently feel that they have more influence over their outcomes than people with an external locus of control. According to Weiten (1989), locus of control is not an either/or position. Like any other dimension of personality he stated, it should be thought of as a continuum. Thus, some people are very external. Some are very internal, and most fall in between the extremes.

In 1969, Rotter published a 29-item scale to measure individual differences in locus of control. Since that time, hundreds of investigators have used this scale to examine how internals and externals differ on a wide variety of behaviors (Lefcourt 1982). However, researchers have created several additional locus of control inventories which are as generalized as Rotter's such as the Norwick-Strickland (1973) scale for children and some other scales which are specific to areas such as health, academic achievement, and marriage (e.g. Wallston and Wallston 1981). One of the reasons they advocate for this trend is that a person's locus of control may not be quite as generalized as Rotter assumed (Paulhouse 1983). According to these researchers, some people display an internal locus of control regarding events in one domain of life while displaying an external locus of control regarding events in another domain. For example, one might feel very internal about personal matters in his life, such as getting a job, but believe he has little ability to

affect government or 'change the system.' Thus, a major advantage of using one of these specific locus of control measure is that researchers can better predict behavior in that particular situation than they can with a more general locus of control measure. But there is a price to pay for this added predictability. The usefulness of these across is limited to the specific domains they are designed for. For example, knowing how much control people feel they have in their marriage tells us a lot about how people will act towards their spouse, but almost nothing about how they will act in an achievement situation.

However, since scales such as Rotter's and Norwick-Strickland's locus of control scores reflect a general tendency to be internal and external, knowing how people score on these tests tell us a little about how people will behave both in their academic, marriage and on the job. This being the case, the choice of how to measure locus of control probably reflects the researchers's purposes.

REVIEW OF EMPIRICAL WORK.

In general, people often find no obvious reason why internals and externals should be any different in their health. If anything, some argue that high-achieving internals may put themselves under excessive stress and pay the price with their health. Yet a growing amount of research indicates that the more internal you are the healthier you are likely to be (Mickland, 1978).

One of the specific domain attracting the most attention centers around personal health. Health-related locus of control appears to affect how people deal with the threat of illness. Internals are more likely than externals to seek information about possible health problems. This desire to know more about one's health problems can translate into taking more actions to get better. For example, internal diabetes patients stay on their diets and keep medical records more faithfully than do externals. (Weiten 1989).

The second major difference between the ways that internals and externals deal with

their health has to do with preventive actions. Internals seem to be more likely to take actions that will keep them healthy. For example, internals may be more successful than externals at quitting smoking (Shipley 1981). According to him, smokers often justify their habit with externally oriented arguments like- "they might get hit by a truck tomorrow any way" and "some non smokers get lung cancer, too" and so on. Because externals do not believe what happens to them is the result of their actions, they are less likely to accept the link between their smoking and their health.

Similar findings are obtained in weight reduction research. Many obese people fail to lose weight, although they realize obesity is a health hazard. They often give up, arguing that nothing they try seem to help. One difference between successful and unsuccessful dieters may be their locus of control orientation. Internals tend to have more success with reduction programmes, particularly those oriented toward self-control eating (Balch and Ross 1975). In addition, because they see a relationship between what they do and how they feel, it could be inferred that internals probably are more likely than externals to try health-maintaining exercise programmes such as using the gymnasium or jogging.

Research has also shown that people suffering from psychological disorders are more external than internals. For example, locus of control scores correlate with measures of anxiety, with external subjects showing the highest anxiety level. However, some notable exceptions to this pattern was found in a study by Hood, More and Garner (1982) which found that young females suffering from the eating disorder (anorexia nervosa) may be more internal than external.

Researchers have also been interested in the relationship between locus of control and depression (e.g. Beniassi, Sweeney and Dufour 1980). Most of these researches point to the fact that depressed people usually are externally oriented. For instance, Capafrou, Barreto and Martorel (1984), using 97 undergraduates to complete the Spanish version of the Becks Depression Inventory, Rotter's internal-external Locus of Control scale and the

Rosenbaum Self control schedule found that a positive relationship was apparent between depression and external locus of control. Also Palton and Noller (1984) in their longitudinal study of male and 56 female high school students (mean 14.97 years) using measures of Self-esteem, Depression (BDI) and Locus of control found that while unemployed, they had increased scores on depression and external locus of control and decreased self-esteem score as against their high school days.

In yet another study, Tesiny (1980), using the 20 item Peer Nomination Inventory and the children's Norwick-Strickland locus of control scale to measure childhood depression and locus of control respectively in 452 male and 492 female 4th and 5th public school children, found that locus of control and depression were positively related. Legget and Archer (1979) in a related study measured the relationship between Rotter's Locus of control and two depressive measures namely the Minnesota Multiphasic Personality Inventory and the Becks Depression Inventory. Using 45 male and 38 female psychiatric patients, he found that the correlational analysis showed significant relationship between externality and depression on both scores. Also, higher magnitude correlation coefficients were found in males.

However, in an earlier but similar study, Petersen, Sunshinsky and Demask (1978) studied 23 males (mean age 35.7) and 16 females (mean age 27.7 years) patients in a private psychiatric hospital, using MMPI and Locus of control scale. External locus of control was compared for groups using multiple definitions of depression. Generally the result did not support the hypothesis that depressed individuals are more external. According to the researchers, the direction of the scores suggest that the results of any given study may depend on the type of depressed participants in the samples. The finding therefore seems to suggest that types or degrees of depression may have different dynamics. It also falls in line with the initial review of literature which suggests that there are different kinds of depression and that each has different ways of manifesting

itself.

This finding and its implication seem also to tally with the notes of caution by Weiten (1989) on his finding that locus of control is related to some forms of psychological disturbance, particularly depression. First, he stated that the vast majority of people scoring on the external end of locus of control scales are happy and well adjusted. Locus of control may play a role in the development of some disorders, but obviously there are many other variables. Second, because the relationship is correlational, it is difficult to make strong statements about the external locus of control causing the disorders. It may be that externals are susceptible to depression, but it also is possible that depressed people become more external.

LOCUS OF CONTROL AND ACADEMIC ACHIEVEMENT

Studies consistently show internal students perform better on academic achievement measures, such as grades and teacher ratings than externals perform (Findley and Cooper 1983). For instance, Maqsdud (1983) in a study on the effects of socioeconomic status, locus of control, intelligent quotient and self-esteem on academic achievement of 80 (eighty) Nigerian secondary school male students whom he provided estimates of prediction of their academic performance using the socioeconomic background questionnaire, Raven Standard Progressive Matrixes and Brookover Scale of self-concept of academic ability found that-

- a) all the four independent variables (SES, LOC, IQ AND SELF-ESTEEM) had significant positive effects on academic achievement.
- b) Internals significantly positively correlated with IQ, Self-esteem and Academic achievement.

c) Internals were significantly more accurate predictors of their own academic performance than the externals.

Also, Galeys and D'silva (1981), in another study with Nigerian children aged 9-13 years using the short form of the Norwick-Strickland Personal Reaction Survey and using grades received in mathematics and reading/language as measures of academic achievement in addition to teachers ratings to assess motivation found that internality was significantly related to academic achievement but not motivation. Findings also indicated that participants who received higher grades perceived themselves as more internally oriented, while no sex differences were found for any of the three measures.

On a related study, Ozioko (1990) using 180 junior secondary school (JSS) two students (mean age 14.97) investigated the role of locus of control and learned helplessness on mathematics performance. With the aid of Norwick-Strickland (1973) locus of control scale for children and mathematics test administered to the participants, results showed that internals performed significantly higher than externals on mathematics. This finding by Ozioko is equally related to that of Egboluche (1991) who also using 192 Nigerian participants found that locality and locus of control had significant effect on mathematics performance- that internals and those living in Urban areas performed significantly better in mathematics than externals and those living in rural areas.

On the foreign scene, Misra (1987) investigated the influence of locus of control and self-concept on the academic performance of 60 male and 60 female Indian junior high school students. Using the Norwick-Strickland locus of control scale for children and the Conceptual Attitudinal Self-concept components which was rated by the teacher, the results showed that internal locus of control orientation was associated with high Self-concept and academic achievement, and with favorable teacher rating. He also found that boys had a higher Self-concept, were more internally oriented and received better ratings

than girls. One issue that needs to be addressed on this finding is to ascertain whether culture had an influence on the teachers rating of the participants especially the male ones. I believe that an understanding of the cultural influence would go a long way in explaining this aspect of the finding.

Besides the academic area, internals engage in more active efforts to control events than externals. Internals are more likely to actively confront a problem. For instance, Sims and Baumann (1972) found that internals react to tornado warnings by seeking information that can help them to protect themselves. In contrast, externals react with more fatalistic inactivity (if its going to hit, its going to hit us). Also research on social actions (Sanger and Alger 1972) suggests that individuals who believe that events are related to their own behavior are more likely than persons trusting faith or powers beyond their control to take steps to change aversive life situations.

Phares (1976) proposed that the cognitive and the motivational aspects of the internal-external dimension lead internals to a superior position in exerting power and control over their environment. One of the reasons for this development might be that they see themselves as responsible for their actions. Internal students are more likely to believe that studying for a test will pay off, whereas externals are more likely to feel that nothing they do will affect their test scores. Another reason may be the way internals and externals respond to feed back. According to Gilmore and Reid (1978), internal students are likely to attribute a high test score to their abilities or studying hard, whereas externals who receive an 'A' might say they were lucky or that the test was easy. Internals also appear better able to adjust their own expectancies for upcoming tests, which means they have a better idea of how to prepare for the next examination. On the other hand, externals are more likely to make excuses, following a poor performance. (Basgall and Snyder 1988). An external student who fails a test because he did not study might conclude that "the teacher is an unfair grader or does not like his writing style." This

probably means he also will not study for the next test and probably will meet the same result.

