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A CROSS-CULTURAL COMPARISON OF THE SYMPTOMS OF MALADAPTIVE FUNCTIONING AND THE ATTITUDES OF PSYCHIATRIC STAFF MEMBERS TOWARD MENTAL ILLNESS IN NIGERIA AND AMERICA (U.S.).

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A CROSS-CULTURAL COMPARISON OF THE SYMPTOMS OF MALADAPTIVE FUNCTIONING AND THE ATTITUDES OF PSYCHIATRIC STAFF MEMBERS TOWARD MENTAL ILLNESS IN NIGERIA AND AMERICA (U.S.)

by

Supo Laosebikan

A Dissertation Submitted to the Faculty of the Graduate School of Loyola University of Chicago in Partial Fulfillment of the Requirements for the Degree of Doctor of Philosophy

December

1976

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VITA

The author, Supo Ayodele Laosebikan, was born October 22, 1949 at Ogbomoso, Nigeria.

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Mental health in Nigeria: The promises of a behavioral approach in treatment and rehabilitation. Journal of Black Studies, 1973, 4, 221-228.

Social distance and pan-Africanism: study of social distance between three different African groups. Afro-American Studies, 1972, 3, 223-225.

Mental health in Nigeria: The roles of the traditional healers in research, treatment and rehabilitation. Journal of Social and Behavioral Sciences, 1972, 19, 40-45.

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CHAPTER I

INTRODUCTION

There has been a plethora of writings on the effects of culture on psychopathology since Kraepelin (1904) recorded the differences in incidence and distribution of psychiatric syndromes in Indonesia compared to Germany. Two seemingly contrasting philosophical viewpoints have guided most of these writings. The assertion that mental illness is subject to cultural relativism promotes the idea that behaviors considered abnormal in one culture may not be considered as such in others (Yap, 1952). Cultural relativists are opposed to the idea that mental illness is a supracultural phenomenon, contending that a behavior has to be identified as inappropriate or abnormal by members of the society in which the behavior is displayed, and not according to some universal clinical criteria. Some cultural relativists contend that symptoms of mental illness are unique to the cultures in which they occur. Two examples of these supposed culture-bound syndromes are "Latah" in Asia, characterized by hypersuggestibility, echolalia, and depression, and "malignant anxiety" - chronic anxiety observed among uneducated Africans (Yap, 1969).

Others, who support a contrasting viewpoint, (Kiev, 1972; Leighton, Lambo, Hughes, Leighton, Murphy and Macklin, (1963) insist that mental illness is not solely dependent on cultural standards of acceptability or tolerance of a behavior. Kiev (1972) maintains that

> Psychiatric diagnosis can be made only on the basis of mental state not in terms of social behavior. This is a particularly important distinction to make if one is to understand the relationship between social behavior and psychiatric disorder (p.19).

A less industrialized society may tolerate or accept behaviors which in a more industrialized society would be classified as evidence of deficiency. A higher level of tolerance for maladaptive behavior, Kiev argues, must not be mistaken as evidence for the absence of such behaviors. Despite Kiev's arguments, it is doubtful that mental state can be separated from social behavior and vice versa. It seems improbable that the community's response to an individual's behavior, or the process by which the individual is identified as needing psychiatric help, has little or no effect on his mental state. Laing (1967), for example, contends that individuals diagnosed as schizophrenics (specifically and perhaps others diagnosed as belonging in other psychiatric categories) behave as they do because they are treated as schizophrenics.

While the cultural relativists stress the importance of culture on psychopathology, the universal theorists contend that culture has little or no effect on "basic" psycho-

pathology. It is perhaps evident that the former theory derives from cultural anthropology while the latter originated in traditional psychiatry. In spite of this difference, the writings of the two factions are similar and seem to reflect the traditional psychiatric view of psychopathology. Both schools of thought have used the psychiatric diagnostic classifications as units of cross-cultural comparisons.

Cultural relativists, for example, seek to understand and explain observed cross-cultural differences in the expression of psychopathology in terms of the degree to which they fit into the present psychiatric nomenclature. Some of the seemingly unusual behaviors encountered cross-culturally have been thought to be cultural elaborations of behaviors commonly displayed in the West (Carothers, 1947). The supposedly unique syndromes of "Latah," "Koro" and "amok" observed in Asia are thought of as equivalent to hysteria, manic, and schizophrenic reactions, respectively, which are commonly diagnosed in Western countries. Yap (1969), who may be considered a leading cultural relativist, questioned the rigidity of present psychiatric classifications and proposed that more flexibility would enhance the integration of the so-called "culture-bound syndromes" into psychiatric nomenclature. This proposal for a uniform typology would enhance global epidemiological surveys as to the incidence of various psychiatric disorders in different parts of the world. On the other hand, it could obviate the possibility of detecting cultural dif-

ferences by defining them out of existence.

The proponents of a universal criteria for psychiatric disorders have attempted to compare the prevalence of different psychiatric reactions in different parts of the world. Wittkower and Rin (1965), in a review of these studies, described as a "hodge podge of observations," concluded that the major diagnostic categories are recognized all over the world. For example, they contend that "...the framework of the schizophrenic process is the same whereever it is found (p.391)." This rather ambitious study deserves to be scrutinized closely. As a study of the "true" prevalence rate of various psychiatric disorders in different parts of the world, the study is inconclusive. It mostly deals with the types of psychiatric disorders as treated at institutions and clinics around the world and ignores the untreated cases, that is, those psychologically maladjusted members of a community or culture who have not come to the attention of mental health agencies. Lambo (1961) observed that the bulk of African "mental defectives" and "psychotics" live as tolerated members of the general community. There is also evidence (Katz, Gudeman and Sanborn, 1969) that different ethnic groups may express their pathology in different ways in the community and the hospital. Japanese psychiatric patients were found to be more socially obstreperous in the community prior to hospitalization compared to their American counterparts. However, American psychiatric patients were found to be more

socially obstreperous than Japanese patients during hospitalization. It would seem that Wittkower and Rin's conclusion is validly descriptive of the framework of the schizophrenic process in individuals who were being treated at the psychiatric clinics they surveyed, but not elsewhere.

There is considerable evidence (e.g.,Braceland, 1969; Krauss, 1968), from studies conducted in the U.S., that diagnosticians often attend to certain symptoms while disregarding others in order to fit the observed symptoms into one diagnostic category or another. The problem looms ever larger in cross-cultural work where the diagnostician may be faced with the categorization of behaviors quite different from those he is familiar with in his own country (Yap, 1969). Perhaps the tendency to see similarity in the "framework of the schizophrenic process" is a consequence of the selective inattention to dissimilarities rather than their absence.

Wittkower and Rin (1965) reviewed the work of Western or Western-trained psychiatrists all over the world. Most of the studies provided support for the medical model, in which most Western psychiatrists are trained to the effect that the underlying or unconscious reasons for psychiatric disorder, as with physical ailments, are universal. Their (Wittkower and Rin) conclusion about the universal framework of the schizophrenic process may be reflective of the durability of the medico-psychoanalytic oriented conceptual scheme with which the diagnosticians viewed their patients, rather than

actual world-wide similarity in the schizophrenic process.

Another vitiating factor may be the doubtful reliability of the original diagnosis of schizophrenia. There is evidence that psychiatrists from one country may use certain diagnostic categories more liberally than others. American psychiatrists, for example, use the diagnosis of schizophrenia more often than their British counterparts (Sandifer, Timbury and Green, 1969). It is unfortunate that none of the authors reviewed specified the behavioral criteria on which the diagnoses of schizophrenia were based, further diminishing the possibility of replicating their findings.

The use of symptoms as units for across-cultural comparisons may minimize the problem of reliability in such studies, since it allows for the objective delineation of overt behavior, thus ensuring a higher level of agreement between observers and cross-disciplines. Leighton (1965) in an epidemiological survey of psychiatric disorders among the Yorubas, noted with some degree of surprise that "... as long as we discussed symptoms with native healers of the Yoruba tribe, we could understand each other and were in reasonable agreement (p. 82)."

Despite this methodological improvement, the question of whether a behavior recognized as a symptom of psychological maladjustment in one culture is considered so or has the same meaning in another culture, deserves some attention. For example, are delusions and hallucinations recognized in cultures

where practices such as witchcraft and strong beliefs in the influence of the supernatural are predominant? The Yorubas of Western Nigeria, who believe very strongly in the power and influence of the supernatural, are reported to share Western notions about psychiatric disorders (Leighton, Lambo, Leighton, Murphy and Macklin, 1963). Leighton (1965), surprised that a Yoruba traditional healer described a patient as suffering from delusions and hallucinations, asked him to explain these terms

> The native healer scratched his head and looked a bit puzzled at the question and then he said: 'Well, when the man came here he was standing right where you see him now and thought he was in Abeokuta (which is about thirty miles away), he thought I was his uncle and he thought God was speaking to him from the clouds. Now I don't know what you call that in the United States, but here we consider that these are hallucinations and delusions' (p.23).

It would seem that there are certain culturally prescribed avenues or rules governing the expression of behaviors indicative of faith in the supernatural and that any inappropriate expression of these behaviors may be readily perceived by others in the culture as evidence of maladaptiveness or abnormality.

In most of the existing empirical studies of symptoms of maladaptive functioning across cultural lines, a great deal of effort has been focused on comparing the symptoms of residential or hospitalized psychiatric patients in the two or more populations under investigation (Draguns, Phillips, Broverman, Caudill and Nishimae, 1971; Fantl and Shiro, 1957; Fundia,

Draguns and Phillips, 1971). However, there are a host of factors, some of them noncultural, that may result in the attenuation or exacerbation of some symptoms after hospitalization. For example, the amount or types of medication administered to patients may be different in the populations under investigation, thus contaminating the results. The physical environment of the hospitals which may be different cross-culturally may also exercise some uncontrollable, unpredictable influences on the expression of symptoms in the two locations. The attitude of the professional psychiatric staff towards their charges may result in their being more rewarding of certain behavior as opposed to others, thus reinforcing the expression of certain behaviors while discouraging others (Yamamoto, 1972). It may be that behaviors of hospitalized patients are essentially reflections of the preferences of the staff at the different locations and not the cultures under observation. These artifacts can be controlled in studies of patients' behaviors prior to hospitalization.

The aim of the present investigation is twofold: First, to compare the overt maladaptive behaviors of psychiatric patients in the United States of America and in Nigeria, at the time of entry into treatment. Second, to compare the attitude of staff members of psychiatric institutions in Nigeria and the United States of America toward the mentally ill. The first aim deals with the objections to studies such as Draguns *et al.*, while the second is relevant to the issue raised by Yamamoto.

CHAPTER II

REVIEW OF RELATED LITERATURE

The early comparisons of psychopathology in Africa and the West - - western Europe and North America - - consisted of naturalistic observations by missionaries (e.g., Parrinder, 1951), colonial psychiatrists (e.g., Carothers, 1947) and anthropologists (e.g., Henry, 1955). These anecdotal accounts were often detailed narratives of the symptoms of individuals considered "abnormal" in the African country which the author had visited (e.g., Field, 1960) or had been assigned to, as was the case with British psychiatrists (e.g., Tooth, 1950) who were often assigned to a British overseas colony such as Ghana. The authors usually based their comparisons on the differences and similarities of the behaviors of these individuals to those they were familiar with or believed to be typical of psychological maladjustment in their own countries. These reports tended to emphasize the strange and unfamiliar behaviors encountered by the authors (e.g., Carothers, 1947). While such reports make interesting reading and have heuristic value, they suffer from a general lack of discipline which is quite evident in the definitiveness with which the conclusions from these largely retrospective and unsystematic comparisons are stated. Carothers' (1951) position that the normal African mentality

bears close resemblence to that of a lobotomized European patient, for example, is obviously absurd.

Most of the recent and supposedly more sophisticated comparisons were based on contradictory clinical evidence of one psychiatric diagnostic category or another (Lambo, 1962). Perhaps, the only difference between these reports and those of earlier writers lies in the delimitation of the field of study. These writers (e.g., Carothers, 1960; Lambo, 1960) concentrated their efforts on comparing the symptoms of individuals diagnosed as belonging to a psychiatric diagnostic category (e.g.,schizophrenia). These reports, like those of early writers, were retrospective and unsystematic and based on the questionable reliability and validity of psychiatric diagnoses. While actual empirical comparisons (e.g., Leighton, Lambo, Hughes, Leighton, Murphy and Macklin, 1963) of symptoms of maladaptive functioning in Africa compared to those seen in Western countries are few, these clinical impressions are useful in that they highlight some of the problems that may be encountered when such a systematic comparison is attempted. In the following section an attempt will be made to review some of the extant literature on "schizophrenia," "depression" and "psychoneurotic conditions," diagnostic classifications which were often the units of comparisons in these anecdotal accounts of psychopathology in Africa and the West.

Schizophrenia. There is wide disagreement among scholars on the predominant symptom pattern of Africans in schizophrenic-like reactions. Carothers' contention (1951) that paranoid ideation is rare among Africans is contradicted by Lambo (1960) who found much evidence of this in his Nigerian sample, and proposed that it was more commonly encountered than was otherwise believed. There is general agreement, however, that the delusions of Africans in schizophrenic-like reactions have magico-religious content (Kiev, 1972).

A special transient form of schizophrenia, supposedly not seen in the West, has been observed among Africans (Lambo, 1956; Shelley and Watson, 1937). This is characterized generally by a "confusional state of brief duration." The specific symptoms are vague but include "nocturnal agitation," and manic-like behaviors accompanied by an emotional state of fear or hostility. The patient usually recovers spontaneously after a brief period, a week or two in some cases. It is questionable whether this form of schizophrenia is any different from the acute schizophrenic episodes with manic features commonly observed in the United States.

Depression. The fact that Africans tend to attribute most discomforts to supernatural causation and to disclaim any extensive personal responsibility has led some scholars (Carothers, 1960) to propose that Africans, in contrast to many Western patients who assume personal responsibility for their problems, are rarely depressed. Carothers (1960) stated

that classical endogenenous depressive psychoses are so rare among Africans as to render these classifications non-functional.

Lambo (1960) disagreed with Carothers' conclusion and proposed that depression may be incorrectly diagnosed as some kind of psychoneurosis among Africans. Lambo further stated that phobic and obsessional preoccupations of the African depressive may so color the symptom pattern that the "underlying depression" is disguised. The patient is preoccupied with vague somatic complaints. Feelings of self-accusation, guilt, fear of the future, regret and profound sorrow may be absent. This is in contrast to the European in a depressive reaction in whom these symptoms are predominant. Lambo's position as well as Carothers' are similar in one respect. Both positions are based solely on the impressions of the theorists and not on any empirical data. However, there is some empirical evidence supportive of Lambo's contention.

Leighton et al., (1963) reported a greater prevalence of depressive symptoms among the Yoruba of Nigeria than was found in a Canadian sample. Field (1960), in a study of patients at the healing shrines in Ghana, described depression as the most common type of illness of the rural female patient. There is very little evidence for Carothers' theory on the rarity of depression in Africa. It seems plausible that Carothers confused the remarkably high level of tolerance of

depressive symptomatology in Africa (Lambo, 1961), with the absence of these symptoms.

Psychoneuroses. The putative low incidence of psychoneurotic reactions among Africans (Laubscher, 1937) is not supported by any substantive clinical evidence. The rationale behind this conclusion is the assumption that Africans seldom feel tense because they have culturally approved avenues in the performance of rituals for assuaging tensions. In addition, Laubascher argues that Africans are "expressive," therefore, repression is rare or superficial and, psychoneuroses should also be rare. According to Lambo (1960), however, psychoneurotics are estimated at

> ...more than half of the persons who seek relief at the out-patient department of general hospitals in most African countries (p.15).