LOCUS OF CONTROL AND SUBSTANCE USE.

Some researchers have studied alcoholic groups and their locus of control measure. For instance, Sandava (1986) found that participants who were relatively successful in reducing drinking tended to be more internal in generalized locus of control, particularly on the dimension of impulse control, and equally tended not to endorse coping reasons for drinking. Also, Basem, Madelein and Roger (1998) investigated the level of awareness of the link between subjects' behavior and subsequent health among three patient groups: 57 alcoholics with liver disease (ALDs); 77 non alcoholics with liver disease; and 115 problem drinkers with no liver disease attending a London community day treatment center (ACCEPT). Participants completed the health locus of control scale. Results suggested that the ALD group had limited insight into the relationship between their drinking and subsequent liver disease, compared to ACCEPT group. The study suggested that alcoholic liver patients receive counseling as part of their total management. Also in Stafford (1982) study, a locus of drinking problem scale and Rotter internal-External locus of control were administered to 116 18-72 year old alcoholic beginning treatment and 41 26-61 year old alcoholism treatment personnel. Responses were analyzed using chi-square and results showed that the two groups held different views as to the locus of control of alcoholism problem. In general, treatment personnel regarded alcoholics as more responsible, less to blame, less in control and having greater internal causation than alcoholics viewed themselves. I personally feel that the reason for this difference in perception has to do with some psychological factors which must have influenced the way the alcoholics perceive themselves. The present study which is studying three of such factors would probably help explain these reasons.

Having considered some studies on substance use and Locus of control, the next section of this review would consider the issue of substance use which is the dependent variable for this study.

SUBSTANCE USE-A REVIEW.

Substance use among adolescents is not a new phenomenon. Indeed, more than a century ago, in the time of Charles Dickens, alcoholism was rampant among the youth of England (Wheeler and Malmquist 1987). Even in Nigeria, use of substances has always and in fact been an integral part of the social process. It has only been in recent years that experts working in the area of substance use have recognized that chemical use among the youth is a problem in its own right.

The study of substance use among adolescents is limited by several factors. One of these is that there is only limited research into teenage substance use pattern (Newcomb and Bentler 1989). This lack of data makes it quite difficult to determine current drug abuse trends, the forces that motivate the individual adolescent to begin use, or the impact that drug use might have on the adolescent's emotional adjustment. Another factor contributing to the confusion surrounding drug use is that there is a tendency for some to equate virtually any use of chemical during adolescence as being a sign of a serious drug abuse problem (Newcomb and Bentler 1989). Thus because very little is known about drug use, it is difficult to identify the difference between experimental drug use, an early drug use problem or addiction (Wheeler and Malmquist 1978).

Kandel (1973) identified three stages in adolescent drug use, beginning with the use of legal drugs such as alcohol, and diet pills. This type of drug use seems to be a social phenomenon related to experimentation and peer involvement. He described the second stage, drug abuse, as primarily peer influenced, but involving the use of illegal drugs such as marihuana. Drug abuse may lead to the third state which he called the physiological

stage.

Rojek (1983) views adolescent substance use by identifying adolescents who exhibit different types of behaviorist. He directed a study of nearly 3,000 adolescents, 6th grade through 12th grades, and delineated three groups of behaviors that were related to the types of drugs used. These groups of behavior he labeled as:

- a. Traditional
- b. Rebel or fringe
- c. Hard core

For the traditional drug use behaviors, he described them as primarily being intoxicated, using beer, liquor or marihuana and smoking cigarettes. The rebel or fringe behaviors comprised recreational use of stimulants, depressants, narcotics, cocaine, psychedelics and unknown drugs, as well as selling drugs. The hard core behaviors on their own part included the habitual or dependent users of hard drugs such as narcotics, as well as auto theft, breaking and entering, running away, school suspension, abuse of aspirin, use of inhalants and assault.

Lewis et al (1994), in describing the issue of substance use emphasized on the need to view it as a continuum rather than a dichotomy. According to the authors, treatment providers sometimes oversimplify the assessment of substance abuse problems by creating a dichotomy that fails to confront the complexity of the diagnostic process. Many people, the authors continued assume that they can identify for example alcoholism as a unitary disease and that once this identification has been made, a particular course of treatment can be prescribed. But the authors argued that drinkers vary in terms of consumption, physical symptoms, patterns of drinking behaviors, life consequences of drinking, personality, social environment, gender, culture and a variety of other factors. This being the case, they suggested that rather than the use of an either or diagnosis, whether of alcoholism or any other substance which only meets the need of individuals

with serious, chronic long standing substance abuse disorder, the disorder should be viewed as a continuum.

For example, insistence on a clear diagnoses of alcoholism drives away from treatment many people who are not necessarily dependent on alcohol but who could benefit from assistance in dealing with life problems associated with incipient alcohol abuse. If we wait until people are ready to accept a diagnoses of alcoholism or addiction, we may be missing an opportunity to help them when they are best able to benefit from assistance.. Thus instead of conceptualizing substance abuse disorder merely as present or absent, it may be viewed along a continuum from non problematic to highly problematic. For example

- non use
- moderate, non problematic use
- heavy use associated with moderate life problems
- heavy use associated with serious life problems
- substance dependence associated with life and health problems.

Such a continuum does not necessarily imply progression in the sense that an individual who begins to develop problems automatically moves along the continuum from left to right. On the contrary, the various points on the continuum may represent different individuals, some of whom move along the continuum from left to right. On the contrary, the various points on the continuum may represent different individuals, some of whom move from less serious to more serious involvement, some of whom stay at one point for an indefinite length of time and some of whom move back and forth between problematic and non problematic substance use.

According to Lewis et al 1994, it is not possible, however to determine through the use of any objective measure whether an individual should be helped. The fact that traditional treatment approaches have tended to be appropriate only for those clients

clustered at the far right of the continuum means that services have in effect been withheld from people exhibiting minor or moderate problems. The question then is where is the cut-off point below which a client should be denied services? Someone with many serious life problems related to drug use clearly needs help, but an individual whose problems are only beginning may also benefit from assistance albeit of a less intensive nature. Thus an individual who has been arrested for driving under the influence of alcohol deserves a chance to learn how to discriminate his or her blood-alcohol level. A young person developing problems associated with careless use of substances deserves an opportunity to learn responsible decision making. A person who has learned to abuse drug as a way of dealing with grief or stress deserves help to enable him or her in the formation of more appropriate coping methods. These clients need help that is not sullied by the process of labeling or by the assumption that progression of their problems is easily predictable. They need to be seen as individuals who can be assisted without being forced to accept diagnoses that they see as inapplicable.

In summary therefore, the key point to remember is that there is a difference between adolescent substance use and abuse. Thus, not every adolescent who uses drug is addicted. As Newcomb and Bentler (1989) pointed out, the occasional use of alcohol or marijuana at a party is not automatically abuse. Rather, if the individual is

a) repeatedly using chemicals

b) uses chemicals at an inappropriate time

c) is one whose chemical use results in legal, school or social problems,

that person might be said to have drug abuse problem. However the case still remains that whether it is the issue of use or abuse, all need attention.

MOTIVES BEHIND THE USE OF SUBSTANCES

The literature on substance use has considered some reasons behind the use of

substances by adolescents. According to Segal (1983), alcohol may be used as means of coping with personal problems or to facilitate social interaction. Marijuana on the other hand, usually is used out of curiosity, to experiment or to get 'high' or to increase relatedness to others. For Davies and Kandel (1981), they see drug use as a means of reducing stress, loneliness, sadness, anger and parental pressure. The behaviors surrounding drug use and the altered states experienced are used as a way of coping by distracting the adolescent from other problems. Ibanga and Zwandor (1993) see the use and abuse of substances as a product of peer influence. According to the authors, many Psychologists have agreed that the adolescent years are very turbulent and stressful, and that it is in these years that the peers group has the strongest impact. Drawing on clinical and socio-anthropological evidence as advanced by Erickson (1950), they argued that adolescence provides a psychological moratorium necessary for the individual to try out new identities and to experiment with stress before it is possible for him to establish him or herself socially, sexually and vocationally. In this experiment, peers are essential in exemplifying alternative identities in providing moral support against the hostilities and in comprehensiveness of adults and in presenting a form in which possibilities can safely be tried out.

Newcomb and Bentler (1989) on their own part stated that several variables such as low socioeconomic status, a lack of religious commitment, low self-esteem, and disturbed families all tend to influence adolescent drug use pattern. In another line of thought, Obot (1993) believes that less attention seem to have been paid to the use and abuse of licit substances, for example alcohol and tobacco, in Nigeria than to the less familiar, often frightening illicit drugs such as cocaine and cannabis. Because of this situation, they are widely available, relatively cheap and their production and distribution receive government support. He thus believes that the consumption of these substances are paradoxically encouraged by the same people who have declared a war on illicit drugs

even when it is known that alcohol and nicotine are dangerous substances. The harm from alcohol and tobacco, he continued may take many years to unfold but is often fatal. Another problem with alcohol and tobacco Obot says, is that their use often begins early in life thereby serving as the impetus for the initiation of other drug use. Thus this stepping-stone theory of drug abuse places alcohol and tobacco on the first few rungs of the ladder. This position by Obot seems to be of crucial importance in any consideration of policies towards drug control in Nigeria. Government might need to review its stand on alcohol and tobacco usage and probably enforce restriction on the age at which one could be able to purchase or use either of these substances. By so doing, it would go a long way in checking the damaging effect of these substances in our society and also help in the drug control programmes.

Having reviewed some reasons postulated by different researchers on drug use by adolescents, the following section would review some empirical studies on adolescent substance use and abuse especially in Nigeria.

SUBSTANCE USE IN NIGERIA.

Several studies in Nigeria have considered the correlates of adolescent substance use. Some of these studies viewed the Psychosocial and cultural factors while others considered the epidemiology of substance use. Abiodun, Adelekan, Ogunremi, Oni and Obayan (1994) in their study on the psychosocial correlates of alcohol, tobacco and cannabis use among secondary school students in Illorin, Nigeria found alcohol use to be significantly associated with Urban location of schools, self reported study difficulty, self reported poor mental health, and having fathers who are highly skilled professionals. The study which utilized a 117 item substance use questionnaire also found current cigarette use to be positively correlated with rural location of school, male sex, older age group and self reported poor mental health. Life time cannabis use was found to be significantly

associated with male sex, self reported poor academic performance and self reported poor mental health. Finally, perceived availability of alcohol, cigarette and cannabis by the respondents was found to be related to the rate of use of these drugs. An important aspect of this research worth mentioning is that which found a relationship between alcohol use and father's profession. It could be suggested, based on these finding that probably the more professional parents do not seem to have enough time for their kids which may make them to look elsewhere for knowledge and companionship. That being the case , it thus draws attention on the need for parents to devote enough time for their young ones no matter how committed or demanding their job could be.

In another research, Ajila (1992) studied the causes of drug abuse among in-school adolescents in Ondo state, Nigeria. Aimed at finding the difference between in-school adolescents in mixed and single sex institutions in their use of drugs, the study which used 450 participants from 15 secondary schools with the aid of a questionnaire found no significant difference between in-school adolescents in mixed and single sex institutions in their abuse of drugs. Also Owie (1988) studied alienation and the use of psychogenic drugs among adolescents in Nigeria. The study which was aimed at evaluating the differences in level of alienation between drug users and non-users found that alienated personalities were more susceptible to drug abuse.

Pela (1984) studied the psycho social aspects of drug dependence in Nigeria. After reviewing the literature, he found that drug abuse is associated with polygamous or large monogamous families which may be suggestive of stressful sibling rivalry. Other factors include defiance of or rebellion against control, the facilitation of social intercourse, and harmful early childhood experience. Implicated social factors in drug abuse include urbanization, westernization and immigration which may weaken the traditional support system. An important outgrowth of the review is that the psycho social variables implicated are not different from those observed in other cultures.

In another line of research, Akerele (1993) found the increase in the number of breweries in Nigeria (thus supply of alcohol) as a major determinant of alcohol consumption and abuse. He stated that in 1978 alone, six new brewery plants were opened while nine such beer enterprises were built between 1981 and 1985 leading to about 30 (thirty) brewery plants in Nigeria, with production capacity of 16.12 million hectoliters of beer and related drinks. Thus, his finding seems to attribute alcohol abuse to the easy accessibility. This finding by Akerele (1993) seems to be related to that of Abiodun, Adelekan, Ogunremi, Oni, and Obayan (1994) which equally related the rate of use of alcohol, cannabis and cigarette to their perceived availability.

EPIDEMIOLOGICAL STUDIES.

Odejide, Ohaeri, Adelekan and Ikuesan (1987) studied the drinking behavior and social change among youths in Nigeria. Using 2079 senior secondary school students in Ibadan and Abeokuta, their findings revealed that the prevalence rate of alcohol use was 56% for Ibadan and 51.5% for Abeokuta. It was also found that males used alcohol significantly more than females in each of the two cities in addition to the finding that alcohol use was more common among younger students in lower school classes and among those from higher and medium socioeconomic background. Finally, the study attributed the contributing factors to abuse of the drug to include parental deprivation and delinquency.

In a related study on the pattern of adolescent psychoactive substance use and abuse in Benin City, Nigeria, Pela (1989) found the following drugs being used in decreasing order of frequency- alcohol, cigarettes, stimulants, cannabis (Indian Hemp) and sedative hypnotics. The study did not report the use of hard drugs by these adolescents. In an earlier study also, Pela (1986) had studied the use of alcohol by adolescents (aged less than 18) in Benin city. The study which was conducted informally through interviews at

an amusement park and three night clubs over a three month period showed that in general, participants began drinking at an early age (8 years) and consumed large quantities of beer (an average of ten bottles per week). Pela further explained that the reasons for drinking by these adolescents were social in nature and reflected a desire to mask security.

Ebie (1990) in studying the use of different alcoholic beverages in two Nigerian cities (Benin City and Lagos) found that beer was the preferred beverage in both cities with higher proportion of consumers in Benin City. The study which made use of 602 respondents from Benin City and 450 from Ibadan further revealed that although heavy drinking was rare in either city, alcohol consumption was common among the young people, with the majority of respondents having their first drink of alcoholic beverage somewhere between the ages of 11(eleven) and 15(fifteen) years. This finding by Ebie is related to that of Pela (1986) which found that people began drinking at about 8 (eight) years and consumed large quantity of beer.

Writing in the same vein, Adelekan (1989) in his survey of drug use by 534 male and 377 female adolescents with mean age of 16.4 in their fourth and final year of secondary school in Abeokuta, Nigeria found that the most commonly used drugs were salicylate analgesics, mild stimulants, alcohol, antibiotics and diazepam. The study also revealed that low use was recorded for Barbiturates, cannabis, organic solvents and cocaine, and that there was no reported use of narcotic analgesics or hallucinogens. Females were also found to use diazepam significantly more than males and that most users of these drugs had their first contact in primary school. Based on this finding, It is surprising that the issue of drug use and abuse has even gotten to the extent of our primary school students becoming victims. This really calls for an urgent step by the government in its efforts in waging the war on drug use.

In a related study with 1000 university students, Oshodin (1982) found that 87%

(eighty seven) of males and 79% (seventy nine) of females drank alcohol, and that 78% (seventy eight) of those who drank started drinking before entering college, and that 71% (seventy one) had since increased their drinking while 50% (fifty) had gotten into trouble with friends or police because of drinking. A majority reported drinking as a response to disappointment and aggravation. All these studies reveal that most substance users especially alcohol tend to start taking them at an early age in life.

In the area of smoking behavior of adolescents in Nigeria, studies reveal a remarkable difference between and female smokers with males recording a higher rate. In a study by Elegbeleye and Femi-Pearse (1976) on smoking habits among secondary school children and Medical students in Lagos Nigeria, 40% (forty percent) of boys and 84% (eighty four percent) of girls at secondary school and 72% (seventy two percent) of men and 22.2% (twenty two point two percent) of the women at medical school were found to smoke. The study also revealed that while the smoking habit of the secondary school boys was influenced by the smoking habit of their parents and friends, the smoking habits of the secondary school girls and female medical students was mainly influenced by their friends.

Onadeko, Awotedu and Onedeku (1987) in another study on the pattern of cigarette smoking among 2317 students of both sexes attending some selected universities, polytechnics, college of Education and Schools of nursing in Nigeria, with the aid of a questionnaire observed that 436 (30%) of male students and 174 (21%) of female students smoked cigarette. The prevalence was noted to be on the increase for female students when compared with previous studies carried out in similar institutions in Nigeria. This obviously shows the rate at which substance use is getting hold of people in the society. The study also revealed that the highest prevalence of smoking was among students from colleges of Education and that over 50% of the students were mild smokers while less than 50% had exceeded a duration of five years of smoking.

STATEMENT OF THE PROBLEM

The central problem of this study is to investigate the relation of depressive mood, self-concept and locus of control to adolescent substance usage. Specifically, the study will attempt to address the following issues.

1. Will there be a relationship between depressive mood and adolescent substance usage?
2. Will there be a relationship between self-concept and adolescent substance usage?
3. Will there be a relationship between locus of control and adolescent substance usage?
4. Will there be gender differences on the relationship between depressive mood, self-concept, locus of control and adolescent substance usage?
5. Will there be locality differences (commercial city and educational city) on the relationship between depressive mood, self-concept, locus of control and adolescent Substance usage?

HYPOTHESES

From the statement of the problem, the following hypotheses are postulated

1. There will be no relationship between depressive mood and adolescent substance usage.
2. There will be no relationship between self-concept and adolescent substance usage.
3. There will be no relationship between locus of control and adolescent substance usage.
4. Gender differences will have no effect on the relationship between depressive mood, self-concept, locus of control and adolescent substance usage.
5. Locality will have no effect on the relationship between depressive mood, self-concept, locus of control and adolescent substance usage.

OPERATIONAL DEFINITION OF TERMS

Adolescent substance use-. This can be defined as any non-prescribed use of conscious altering drug/substances by an adolescent within the past three months. For the purpose of this study, it refers to the scores that will be obtained from the substance use inventory.

Depressive mood-. This refers to the scores that will be obtained from the Center For Epidemiological studies Depression Scale.

Self-Concept- For the purpose of this study, these are scores that will be obtained from the Ezeilo Semantic Differential Self-Concept Scale.

Locus of Control- For the purpose of this study, this refers to the scores that will be obtained from the Norwick-Strickland Locus of Control scale For children.