The obvious lack of consistency in these rather nebulous studies of these three psychiatric diagnostic categories may be examined by focusing on the problem of the units employed in making the comparisons, the setting in which the observations were made, and variables associated with the observer.

Unit of Comparison, Setting, and Observer Variables

Unit of Comparison. One important reason for inconsistencies in research findings is the previously noted unreliability of psychiatric diagnoses as dependable criteria for research purposes. Most of the conclusions were derived from unstandardized clinical interviews. In a study of British

and American psychiatrists, Sandifer, Horden, Timbury and Green (1969), found that American psychiatrists were more likely to use the diagnosis of schizophrenia than their British counterparts. British psychiatrists, on the other hand, were more likely to use the diagnosis of affective disorder. Psychiatric diagnosis then may depend on the training and background of the diagnostician. The different conclusions, therefore, may reflect the diversity in the training of the diagnosticians.

While most of the researchers based their conclusions on clinical interviews, the research methodologies and the populations studied vary widely, which also determined the significant lack of agreement in the various studies. For example, Field (1960) used key informants and direct observations in her study of the prevalence of schizophrenia in some villages in Ghana. Lambo (1960), on the other hand, based his conclusions on a study of the prevalence of schizophrenia among individuals who seek help at psychiatric clinics in Nigeria.

Setting. The effect of the settings--Western styled and mostly custodial mental hospitals--in which these studies were conducted may have a significant, if often inadvertent, effect on the behavior of patients within their walls (Goffman, 1961). There is little information on what effect, if any, the process of hospitalization in such an alien institution has on the behavior of patients. The hospital itself, or more

specifically, the attitudes of its staff, its physical environment, and the community's perception of the hospital's purposes, which may be different intra-culturally (Asuni, 1969) and cross-culturally (Yamamoto, 1972), may also affect the ease with which certain behaviors may be displayed in the hospital. Yamamoto (1972) observed that Japanese institutional staff rewarded the compliant behavior of their patients rather than the insightful behavior which is highly valued in America. Thus, the hospital environment may lead to the selective attenuation of some behaviors while exacerbating others. One answer to the problem is to assess the attitude of the hospital staff toward the patients, or to supplement the recordings of patients' behaviors within the hospital with observations of their behaviors in the community.

Another important error in the studies reviewed is the researchers' tendency to generalize to the all of Africa, observations which pertain to one African country or another. For example, Carothers' (1947) observations on the rarity of depression in Africa are essentially derived from his practice in Kenya rather than from observations over the entire continent of Africa.

Observer Variables. The investigator's race, theoretical orientation, and other more inconspicuous factors, which may not vitiate his research in his own country, assume greater import in cross-cultural work. It has been suggested that such investigators, because of their limited contact with

Africa, would bring into their research a high level of objectivity. On the other hand, the investigators' ignorance and limited familiarity with etiquettes, taboos, and language of his subjects may result in uninformed interpretations (Draguns, 1973; Sandifer et al., 1969).

One field study (Leighton, Lambo, Hughes, Murphy and Macklin, 1963) of non-hospitalized Yorubas of Nigeria and Sterling County Canadians provides useful epidemiological data on the two samples, but also provides invaluable examples of the problems that a foreign research team may expect in the conduct of research in Africa. Using a modified questionnaire, the Yoruba informant was told what the interviewers wanted:

> ...to find out about the health conditions of the village by talking to the people and examining them. We shall ask you about your health and while asking we will write down your answers (p. 310).

The subject was then asked if he had experienced a set of symptoms of different physical and mental illnesses. Using the Diagnostic and Statistical Manual: Mental Disorders, (American Psychiatric Association, 1952) a psychiatric symptom pattern was obtained on each person. The patterns of psychiatric disorders were obtained from a predetermined grouping of symptoms. This data was then compared to the Sterling County Canada data (Leighton, 1959). The conclusion was that patterns of psychiatric disorders among the Yoruba closely resembled those found in Euro-American cultures. The influences of culture, e.g. belief systems and attitude towards mental illness, were found to provide qualitative differences in the recognition, treatment

and ascribed etiology in the different cultures.

Prior to the psychiatric interviewing, a medical team had visited the villages and treated villagers for various physical illnesses. It was not unlikely that many villagers might have tried to dramatize their need for further medical attention by claiming to have various discomforts and symptoms. All the items on the interview questionnaire required the informant to indicate if he had suffered from one symptom or another. Taking into consideration the Yorubas' traditional deference to strangers (Johnson, 1956), it seems likely that the Yoruba sample may have acquiesced more often than the Canadian sample. This kind of contamination of data collection may render data on the Yoruba sample unreliable. The entry of the research team into the villages in a caravan of motor cars, and foreign researchers who were busy "snapping pictures" and making notes, most probably did nothing to encourage honest and open responses. Leighton et al., (1963) admitted that the respondents were prompted and coached by large crowds of onlookers who might have been jealous of the attention commanded by the informant. Field studies and more especially cross-cultural studies are fraught with factors that cannot be as properly controlled as in laboratory studies. Nevertheless, the study has heuristic value in its exposure of problems one might reasonably expect to encounter in the conduct of field studies in most African countries.

Similarly, the work of researchers of African origin may be contaminated by their own over-identification with the subjects of the study. This is somewhat evident in the passionate, and invidious rebuttals of studies such as those of Carothers (1947), by Lambo (1962) and this writer (Laosebikan, 1973). These observer variables, if uncontrolled, as is the case in most studies that depend on the observer's subjective or clinical impressions, may invalidate the results. Draguns (1973) proposed solution is for increased use of bicultural observers, supposedly, "equally at home in the cultures under observation." In my opinion, this is a moot point, since freedom from observational bias is more easily attained through improved methodology than through attempts to change the attributes of researchers. These observer variables, and biases may be minimized in a good research design, i.e. multiple observers.

Hypotheses on the Present Study

Industrialization may affect societal attitudes towards behaviors regarded as maladaptive. In non-industrialized societes, any behaviors that do not actively disturb the community's homeostasis are tolerated. Lambo (1961), commenting on the attitude of Nigerians toward maladaptive functioning, stated that

> community attitude clearly permits the bulk of African mental defectives with various grades of insufficiency and some psychotics who keep themselves at some sort of functional level, to live as tolerated members of the general community...(p. 4).

Leighton et al., (1963) in a study of the Yorubas of Western Nigeria, concluded that the respondents did not perceive individuals suffering from "psychoneurotic reactions" as mentally ill. Rather, mental illness is equated with more gross forms of maladaptive behaviors. The negative effect of the maladaptive behavior on the employability of the individual, which may be a reason for seeking hospitalization in a more industrialized country (e.g. U.S.A.), is less likely to be a factor for seeking hospitalization in a less industrialized country (e.g. Nigeria). The malfunctioning individual is well provided for within the extended family systems (characterized by bonds of consanguinity) that is predominant in Nigeria. The responsibility for caring for the disturbed relative is shared by many individuals in contrast to the financial hardship that may be suffered by very few in the more nucleated American family. The Nigerian community, as a result, may be more tolerant of maladaptive behavior than the American community. It is likely that Nigerians who seek psychiatric help, will be more disturbed than their American counterparts.

Hypothesis I Psychiatric patients in Nigeria exhibit significantly more maladaptive behaviors in the community than American psychiatric patients just prior to seeking hospital treatment.

One theoretical basis for the use of symptoms in cross-cultural research is based on the hypothesis of Opler and Singer (1959) that symptoms are exaggerations of the normal coping pattern of the culture. (Breen (1968) defined schizophrenia, for example, as an exaggeration of the defense systems "which in milder forms, define aspects of the mature personality of the culture (p. 282)," in which the schizophrenic was raised. The "sick" individual displays symptoms which are congruent with his culture, and he verbally describes his symptoms in ways which are meaningful to members of his culture.

This proposal constitutes what is generally referred to as the continuity hypothesis. It posits that psychopathology does not arise haphazardly and independent of an individual's life circumstances. Rather, psychopathological behavior represents the misuse of the culturally prescribed patterns of coping (with stress). Central to the theory is the idea that psychopathological behaviors and the modal behaviors of a culture vary along a continuum (Draguns, 1973), Phillips and Draguns, 1971). The converse (Schooler and Caudill, 1964), that psychopathological behavior is in contrast with and bears no resemblance to the modal behavior of the culture in which the behavior is displayed, has been "rarely articulated or tested" (Draguns, 1973).

Opler and Singer (1959) hypothesized that Italian-Americans in schizophrenic reactions whose culture allowed for a freer emotional expression would act out, and be more impulsive than Irish-Americans in schizophrenic reactions from a culture that allows for a more controlled expression of emotions. This hypothesis was supported when symptoms of matched groups of schizophrenics from both cultures were compared.

Diaz Guerrero (1967a, 1967b), a Mexican psychologist, proposed that two essential differences exist in the prescribed cultural reaction to stress in Spanish-speaking and English-speaking countries of the Americas: in the latter, an active, forceful attempt to understand and master the stress is encouraged; while in the former, a serene, passive resignation to the exigency is favored. This hypothesis was tested by Fundia, Draguns, and Phillips (1971) who reported more evidence indicative of a withdrawal from others in their Argentine sample compared with a matched group from the United States.

Other studies that have explored the area of symptom differences among several ethnic groups include Fantil and Shiro's (1957) study of Irish and Italian female "schizophrenics" and Figelman's (1969) study of Negro and Jewish mental patients. The use of groups matched on the basis of sex, age, and diagnosis in these studies is necessitated by the problems of obtaining random samples in cross-cultural

research. This is a significant improvement from comparisons (e.g., Sechrest, 1969) based on non-random samples which may differ on many factors such as age and socioeconomic class. Although these studies are supportive of the cultural relativists' position, unlike previous accounts (e.g., Yap, 1952, 1969) they are based on empirical evidence rather than theoretical notions or impressions.

The continuity hypothesis is further elaborated by Phillips and Draguns (1969) who conceptualize symptoms as reflections of the individuals' life style, and classifiable along two dimensions: "role orientation" and "sphere dominance." Role orientation refers to the

> relative dominance of pathological symptoms indicative of a turning against the other, e.g. threatened assault, destructive outbursts or avoidance of others, e.g. suspiciousness and withdrawal (p.25).

Individuals who feel responsible for their failures in life are more likely to display symptoms of "turning against the self," e.g.,guilt feelings, suicidal attempts, than are individuals who ascribe blame for their failures or problems to other forces or individuals. The latter are more likely to display symptoms indicative of an "avoidance of others," e.g., suspiciousness and withdrawal) and "turning against others," e.g., threatened assault, destructive outbursts).

Cross-cultural studies of symptoms of matched samples of Japanese and American patients (Draguns, Phillips, Braverman and Caudill, 1970) lend further support to this model. These studies indicate that Japanese patients from

a culture in which an individual's misfortunes are more likely to be attributed to others or forces other than the individual, tend to display symptoms indicative of a turning against others more often than American patients. In contrast, American patients from a culture that emphasizes the individual's responsibility for his failures exhibit symptoms that are more indicative of a turning against self.

In Africa, it is generally believed that a person, with the help of the gods, can wish mental illness on others. Among the Yorubas of Western Nigeria, for example, illness is often ascribed to supernatural influences, (e.g., spirits, gods, witchcraft, magic) and not to any psychological distress or response to psychological trauma (Leighton et al., 1963). Successful Africans attempt to appear modest in order to placate less successful individuals who may seek to harm them. In many African countries, e.g.,Ghana, many patients often consult traditional healers to seek protection from others who may be jealous of their success or who may wish to do them harm for other reasons (Field, 1960). Lambo (1960) referred to the tendency of the Nigerian to attribute frictions in domestic and interpersonal relationships to the malevolence of some imagined individual (s).

It seems likely then that the Nigerian psychiatric patients will show more symptoms indicative of turning against others than do American patients. Overt behaviors indicative of a "turning against others" may be called socially obstrep-

erous behaviors. Since the process of hospitalization may affect the expression of these behaviors (Katz, Gudeman and Sanborn, 1969), the occurrence of these behaviors at the time of admission to treatment will be considered.

Hypothesis II: The behavior of Nigerian psychiatric patients in the community will be significantly more socially obstreperous than that of American (U.S.) psychiatric patients just prior to seeking treatment.

Despite the fact that the attitude of psychiatric staff may profoundly influence the expression of symptoms of psychopathology, there has been little systematic research on the attitude of psychiatric staff towards the mentally ill. This is of paramount importance in cross-cultural research where the differences in symptoms encountered in any comparisons of hospitalized patients in two or more cultures may bear directly on the differences in the training, education, and orientation of the psychiatric staff member in the different cultures, rather than any putative cultural differences.

In all studies considered (or cited) so far, symptoms obtained from patients' case records is the unit of comparison. Case records are not the most reliable tools for research purposes since they may be influenced by a host of factors, among which are the philosophical orientation of the hospital, attitude of the staff toward patients, and availa-

bility and type of training of staff members.

For example, in the strictly authoritarian Japanese culture, professionals expect behavioral compliance from patients rather than self-understanding which is highly valued in American culture (Yamamoto, 1972). Katz, Gudeman, and Sanborn (1969) observed that Japanese psychiatric patients from a less-industrialized society, were more socially obstreperous than American patients from a more industrialized society in the community prior to hospital admission. American patients were more socially obstreperous following hospital admission than Japanese patients. They concluded that both ethnic groups expressed their pathology in different ways in the community and the hospital. The greater degree of compliant behavior of Japanese patients in Katz et al. study may be predicated on the attitude of the professional staff towards patients.

Levine (1972) in a study of samples of students, physicians, nurses and police in Great Britain, Czechoslovakia and Germany concluded that the differences in attitudes toward mental illness between occupational groups were not as substantial as cross-national differences. These latter differences were seen as reflections of the community climate. Thus, all Czechoslovakian vocational groups endorsed more items indicative of a socially restrictive attitude towards mental illness than any of the others. This finding was interpreted as a reflection of the more socially restrictive nature of the Czecho-

slovakian socio-political situation. Levine, however, did not analyze the possible intranational differences in the attitudes of different occupational groups towards the mentally ill.

In some instances the attitudes of the professionals in a psychiatric hospital may be discordant with that of the predominant culture. This is most evident in traditional cultures experiencing rapid change. As a result of these changes, and the attendant-disruption in traditional roles, attitudes tend to be polarized between the educated and more westernized individuals, and the less educated, more traditional individuals. While the tolerant attitude of the general populace, toward the mentally ill in Nigeria has been noted (Lambo, 1960), Nigerians in "non-traditional" (i.e. western educated) occupations advocate more social restriction of the mentally ill (Asuni, 1969).

There is no comparative data on the attitude of psychiatric hospital staff members in Nigeria and the United States towards the mentally ill. The paucity of information makes the formulation of a specific directional hypothesis somewhat difficult. However, the information presently available suggests that United States psychiatric professionals are less socially restrictive in their attitude towards the mentally ill than their counterparts in other countries, e.g., Japan (Yamamoto, 1972). On the other hand, if the attitude of the Nigerian psychiatric professional toward the mentally ill is in keeping with that of other professional Nigerians, the

tendency may be to impose restrictions on patients' behavior while in the hospital, thus reinforcing compliance and dependency in patients. This led to the formulation of a working hypothesis that:

Hypothesis III: Staff members at the Nigerian psychiatric hospital will be more socially restrictive in attitude towards the mentally ill than their American counterparts.

The issues raised by hypothesis I and II are closely related to each other, and are explored in Study I. The third hypothesis on staff attitudes is presented last in Study II.