CHAPTER THREE

METHODOLOGY

PARTICIPANTS

Two major groups of participants were utilized for this study. For the first group, it comprised of those selected for the development of the Substance Use Inventory (SUV), an instrument utilized for measuring the dependent variable for this study which is substance use. The participants comprised of 372 (three hundred and seventy two) male and female senior secondary school students randomly selected from four schools in Awka, Anambra State and Nsukka, Enugu State of Nigeria. The schools are Igwebuike secondary school, Awka, Girls Secondary school Isienu, Nsukka High School and New Science secondary school Nsukka.

The choice of schools from the two towns is based on some common features which they seem to share. First, these towns have the peculiar feature of accommodating distinct classes of people, the highly educated and the illiterates. This peculiar quality could probably be said to be due to some factors. First, the towns are semi-urban in nature, small in size and the indigen known to be clinging tenaciously to their traditional ways of life. However, with the presence of two federal Universities in the towns, namely The University of Nigeria Nsukka and the Nnamdi Azikiwe University Awka, People from different parts of the country with different cultural backgrounds and academic inclinations now reside in the towns. This could be attributed to the fact that the university is a conglomeration of people from different tribes, cultures, social class and experiences. As these people converge, they equally bring their various knowledge, habits

and experiences on different issues including substance use.

Secondly, the various secondary schools in these towns do not seem to have any sharp class distinction, hence creating an opportunity for adolescents from different backgrounds to share their ways of life and experiences in school with friends. This factor is bound to have a great deal of influence on the quality of knowledge and exposure to substance awareness among these adolescents.

The second group of participants were for the main study and comprised of 721 (seven hundred and twenty-one) senior secondary school (S.S.S) students whose responses were collected from four secondary schools in Enugu and Anambra State of Nigeria. The schools were The University of Nigeria Secondary school Enugu Campus and College of Immaculate Heart conception (C.I.C) (both in Enugu State). And from Anambra state, the schools were Dennis Memorial Grammar School Onitsha and Queens School, also in Onitsha. However, 536 (five hundred and thirty-six) responses, 376 (three hundred and seventy-six) boys and 160 (one hundred and sixty girls) were finally used for the study while one hundred and eighty (one hundred and eighty) were discarded due to incomplete information in their responses. The participants are normal adolescent boys and girls with a mean age of 18 for both sexes. Being government schools, the socioeconomic backgrounds of the participants could be said to cut across various strata of the society.

The choice of these schools is due to their various locations which is of importance to the researcher in studying the relation of substance use to the three psychological variables of interest. Onitsha is a highly Commercialized City and has one of the biggest markets in West Africa. The choice of Dennis Memorial Grammar School and Queens School for the major study is to enable the researcher appreciate the influence a highly commercialized city will have on the participants substance use in relation to the three variables of interest namely Depressive mood, Self-concept and Locus of Control. It is worth knowing that no major institution of higher learning is presently located in this

city.

Enugu on its own part is a city with high concentration of civil servants. From the time of Nigeria's independence, the town has been acting as a regional capital with so many government ministries and Parastatal. It equally has to its credit a number of higher institutions (both public and Private). This peculiar nature of the city marks it out as a pure educationally oriented city. The choice of the two schools is to see to what extent an educational environment would influence the rate of substance use in relation to depressive mood, self-concept and locus of control.

INSTRUMENT

Four sets of measures, namely the Center for Epidemiological studies Depression scale (CES-D), Ezeilo Semantic differential self-concept scale, the Norwick-Strickland locus of Control and the Substance Use Inventory were employed in the study.

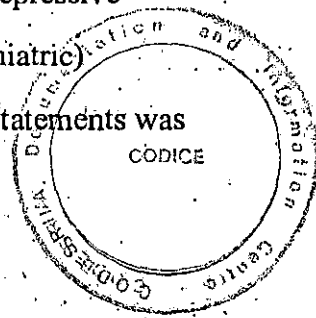
1. Center For Epidemiological Studies Depression Scale (CES-D)(Radloff 1977).

This is a self report measure of frequency of occurrence of 20 (twenty) depressive symptoms in individuals and was designed for use in general (ie.non psychiatric) population. To determine the depression score, against each of the twenty statements was a four point scale of-

- none of the time with a value of 0
- some of the time with a value of 1.
- moderate amount of time with a value of 2
- most of the time with a value of 3

The participants were asked to report the frequency with which each of the twenty events was experienced. For example:

I felt that people dislike me:



- a) none of the time
- b) some of the time
- c) moderate amount of time
- d) most of the time.

Four of these items, number 4, 8, 12, and 16 reflect positive experiences. Thus, for the purpose of analysis, the scales for items 4, 8, 12, and 16 were reversed. This was because these four items reflected positive experiences rather than negative one. The scores for each participant ranged between 0-60. If a participant's total is 16 or greater, then he might have experienced some depression within a given period. Thus, 16-20 indicates 'mild depression', 21-30 indicating 'moderate depression' and scores above 31 indicating 'severe depression'. Validation studies have demonstrated that the Center For Epidemiological Studies Depression Scale correlates substantially with clinical ratings of depression (Roberts and Vernon 1983). Findings also indicates that it correlates significantly with other measures of depression (Weissman, Sholomskas, Pottenger, Prusoff and Locke, 1977), indicating acceptable convergent validity. Moreover, Weissman et al reported the sensitivity of the CES-D (i.e. its capability to identify cases of depression) to be above .90, and its specificity (i.e. its ability to identify noncases) to be above .55. The CES-D has been used extensively in identifying depression in adolescents, the most popular being that which was reported by Roberts et al (1990), based on a study using 2,000 students in grade 9 through 12 in Western Oregon. Internal consistency reliabilities across samples were all above 0.87. Test retest reliability over a one-month period were 0.49 for boys and 0.60 for girls. It has also been validated for the Nigerian population (Okafor, 1991) with a reliability of .85. Also, a split half reliability using 124 (one hundred and twenty four) senior secondary school students by the researcher gave a reliability of .73.

The Ezeilo Semantic Differential Self-Concept Scale

For the self-concept scale, a 54 item semantic differential developed by Ezeilo (1986) was utilized for this purpose. Each of the test item contains a seven point scale where a respondent indicates his/her level of self-concept. The scale has number one to seven assigned to each space between each pair of the bipolar adjectives, with one at the negative end of the pole and seven at the positive end. For example;

If you feel that your self-concept is very closely related to one end of the scale, you should place your check-mark as follows

Relaxed ☒ ----- Tensed

or

Relaxed ----- ☒ Tensed

If you feel that your self-concept is quite closely related to one or the other end of the scale (but not extremely) you should place your check-mark as follows

Competitive ☒ ----- Cooperative

or

Competitive ----- ☒ Cooperative.

If your self-concept seems only slightly related to one side as opposed to the other side (but is not really neutral), then you should check as follows;

Leading ☒ ----- Following

or

Leading ----- ☒ Following

The direction towards which you check, of course depends upon which of the two ends of the scale seems most characteristic of you. If you consider your self-concept to be neutral on the scale, both sides of the scale equally associated with your self-concept, then you should place your check-mark in the space.

Aggressive ----- ☒ ----- Defensive.

The score for each participant would therefore be summed up to obtain the total self-concept score. This instrument which is locally developed with test-retest coefficient of 0.69 has been shown to be psychometrically useful for measuring the self-concept of

literate Nigerians.

Locus of Control Measure

The locus of control for this study was measured with the aid of the Norwick-Strickland (1973) scale for children. This is a generalized paper and pencil measure consisting of 40 questions in either Yes or No form, by placing a mark such as () next to the question. For example;

Do you believe that you can stop yourself from catching a cold?

Yes/No

Do you believe that if somebody studies hard enough he or she can pass any subject?

Yes/No

To determine the locus of control scores, an established format of Yes/No which determines externality or internality of the scores is marked against a participants response. The total number of agreed upon criteria are eventually summed up to obtain a locus of control score. The instrument is scored in the external direction-the higher the score, the more external the orientation. The scale is a standardized questionnaire and has been shown to be reliable in the Nigerian context at $r .73$ (Ozioko 1990).

The Substance Use Inventory

The substance use inventory was developed by the researcher for the purpose of determining the frequency of substance use among adolescents. Questionnaire with lists of substances ,12 (twelve) in number gotten through literatures were itemized for this purpose. Three spaces were also provided at the end of the lists whereby the respondents were expected to include other substances which they had used but was not included in the list. These items were then to be rated on a five-point scale to determine the frequency

Alcohol (e.g palmwine, beer) 0times / 1-2 times/ 3-8 times/ 9-14 times/ above 15

The questionnaire also contained some sub questions that reflected on five other areas that pertained to the general characteristic of the population under study such as

- How they got to know or got introduced to the substances
- Common places and time of substance use.
- Whether they are using more and more of the substance to get the needed effect.
- Whether they had missed out on activities due to the effect of the substance.
- Whether they had fallen into trouble either with parents, school authority, friends or police due to the effect of the substances.