CHAPTER III

STUDY ONE: A COMPARISON OF THE SYMPTOMS OF MALADAPTIVE FUNCTIONING IN WESTERN NIGERIA AND THE UNITED STATES

Hypothesis I: The behavior of Nigerian psychiatric patients in the community will be significantly more socially obstreperous than that of American (U.S.) psychiatric patients.

Hypothesis II: Psychiatric patients in Nigeria will exhibit significantly more maladaptive behaviors in the community than American psychiatric patients.

Plan of Study, Selection and Development of Instrument

To ensure comparability of data obtained in both countries on patients' behaviors in the community prior to requesting hospital treatment the following procedure was followed:

1. Interviews were conducted with the relatives of patients seeking psychiatric hospital treatment in both countries at the time of their request. The use of relatives as informants instead of patients controls for the usual psychometric problems with self-ratings, e.g.,the tendency to give socially desirable responses. Moreover, highly disturbed patients can not be expected to give valid and reliable information about their behaviors. The role of relatives in the

research process is in keeping with their function in clinical situations where a close relative is usually relied upon to provide background information on the patient and the illness.

2. These interviews were structured around the same objective rating scale for assessing patients' behaviors in the community just prior to the request for hospital treatment.

The relatives' ratings of patient's behaviors was obtained as part of the intake procedure. The Relatives Rating Inventory of Patient Symptom and Social Behavior (Katz and Lyerly, 1963) was the instrument used. (See Appendix A).

Description of Instrument. This 127 item Katz and Lyerly inventory is designed to provide information on the patient's symptomatology and social behavior as reported by a close relative or significant other. Some of the items were designed to cover psychiatric symptomatology in easy-to-understand everyday language (e.g., "will stay in one position for a long time"). Another set of items were designed to reveal information on the patient's positive and negative social behaviors. These items range from "dependable," and "responsible", through "curses at people", "resentful," and "stubborn."

Validity and Reliability of the Relatives' Rating Inventory of Patient's Symptoms and Social Behavior (RRI). Katz and Lyerly (1963) sought to determine the validity of the information given by the relatives and to ascertain the discriminative power of the RRI. The subjects consisted of fifteen

former psychiatric patients who were clinically evaluated by the psychiatric staff as maintaining relatively good adjustment in the community, and fifteen former patients whose adjustment in the community was described as "marginal" or "poor" by the staff. Both groups were matched in terms of age, sex, hospital diagnosis, time out of the hospital, educational background, and occupational level. The RRI was then administered to one close relative of each patient. The 127 items were classed into three categories: minor psychiatric symptoms, major psychiatric problems, and level of interpersonal disturbance. The first category, minor psychiatric symptoms, consisted of symptoms which were thought to be indicative of minor emotional maladjustment, e.g.,"has trouble sleeping." The second category, major psychiatric symptoms, consisted of symptoms which were determined to be indicative of psychotic disturbance, e.g.,"talks to people who are not there." The third category, level of interpersonal disturbance was made up of behaviors with distinct social reference, e.g.,"gets into frequent arguments." There were significant differences in the means of the two groups (the well adjusted group and the marginally adjusted group) in the three categories. A significant degree of correspondence was noted between clinical judgment and the relative's ratings when point-biserial correlations of relatives' ratings on the three categories and clinical judgment were computed. Katz and Lyerly concluded that relatives were capable of

making valid judgments as to the behavior of the patients.

The RRI correlates highly with other measures of psychopathological behaviors. In one study, Vestre and Zimmerman (1968) compared the ratings of the relatives of 138 admissions to a psychiatric unit with the ratings of the same patients by nurses using the (PRP) Psychiatric Reaction Profile (Lorr, O'Connor and Stafford, 1960). Most of the RRI clusters correlated highly with the PRP scale. Similar results were obtained in a study of the correlation of the ratings of psychiatrists obtained from the Inpatient Multidimensional Psychiatric Rating Scale (Lorr, Klett, McNair and Lasky, 1962) with the ratings of relatives as measured by the RRI.

In another study (Katz and Lyerly, 1963), a social worker administered the RRI to relatives of 100 newly admitted patients described as exhibiting predominantly schizophrenic-like behavior. They were instructed to describe the patient as he was within the two week period before admission, presumably at the height of his illness. The data obtained were subjected to cluster analysis. The 127 item variables were intercorrelated and only those with intercorrelations above .40 were considered for subsequent analysis. Clusters were formed consisting of those items that had relatively high correlations among themselves and little or no correlation with items in other clusters. A set of items that was found to correlate with a minimum of five of the clusters were set aside to form a cluster measure of the inventory's

"general factor," and was later named "general psychopathology." The twelve clusters obtained were named on the basis of their item composition as follows: 1. belligerance; 2. verbal expansiveness; 3. negativism; 4. helplessness; 5. suspiciousness; 6. anxiety; 7. withdrawal and retardation; 8. general psychopathology; 9. nervousness; 10. confusion; 11. bizarreness and 12. hyperactivity. (See Table 1).

The internal consistency coefficients of the items in each sub-cluster were high, ranging from .84 for suspiciousness to .61 for nervousness. Similar results were obtained in a National Institute of Mental Health (NIMH) study (Katz and Lyerly, 1963) of newly admitted patients in nine hospitals, diagnosed as acute schizophrenics. In view of the fact that the clusters were formed on the basis of the principles of internal consistency, the maintainence of these high internal consistencies with different samples in different settings, is an indication of the stability or reliability of the RRI.

In an attempt to categorize patients in terms of the type of symptoms they presented, the clusters that were obtained from the cluster analysis of the profiles of the NIMH sample were factor analyzed. The results indicated that three factors can account for 57 per cent of the total variance. They are described by Katz and Lyerly (1963) as:

TABLE 1

THE 12 CLUSTERS OF THE RELATIVES' RATING INVENTORY (RRI)

(1) Belligerence

28. Got angry and broke things.
50. Cursed at people.
45. Got into fights with people.
113. Threatened to tell people off.

(2) Verbal Expansiveness

100. Shouted or yelled for no reason.
106. Talked too much.
99. Spoke very loud.
105. Kept changing from one subject to another for no reason.
118. Bragged about how good he was.

(3) Negativism

46. Was not cooperative
36. Acted as if he did not care about other people's feelings.
47. Did the opposite of what he was asked.
48. Stubborn.
56. Critical of other people.
51. Deliberately upset routine.
59. Lied.
37. Thought only of himself.
60. Got into trouble with law.

(4) Helplessness

93. Acted as if he could not make decisions.
74. Acted helpless
92. Acted as if he could not concentrate on one thing.
3. Cried easily.

(5) Suspiciousness

40. Thought people were talking about him.
107. Said people were talking about him.
43. Acted as if he were suspicious of people.
108. Said that people were trying to make him do or think things he did not want to.

(6) Anxiety

19. Afraid something terrible was going to happen.
122. Said that something terrible was going to happen.
18. Had strange fears.
111. Talked about people or things he was afraid of.
23. Got suddenly frightened for no reason.
125. Talked about suicide.

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TABLE 1--Continued

(7) Withdrawal and Retardation

76. Moved about very slowly.
8. Just sat.
80. Very slow to react.
70. Quiet.
17. Needed to do things very slowly to do them right.
84. Would stay in one position for long period of time.

(8) General Psychopathology

5. Acted as if he had no interest in things.
12. Felt that people did not care about him.
30. Acted as if he had no control over his emotions.
31. Laughed or cried at strange times.
32. Has mood changes without reason.
33. Had temper tantrums.
34. Got very excited for no reason.
42. Bossy.
44. Argued.
52. Resentful.
55. Got annoyed easily.
67. Stayed away from people.
71. Preferred to be alone.
73. Behavior was childish.

(8) General Psychopathology--Continued

79. Very quick to react to something said or done.
90. Acted as if he were confused about things; in a daze.
91. Acted as if he could not get certain thoughts out of his mind.
94. Talked without making sense.
97. Refused to speak at all for periods of time.
98. Spoke so low you could not hear him.
110. Talked about how angry he was at certain people.
119. Said the same things over and over again.
121. Talked about big plans he had for the future.
127. Gave advice without being asked.

(9) Nervousness

20. Got nervous easily.
21. Jittery.
38. Showed his feelings.
22. Worried or fretted.

(10) Confusion

85. Lost track of day, month, or the year.
86. Forgot his address or other places he knows well.
88. Acted as if he did not know where he was.

TABLE 1--Continued

(11) Bizarreness

116. Talked about strange things that were going on inside his body.

26. Did strange things without reason.
25. Acted as if he saw people or things that weren't there.
124. Believed in strange things.
24. Had bad dreams.

(12) Hyperactivity

7. Had periods where he could not stop moving or doing something.
13. Did the same thing over and over again without reason.
6. Was restless.

Factor I: "...belligerence, negativism, verbal expansiveness and general psychopathology--a general dimension of social obstreperousness, ranging from manifest belligerance and boisterousness through negativism and covert hostility."

Factor II: "...anxiety, bizarreness and hyperactivity--acute psychoticism."

Factor III: "...withdrawal and retardation and helplessness--the dimension appears to reflect withdrawn depression (530)."

The RRI may well be the best instrument available to study patient's prehospitalization behavior cross-culturally. Emphasis is placed on such terms as "looks like," "acts as if" and "says" in order that relatives may describe observable behavior, avoiding inferences or clinical judgment. Although the RRI has been used cross-culturally (Katz, Gudeman and Sanborn, 1969), one of the most difficult problems for this study was the translation of the instrument into a Nigerian language.

Translation of Rating Scale (RRI) into Yoruba. The first decision about translating the Relatives' Rating Inventory was which of the many Nigerian languages was to be used. Since Aro Psychiatric Hospital, where the study was to be conducted is in the heartland of the Yoruba tribe, it was

decided to translate the inventory into Yoruba, and an overwhelming majority (90%) of individuals who seek help at Aro Hospital are Yorubas. Moreover, the arrangement afforded the researcher, who is a Yoruba, some level of control on the quality of the translation.

The translation of the inventory into an equivalent Yoruba form was first attempted using the back-translation method, which has been used extensively in cross-cultural studies, (Brislin, Lonner and Thorndike, 1973). Two bilinguals, both working independently were employed in this phase of the translation. A number of successive translations were completed, with the first bilingual (A) translating the original English into Yoruba form. Then, with this Yoruba translation, the second bilingual (B) translated the inventory back into English. After this, a review of the translations was instituted. The source (English) and target (Yoruba) language versions, were subjected to many reviews and revisions. The revision usually involved the modification or change of terms and other words which have no equivalent in the other language. A literal translation into Yoruba of English language metaphors and colloquial terms would have completely obscured the original meaning of some of the items. For example, in item 13, "gets very sad, blue", the meaning of blue in this context is not the color. For successful back translation of this item, it was necessary to drop the word "blue" from the original

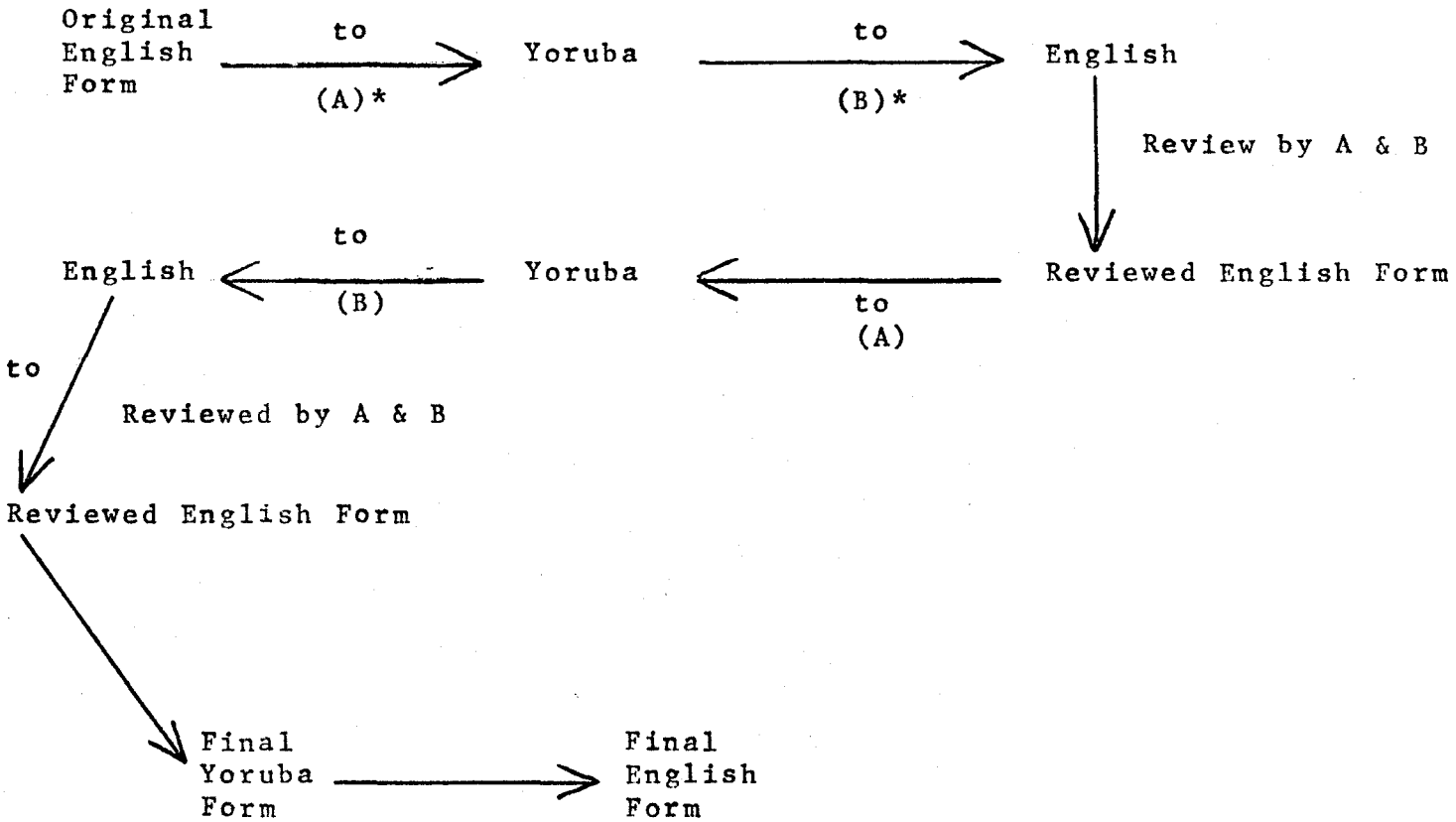
English version. The successive translations and reviews undertaken in this study are shown below in Figure 1.

In the present investigation, this final Yoruba form was field tested on a pretest sample of five relatives of patients who were seeking help at Aro Hospital. The pretest sample was made up of a 27 year old male high school graduate, a 35 year old female college graduate, a 30 year old nonliterate housewife, and two nonliterate male farmers, aged 38 and 64. Each of the five was asked separately, "what do I mean when I say the following." Each of the 127 items of the Yoruba form was then presented and those items that did not have the same meaning for at least four subjects were identified for further revisions. In addition, the meaning of items in Yoruba on which there was high agreement (items on which at least 4 of 5 subjects agreed as to the meaning) were then compared to the meaning of the final English version. The number of questions the members of the pretest sample asked when presented with an item became an indirect measure of the awkwardness of the translation.