Nine out of the twelve substances were identified as the ones commonly used by the adolescents. The method of administering these items was the systematic random sampling (Eboh 1998). The nine items were then given to experts in the field of substance use/ abuse for content and face validation. These experts included three clinical psychologists, one psychiatrist and six Psychiatric Nurses. They were requested to rate in a Yes/No format on those substances,(basing on their professional experience) they agree or do not agree that are commonly used by the adolescents in our society. At the end, two of the substances were dropped, leaving the researcher with seven items which eventually made the final list. These are-

- Alcohol
- Cigarette
- Valium/librium/lexotan
- Marijuana/Indian hemp
- Heroin
- Cocaine/Crack
- Antibiotics

Procedures

Before the test items were administered, two research Assistants (undergraduate Psychology Students) were trained on the scoring and interpretation of the instruments. For each of the schools used for the study, a letter of introduction from the Head, Department of Psychology, University of Nigeria was obtained introducing the researcher to the school authority. Usually, the researcher's first port of call was the office of the Principal or his or her Assistant as the case may be for an introduction and mission statement. They in turn usually introduced the researcher and his assistant to their Guidance counselors or one of their teachers who then took us to the classrooms (senior secondary classes). In these classes, the researcher and his assistants were introduced to the students by the teacher or Counselor and subsequently were asked to explain the aim and nature of the study. The researcher then explained the study to the participants and normally solicited their cooperation.

The study is based on a multi phasic probability sampling method which involved a random selection procedure to ensure that each unit of the sample is chosen on the basis of chance. Each of the four measures namely the Depression Inventory, Self-concept scale, Locus of Control scale and the Substance Use Inventory were administered together to each of the participants in a classroom situation. The method of selecting the participants was the linear systematic sampling. This method of sampling is characterized by a random start, followed by a pre-determined or systematized order of selection. Once the first unit has been selected (that is the random start) all the rest of the units for the sample are pre-determined. It is probability sampling because the chance of selection for each unit is known and the starting point is random.

For this study, the procedure for the linear systematic sampling was first randomly choosing a student seated in a classroom and then selecting the rest of the participants in an alternate number form. The key advantage of systematic random sampling is that it

saves time and costs of doing a list of large population and still retains the features of probability sampling (Eboh 1998).

Statistics

The Pearson product-moment correlation coefficient was used in correlating the degree of relationship between substance use and each of the independent variables for the study namely depressive mood, self-concept and locus of control. The Pearson product-moment coefficient represents a descriptive statistics indicating the degree of linear relationship between two variables. When the points on a scatter diagram can be summarized by a straight line, Pearson r is the appropriate measure of degree of relationship. (Christensen and Soup 1991).

CHAPTER IV

RESULTS

The analysis consists first of examining the bivariate relationship between the three independent variables with their gender and locality differences and substance use. This is followed by results of the various sub-findings represented in tables IV, V, VI, VII, and VIII which further define the characteristics of the adolescent population.

TABLE I: THE RELATIONSHIP BETWEEN DEPRESSIVE MOOD AND ADOLESCENT SUBSTANCE USE.

TABLE Ia.: MEANS AND STANDARD DEVIATION: DEPRESSION AND SUBSTANCE USE (GENDER DIFFERENCES)

GENDER	X	Y
Male	X = 16.99	X = 10.56
	S.D. = 6.97	S.D. = 3.13
Female	X = 16.6	X = 9.52
	S.D. = 8.23	S.D. = 3.20

TABLE 1b. MEANS AND STANDARD DEVIATION: DEPRESSION AND
SUBSTANCE USE (LOCALITY DIFFERENCES)

LOCALITY	X	Y
Educational	X = 17.25	X = 9.72
	S.D. = 8.16	S.D. = 3.94
Commercial	X = 16.80	X = 10.71
	S.D. = 6.68	S.D. = 2.68

TABLE IC:

PARTICIPANTS	N	r	Significance
General	536	0.23	$P < .05$
Male	376	0.002	$P > .05$
Female	160	0.61	$P < .05$
Commercial City (Onitsha)	266	0.05	$P > .05$
Educational City (Enugu)	255	0.095	$P > .05$

As indicated in table I, the analyses shows a significant positive relationship of .23 between depressive mood and adolescent substance use at $p < .05$. On the gender differences however, the males have a low correlation of .002 while the females have a high relationship of 0.61. The scores for the locality differences (commercial and educational) show a very low correlation of .05 and .095 respectively.

TABLE II: THE RELATIONSHIP BETWEEN SELF-CONCEPT AND ADOLESCENT SUBSTANCE USE.

TABLE IIa: MEANS AND STANDARD DEVIATION: SELF-CONCEPT AND SUBSTANCE USE (GENDER DIFFERENCES)

GENDER	X	Y
Male	X = 302.52	X = 10.56
	S.D. =	S.D. = 3.13
Female	X = 303.51	X = 9.52
	S.D. = 63.84	S.D. = 3.20

TABLE IIb: MEANS AND STANDARD DEVIATION: SELF-CONCEPT AND
SUBSTANCE USE (LOCALITY DIFFERENCES)

LOCALITY	X	Y
Educational	X = 300	X = 9.72
	S.D. = 43.35	S.D. = 3.94
Commercial	X = 309	X = 10.71
	S.D. = 38	S.D. = 2.68

TABLE IIc:

PARTICIPANTS	N	r	Significance
General	536	0.06	$P > .05$
Male	376	-0.01	$P > .05$
Female	160	0.204	$P < .05$
Commercial City (Onitsha)	266	0.316	$P < .05$
Educational City (Enugu)	255	-0.12	$P > .05$

In table II, the result shows a very low positive relationship of .06 between self-concept and adolescent substance use. A closer look at the gender differences indicates that males have a low negative relationship of -0.01 compared to females that show a significant positive relationship of .204 at $p < .05$. On the locality differences, commercial city has a significant positive relationship of .316 at $p < .05$ while the educational city shows a low negative correlation of -0.12.

TABLE III: THE RELATIONSHIP BETWEEN LOCUS OF CONTROL AND ADOLESCENT SUBSTANCE USE.

TABLE IIIa: MEANS AND STANDARD DEVIATION: LOCUS OF CONTROL AND SUBSTANCE USE (GENDER DIFFERENCES).

GENDER	X	Y
Male	X = 16.55	X = 10.56
	S.D. = 4.51	S.D. = 3.13
Female	X = 17.925	X = 9.52
	S.D. = 5.02	S.D. = 3.20

TABLE IIIb: MEANS AND STANDARD DEVIATION: LOCUS OF CONTROL AND SUBSTANCE USE (LOCALITY DIFFERENCES)

LOCALITY	X	Y
Educational	X = 16.14	X = 9.72
	S.D. = 4.57	S.D. = 3.94
Commercial	X = 17.70	X = 10.71
	S.D. = 4.40	S.D. = 2.68

TABLE IIIc:

PARTICIPANTS	N	r	Significance
General	536	0.107	$P > .05$
Male	376	0.065	$P > .05$
Female	160	0.26	$P < .05$
Commercial City (Onitsha)	266	0.03	$P > .05$
Educational City (Enugu)	255	0.12	$P > .05$

Table three shows a low positive relationship of .107 between locus of control and adolescent substance use. The gender differences shows equally a low positive relationship of .065 for the males while the female scores indicates a significant positive relationship of .26 at $p < .05$. For both localities (educational and commercial), a low positive relationship of .03 and .12 were found respectively.

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TABLE IV (SUB FINDING)

MAJOR SOURCE OF KNOWLEDGE OR INTRODUCTION TO THE SUBSTANCE

	N	%	N	%
SOURCE	Male	Male	Female	Female
1. Sibling	10	3%	20	14%
2. Doctor	34	10%	10	7%
3. Parents	80	25%	76	55%
4. Friends	166	51%	19	14%
5. Self	34	10%	5	4%

Table IV which tabulates the major source of knowledge or introduction to the substance shows that for the male participants, friends were the major source (51%: N= 166) while females were mostly through thier Parents (55%: N= 76).

TABLE V (SUB FINDING): COMMON PLACES AND TIME OF SUBSTANCE USAGE

	N	%	N	%
PLACE/TIME	Male	Male	Female	Female
Home	165	49	128	76
School hours	--	--	4	2
Activities (School events/ weekend parties)	109	32	9	5
At night with friends	41	12	1	1
Joints (Hotels, School toilet, streams)	3	1	--	--
Exam	20	6	26	15

Table V tabulates the most common places where these substances are used. For males, homes (49%: N=165) and occasions such as weekend parties and school events (32%: N=109) were the major places. The female result reveals that 76% (N= 128) took these substances at home

TABLE VI (SUB FINDING): PERCENTAGE OF PARTICIPANTS USING MORE AND MORE OF THE SUBSTANCES TO GET NEEDED EFFECT.

	N	%	N	%
Using more and more	Male	Male	Female	Female
Yes	159	44	40	26
No	205	56	116	74

Table VI which tabulates the number of participants who are using more and more of the substances in order to get the effect needed shows 44% (N= 159) of the males and 26% (N=40) of the female identifying with this category.

TABLE VII (SUB FINDING): NUMBER OF PARTICIPANTS THAT HAVE MISSED OUT ON ACTIVITIES DUE TO THE EFFECT OF THESE SUBSTANCES.

	N	%	N	%
Missed out on activities	Male	Male	Female	Female
Yes	29	9	7	6
No	278	91	120	94

As shown in table VII, the number of participants that have missed out on activities due to the effect of these substances is considered . 9%: N=29 of the males have experienced this compared to 6%: N=7 of females.

TABLE VIII (SUB FINDING): NUMBER OF PARTICIPANTS THAT HAVE FALLEN INTO TROUBLE (EITHER WITH PARENTS, SCHOOL AUTHORITY, FRIENDS OR POLICE) DUE TO THE USE OF SUBSTANCES.