Of the 127 items in the final Yoruba form, the meaning of 84 items were shared by at least 4 out of 5 members of our pretest sample. Of these items, 80 items were judged as having meanings equivalent to those of similarly numbered items in the English version. Of these 80 items, at least 25 or more items were rated as awkward or evaluated as involving uncommon usage of words. In a study

Figure 1

Back-Translations of the RRI into Yoruba



* (A) = First Bilingual Translator

* (B) = Second Bilingual Translator

of the response pattern of this pretest sample, there was a significant difference between the responses of the non-literate and the literate members of the sample. The literate members asked fewer questions and expressed greater understanding of items which were blatantly awkward in terms of sentence construction and seeming ambiguity. When questioned, it became obvious that those two respondents evaluated these items in terms of what they thought the experimenter "meant to say" and not the meaning of the items as conveyed in the translation. This demand characteristic, that is, the process by which subjects attempt to discover the experimenter's intent, may be a most important contaminant of any research conducted in developing countries where the research instructions may have a different meaning for literate and illiterate subjects. The literate members of the pretest sample seemed anxious to display their familiarity with the research process. In fact they seemed a little too eager to display their superior understanding of the research process. They also gave unsolicited and sometimes condescending suggestions on how the items should be presented to non-literate individuals. This demand characteristic diminished the experimenter's confidence in the validity of the ratings of the translated 127 items.

There were other problems of a more technical nature with the translation that relates to the differences in the grammatical forms of the two languages, Yoruba and

English. For example, item 1, "Has trouble sleeping" which is seemingly straightforward and presumably, easy to translate, is back translated as shown below:

(1)	Original English version:	"Has trouble sleeping"
(2)	Yoruba version:	"A máa ni wàhálà nipa atusun
(3)	Yoruba version back-translated into English:	"Has trouble about sleeping"

Although equivalence is achieved in the above translation, the Yoruba version (2) is awkward and was misunderstood by more than 4 out of 5 members of a pre-test sample of Yoruba respondents. The primary reasons for this is the unfamiliarity of the sentence structure and the odd usage of words. Moreover, when the Yoruba version (2) is backtranslated into English version (3) the original meaning is obscured in the translation by the word "about". A revision of the original English version to make it more easily backtranslatable, does not help matters much. It is illustrated below:

Revised English form (4)	"Has trouble with sleeping"
Backtranslated into Yoruba (5)	"A má ni wàhálà pelu orun sisun"

The pretest sample found the Yoruba form (5) easy to understand but the sentence still retained some of the awkwardness that characterized the first backtranslation into Yoruba (2).

Furthermore, when the second bilingual backtranslated the Yoruba version (5) into English (6) the following

was obtained:

"Has trouble with the process of sleeping."

Although the sentence (6) is easy to understand, it is awkward and unnecessarily more complex than the original English version (1).

This type of technical problem was encountered throughout the translation exercise. In addition there are some key psychological concepts which were difficult to express in Yoruba when the rather inflexible method of backtranslation is employed. For example, there are no equivalent Yoruba words for "nervous," "mood," or "temper tantrum," although such behaviors are describable in Yoruba.

In some instances where items were easily backtranslatable, the members of the pretest sample were so sensitive to some questions, that their responses seem controlled, if not less than truthful. For example, item 126, "talks about strange sexual ideas" was easily backtranslated into Yoruba, but such direct questioning by a stranger, regardless of his status as an experimenter, is considered impolite. One of the respondents whose mother was seeking help at Aro refused to talk about the meaning of this item when presented in this manner. Holtzman referred to this kind of problem when he noted that the "...semantic value of particular words and phrases may still differ appreciably across two cultures, leading to different response sets and interpretations of meaning (Holtzman, 1965, p. 74)."

These kinds of problems led to the abandonment of backtranslation in favor of a more direct method of translation which would lead to the minimization of these potential sources of bias. Yoruba scholars (e.g.,Johnson, 1956) have called attention to the limited validity of translations in which "...every word and particle of the English is translated into an equivalent Yoruba form..." thus rendering the translation obscure and confusing. They have suggested that rather than labor to achieve literal equivalence, attention should be directed towards obtaining translation that is equivalent in terms of its meaning to that of the original language version. With this in mind, a committee was formed from a group of experts in the Yoruba language who were meeting at the University of Ife in Nigeria on the translation into Yoruba of technical English passages. This fortuitous event provided the opportunity to form a committee that consisted of Dr. A. Afolayan, a professor of Linguistics at the University of Ife, Mr. A.M. Laosebikan, a lecturer in Yoruba at the same university, and the experimenter. The task before this committee was to translate the original English version into Yoruba without eliciting meanings not intended in the English version. Dr. Afolayan and Mr. Laosebikan translated the English version into Yoruba independently. Both translators went to great lengths to use easy to understand and commonly used words in their translations. (See Appendix B).

The committee met to compare results of the two independent translations. The "appropriateness" of each item was discussed especially when the two Yoruba translations differed. A consensus on the appropriateness of each item was reached. On some items, e.g. 41, 31, 33 it was decided that adding context by being more descriptive, helped clarify the intent or meaning of these items. For example, item 41, "complains of headaches, stomach trouble, other physical ailments" was translated into "Igba gbogbo ni ma wijo; oni ori nro mi olg edo ndun mi," which if backtranslated into English becomes "complains all the time about his body; today he complains of headache, tomorrow he may complain of intestinal problems." To the Yoruba subject the introduction of the inconsistent characteristic of the complaints supposedly helps illustrate the psychological maladaptiveness of the complaint and separate it from that which is encountered in normal interaction with others.

Item 31, "laughs or cries at strange times," if backtranslated becomes "Akoko erin nre ki ba ti araiye mu". If translated back into English the item becomes--"the times that he/she laughs is not the same as that of others in the world." Although the Yoruba version is not semantically similar to the English version, they have equivalent meanings. In addition, a Yoruba respondent would have no doubt as to the intent or meaning of the item. On item 29, the two alternative translations of the item were included in

the final product. The two translations have identical meanings, but different sentence constructions. However, each of the two translations provided context for the understanding of the other. Behaviors that the Yoruba respondents were known to be especially sensitive to were presented in culturally prescribed manners. For example, item 126, "talks about strange sexual ideas", when translated became "Orisirisi asa lori tokunrin toburin lo po le nu re." If this were back translated into English, the sentence would read as follows: His/her mouth is full of talk about different customs of the relationship between men and women. While the sentence would be ambiguous, if not incomprehensible to an American respondent, the meaning of the item was well understood by the Yoruba respondents.

Reliability and Validity of the Yoruba Translation of the Relatives' Ratings Inventory. The fact that each patient is accompanied to Aro Psychiatric Hospital in Nigeria by a complement of at least three relatives provided ample opportunity for the analysis of inter-rater reliability. The RRI was administered independently to two close relatives of each of nine patients who were seeking help at Aro. The data was scored dichotomously for presence or absence of each of the 127 symptoms. A high reliability coefficient (0.90941) was obtained.

The analysis of the validity of the translated questionnaire presented the research with some problems. The plan called for the matching patients diagnosed as psychotics with patients diagnosed as neurotics on demographic variables such as age, sex, and occupational status. The expectation was that patients diagnosed as psychotics would be rated by relatives as more seriously disturbed than those diagnosed as neurotics. The difference was expected to show up in terms of higher means for the psychotic group on subcluster 8, general psychopathology. While there was a large number of patients who were diagnosed as psychotics, almost no one was diagnosed as neurotic in a 10 day period. As a result, the researcher had to look elsewhere. The group of neurotic patients in this analysis were from the University College Hospital (at Ibadan) Outpatient Psychiatric Clinic.

Five patients diagnosed as psychotics on the basis of a clinical interview by a Nigerian psychiatrist at the Aro Hospital were matched on the variable of age, sex, and occupational status with 5 other patients who were diagnosed as neurotics, on the basis of a similar kind of interview, at the University College Hospital. The relatives of the 10 patients were administered the RRI. The psychotic group obtained a mean of 18.4 which is significantly higher ($p > .009$) than the mean of 7.0 for the neurotic group.

Procedure

Research Institutions. The research was conducted at Aro Psychiatric Hospital in Nigeria and Jackson Park Hospital in Chicago.

Aro Hospital, which was built in 1954, is the first psychiatric center established in Sub Saharan Africa. It is located on the outskirts of Abeokuta, a city of some 300,000 inhabitants in Ogun state. Despite its location in the predominantly Yoruba-speaking area of Nigeria, patients come to Aro from all parts of Nigeria and some other African countries.

The hospital (Aro) has 200 beds and had the same facilities as any up-to-date mental hospital. It has facilities for occupational therapy, electric shock treatment and chemotherapy. The hospital also has what is referred to as the day hospital which functions largely as an outpatient unit.

The core primary treatment staff consists of four M.D.'s (two qualified psychiatrists) and about forty psychiatric nurses, most of whom received their training at the Aro Psychiatric Nursing School.

Jackson Park Hospital is a general hospital located in Chicago's predominantly black southside. It has a 14-bed psychiatric inpatient unit and an outpatient program that serves about 300 individuals annually. The primary treatment staff consists of two qualified psychiatrists, two

psychologists, four social workers, eight psychiatric nurses, and a variable number of technicians or aides.

Subjects

The criteria for inclusion in the research were as follows:

a) That the patient be accompanied by at least one relative at intake;

b) That the relative be willing to participate in the research process.

All patients who sought help at Aro from July 13 through August, 1974, fulfilled the first requirement since this is in keeping with the hospital's requirement that patients be accompanied by at least one relative. As for the second criteria, all the relatives agreed to participate, but it was not very clear what meaning the Nigerian relatives attached to the research process. This was not a problem in Chicago where the patients and their relatives professed some familiarity with the research process. At Jackson Park Hospital, a surprising 70% of individuals that sought help at the psychiatric department from December, 1975 through March, 1976, were accompanied by at least one relative, although this was not a hospital requirement. The patients that were unaccompanied fell into two large categories: vagrant psychotics who were picked up by the police, and individuals with milder psychological disturbances who were mostly non-psychotic, and who often did not

want their families to know about their problem.

The importance of explaining in detail the meaning of the research process to prospective respondents has been ignored in most cross-cultural research despite the fact that it may have different meanings across cultures. It is a fact that people from some countries, especially developing countries like Nigeria, are not as familiar with research as people of more developed countries such as the U.S.A. To minimize the potential bias of differential interpretation of the research across cultures, the recruitment of prospective subjects was standardized. This consisted of the following steps:

1) A general discussion of the meaning of research;

2) A discussion of the nature of this research;

3) Assurances of confidentiality.

The researcher discussed these points with all the prospective informants (or relatives) after which they were asked to volunteer for the project. There was a notable difference in the questions asked the researcher (E) by the prospective informants at the two locations. At Aro, there was more concern with how the research would help the treatment of the patient, the informant's relative, while in Chicago, the researcher was asked more questions about the issue of confidentiality. All the relatives of patients who sought help at the two locations during the periods of the investigation agreed to participate.

Excluded from final consideration were the following:

1) Individuals with histories of regular alcohol abuse or abuse of drugs acting on the central nervous system;
2) Individuals diagnosed as suffering from psychosis attributable to endocrine disorders;
3) Individuals diagnosed as suffering from psychosis attributable to nutritional disorders, epilepsy, or some metabolic deficiency.

These individuals were excluded to control for possible differences in the incidence of physiological disorders in both samples. [In Nigeria, for example, individuals suffering from epilepsy are routinely treated at Aro Psychiatric Hospital]. This minimizes the possibility that the data is a function of the variable distribution of physiological rather than functional disorders.

The samples consisted of 102 patients who were accompanied by at least one informant or relative. There were 34 males and 35 females in the Nigerian (Yoruba) sample (1), compared to 22 males and 21 females in the American sample (2). All the subjects in sample 2 were black.[1] The mean and median ages of the two samples were 31.623 and 26.250 for sample 1 and 30.488 and 26.625 for the American sample. In terms of mari-

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[1] The researcher tried repeatedly without success to obtain a comparable sample of white American respondents.

tal status, 35 or 50.7% of subjects in Sample 1 were married, compared with 34.9% in Sample 2. As expected there were more Christians in Sample 2 than in Sample 1. More of the subjects in Sample 2 were unemployed compared to Sample 1 (Table 2). Most of the employed in the two groups had low prestige occupations, according to the International Occupational Scale (Havighurst and Manaster, 1973).

Method

At least one relative of each patient was administered the RRI by the researcher. The Nigerian relatives were given the Yoruba translation while the American Black relatives were administered the original English version. Each relative was asked to indicate if the patient he/she accompanied had any of the behaviors and moods listed on the 127 item Relatives' Rating Inventory (RRI).

The items were scored on a 4-point scale (never = 1, often = 3, sometimes = 2 and always = 4) but were also scored dichotomously for the presence (i.e., always to sometimes =1) or absence (i.e., never = 0). Each patient's score on each of the 12 subclusters and three factors was obtained by adding the patient's score on items that make up the subcluster or factor.

TABLE 2

OCCUPATIONAL STATUS OF SUBJECTS BY SAMPLE

	NIGERIAN			AMERICAN		
	CODE	ABSOLUTE FREQUENCY	RELATIVE FREQUENCY (PCT)	CODE	ABSOLUTE FREQUENCY	RELATIVE FREQUENCY (PCT)
MIDDLE STATUS	2.	2	2.9	2.	2	4.7
LOW STATUS	3.	51	73.9	3.	10	23.3
UNEMPLOYED	4.	16	23.2	4.	31	72.1
TOTALS		69	100.0		43	100.0

Some Problems Encountered in the Administration of the RRI in Nigeria. There were some special problems with the administration of a research instrument, developed for use in the United States, in a developing country like Nigeria. Some of these potential sources of bias are discussed in the hope that they would provide a useful guide for future investigators.

First, there is literacy as a source of bias. This problem was touched on in the section on translation. While it may be expected that the least acculturated and often non-literate respondents' lack of familiarity with the research process (e.g., responding "objectively" to standard questions) could contaminate the data obtained and render it invalid, the overidentification of acculturated and mostly literate Nigerian respondents with the researcher and the research process is an equally important source of bias. An intensive orientation program minimized some of the potential errors attributable to the relative lack of familiarity with the research process. However, E was unprepared for the tendency of acculturated respondents to over state the extent of their association with the sick relative, their profession of knowledge in areas where their understanding is somewhat limited and their tendency to show off their knowledge by second guessing the researcher. It became evident that most of these individuals were asked to accompany the sick individual to the hospital specifically because of their known familiarity with the

world of literacy. These individuals were merely fulfilling the expectation of their relatives, that is, to act as buffers between them (the relatives) and the strange Western setting of Aro Hospital. These problems were minimized considerably by seeking information from other relatives who have had contact with the patient to validate the impressions of the literate relative.

Second, there is spokesperson-bias. In some cultures, the researcher's choice of interviewers or spokespersons may be discordant with culturally prescribed roles and expectations. For example, at Aro, the oldest relative accompanying the patient was usually presented as the family's spokesperson despite the fact that the individual may know very little or less than other relatives about the patient's condition. According to Yoruba customs, elders are regarded as the "wisemen of the culture" whose experience and consequently wisdom accrues with age. They are customarily called upon to explain baffling phenomenon such as mental illness. A researcher, who interviews another family member before talking to the eldest relative might incure the wrath of other family members and potential respondents whose cooperation may be essential to the research process. In the present study, special care was taken not to slight the most elderly relative. The most elderly relative was always interviewed first and, at least, given some items of the RRI if the eldest relative was the secondary informant. If the eldest relative was

the primary informant he or she was given the entire inventory.

Third, there is individual-group opinion bias. In some cultures it may be difficult to obtain responses from one individual that are not contaminated by the opinions of relatives and friends. This is a particularly important problem in countries like Nigeria where the patient is usually accompanied by an average of 3 relatives, all of whom have their opinions about the patient's behaviors and are concerned about his welfare. The interviewer's responses were amplified and elaborated by the other members of the family. On some occasions, the interviewees also tried to solicit the opinions of other relatives. A similar problem was noted by Leighton et al., (1963) in their study of the Yorubas. They noted that their interviewees were prompted and coached by onlookers who were intrigued by the interview process. One solution to the problem which was tried in the present study is to isolate the interviewee from other family members. However, this was not always possible because of the acute shortage of space. The fact that patients are accompanied by so many relatives is, however, not without some benefits to the research process. On a few occasions, responses from more than one relative were solicited to provide some consensual validation for seemingly inconsistent information provided by another relative. This additional information was used in the evaluation of inter-rater reliability.