	N	%	N	%
Fallen into trouble	Male	Male	Female	Female
Yes	34	11	10	8
No	273	89	116	92

Finally, table VIII considers the number of participants that have fallen into trouble with either parents, police, school authority or friends. Results show that 11% (N=34) of males have been involved in this compared to 8% (N=10) of the female participants

CHAPTER FIVE

DISCUSSION

This study considers the relation of adolescent substance use to three variables namely depressive mood, self-concept and locus of control. For each of these variables also, the sex and locality differences were tested to ascertain their effect on the finding.

From the results, we fail to accept the first hypothesis that there will be no relationship between depressive mood and adolescent substance use. As shown in table I, a correlation of .23 was found. This result accords with the findings of authors like Josh and Scott (1988); Newcomb and Bentler (1989); and Hammen (1991) that most adolescents continue to use substances in response to internal emotional discomfort such as depression. Writers like Brandes (1971) have noted that drugs, alcoholism, promiscuous and delinquent behaviors may be depressive equivalent. In addition, Haagen (1970) who after comparing the personality profiles of college students who subsequently became frequent marijuana users as compared to those who remained non users found frequent users to be more insecure in their personal identity, anxious, in conflict with other people and erratic in mood. These findings all seem to fall in line with the present result.

Reference should also be made to the finding of Pathon and Kandel (1978) who of so many psychological variables studied found depressive mood and normlessness as having positive relationship with the use of illicit substances. Depressive mood especially among adolescents could place great demand on them and even over tax their adjustive and

coping resources. Thus Carls and Cantwell (1980) view acting out as a common way for depressed adolescents to ward off helplessness and despair.

This finding notwithstanding, a closer look at the result especially in comparison between the sexes reveals a significant difference. For the females, a high positive relationship of .61 was found compared to the males who had a very low positive correlation of .002. The question then arises- Why is there a higher positive correlation for females compared to the male participants? To answer this question, a closer look at the literature on depression and substance use might be relevant at this point. Evidence seems to suggest that increase in depressive mood and disorders are greater for girls than for boys during adolescence, and that these gender differences that emerge by age 14-15 (puberty) appears to persist into adulthood (Kandel and Davies 1982; Petersen, Kennedy and Sullivan 1991).

One of the reasons for these sharp differences may include the manner or different approaches by which girls and boys respond to problems. Whereas boys may usually be more open and distract themselves either by going out for games or chatting with friends, girls may tend to ruminate on their depressed mood and therefore amplify it. Another reason that could cause girls to seem to experience higher level of depression is the manner of sex role socialization in early adolescence, with regard to biological changes of puberty that heighten an identity with one's gender. Thus females tend to experience more challenges in early adolescence (Petersen, Sarigiani and Kennedy 1991). For example, girls are more likely than boys to go through puberty before or during transition to secondary school. Hence, both less effective coping styles and more challenges especially in our society (Nigeria) may increase the likelihood of depression among girls. It could then be said that the use of substances by adolescents especially females could be expressed as individual ways of elaborating the experience of long-lasting depressive mood which cannot be interpreted in another way.

RELATIONSHIP BETWEEN SELF-CONCEPT AND SUBSTANCE USE

The second hypotheses that there will be no relationship between self-concept and adolescent substance use was equally not accepted. The result shows a positive, though very low correlation of 0.06. However, a closer look at the sex differences reveals that the males have a very low negative correlation (-0.01) between the two variables while the female participants have a mild positive relation of 0.26.

Most researchers and professionals who have given consideration to substance use and abuse tend to tilt more towards the finding for the males in this study: that is, that substance users tend to have low self-concept. For example, Reardon and Griffing (1983) and Cohen (1977) have found that many adolescent drug abusers have low esteem and low estimate of their own worth. Also Wright (1977) cites "poor self image" as one of the reasons for drug abuse while Wishnie (1977) in his position equally states that "the drug abusers' fragile sense of self-esteem is always hanging in the balance." Similarly, Penny and Robinson (1986) in their research found that adolescents who smoked had a lower self-esteem compared with participants who did not smoke.

All these findings seems to be in accord with the results of the male participants in this study. One might then begin to wonder the reasons that could lead to this form of relationship. One major reason which seems to have a strong influence is the extent of peer influence at this stage of development. As indicated in table IV of the result section, 51% of the male respondents claim to have been introduced to substance use by their friends as against 14% reported by the female participants. Basing on this finding then it would seem that peer influence is stronger in male adolescents than in females. This trend probably led Franklin(1985) to assert that "drug use is more among individuals with poor self-esteem, who also experience strong pressure of peer drug culture... and who are not in a growth fostering environment."

Adolescence obviously is a period of turmoil, of great turbulence and stress. It is also the period that peers tend to have the strongest influence. Use of substances among male participants in this study as a means of facilitating social interaction is therefore not surprising. When social developmentalists talk about true peer groups, they are referring not merely to a collection of playmates but rather to a confederation that:

- a) interacts on a regular basis
- b) defines a sense of belonging
- c) shares implicit or explicit norms that specify how members are supposed to behave
- d) develop a structure or hierarchical organization that enables the membership to work together toward the accomplishment of shared goals.

One of the most important ways in which peers influence one another is by forcing groups and setting norms that define how group members are supposed to look, think and act. Several studies have been done to buttress these peer influences, (e.g. Sebald 1986; Kandell 1973). Also evidence from African studies suggest that interpersonal pressure is an important factor in substance use. For instance, D'hondt and Vandewide (1983); in their study found that a large percentage of youth between the ages of 17 (seventeen) and 21 (twenty-one) smoked to relieve stress and as a 'right of passage', while an earlier study by Nevadomsky (1982) showed that Nigerian children used drugs including nicotine for several reasons one of which was to "get along with friends." The significance of friends in smoking onset has also been confirmed by Onadeko et al (1983) which showed that friends in the same or other schools were the most important sources of first supply of drugs. Furthermore, (Adidi 1990) reported that among senior secondary school students in Nigeria, 55% of the smokers and 11% of the non smokers had best friends who smoked.

Although the gender differences for these studies were not discussed, the result seems related to the finding of this research as reported in table IV which indicates that peers

had greater influence on males adolescent (51%) in terms of substance use. This seems to suggest that males with low self-esteem would use substances which could be a way of identifying with peers and also to enable them boost their ego.

A difference in this approach is however observed in the result of the female participants who had a significant positive relationship between self-concept and substance use. What does this then imply? A consideration of table IV of the result section indicates that the first sources of supply of these substances for the female participants were mostly Parents (55%) as against 25% recorded for the males. In addition, 76% of the female participants on table V claimed they normally took these substances at home as against 49% of the boys. This result therefore seems to suggest that to some extent, Parents act as models for these females as regards their use of substances. A parent or family member acting as a model when it comes to substance use could affect a child in two ways. One, it makes the substance readily available in the house, and by being exposed to a model in the house, would tend to cause the child or adolescent to develop a positive attitude towards the substance (Obot 1991). It is therefore not surprising that females with high self-concept tend to use substances, since their Parents whom they look up to equally engage in such behavior.

Another way of explaining this finding would be by perceiving it as a function of social circumstance- specifically of the current prevalence of substance use among adolescents in Nigeria. For instance, it is necessary to recognize that in contemporary Nigerian culture, there is widespread prevalence and apparent acceptability of 'licit' or common substances such as antibiotic and alcohol (Obot 1993) among adolescents. This being the case, it is not surprising that female adolescents with high self-concept would engage in use of substances. Indeed, not to do so may reflect a degree of inhibition and social isolation among her peers, which may invariably lead to low self-concept.

Although no prior study has focused explicitly on the psychology of adolescent non

users, there is some empirical precedent for the present finding that non users might not be the most well adjusted of adolescents including their self-concept. The findings of Jones (1968) and Hogan, Mankin, Conway and Fox (1970), - even though it is based on different methodology- which found users of substances better adjusted than non users are strikingly similar to the findings of this present research. This direction of discussion does not suggest that positive relationship between frequency of substance use and self-concept of adolescent girls expresses a fundamental psychological "Principle" or "law". Rather, it is viewed as a function of social circumstance, specifically of the current prevalence of substance use among adolescents in contemporary Nigerian society.

RELATIONSHIP BETWEEN LOCUS OF CONTROL AND ADOLESCENT SUBSTANCE USE

The result of the third hypothesis shows a positive but low correlation between locus of control and adolescent substance use. For the sex differences however, a mild positive relationship of 0.26 was found for the female participants while for the males, a very low positive correlation of .065 was found.

This finding is in accord with several studies which have often associated substance use to be positively correlated with external locus of control in adolescents (e.g Sadava 1986) It is also consistent with the finding that girls are more externally oriented than boys (Cox and Baker 1982). These results demonstrate unequivocally that locus of control has an appreciable influence on adolescent (male and female) substance users. A person with an external locus of control is bound to have less control over him or herself and the environment, and has a tendency of being controlled by other people. An externally oriented adolescent or individual has greater tendency of being more prone to fatalism and learned helplessness, and this being the case, it is not surprising that they tend to indulge more in substance use than the externally oriented people since they are in

less control of the environment.

LOCALITY FACTOR: COMMERCIAL VERSUS EDUCATIONAL

The fifth hypothesis for this study is based on locality and its influence on the research variables. The results as stated in table I, II, and III seem to be quite revealing. For the first variable which is the relationship between depressive mood and substance use, very low positive correlation of .05 and .095 was found for the adolescents in Onitsha (commercial city) and Enugu (Educational city) respectively. For the second variable, (table II) which considers the relationship between self-concept and adolescent substance use, the locality findings were quite different. For the commercial city, a significant positive relationship of .316 at $p < .05$ was found while educational city had a negative (though low) correlation of -0.12 . The question then is what could be attributed to these differences in result?