Then there is the "reticent-loquacious" bias. While members of some cultures (e.g., Japanese) are reticent, especially at the beginning of an interview, members of other cultures (e.g., India) happily converse at length with the interviewer (Brislin, Lonner, and Thorndike, 1973). The non-literate Yoruba respondents interviewed in this study were usually more reticent at the beginning of the interview but became more verbally expressive as the interview proceeded. It is not unlikely that this group of respondents were intimidated by the unfamiliar environmental and procedural factors of a western-styled psychiatric hospital. They might have also been reacting to the strangeness of the interview process which has more dissimilarities than similarities with that conducted by traditional Yoruba healers. Traditional healers often base their diagnosis of their patient's condition on divine oracular guidance rather than history elicited from the patient or their relatives. One of the respondents put it very bluntly, he said, "Why ask me all those questions when you people are supposed to be the experts?" Such objections, although few, were generally dealt with seriously by the researcher who took time to reiterate the importance of the questions and the meaning of the research process.

The initial phase of reticence was shortlived in most cases, as the relatives warmed up to the interview process. Their answers became more copious despite the fact

that the questions called for one-word responses. For example, when asked if the patient "has bad dreams" (item 24), most relatives who answered in the affirmative discussed the content of the dreams at length instead of indicating the frequency of such dreams as specified in the instructions. Such verbose and detailed narrations were the rule rather than the exception, and it took as long as an average of two hours to complete each interview in Nigeria compared with an average of forty-five minutes per interview for the American sample. The researcher's initial attempts to limit the amount of unnecessary information he received were ignored by the responding relatives until the researcher reluctantly gave up trying.

The redundant information provided by the Nigerian sample is not without some benefit to the research process. It became an indirect measure of the respondent's comprehension and, therefore, a measure of the adequacy of the translation. It also provided some validation for the respondent's estimate of the frequency and intensity of a behavior. It would seem that the condition leading to the valid rating of a patient's level of disturbance by relatives was one which allowed relatives to use their own familiar, albeit time consuming measuring system.

The age estimate bias resulted from the fact that most of the patients and relatives in our Yoruba sample could not tell the researcher how old they were. In Nigeria, there is no law requiring individuals to have a record of their birth. Neither is there any governmental agency assigned the responsibility of keeping such records. Furthermore, written records of age could be grossly inaccurate, as the researcher learned, when the source of the information is taken into consideration. For example, two of the relatives interviewed at Aro told the researcher that sworn declarations of age obtained from employers were often inaccurate since employees often underestimate their ages to gain a few years of employment before reaching the mandatory retirement age of 55. Another type of written record of age was found in baptismal certificates of two Christian subjects. This certificate contained a record of the date of the subject's baptism and a date of birth. However, in both instances the recorded dates of birth were based on the guesses of the patient's literate relatives who were present during the baptism. There is no reason to think the guesses were accurate as shown in the present investigation where large discrepancies were generally found between the numerical estimates of a patient's age by adult relatives.

The concept of "age" is an important determinant of social status within kinship groups among the Yorubas. Older individuals within the kinship group are given more

responsibilities and have more privileges than those of younger ages. Since the kinship group usually has a very accurate knowledge of the sequence of birth of individuals within the group, there was very little need for any further documentation of age.

However, most Yoruba respondents (Leighton et al., 1963) are able to say whether they were born before or after some important commonly known historical event. A list of such commonly known historical events were compiled using some of the events described in the Leighton et al. (1963) study with some new items contributed by staff members at Aro Hospital. The final list of events were sufficiently regular in distribution over time that the margin of error was further reduced. This list was used to determine the ages of relatives and patients.

Results

The data obtained from the 4-point scoring technique was judged invalid for these reasons: Relatives in both cultures tended to exaggerate the extent of the patients' pathology perhaps to dramatize the patients' need for help. This resulted in a preponderance of "often" and "almost always" in the answers of relatives. Consequently, the means of both on the different factors and subclusters, were consistently high

and not very different.[2] In addition, it was very difficult to ascertain whether a behavior whose frequency of occurence is constant across cultures would be rated similarly by relatives from the two cultures under consideration. The relatives' estimates of the degree of pathology may vary according to their ability, which may be different cross culturally, to tolerate the behavior and not in terms of actual variations in the intensity or frequency with which the behavior is exhibited. Furthermore, some of the behaviors under investigation may not be as finely differentiated as this scoring system would suggest. Relatives found it difficult to say with any degree of certainty whether a behavior occured sometimes or often, or if it occured often or always. It may very

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[2] For example, the result of the analysis of variance for the 12 subclusters and 3 factors yielded only two significant sample differences on the subclusters of nervousness and verbal expansiveness. The Nigerian sample obtained a significantly ($p > .01$) higher mean than their American counterpart on the subcluster of verbal expansiveness. On the subcluster of nervousness, however, the mean of the American sample was significantly higher ($p > .05$) than that of their Nigerian counterparts. Considering the number of analyses undertaken, these significant differences may be due to chance rather than any actual differences in symptomatology.

well be that this scoring system is an imposition of fine gradation on a phenomenon which is not so finely graded in its natural state.

The data considered in the subsequent analysis is based on the dichotomous scoring system.

With regard to the first hypothesis that Nigerian patients compared with American patients would display more maladaptive behavior in the community prior to seeking hospital treatment, the application of the analysis of variance (for sample, sex, and age) on the RRI's general measure of psychopathology produced no significant difference between the means of the two samples. The hypothesis was not supported by the data (Tables 3 and 4).

The result of the analysis of variance for social obstreperousness (Table 5) is shown in Table 6. There were no significant differences in the mean scores of Nigerian and American patients on the factor of social obstreperousness. The hypothesis (II that the behavior of Nigerian psychiatric patients in the community will be significantly more socially obstreperous than that of American (U.S)

TABLE 3

DESCRIPTION OF SUBPOPULATIONS, CRITERION VARIABLE

GENERAL PSYCHOPATHOLOGY BY SAMPLE, SEX AND AGE

VARIABLE	CODE	VALUE LABEL	SUM	MEAN	STD DEV	VARIANCE	N
FOR ENTIRE POPULATION			1663.0000	14.8482	6.2604	39.1930	(112)
Sample	1.	NIGERIAN	1018.000	14.754	6.321	39.953	(69)
Sex	1.	Male	498.000	14.647	6.531	42.660	(34)
Age	1.	Under 30	405.000	15.000	6.214	38.615	(27)
Age	2.	Over 30	93.000	13.286	8.036	64.571	(7)
Sex	2.	Female	520.000	14.857	6.203	38.479	(35)
Age	1.	Under 30	242.000	15.125	6.185	38.250	(16)
Age	2.	Over 30	278.000	14.632	6.379	40.690	(19)
Sample	2.	AMERICAN	645.000	15.000	6.234	38.857	(43)
Sex	1.	Male	321.000	14.591	7.109	50.539	(22)
Age	1.	Under 30	220.000	16.923	6.130	37.577	(13)
Age	2.	Over 30	101.000	11.222	7.396	54.694	(9)
Sex	2.	Female	324.000	15.429	5.306	28.157	(21)
Age	1.	Under 30	225.000	15.000	5.892	34.714	(15)
Age	2.	Over 30	99.000	16.500	3.674	13.500	(6)

TOTAL CASES = 112

TABLE 4

ANALYSIS OF VARIANCE FOR GENERAL PSYCHOPATHOLOGY BY SAMPLE, SEX AND AGE

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
Main Effects	69.457	3	23.152	0.582	0.999
Sample	1.232	1	1.232	0.031	0.999
Sex	13.428	1	13.428	0.337	0.999
Age	62.156	1	62.156	1.562	0.212
2-Way Interactions	91.467	3	30.489	0.766	0.999
Sample Sex	0.002	1	0.002	0.000	0.999
Sample Age	4.682	1	4.682	0.118	0.999
Sex Age	78.192	1	78.192	1.964	0.160
3-Way Interactions	49.917	1	49.917	1.254	0.264
Sample Sex Age	49.917	1	49.917	1.254	0.264

TABLE 5

DESCRIPTION OF SUBPOPULATIONS, CRITERION VARIABLE

FACTOR 1, SOCIAL OBSTREPEROUSNESS,

BY SAMPLE, SEX AND AGE

VARIABLE	CODE	VALUE LABEL	SUM	MEAN	STD DEV	VARIANCE	N
FOR ENTIRE POPULATION			2649.0000	23.6518	10.7189	114.8958	(112)
Sample	1.	NIGERIAN	1607.000	23.290	10.843	117.562	(69)
Sex	1.	Male	797.000	23.441	11.125	123.770	(34)
Age	1.	Under 30	659.000	24.407	10.969	120.328	(27)
Age	2.	Over 30	138.000	19.714	11.786	138.905	(7)
Sex	2.	Female	810.000	23.143	10.721	114.950	(35)
Age	1.	Under 30	369.000	23.063	10.573	111.796	(16)
Age	2.	Over 30	441.000	23.211	11.133	123.953	(19)
Sample	2.	AMERICAN	1042.000	24.233	10.619	112.755	(43)
Sex	1.	Male	527.000	23.955	11.974	143.379	(22)
Age	1.	Under 30	361.000	27.769	10.418	108.526	(13)
Age	2.	Over 30	166.000	18.444	12.481	155.778	(9)
Sex	2.	Female	515.000	24.524	9.277	86.062	(21)
Age	1.	Under 30	634.000	24.267	10.074	101.496	(15)
Age	2.	Over 30	151.000	25.167	7.705	59.367	(6)

TOTAL CASES = 112

TABLE 6

ANALYSIS OF VARIANCE FOR FACTOR 1,

SOCIAL OBSTREPEROUSNESS BY

SAMPLE, SEX AND AGE

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARES	F	SIGNIF OF F
Main Effects	235.658	3	78.553	0.673	0.999
Sample	20.080	1	20.080	0.172	0.999
Sex	6.781	1	6.781	0.058	0.999
Age	212.081	1	212.081	1.817	0.177
2-Way Interactions	340.969	3	113.656	0.974	0.999
Sample Sex	0.680	1	0.680	0.006	0.999
Sample Age	19.470	1	19.470	0.167	0.999
Sex Age	287.098	1	287.098	2.460	0.116
3-Way Interactions	40.456	1	40.456	0.347	0.999
Sample Sex Age	40.456	1	40.456	0.347	0.999

psychiatric patients just prior to seeking treatment was not supported by this analysis of the data. When the analysis of variance was applied to each of the subclusters that make up the social obstreperous factor (i.e., General Psychopathology, Belligerance, Negativism, Verbal Expansiveness--Tables 5 to 13), no significant differences were found between the means of the two samples except on the subcluster of Belligerance (see Tables 7 and 8) where the mean of the American sample was significantly higher than that of their Nigerian counterparts.

Although no significant differences were found in terms of the hypothesized relationships, there were significant differences across cultures on the subclusters of Nervousness and Bizarreness. On the subcluster of Nervousness, the differences between the means of the two samples was significant at the .001 level, with the American black sample's mean score greater than the Nigerian (Tables 13 and 14). The American black sample was rated as significantly more nervous than the Nigerian.

On the subcluster of Bizarreness (Tables 15 and 16) the difference between the means were significant at the .05 level with the Nigerian sample's mean significantly higher than that of the American. The Nigerian sample was rated as significantly more bizarre than the American sample. The interaction of sample and age was significant at the .05 level. The Nigerian subjects over 30 years of age obtained a significantly ($t=3.11$, 39 df $p < .004$) higher mean than their

TABLE 7

DESCRIPTION OF SUBPOPULATIONS, CRITERION VARIABLE

OF BELLIGERENCE BY SAMPLE, SEX AND AGE

VARIABLE	CODE	VALUE LABEL	SUM	MEAN	STD DEV	VARIANCE	N
FOR ENTIRE POPULATION			172.0000	1.5357	1.4761	2.1789	(112)
Sample	1.	NIGERIAN	91.000	1.319	1.460	2.132	(69)
Sex	1.	Male	47.000	1.382	1.498	2.243	(34)
Age	1.	Under 30	44.000	1.630	1.548	2.396	(27)
Age	2.	Over 30	3.000	0.429	0.787	0.619	(7)
Sex	2.	Female	44.000	1.257	1.442	2.079	(35)
Age	1.	Under 30	20.000	1.250	1.390	1.933	(16)
Age	2.	Over 30	24.000	1.263	1.522	2.316	(19)
Sample	2.	AMERICAN	81.000	1.884	1.451	2.105	(43)
Sex	1.	Male	39.000	1.773	1.445	2.089	(22)
Age	1.	Under 30	26.000	2.000	1.581	2.500	(13)
Age	2.	Over 30	13.000	1.444	1.236	1.528	(9)
Sex	2.	Female	42.000	2.000	1.483	2.200	(21)
Age	1.	Under 30	31.000	2.067	1.387	1.924	(15)
Age	2.	Over 30	11.000	1.833	1.835	3.367	(6)

TOTAL CASES = 112

TABLE 8

ANALYSIS OF VARIANCE FOR BELLIGERENCE BY SAMPLE, SEX AND AGE

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
Main Effects	13.776	3	4.592	2.145	0.098
Sample	8.111	1	8.111	3.788	0.050
Sex	0.190	1	0.190	0.089	0.999
Age	5.310	1	5.320	2.485	0.114
2-Way Interactions	4.286	3	1.429	0.667	0.999
Sample Sex	0.128	1	0.128	0.060	0.999
Sample Age	0.196	1	0.196	0.092	0.999
Sex Age	4.133	1	4.133	1.930	0.164
3-Way Interactions	1.111	1	1.111	0.519	0.999
Sample Sex Age	1.111	1	1.111	0.519	0.999

TABLE 9

DESCRIPTION OF SUBPOPULATIONS, CRITERION VARIABLE

VERBAL EXPANSIVENESS BY SAMPLE, SEX AND AGE

VARIABLE	CODE	VALUE LABEL	SUM	MEAN	STD DEV	VARIANCE	N
FOR ENTIRE POPULATION			297.0000	2.6518	1.5050	2.2650	(112)
Sample	1.	NIGERIAN	191.000	2.768	1.436	2.063	(69)
Sex	1.	Male	96.000	2.824	1.507	2.271	(34)
Age	1.	Under 30	80.000	2.963	1.605	2.576	(27)
Age	2.	Over 30	16.000	2.286	0.951	0.905	(7)
Sex	2.	Female	95.000	2.714	1.384	1.916	(35)
Age	1.	Under 30	37.000	2.313	1.401	1.962	(16)
Age	2.	Over 30	58.000	3.053	1.311	1.719	(19)
Sample	2.	AMERICAN	106.000	2.465	1.609	2.588	(43)
Sex	1.	Male	51.000	2.318	1.810	3.275	(22)
Age	1.	Under 30	33.000	2.538	1.808	3.269	(13)
Age	2.	Over 30	18.000	2.000	1.871	3.500	(9)
Sex	2.	Female	55.000	2.619	1.396	1.948	(21)
Age	1.	Under 30	39.000	2.600	1.454	2.114	(15)
Age	2.	Over 30	16.000	2.667	1.366	1.867	(6)

TOTAL CASES = 112

TABLE 10

ANALYSIS OF VARIANCE FOR VERBAL EXPANSIVENESS BY SAMPLE, SEX AND AGE

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
Main Effects	2.551	3	0.850	0.370	0.999
Sample	2.434	1	2.434	1.059	0.306
Sex	0.084	1	0.084	0.037	0.999
Age	0.054	1	0.054	0.023	0.999
2-Way Interactions	9.008	3	3.003	1.307	0.275
Sample Sex	1.185	1	1.185	0.516	0.999
Sample Age	0.433	1	0.433	0.188	0.999
Sex Age	6.758	1	6.758	2.941	0.085
3-Way Interactions	0.921	1	0.921	0.401	0.999
Sample Sex Age	0.921	1	0.921	0.401	0.999

TABLE 11

DESCRIPTION OF SUBPOPULATIONS, CRITERION VARIABLE

NEGATIVISM BY SAMPLE, SEX AND AGE

VARIABLE	CODE	VALUE LABEL	SUM	MEAN	STD DEV	VARIANCE	N
FOR ENTIRE POPULATION			517.0000	4.6161	2.5618	6.5630	(112)
Sample	1.	NIGERIAN	307.000	4.449	2.621	6.869	(69)
Sex	1.	Male	156.000	4.588	2.548	6.492	(34)
Age	1.	Under 30	130.000	4.815	2.481	6.157	(27)
Age	2.	Over 30	26.000	3.714	2.812	7.905	(7)
Sex	2.	Female	151.000	4.314	2.720	7.398	(35)
Age	1.	Under 30	70.000	4.375	2.705	7.317	(16)
Age	2.	Over 30	81.000	4.263	2.806	7.871	(19)
Sample	2.	AMERICAN	210.000	4.884	2.471	6.106	(43)
Sex	1.	Male	116.000	5.273	2.529	6.398	(22)
Age	1.	Under 30	82.000	6.308	1.974	3.897	(13)
Age	2.	Over 30	34.000	3.778	2.587	6.694	(9)
Sex	2.	Female	94.000	4.476	2.400	5.762	(21)
Age	1.	Under 30	69.000	4.600	2.324	5.400	(15)
Age	2.	Over 30	25.000	4.167	2.787	7.767	(6)

TOTAL CASES = 112

TABLE 12

ANALYSIS OF VARIANCE FOR NEGATIVISM BY SAMPLE, SEX AND AGE

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
Main Effects	28.450	3	9.483	1.464	0.227
Sample	4.339	1	4.339	0.670	0.999
Sex	3.192	1	3.192	0.493	0.999
Age	17.147	1	17.147	2.647	0.103
2-Way Interactions	24.633	3	8.211	1.268	0.289
Sample Sex	4.953	1	4.953	0.765	0.999
Sample Age	4.136	1	4.136	0.639	0.999
Sex Age	12.032	1	12.032	1.857	0.172
3-Way Interactions	1.713	1	1.713	0.264	0.999
Sample Sex Age	1.713	1	1.713	0.264	0.999

TABLE 13

DESCRIPTION OF SUBPOPULATIONS, CRITERION VARIABLE

NERVOUSNESS BY SAMPLE, SEX AND AGE

VARIABLE	CODE	VALUE LABEL	SUM	MEAN	STD DEV	VARIANCE	N
FOR ENTIRE POPULATION			267.0000	2.3839	1.4472	2.0945	(112)
Sample	1.	NIGERIAN	137.000	1.986	1.345	1.809	(69)
Sex	1.	Male	59.000	1.735	1.238	1.534	(34)
Age	1.	Under 30	47.000	1.741	1.347	1.815	(27)
Age	2.	Over 30	12.000	1.714	0.756	0.571	(7)
Sex	2.	Female	78.000	2.229	1.416	2.005	(35)
Age	1.	Under 30	36.000	2.250	1.528	2.333	(16)
Age	2.	Over 30	42.000	2.211	1.357	1.842	(19)
Sample	2.	AMERICAN	130.000	3.023	1.389	1.928	(43)
Sex	1.	Male	62.000	2.818	1.500	2.251	(22)
Age	1.	Under 30	35.000	2.692	1.548	2.397	(13)
Age	2.	Over 30	27.000	3.000	1.500	2.250	(9)
Sex	2.	Female	68.000	3.238	1.261	1.590	(21)
Age	1.	Under 30	46.000	3.067	1.387	1.924	(15)
Age	2.	Over 30	22.000	3.667	0.816	0.667	(6)

TOTAL CASES = 112

TABLE 14

ANALYSIS OF VARIANCE FOR NERVOUSNESS BY SAMPLE, SEX AND AGE

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
Main Effects	35.199	3	11.733	6.232	0.001
Sample	29.201	1	29.201	15.510	0.001
Sex	5.271	1	5.271	2.800	0.093
Age	0.615	1	0.615	0.327	0.999
2-Way Interactions	1.354	3	0.451	0.240	0.999
Sample Sex	0.006	1	0.006	0.003	0.999
Sample Age	1.347	1	1.347	0.715	0.999
Sex Age	0.073	1	0.073	0.039	0.999
3-Way Interactions	0.130	1	0.130	0.069	0.999
Sample Sex Age	0.130	1	0.130	0.069	0.999

TABLE 15

DESCRIPTION OF SUBPOPULATIONS, CRITERION VARIABLE

BIZARRENESS BY SAMPLE, SEX AND AGE

VARIABLE	CODE	VALUE LABEL	SUM	MEAN	STD DEV	VARIANCE	N
FOR ENTIRE POPULATION			306.0000	2.7321	1.4764	2.1799	(112)
Sample	1.	NIGERIAN	204.000	2.957	1.311	1.719	(69)
Sex	1.	Male	102.000	3.000	1.181	1.394	(34)
Age	1.	Under 30	79.000	2.926	1.207	1.456	(27)
Age	2.	Over 30	23.000	3.286	1.113	1.238	(7)
Sex	2.	Female	102.000	2.914	1.442	2.081	(35)
Age	1.	Under 30	42.000	2.625	1.360	1.850	(16)
Age	2.	Over 30	60.000	3.158	1.500	2.251	(19)
Sample	2.	AMERICAN	102.000	2.372	1.662	2.763	(43)
Sex	1.	Male	50.000	2.273	1.778	3.160	(22)
Age	1.	Under 30	38.000	2.923	1.891	3.577	(13)
Age	2.	Over 30	12.000	1.333	1.118	1.250	(9)
Sex	2.	Female	52.000	2.476	1.569	2.462	(21)
Age	1.	Under 30	37.000	2.467	1.642	2.695	(15)
Age	2.	Over 30	15.000	2.500	1.517	2.300	(6)

TOTAL CASES = 112

TABLE 16

ANALYSIS OF VARIANCE FOR BIZARRENESS BY SAMPLE, SEX AND AGE

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARES	F	SIGNIF OF F
Main Effects	9.327	3	3.109	1.499	0.218
Sample	9.103	1	9.103	4.389	0.036
Sex	0.047	1	0.047	0.023	0.999
Age	0.260	1	0.260	0.126	0.999
2-Way Interactions	13.990	3	4.663	2.248	0.086
Sample Sex	0.705	1	0.705	0.340	0.999
Sample Age	8.111	1	8.111	3.911	0.048
Sex Age	3.419	1	3.419	1.648	0.199
3-Way Interactions	2.935	1	2.935	1.415	0.235
Sample Sex Age	2.935	1	2.935	1.415	0.235

American black counterparts. The difference between the means of the American black and the Nigerian subjects under 30 was not significant.

There was one 3-way interaction of sample, sex and age on the subcluster of Withdrawal and Retardation which was significant at the .05 level (Tables 17 and 18). American black males under 30 years of age obtained a significantly higher mean score than Nigerian males under 30 years of age. This 3-way interaction is hard to interpret. Considering the number of analyses undertaken the finding of significant differences may be due to chance.

There were two significant sex differences. On the subcluster of helplessness and anxiety, females obtained significantly higher means than males. (See Tables 19-22). Females were rated as more helpless and anxious than males. There were no significant sample, age or sex differences on the remaining subclusters of Suspiciousness, Confusion, and Hyperactivity, and the factors of Acute Psychoticism and Withdrawn Depression (Tables 23-32).

TABLE 17

DESCRIPTION OF SUBPOPULATIONS, CRITERION VARIABLE

WITHDRAWAL AND RETARDATION BY SAMPLE, SEX AND AGE

VARIABLE	CODE	VALUE LABEL	SUM	MEAN	STD DEV	VARIANCE	N
FOR ENTIRE POPULATION			387.0000	3.4554	1.6269	2.6466	(112)
Sample	1.	NIGERIAN	230.000	3.333	1.521	2.314	(69)
Sex	1.	Male	107.000	3.147	1.635	2.675	(34)
Age	1.	Under 30	84.000	3.111	1.577	2.487	(27)
Age	2.	Over 30	23.000	3.286	1.976	3.905	(7)
Sex	2.	Female	123.000	3.514	1.401	1.963	(35)
Age	1.	Under 30	60.000	3.750	1.438	2.067	(16)
Age	2.	Over 30	63.000	3.316	1.376	1.895	(19)
Sample	2.	AMERICAN	157.000	3.651	1.785	3.185	(43)
Sex	1.	Male	79.000	3.591	1.843	3.396	(22)
Age	1.	Under 30	53.000	4.077	1.498	2.244	(13)
Age	2.	Over 30	26.000	2.889	2.147	4.611	(9)
Sex	2.	Female	78.000	3.714	1.765	3.114	(21)
Age	1.	Under 30	51.000	3.400	1.993	3.971	(15)
Age	2.	Over 30	27.000	4.500	0.548	0.300	(6)

TOTAL CASES = 112

TABLE 18

ANALYSIS OF VARIANCE FOR WITHDRAWAL AND RETARDATION BY SAMPLE, SEX AND AGE

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
Main Effects	5.303	3	1.768	0.671	0.999
Sample	2.699	1	2.699	1.024	0.315
Sex	2.398	1	2.398	0.910	0.999
Age	0.531	1	0.531	0.201	0.999
2-Way Interactions	2.648	3	0.883	0.335	0.999
Sample Sex	0.689	1	0.689	0.261	0.999
Sample Age	0.088	1	0.088	0.033	0.999
3-Way Interactions	11.714	1	11.714	4.444	0.035
Sample Sex Age	11.714	1	11.714	4.444	0.035

TABLE 19

DESCRIPTION OF SUBPOPULATIONS, CRITERION VARIABLE

HELPLESSNESS BY SAMPLE, SEX AND AGE

VARIABLE	CODE	VALUE LABEL	SUM	MEAN	STD DEV	VARIANCE	N
FOR ENTIRE POPULATION			313.0000	2.7946	1.1941	1.4259	(112)
Sample	1.	NIGERIAN	192.000	2.783	1.211	1.467	(69)
Sex	1.	Male	85.000	2.500	1.331	1.773	(34)
Age	1.	Under 30	68.000	2.519	1.312	1.721	(27)
Age	2.	Over 30	17.000	2.429	1.512	2.286	(7)
Sex	2.	Female	107.000	3.057	1.027	1.055	(35)
Age	1.	Under 30	50.000	3.125	0.957	0.917	(16)
Age	2.	Over 30	57.000	3.000	1.106	1.222	(19)
Sample	2.	AMERICAN	121.000	2.814	1.180	1.393	(43)
Sex	1.	Male	58.000	2.636	1.255	1.576	(22)
Age	1.	Under 30	36.000	2.769	1.235	1.526	(13)
Age	2.	Over 30	22.000	2.444	1.333	1.778	(9)
Sex	2.	Female	63.000	3.000	1.095	1.200	(21)
Age	1.	Under 30	43.000	2.867	1.246	1.552	(15)
Age	2.	Over 30	20.000	3.333	0.516	0.267	(6)

TOTAL CASES = 112

TABLE 20

ANALYSIS OF VARIANCE FOR HELPLESSNESS BY SAMPLE, SEX AND AGE

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
Main Effects	6.573	3	2.191	1.521	0.212
Sample	0.042	1	0.042	0.029	0.999
Sex	6.467	1	6.467	4.490	0.034
Age	0.021	1	0.021	0.014	0.999
2-Way Interactions	0.949	3	0.316	0.220	0.999
Sample Sex	0.325	1	0.325	0.226	0.999
Sample Age	0.201	1	0.201	0.140	0.999
Sex Age	0.537	1	0.537	0.373	0.999
3-Way Interactions	0.954	1	0.954	0.662	0.999
Sample Sex Age	0.954	1	0.954	0.662	0.999

TABLE 21

DESCRIPTION OF SUBPOPULATIONS, CRITERION VARIABLE

ANXIETY BY SAMPLE, SEX AND AGE

VARIABLE	CODE	VALUE LABEL	SUM	MEAN	STD DEV	VARIANCE	N
FOR ENTIRE POPULATION			364.0000	3.2500	1.9796	3.9189	(112)
Sample	1.	NIGERIAN	219.000	3.174	2.051	4.205	(69)
Sex	1.	Male	91.000	2.676	1.996	3.983	(34)
Age	1.	Under 30	77.000	2.852	2.088	4.362	(27)
Age	2.	Over 30	14.000	2.000	1.528	2.333	(7)
Sex	2.	Female	128.000	3.657	2.014	4.055	(35)
Age	1.	Under 30	58.000	3.625	2.094	4.383	(16)
Age	2.	Over 30	70.000	3.684	2.001	4.006	(19)
Sample	2.	AMERICAN	145.000	3.372	1.877	3.525	(43)
Sex	1.	Male	65.000	2.955	2.035	4.141	(22)
Age	1.	Under 30	43.000	3.308	2.213	4.897	(13)
Age	2.	Over 30	22.000	2.444	1.740	3.028	(9)
Sex	2.	Female	80.000	3.810	1.632	2.662	(21)
Age	1.	Under 30	55.000	3.667	1.759	3.095	(15)
Age	2.	Over 30	25.000	4.167	1.329	1.767	(6)

TOTAL CASES = 112

TABLE 22

ANALYSIS OF VARIANCE FOR ANXIETY BY SAMPLE, SEX AND AGE

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
Main Effects	26.941	3	8.980	2.332	0.077
Sample	1.162	1	1.162	0.302	0.999
Sex	25.730	1	25.730	6.683	0.011
Age	1.565	1	1.565	0.406	0.999
2-Way Interactions	7.353	3	2.451	0.637	0.999
Sample Sex	0.423	1	0.423	0.110	0.999
Sample Age	0.273	1	0.273	0.071	0.999
Sex Age	6.939	1	6.939	1.802	0.179
3-Way Interactions	0.285	1	0.285	0.074	0.999
Sample Sex Age	0.285	1	0.285	0.074	0.999

TABLE 23

DESCRIPTION OF SUBPOPULATIONS, CRITERION VARIABLE

SUSPICIOUSNESS BY SAMPLE, SEX AND AGE

VARIABLE	CODE	VALUE LABEL	SUM	MEAN	STD DEV	VARIANCE	N
FOR ENTIRE POPULATION			270.0000	2.4107	1.5100	2.2802	(112)
Sample	1.	NIGERIAN	157.000	2.275	1.552	2.408	(69)
Sex	1.	Male	82.000	2.412	1.520	2.310	(34)
Age	1.	Under 30	67.000	2.481	1.451	2.105	(27)
Age	2.	Over 30	15.000	2.143	1.864	3.476	(7)
Sex	2.	Female	75.000	2.143	1.593	2.538	(35)
Age	1.	Under 30	31.000	1.938	1.692	2.862	(16)
Age	2.	Over 30	44.000	2.316	1.529	2.339	(19)
Sample	2.	AMERICAN	133.000	2.628	1.431	2.049	(43)
Sex	1.	Male	57.000	2.591	1.436	2.063	(22)
Age	1.	Under 30	36.000	2.769	1.481	2.192	(13)
Age	2.	Over 30	21.000	2.333	1.414	2.000	(9)
Sex	2.	Female	56.000	2.667	1.461	2.133	(21)
Age	1.	Under 30	40.000	2.667	1.496	2.238	(15)
Age	2.	Over 30	16.000	2.667	1.506	2.267	(6)