One major reason that could lead to these differences could stem from the nature and life style of the average Onitsha resident. Their normal daily routine usually involves waking up very early in the morning and rushing to their market stores where they attend to various customers till late in the evening. From there, most retire to drinking houses and restaurants for their relaxation, since they do not usually have breaks during the buying and selling period (Business hours) of the day. At these various relaxation places, it is very common for these men and women to use various substances like alcohol and tobacco to relax themselves. It is possible and most probable that the younger ones especially the adolescents observe these adults as they indulge in these activities, and subsequently internalize the habits which they may view as a normal life pattern. Of course there is an inherent danger when adults, especially parents act as models for children and adolescents in terms of substance usage. As Obot (1991) aptly pointed out, it could cause the child or adolescent to develop a positive attitude towards the substance.

Another reason which is related to the first is the large concentration of various

industries that produce different substances, such as beer and tobacco in this commercial city, probably due to its position as a major commercial center in west Africa. This not only makes these substances available but equally obtainable at a cheaper rate.

A third reason that could be used in explaining the finding is the apparent low level of education of most residents in the city as compared to that of Enugu residents. Thus, they might not be aware of the health implications of using various substances. Rather, they may view their use as a way of displaying their wealth and a form of entertainment. For instance, it is not uncommon to find young men in this city boasting of the number of bottles of beer they are able to consume at a sitting.

These behaviors and attitudes are quite contrary to what one may find in Enugu (an educational city). Being mostly a civil service oriented city, there isn't a high concentration of industries which might make these substances readily available for easier and cheaper consumption. Second, most residents are literate and may be cautious of the health implications of using these substances. Thus, it is not surprising that the relationship between self-concept of adolescent correlated negatively with substance use in this city, unlike the commercial city of Onitsha which correlated positively.

The third variable of interest which is the relationship between locus of control and substance use for the two localities shows a positive but low correlation with Onitsha (commercial city) having 0.03 and Enugu (educational city) 0.12. This result seems to suggest that participants in the educationally oriented city seem to have a higher positive relationship compared to those in the commercial city. One of the reasons that could be attributed to this result is the difference in the financial bases of residents of the two cities. Parents of adolescents in Onitsha may tend to have a higher financial base than parents of adolescents in Enugu, and this situation may cause the Onitsha residents to believe that they are in better control of events in their surrounding, being in a country where money seems to command authority. This is unlike Enugu participants (mostly

children of civil servants) who could resort to substance use as a function of helplessness and inability to control events in the environment- probably due to hardship and mounting social pressure which he or she may find difficult to control.

IMPLICATION OF FINDINGS

Various reasons have been postulated by several researchers on the motive behind the use and abuse of substances by adolescents. Majority of these studies unfortunately have been emphasizing on the population of those who are labeled addicts or whose substance problem have started manifesting physiologically or started making inroad into their behavior. The major area of concern for this study has been on the "normal" adolescents with a view to studying the psychological reasons that could lead to and maintain the use of various substances irrespective of the quantity. The research outcomes has obviously opened up a series of question and challenges, first for Psychologists and researchers in substance use and abuse field, and second to the government.

One of the implications of this study is that it has pointed to the need for the consideration of adolescent development when discussing the use of various substances. It is obvious that adolescence is a time when the child is slowly separating from his or her family of origin and creating a different identity for him or herself. It is also a time when the behaviors and values of peer groups have increasing influence on adolescents. A better understanding of adolescent development would make one realize that acceptance of peer influence is not necessarily the rejection of family, and that peer influence tend to be more limited in duration and focused on more short-term issues compared to family influence. According to Glynn (1981), influence from family seem to be most effective when (a) there is a strong, well developed parent-adolescent relationship prior to adolescence; (b) parents do not rely on alcohol or other substances thereby acting as models for their children and c) parents rely more on reason than control by strict limits

or no involvement so they are unable to state their position about substance use without feeling the risk of destroying parent- adolescent relationship.

Thus, families have an important influence along with, rather than in conflict with peer group during adolescence, knowing that peer influence in general are less significant when the family is strong. However, when the relationship between the family and the adolescent is strained, the young adolescent may turn to a drug culture. This assertion is of tremendous relevance to parents.

Another issue of concern as revealed by this study is in the area of female development. In contrast to male development, relatively little seem to have been researched on female development. This finding poses a great challenge to researchers as the various findings of this work has exposed some areas of interest concerning female adolescents. Theorist like Erickson (1968) noticed this trend when he mentioned that female development seems to differ from male development, but unfortunately the theory is based on male model with female development simply viewed as a deviation from the male norm. Hence new conceptualizations of development are needed that include the female developmental processes as part of the model of development. This would invariably supplement for the very porous literature in this area.

On the part of the government, this research finding has added a new dimension to the current trends in substance use and abuse campaign. It calls for an urgent need to intensify effective preventive programmes rather curative. It seems obvious that substance users need as much help as abusers. It reveals that these adolescents are psychologically lacking and are seriously seeking for help. There is therefore an urgent need for the government to integrate the services of Psychologists in the Mental Health programmes and also in drug law formulation. Psychologists have special expertise to offer in assessment and treatment of alcohol/substance problem. Current evidence (Miller and Brown 1997) indicates that

- a) substance problems generally obey ordinary behavioral principles and processes.
- b) substance abuse frequently occur within a broader cluster of psychological problems
- c) the treatment approaches most strongly supported by outcomes research are fundamentally psychological in nature
- d) cognitive- behavioral principles are of demonstratable values in motivating change in substance use
- e) Clinical skills and styles (e.g empathy) commonly included in the training of psychologist are important determinants of favourable treatment outcomes with substance use disorders.

These factors in the context of changing health care indicates that psychologists should play an increasing role in assessing and treating addictive behavior. These programmes would be aimed primarily at equipping these adolescents with skills such as assertiveness, relaxation and possibly responding to peer pressure. Developing these skills would have an impact on the adolescents entire life-style, and not just in the area of substance consumption.

Furthermore, there is an urgent need for the government to introduce awareness campaigns on the effects/implications of substance use especially in highly commercialized cities like Onitsha. These campaigns would bring to consciousness the medical and social effects of these form of lifestyle, and its influence on the younger population.

Finally, there is the urgent need on the part of Government to intervene in the dwindling rate of social life of its citizenry. For instance, the rate of traffic jam due to poor road network, which indirectly would cause a person to seek for an immediate source of relaxation (i.e substance use) need urgent attention. Better forms of relaxation and recreational facilities such as parks and sporting facilities need to be provided in cities to act as more healthy alternatives to substance use.

SUMMARY AND CONCLUSION

The concept of substance use as a major source of concern to warrant empirical study has not been very common among researchers especially in Nigeria. This present research however, has studied three psychological variables namely depressive mood, self-concept and locus of control in addition to gender and locality differences to substance use among adolescents. The research findings have revealed very interesting outcomes which correlate strongly with some previous works on substance abuse.

Based on these findings, the implications are discussed on theoretical, empirical and practical aspects. It was suggested that there was need for psychological assistance on any person involved in any form of substance use or abuse, and that the family, government and society in general have a leading role to play as it concerns the use of any form of substance irrespective of social acceptability and role.

LIMITATIONS AND SUGGESTION FOR FURTHER STUDIES

As earlier stated, the results of this study are neither psychological Principles nor Laws. One of the results of this research found, contrary to commonly held beliefs and predictions that a significant positive relationship exists between the self-concept of female participants and substance use. This contradictory result, although consistent with a few other similar studies need to be further explored.

Furthermore, the participants used in this study could be said to be relatively urban in nature. A pure urban-rural differences could make an interesting finding. Hence researchers are encouraged to explore this area. Finally, many more Psychological factors such as assertiveness and alienation could be explored in its relationship with adolescent substance use. There seems to be paucities of such researches particularly in Nigeria, and such findings may yield very interesting results.

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APPENDIX A
CENTER FOR EPIDEMIOLOGICAL STUDIES DEPRESSION SCALE

EVENTS

DURING THE PAST THREE MONTHS:

	None of the time	Some of the time	Moderate amount of time	Most of the time
1. I was bothered by things that usually don't bother me				
2. I did not feel like eating. My appetite was poor.				
3. I felt that could not shake off the blues even with the help of my family/ friends				
4. I felt that I was just as good as other people.				
5. I had trouble keeping my mind on what I was doing.				
6. I felt depressed.				
7. I felt that every thing I did was an effort.				
8. I felt hopeful about the future				
9. I thought my life had been a failure.				
10. I felt fearful.				
11. My sleep was restless.				
12. I was happy.				
13. I talked less than usual.				

14. I felt lonely.				
15. People were unfriendly.				
16. I enjoyed life.				
17. I had crying spells.				
18. I felt sad.				
19. I felt that people disliked me.				
20. I could not get going.				

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APPENDIX B

Name-----

Date-----

The purpose of this study is to measure how various people see and feel about themselves by having them judge themselves against a series of descriptive scales. In taking this test, please make your judgement on the basis of how you perceive yourself. You are to rate your self-concept on each of the scales below. Here is how to use these scales.

If you feel that your self-concept is very closely related to one end of the scale, you should place your check-mark as follows:

Relaxed ☒ ----- Tensed

Relaxed ----- ☒ Tensed

If you feel that your self-concept is quite closely related to one or the other end of the scale, (but not extremely) you should place your check-mark as follows:

Competitive ☒ ----- Cooperative.

Competitive ----- ☒ Cooperative.

If your self-concept seems only slightly related to one side as opposed to the other side (but is not really neutral), then you should check as follows:

Leading ☒ ----- Following.

Leading ----- ☒ Following.

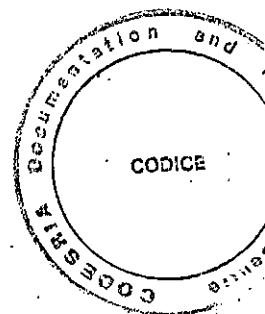
The direction toward which you check, of course, depends upon which of the two ends of the scale seems most characteristic of you.

If you consider your self-concept to be neutral on the scale, both sides of the scale equally associated with your self-concept, then you should place your check-mark in the middle space.

Aggressive ----- ☒ ----- Defensive

20.	Tall.	---	---	---	---	---	---	Short
21.	Smart.	---	---	---	---	---	---	Sluggish
22.	Immoral	---	---	---	---	---	---	Moralistic
23.	Boring	---	---	---	---	---	---	Interesting
24.	Discontented	---	---	---	---	---	---	Contented
26.	Polite	---	---	---	---	---	---	Rude
27.	Untrustworthy	---	---	---	---	---	---	Trustworthy
28.	Pessimistic	---	---	---	---	---	---	Optimistic
29.	Complete	---	---	---	---	---	---	Incomplete
30.	Ungrateful	---	---	---	---	---	---	Grateful
31.	Cruel	---	---	---	---	---	---	Kind
32.	Hopeful	---	---	---	---	---	---	Hopeless
33.	Unselfish	---	---	---	---	---	---	Selfish
34.	Cowardly	---	---	---	---	---	---	Brave
35.	Merciful	---	---	---	---	---	---	Merciless
36.	Disapproving	---	---	---	---	---	---	Approving
37.	Awkward	---	---	---	---	---	---	Graceful
38.	Beautiful	---	---	---	---	---	---	Ugly
39.	Successful	---	---	---	---	---	---	Unsuccessful
40.	Consistent	---	---	---	---	---	---	Inconsistent
41.	Uninfluential.	---	---	---	---	---	---	Influential
42.	Progressive	---	---	---	---	---	---	Unprogressive
43.	Disreputable	---	---	---	---	---	---	Reputable
44.	Foolish	---	---	---	---	---	---	Wise
45.	Honest	---	---	---	---	---	---	Dishonest
46.	Weak	---	---	---	---	---	---	Strong

- | | | | |
|-----|-------------|-------|-------------|
| 47. | Passive | ----- | Active |
| 48. | Emotional | ----- | Unemotional |
| 49. | Changeable | ----- | Stable |
| 50. | Well | ----- | Sickly |
| 51. | Careful | ----- | Careless |
| 52. | Obedient | ----- | Disobedient |
| 53. | Unimportant | ----- | Important |
| 54. | Untruthful | ----- | Truthful |



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APPENDIX CTHE NORWICK-STRICTLAND LOCUS OF CONTROL SCALE FOR CHILDREN

This questionnaire contains items reflecting on your beliefs and values. Please tick ()
 "YES" or "NO" as appropriate.

Name-----

Age-----

Sex-----

- | | |
|--|--------|
| 1. Do you believe that most problems will solve themselves if you just
don't just fool with them | Yes/No |
| 2. Do you believe that you can stop yourself from catching a cold? | Yes/No |
| 3. Are some kids just born lucky? | Yes/No |
| 4. Most of the time, do you feel that getting good grades means a great
deal to you? | Yes/No |
| 5. Are you often blamed for things that just aren't your fault? | Yes/No |
| 6. Do you believe that if somebody studies hard enough he or she can
pass any subject? | Yes/No |
| 7. Do you feel that most of the time it doesn't pay to try hard because
things never turn out right anyway? | Yes/No |
| 8. Do you feel that if things start out well in the morning that it's
going to be a good day no matter what you do? | Yes/No |
| 9. Do you feel that most of the time parents listen to what their children
have to say? | Yes/No |
| 10. Do you believe that wishing can make good things happen? | Yes/No |
| 11. When you get Punished, does it usually seem it's for no | |

- good reason at all ? Yes/No
12. Most of the time do you find it hard to change a friends (mind)
Opinion ? Yes/No
13. Do you think that cheering more than luck helps a team to win? Yes/No
14. Do you feel that it's nearly impossible to change your parent's
mind about anything? Yes/No
15. Do you believe that your parents should allow you to make most
of your own decisions? Yes/No
16. Do you feel that when you do something wrong there's very
little you can do to make it right? Yes/No
17. Do you believe that most kids are just born good at sports? Yes/No
18. Are most of the other kids your age stronger than you are? Yes/No
19. Do you feel that one of the best ways to handle most problems is
Just not to think about them? Yes/No
20. Do you feel that you have a lot of choice in deciding who
your friends are Yes/No
21. If you find a four-leaf clover, do you believe that it might
bring you good luck? Yes/No
22. Do you often feel that whether you do your homework has
much to do with what kind of grades you get? Yes/No
23. Do you feel that when a kid your age decides to hit you, there's
little you can do to stop him or her? Yes/No
24. Have you ever had a good luck charm? Yes/No
25. Do you believe that whether or not people like you
depends on how you act ? Yes/No
26. Will your parents usually help you if you ask them to? Yes/No

27. Have you felt that when people were mean to you, it was usually
for no reason at all? Yes/No
28. Most of the time, Do you feel that you can change what might happen
tomorrow ? Yes/No
29. Do you believe that when bad things are going to happen,
they just are going to happen no matter what you try to stop them? Yes/No
30. Do you think that kids can get their own way if they just keep trying? Yes/No
31. Most of the time do you find it useless to try to get your own way at home? Yes/No
32. Do you feel that when good things happen they happen because of
hard work? Yes/No
33. Do you feel that when somebody your age wants to be your enemy, there's
little you can do to change matters? Yes/No
34. Do you feel that it's easy to get friends to do what you want them to? Yes/No
35. Do you usually feel that you have little to say about what you get to
eat at home ? Yes/No
36. Do you feel that when someone doesn't like you, there little you
can do about it? Yes/No
37. Do you usually feel that its almost useless to try in school because most other
children are just plain smarter than you are? Yes/No
38. Are you the kind of person who believes that planning ahead
makes things turn out better? Yes/No
39. Most of the time, do you feel that you have little to say about
what your family decides to do? Yes/No
40. Do you think it's better to be smart than to be lucky? Yes/No

APPENDIX D.SUBSTANCE USE INVENTORY

Sex-----

Age-----

Class-----

The following are lists of substances commonly used in our society.

How many times have you used each of these substances in the last THREE (3)

MONTHS ? Put an X in the box that applies to you.

	0 times	1-2	3-8	9-14	Above 15
1. Alcohol(e.g beer, palm wine)					
2. Cigarettes					
3. Valium/Librium/Lexotan					
4. Marijuana/Indian hemp					
5. Heroine					
6. Cocaine/Crack					
7. Antibiotics (e.g Ampicillin)					

B. Through who did you get to know about these substances?

a) Father b) Mother c) Brother d) Sister e) Doctor f) Friend

C. Which of the above listed substances have you had to use more and more in order to get the effect you wanted?

D. Have you ever fallen into trouble either with your friends, Parents, school authority or police due to the effect of any of these substances?

Yes No

E. Have you had to miss going to school or other engagements because of the effect of any of these substances (specify).

Yes No

F. Where do you normally use these substances ?(specify)

- a) At home b) during examination c) At school events d) At weekend Parties
e) On the way to school f) During school hours g) During school hours away from
school h) At school i) Right after school.

(List any other place/time.)

Appendix E

TOTAL RAW SCORE (SEX DIFFERENCES)

A) Relationship between depressive mood and adolescent substance use

Participants	Ex	Ex2	Ey	EY2	Exy	N
Male	6389	126816	3969	45614	68376	376
female	2659	55041	1524	16159	27337	160

B) Relationship between self-concept and adolescent substance use

Participants	Ex	Ex2	Ey	Ey2	Exy	N
Male	113748	3529181	3969	45614	1200044	376
Female	48563	15391104	1524	16159	1469250	160

C) Relationship between locus of control and adolescent substance use

Participants	Ex	Ex2	Ey	Ey2	Exy	N
Male	6222	110643	3969	45614	66018	376
Female	2868	55436	1524	16159	28009	160

Appendix F

TOTAL RAW SCORES (LOCALITY: EDUCATIONAL VS COMMERCIAL)

a) Relationship between depressive mood and adolescent substance use

Locality	Ex	Ex2	Ey	Ey2	Exy	N
Educational City (Enugu)	4401	92875	2480	28069	43582	255
Commercial City (onitsha)	4470	86951	2850	32448	48139	266

b) Relationship between self-concept and adolescent substance use

Locality	Ex	Ex2	Ey	Ey2	Exy	N
Educational City (Enugu)	76530	23444758	2480	28069	738758	255
Commercial City (Onitsha)	82330	25871575	2850	32448	890734	266

c) Relationship between locus of control and adolescent substance use.

Locality	Ex	Ex2	Ey	Ey2	Exy	N
Educational City (Enugu)	4116	71760	2480	28069	40606	255
Commercial City (Onitsha)	4709	88505	2850	32448	50563	266