TOTAL CASES = 112

TABLE 24

ANALYSIS OF VARIANCE FOR SUSPICIOUSNESS BY SAMPLE, SEX AND AGE

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
Main Effects	3.968	3	1.323	0.560	0.999
Sample	3.205	1	3.205	1.357	0.245
Sex	0.419	1	0.419	0.178	0.999
Age	0.153	1	0.153	0.065	0.999
2-Way Interactions	3.414	3	1.138	0.482	0.999
Sample Sex	0.746	1	0.746	0.316	0.999
Sample Age	0.326	1	0.326	0.138	0.999
Sex Age	2.083	1	2.083	0.882	0.999
3-Way Interactions	0.110	1	0.110	0.047	0.999
Sample Sex Age	0.110	1	0.110	0.047	0.999

TABLE 25

DESCRIPTION OF SUBPOPULATION, CRITERION VARIABLE

CONFUSION BY SAMPLE, SEX AND AGE

VARIABLE	CODE	VALUE LABEL	SUM	MEAN	STD DEV	VARIANCE	N
FOR ENTIRE POPULATION			122.0000	1.0893	1.1972	1.4334	(112)
Sample	1.	NIGERIAN	69.000	1.000	1.176	1.382	(69)
Sex	1.	Male	32.000	0.941	1.179	1.390	(34)
Age	1.	Under 30	28.000	1.037	1.224	1.499	(27)
Age	2.	Over 30	4.000	0.571	0.976	0.952	(7)
Sex	2.	Female	37.000	1.057	1.187	1.408	(35)
Age	1.	Under 30	19.000	1.188	1.276	1.629	(16)
Age	2.	Over 30	18.000	0.947	1.129	1.275	(19)
Sample	2.	AMERICAN	53.000	1.233	1.231	1.516	(43)
Sex	1.	Male	31.000	1.409	1.297	1.682	(22)
Age	1.	Under 30	21.000	1.615	1.261	1.590	(13)
Age	2.	Over 30	10.000	1.111	1.364	1.861	(9)
Sex	2.	Female	22.000	1.048	1.161	1.348	(21)
Age	1.	Under 30	15.000	1.000	1.195	1.429	(15)
Age	2.	Over 30	7.000	1.167	1.169	1.367	(6)

TOTAL CASES = 112

TABLE 26

ANALYSIS OF VARIANCE FOR CONFUSION BY SAMPLE, SEX AND AGE

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARES	F	SIGNIF OF F
Main Effects	2.625	3	0.875	0.595	0.999
Sample	1.354	1	1.354	0.921	0.999
Sex	0.032	1	0.032	0.022	0.999
Age	0.065	1	0.065	0.725	0.999
2-Way Interactions	3.344	3	1.115	0.758	0.999
Sample Sex	2.352	1	2.352	1.600	0.206
Sample Age	0.202	1	0.202	0.137	0.999
Sex Age	0.964	1	0.964	0.656	0.999
3-Way Interactions	0.277	1	0.277	0.188	0.999
Sample Sex Age	0.277	1	0.277	0.188	0.999

TABLE 27

DESCRIPTION OF SUBPOPULATIONS, CRITERION VARIABLE

HYPERACTIVITY BY SAMPLE, SEX AND AGE

VARIABLE	CODE	VALUE LABEL	SUM	MEAN	STD DEV	VARIANCE	N
FOR ENTIRE POPULATION			258.0000	2.3036	1.0470	1.0962	(112)
Sample	1.	NIGERIAN	150.000	2.174	1.163	1.352	(69)
Sex	1.	Male	74.000	2.176	1.167	1.362	(34)
Age	1.	Under 30	61.000	2.259	1.163	1.353	(27)
Age	2.	Over 30	13.000	1.857	1.215	1.476	(7)
Sex	2.	Female	76.000	2.171	1.175	1.382	(35)
Age	1.	Under 30	33.000	2.063	1.124	1.262	(16)
Age	2.	Over 30	43.000	2.263	1.240	1.538	(19)
Sample	2.	AMERICAN	108.000	2.512	0.798	0.637	(43)
Sex	1.	Male	54.000	2.455	0.912	0.831	(22)
Age	1.	Under 30	34.000	2.615	0.768	0.590	(13)
Age	2.	Over 30	20.000	2.222	1.093	1.194	(9)
Sex	2.	Female	54.000	2.571	0.676	0.457	(21)
Age	1.	Under 30	39.000	2.600	0.737	0.543	(15)
Age	2.	Over 30	15.000	2.500	0.548	0.300	(6)

TOTAL CASES = 112

TABLE 28

ANALYSIS OF VARIANCE FOR HYPERACTIVITY BY SAMPLE, SEX AND AGE

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARES	F	SIGNIF OF F
Main Effects	3.524	3	1.175	1.049	0.375
Sample	2.973	1	2.973	2.656	0.102
Sex	0.109	1	0.109	0.097	0.999
Age	0.453	1	0.453	0.405	0.999
2-Way Interactions	1.625	3	0.542	0.484	0.999
Sample Sex	0.036	1	0.036	0.032	0.999
Sample Age	0.126	1	0.126	0.112	0.999
Sex Age	1.302	1	1.302	1.163	0.283
3-Way Interactions	0.134	1	0.134	0.120	0.999
Sample Sex Age	0.134	1	0.134	0.120	0.999

TABLE 29

DESCRIPTION OF SUBPOPULATIONS, CRITERION VARIABLE

FACTOR 2, ACUTE PSYCHOTICISM, BY SAMPLE, SEX AND AGE

VARIABLE	CODE	VALUE LABEL	SUM	MEAN	STD DEV	VARIANCE	N
FOR ENTIRE POPULATION			928.0000	8.2857	3.6328	13.1969	(112)
Sample	1.	NIGERIAN	573.000	8.304	3.482	12.127	(69)
Sex	1.	Male	267.000	7.853	3.543	12.553	(34)
Age	1.	Under 30	217.000	8.037	3.777	14.268	(27)
Age	2.	Over 30	50.000	7.143	2.545	6.476	(7)
Sex	2.	Female	306.000	8.743	3.416	11.667	(35)
Age	1.	Under 30	133.000	8.313	3.049	9.296	(16)
Age	2.	Over 30	173.000	9.105	3.740	13.988	(19)
Sample	2.	AMERICAN	355.000	8.256	3.904	15.243	(43)
Sex	1.	Male	169.000	7.682	4.358	18.989	(22)
Age	1.	Under 30	115.000	8.846	4.580	20.974	(13)
Age	2.	Over 30	54.000	6.000	3.606	13.000	(9)
Sex	2.	Female	186,000	8.857	3.366	11.329	(21)
Age	1.	Under 30	131.000	8.733	3.615	13.067	(15)
Age	2.	Over 30	55.000	9.167	2.927	8.567	(6)

TOTAL CASES = 112

TABLE 30

ANALYSIS OF VARIANCE FOR FACTOR 2, ACUTE PSYCHOTICISM, BY SAMPLE, SEX AND AGE

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
Main Effects	33.950	3	11.317	0.851	0.999
Sample	0.046	1	0.046	0.003	0.999
Sex	31.575	1	31.575	2.375	0.122
Age	5.927	1	5.927	0.446	0.999
2-Way Interactions	44.860	3	14.953	1.125	0.343
Sample Sex	0.144	1	0.144	0.011	0.999
Sample Age	7.187	1	7.187	0.541	0.999
Sex Age	31.629	1	31.629	2.379	0.122
3-Way Interactions	3.540	1	3.540	0.266	0.999
Sample Sex Age	3.540	1	3.540	0.266	0.999

TABLE 31

DESCRIPTION OF SUBPOPULATIONS, CRITERION VARIABLE

FACTOR 3, WITHDRAWN DEPRESSION, BY SAMPLE, SEX AND AGE

VARIABLE	CODE	VALUE LABEL	SUM	MEAN	STD DEV	VARIANCE	N
FOR ENTIRE POPULATION			700.0000	6.2500	2.4403	5.9550	(112)
Sample	1.	NIGERIAN	422.000	6.116	2.298	5.280	(69)
Sex	1.	Male	192.000	5.647	2.460	6.053	(34)
Age	1.	Under 30	152.000	5.630	2.356	5.550	(27)
Age	2.	Over 30	40.000	5.714	3.039	9.238	(7)
Sex	2.	Female	230.000	6.571	2.062	4.252	(35)
Age	1.	Under 30	110.000	6.875	1.893	3.583	(16)
Age	2.	Over 30	120.000	6.316	2.212	4.895	(19)
Sample	2.	AMERICAN	278.000	6.465	2.667	7.112	(43)
Sex	1.	Male	137.000	6.227	2.724	7.422	(22)
Age	1.	Under 30	89.000	6.846	2.193	4.808	(13)
Age	2.	Over 30	48.000	5.333	3.279	10.750	(9)
Sex	2.	Female	141.000	6.714	2.648	7.014	(21)
Age	1.	Under 30	94.000	6.267	3.035	9.210	(15)
Age	2.	Over 30	47.000	7.833	0.408	0.167	(6)

TOTAL CASES = 112

TABLE 32

ANALYSIS OF VARIANCE FOR FACTOR 3, BY SAMPLE, SEX AND AGE

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
Main Effects	20.010	3	6.670	1.128	0.341
Sample	3.413	1	3.413	0.577	0.999
Sex	16.742	1	16.742	2.831	0.092
Age	0.761	1	0.761	0.129	0.999
2-Way Interactions	6.600	3	2.200	0.372	0.999
Sample Sex	1.961	1	1.961	0.332	0.999
Sample Age	0.554	1	0.554	0.094	0.999
Sex Age	4.559	1	4.559	0.771	0.999
3-Way Interactions	19.352	1	19.352	3.272	0.070
Sample Sex Age	19.352	1	19.352	3.272	0.070

Discussion

The results of this investigation are notable because of the striking similarities and the relative lack of differences between the two national samples. The hypothesized differences in the symptoms of Nigerian and American patients at the time of admission into treatment have not been supported by the present data. However, it is important to explore the possibility that methodological characteristics and/or deficiencies in the design of the research account for the findings of no differences rather than the real lack of cultural differences. It does not seem that the results can be explained on the basis of sampling inadequacies. First, interviews were conducted at the point of sought treatment in both countries. Second, there are no remarkable differences between the groups in terms of the demographic variables such as age, sex, and occupational status. Occupational status was chosen as a measure of socioeconomic status because of the limited utility of the traditionally employed factors, such as education and income (Hollingshead and Redlich, 1958). The differences in the salary and educational (Moumoni, 1968) structures in the two countries are so great as to render invalid any comparative data generated from these two factors. Occupational prestige or occupational status has been a useful tool in crosscultural psychology in recent years. It has been used in studies for the assessment of socioeconomic

status in Brazil and England (Manaster and Havighurst 1972) and, of more relevance to this investigation, Nigeria and the United States (Sofola 1969). However, despite the fact that the two samples come from the low-prestige occupations, the classification is ambiguous with respect to unemployment. The data on occupational prestige ratings showed that a significantly larger number of subjects in the black American sample were unemployed compared to the Nigerian group. However, this is a true reflection of the characteristics of the populations and not a methodological artifact. Moreover, the results of research on the causal relationship between life stresses such as unemployment and symptomatology has been equivocal (Dohrenwend, 1976).

Another plausible explanation for the findings may be that they are functions of the deficiencies of the Relatives' Rating Inventory. Despite the fact that much time and research was invested in the translation of the inventory, translation inadequacies may be one artifact that is impossible to control with any degree of certainty. Great care was taken to ensure that each item carried the same meaning in the two languages, thus minimizing the possibility that the results are merely due to problems in the translation of the original version into Yoruba. However, an attempt to statistically explore the equivalence of the English and the Yoruba versions using a factor analytic method proved inconclusive. One possible explanation for this finding is

that the total number of subjects is really too small for a clearly interpreted factor analysis (Harmon, 1967). The separate factor analysis of the sample produced factors which were similar in some respects but which were mostly dissimilar.

A scale was constructed for each factor with items that loaded .30 or higher. Factor 1 accounted for 35% and 32% of the common variance in the Nigerian and the American groups respectively. Items in Factor 1 are shown below in Table 33. For the Nigerian sample, there were 28 items, in Factor 1 compared with 26 items for the American sample. Only six items were common to both groups; however, this does not tell the whole story. For instance, item 40 "thought people were talking about him", which contributes to Factor 1 for the Nigerian sample, is similar, at least in terms of its meaning to item 107 "said people were talking about him," which contributes to Factor 1 for the American black group. The two items are interdependent and similar in terms of their intent that one can be substituted for the other without any great loss of meaning.

Another factor analytic study (Graham, Lily Paolino, Friedman and Konick, 1972) of the RRI came to somewhat similar conclusions. Few of the factors derived in the study (Graham et al.) resembled any of the 12 clusters and 3 factors of the Katz and Lyerly (1963) study in terms of item composition. One explanation offered for this was that some of the differences between the two studies could be accounted for by the differences in the factor analytic procedures employed. However,

TABLE 33

RRI ITEM NUMBERS FOR FACTOR 1 BY SAMPLE

	Nigerian	Black American
Items	117	120
	113	121
	112	122
	110*	123
	101	116
	99	113
		110*
	82*	108
	59	107
	57	100
	55	82*
	56*	56*
	52	53
	51	50
	40	
	48	44
	47	43*
	45	36
	43*	34
		33
	35	30
	36	28*
	37	26
	35	25
	33	
	31	19
	28*	17*
	17*	18
	5	
	2	

*Items which appear in both groups

an item by item analysis of the meaning of the items that made up the different factors found in the two studies revealed that many of these items were similar in terms of their meaning. Obviously there is a need for more research on the RRI. The possibility that the result of the research is, to some extent, a function of the instability or inadequacies of the instrument can not be totally ignored.

The significant sample differences found on the subclusters of Belligerence, Nervousness and Bizarreness could also be functions of the inadequacies of the instrument. These differences may be due to chance rather than any real cultural differences considering the number of analysis undertaken. For whatever it is worth the significantly higher mean of the Nigerian sample on Bizarreness compared with that of the American sample is in keeping with the rationale of hypothesis I that Nigerians are more tolerant of maladaptive behaviors than their American counterparts. These findings seem to suggest that Nigerians may be more tolerant of bizarre behaviors than Americans but are no more tolerant than Americans of other categories of maladaptiveness.

An additional problem is that of the possible confounding of language differences and personality variables. Ervin (1964) administered the Thematic Apperception Test to sixty-four bilingual Frenchmen on two different occasions. One administration was in French, while the other was in English. The response content and associated personality

variables shifted significantly when responses in the two languages were compared. This raises a most important question: is the projection of an individual's personality integration a function of language? Ervin speculated that perhaps the instruction to speak a particular language is interpreted by the respondents as an instruction to tell a story appropriate to the culture of that language. Without a doubt, language carries with it some expectations in terms of social roles and attitudes which bear significantly on how the patient is viewed by others. The present findings may be a function of language and therefore cultural differences and related expectations, rather than a relative lack of differences in the objective behavior of patients in the two cultures.

There is an obvious need for more studies of bilinguals and biculturals to help provide some insight into this problem. One solution which controls for language and cultural differences is to have a group of bicultural observers, i.e. individuals who are familiar with both of two cultures under investigation, rate the behavior of patients in the two locations. This should ideally require that the patients be observed in some unobtrusive fashion in their native environment. Observations made in the hospital are another setting where there are a host of factors, including the effect of hospitalization itself which may be different across cultures which undoubtedly affect significantly the

behaviors of inpatient subjects. The main limitation of the study is that the data is derived from relatives' impressions of patients' behaviors rather than the actual observations of the patients' behaviors in the community by the researcher. The findings may be partly due to the inability of relatives to objectively report on the patients' behaviors rather than the lack of real differences.

There is one such naturalistic observation available from a cross-cultural epidemiological study of the patterns of the symptoms of mental illness of Yoruba villagers and Canadians in Stirling County (Leighton et al., 1963). The observation team consisted of psychiatrists and sociologists and anthropologists from Nigeria and the United States. There were no differences found in the overall patterns of psychological maladjustment in the two countries. Lorr and Klett (1969) came to a somewhat similar conclusion in a well controlled factor analytic study of 1,100 psychotic patients from England, France, Germany, Italy, Japan and Sweden. Other studies, e.g. Zubin and Kietzman, 1966) also stressed the "cultural invariance in primary symptomatology."

A recent detailed study by the World Health Organization (1975) of 1202 patients from psychiatric centers in China, Columbia, Czechoslovakia, Denmark, India, Nigeria, United Kingdom, United States (U.S.) and Union of Soviet Socialist Republics (U.S.S.R.) provides, perhaps, the most conclusive evidence to date on the subject. Excluded from the sample were

patients whose conditions may have been caused or influenced significantly by organic conditions. Researchers at the different centers were trained to use eight different diagnostic instruments to evaluate the behaviors of these patients. The most important of the instruments was the Present State Examination (Wing, Cooper and Sartorius, 1976) which basically consists of a list of behaviors that the diagnostician observes or inquires about. Patients were interviewed at the point of entry into treatment. The conclusion of this study with particular reference to schizophrenia, the largest diagnostic entity represented were as follows:

> 1. There is a high degree of similarity among the centers, with regard to the psychopathology of the patient groups identified as schizophrenic.
>
> 2. There is a high degree of similarity among the centers with regard to the psychopathology of individual schizophrenic subgroups when comparisons are carried out among those centers that had large enough numbers of patients in individual schizophrenic subgroups to make analysis possible, (p.75).

Of particular interest to this investigation is the fact that the patients in the Nigerian sub-sample were Yoruba's. In addition the U.S. subsample seems more representative of (the age, sex and racial) distribution of psychotic conditions in America than the U.S. sample in the present study which is limited to individuals of one racial group. It may be argued that the social and political realities of a minority group, such as black individuals who compose the American sample in this investigation are so different from that of the majority

of Americans that generalizability of the study is in question. While this may be so, the World Health Organization study reviewed here which used a more representative sample arrived at similar conclusions. However, this does not obviate the need for additional research on the behavior of patients prior to hospital contact with samples that are more representative of the cultures under investigation.

There is a suggestion (Hallowell, 1965) that cultures may not be as different as is often assumed by anthropologists. In some instances, frequent contacts between individuals of different cultures may diminish the importance of differences between them. Hallowell argues that there is a basic unity of man across cultures, which is seen in common strategies for coping with stress and common forms of maladaptiveness. With particular reference to the present sample, which consists primarily of individuals of lower socioeconomic backgrounds, Dohrenwend and Dohrenwend (1967) have shown in a world-wide survey that the most common form of psychological disturbance among this group of individuals is schizophrenia. Perhaps individuals from lower socioeconomic backgrounds share a certain amount of experiences and hence develop similar strategies in dealing with the stresses of their existence regardless of culture.

CHAPTER IV

STUDY TWO: A CROSS-CULTURAL COMPARISON OF THE ATTITUDE OF PSYCHIATRIC STAFF MEMBERS IN NIGERIA AND THE UNITED STATES TOWARDS MENTAL ILLNESS

Hypothesis III: Staff members at the Nigerian psychiatric hospital will be more socially restrictive in attitude toward the mentally ill than their American counterparts.

Method

The Cohen-Struening (1967) Opinion about Mental Illness (OMI) Scale was used to measure the attitudes of institutional staff toward the mentally ill at both Aro Hospital in Nigeria and Jackson Park Hospital in Chicago. The OMI scale is a 51 item questionnaire (see Table 34) which yields five factors, namely: Authoritarianism, Benevolence, Mental Hygiene Ideology, Social Restrictiveness and Interpersonal Etiology. As described by Cohen and Struening, Factor A-Authoritarianism, reflects the characteristics of submission and anti-intraceptiveness of the authoritarian and a view of mental patients as an inferior class needing coercive controls. For example, "the best way to handle patients in mental hospitals is to

TABLE 34

OPINIONS ABOUT MENTAL ILLNESS

There are different opinions about Mental Illness. The statements below are reflective of these varieties of opinions. Since these are issues about which even professionals are known to differ, there are No right or wrong answers.

Please complete the statements without help from anyone. It is important that this be done anonymously, so do NOT write your name on any of the sheets.

Background Data

Sex .....M .....F
Age .....
Education .....
Occupation .....

Please complete these statements by indicating the degree to which you agree or disagree with each statement.

	Disagree Strongly 1	2	3	4	5	Agree Strongly 6
1. If parents loved their children more there would be less mental illness						
2. One of the main causes of mental illness is a lack of moral strength or will power.						
3. Mental patients come from houses where the parents took little interest in their children.						
4. Although they usually aren't aware of it many people become mentally ill to avoid the difficult problems of every day life.						

TABLE 34--Continued

	Disagree Strongly 1	2	3	4	5	Agree Strongly 6
5. The mental illness of many people is caused by the separation or divorce of their parents during childhood.						
6. People would not become mentally ill if they avoided bad thoughts.						
7. People who are mentally ill let their emotions control them, normal people think things out.						
8. If the children of mentally ill parents were raised by normal parents, they would probably not become mentally ill.						
9. When a person has a problem or worry, it is best not to think about it, but keep busy with more pleasant things.						
10. Nervous breakdown usually result when people work too hard.						
11. The patients of a mental hospital should have something to say about the way the hospital is run.						
12. Mental illness is usually caused by some disease of the nervous system.						
13. All patients in mental hospitals should be prevented from having children by a painless operation.						

TABLE 34--Continued

		Disagree Strongly 1	2	3	4	5	Agree Strongly 6
14.	The small children of patients in mental hospitals should not be allowed to visit them.						
15.	Mental illness is an illness like any other.						
16.	It is easy to recognize someone who once had a serious mental illness.						
17.	Most mental patients are willing to work.						
18.	Regardless of how you look at it, patients with severe mental illness are no longer really human.						
19.	Many people who have been patients in a mental hospital are mentally ill than many hospitalized mental patients.						
20.	There is something about mental patients that makes it easy to tell them from normal people.						
21.	If people would talk less and work more everybody would be better off.						
22.	Even though patients in mental hospitals behave in funny ways, it is wrong to laugh about them.						

TABLE 34--Continued

		Disagree Strongly 1	2	3	4	5	Agree Strongly 6
23.	People with mental illness should never be treated in the same hospital as people with physical illness.						
24.	A person who has bad manners, habits, and breeding can hardly expect to get along with decent people.						
25.	If the children of normal parents were raised by mentally ill parents they would probably become mentally ill.						
26.	A heart patient has just one thing wrong with him, while a mentally ill person is completely different from other patients.						
27.	To become a patient in a mental hospital is to become a failure in life.						
28.	Patients in mental hospitals are in many ways like children.						
29.	More tax money should be spent in the care and treatment of people with severe mental illness.						
30.	Although some mental patients seem alright, it is dangerous to forget for a moment that they are mentally ill.						

TABLE 34--Continued

		Disagree Strongly 1	2	3	4	5	Agree Strongly 6
31.	A woman would be foolish to marry a man who has had a severe mental illness even though he seems fully recovered.						
32.	Anyone who tries hard to better himself deserves the respect of others.						
33.	Our mental hospitals seem more like prisons than like places where mentally ill people can be cared for.						
34.	People who have been patients in a mental hospital will never be their old selves again.						
35.	If our hospitals had enough well trained doctors, nurses and aids many of the patients would get well enough to live outside the hospital.						
36.	The law should allow a woman to divorce her husband as soon as he has been confined in a mental hospital with a severe mental illness.						
37.	The best way to handle patients in mental hospitals is to keep them behind locked doors.						
38.	Many patients in mental hospitals make wholesome friendships with other patients.						

TABLE 34--Continued

		Disagree Strongly 1	2	3	4	5	Agree Strongly 6
39.	Although patients discharged from mental hospitals may seem alright, they should not be allowed to marry.						
40.	Many mental patients are capable of skilled labor even though in some ways they are very disturbed mentally.						
41.	There is little that can be done for patients in mental hospitals except to see that they are comfortable and well fed.						
42.	Many mental patients would remain in the hospital until they were well even if the doors were unlocked.						
43.	Every mental hospital should be surrounded by a high fence and guards.						
44.	Every person should make a strong attempt to raise his social position.						
45.	Most women who were once patients in a mental hospital could be trusted as baby sitters.						
46.	Most patients in mental hospitals don't care how they look.						

TABLE 34--Continued

		Disagree Strongly 1	2	3	4	5	Agree Strongly 6
47.	Obedience and respect for authority are the most important virtues children should learn.						
48.	College professors are more likely to become mentally ill than are businessmen.						
49.	People who are successful in their work seldom become mentally ill.						
50.	There is hardly anything lower than a person who does not feel a great love, gratitude and respect for his parents.						
51.	Every person should have complete faith in some supernatural power whose discussions he obeys without questions.						

Return the completed questionnaire to the designated authority.

keep them under locked doors" (item 37). The scale contains six items from the California F Scale which correlates highly .86 with Factor A. The factor is composed of the following items: 2, 6, 7, 9, 10, 11, 12, 13, 16, 18, 20, 21, 23, 24, 26, 30, 37, 39, 43, 44, 47, 50 and 51.

Factor B, Benevolence, reflects a kindly, paternalistic view steeped in moral or "christian kindliness," rather than scientific or professional dogma. For example, "there is little that can be done for patients in a mental hospital except to see that they are comfortable and well fed" (item 41). The other items in this factor are 4, 22, 27, 28, 29, 30, 32, 33 and 44.

Factor C, Mental Hygiene Ideology, reflects a positive attitude towards the mentally ill, which is congruent with the tenets of the medical model of mental illness. For example "mental illness is an illness like any other" (item 15). The other items that make up this factor are 13, 17, 19, 29, 33, 35, 40, 42 and 45.

Factor D, Social Restrictiveness, which is most relevant to the hypothesis is a measure of the level of social control the respondent believes should be imposed on the mentally ill. It emphasizes the need to impose controls on the patient during and after hospitalization for the protection of society, e.g. "people who have been patients in a mental hospital will never be their old selves again." (item 34). The other items in this factor are 13, 14, 31, 36, 38, 39, 41, 45 and 46.

Factor E, Interpersonal Etiology, reflects the attitude that mental illness arises from difficulty in coping with life experiences, e.g. "people who are successful in their work seldom become mentally ill" (item 49). The other items in this factor are 1, 3, 4, 5, 8 and 25.

Cohen and Struening (1967) obtained evidence on the stability of the factors in an administration of the OMI to staff members at two large Veteran's Administration hospitals. The data from the two hospitals were then correlated. The resulting Pearson correlations between hospitals were Factor A, .92; Factor B, .62; Factor C, .51; Factor D, .61; Factor E, .81. Evidence for the construct validity of the OMI was obtained by Levine (1972) in a cross-cultural administration of the OMI in Great Britain, Czechoslovakia, and West Germany. He postulated that the different socio-political situations in these countries would be reflected in attitudes toward the mentally ill. That is, in a country characterized by an authoritarian socio-political climate, attitudes toward the mentally ill would tend to be socially restrictive in comparison with countries in which the socio-political structure is less socially restrictive. The data he obtained was supportive of this hypothesis.

In an attempt to evaluate the reliability of the OMI with Nigerian psychiatric staff members, the scale was administered twice to a group of 15 staff members assigned to the outpatient clinic. The second administration was conducted a week after the first. A high test--retest relaibility coefficient

(.96437) was obtained.

Subjects

The Nigerian sample consisted of 41 staff members at Aro Hospital. The American sample was made up of 24 staff members of Jackson Park Hospital. There were 26 males in the Nigerian sample and 14 females, while there were 14 females in the American sample and 9 males. The mean age of the Nigerian sample was 25 compared with a mean age of 30 for the American sample. The mean education (years in school) for the American sample was 16 years compared with 13 for the Nigerian sample. Most (94%) of the individuals in the Nigerian group were nurses, while most (70%) of those in the American group were social workers. [Student nurses and social work students were classified as nurses and social workers.] Excluded from both groups were individuals who functioned in non-treatment capacities at the two hospitals, (e.g. cooks, gardeners, etc.).

Procedure;

The OMI was presented in Likert format. In the main, the subjects were group tested and specifically asked not to identify their completed questionnaire so as to ensure anonymity.

Neither group expressed difficulty with understanding the OMI in the original English version. All the Nigerian psychiatric staff members in the sample had a degree of fluency

in English comparable to, at least, that of an American high school graduate. Translation of the OMI into Yoruba would have introduced an unnecessary source of bias without any improvement in comprehension.

Results

The analysis of variance technique was applied to the data. The results showed significant difference existed between Nigerian and United States subjects. In fact, on most of the factors, the two samples seem to be at the opposite ends of a continuum, with the responses of the United States subjects more representative of current information about the treatment of mental illness, while the responses of the Nigerian sample seem outdated especially about treatment.

On Factor A, Authoritarianism, the mean of the Nigerian sample was 93.707, while the mean of the American sample was 48.33, a difference of almost two standard deviations (Table 35). The difference between the two means was significant at the .001 level (Table 36). The Nigerian sample was more authoritarian in it's attitude towards the mentally ill than the American sample. The sex by age interaction was significant at the .05 level, with women under the age of 30, in both samples, obtaining a lower mean than men under 30.

On Factor B, Benevolence, the mean of the Nigerian sample, 39.7, was significantly higher than the mean, 34.1, of the American sample, a difference which is significant at the .02 level (Tables 37 and 38).

TABLE 35

DESCRIPTION OF SUBPOPULATIONS CRITERION FACTOR A

BROKEN DOWN BY SAMPLE, SEX, AND AGE

VARIABLE	CODE	VALUE LABEL	SUM	MEAN	STD DEV	VARIANCE	N
FOR ENTIRE POPULATION			5002.0000	76.9538	25.5939	655.0459	65
Sample	1.	AMERICAN	1160.000	48.333	13.021	169.537	24
Sex	1.	Male	469.000	52.111	11.429	130.612	9
Age	1.	Under 30	230.000	57.500	7.141	51.000	4
Age	2.	Over 30	239.000	47.800	13.065	170.701	5
Sex	2.	Female	641.000	45.786	14.230	202.489	14
Age	1.	Under 30	433.000	43.300	9.105	82.901	10
Age	2.	Over 30	208.000	52.000	23.594	556.667	4
Sample	2.	Nigerian	3842.000	93.707	13.093	171.414	41
Sex	1.	Male	2398.000	92.231	11.813	139.547	26
Age	1.	Under 30	1965.000	93.571	12.412	154.059	21
Age	2.	Over 30	433.000	86.600	7.266	52.802	5
Sex	2.	Female	1329.000	94.929	14.772	218.231	14
Age	1.	Under 30	1128.000	94.000	15.817	250.182	12
Age	2.	Over 30	201.000	100.500	3.536	12.500	2

TOTAL CASES = 65

TABLE 36

ANALYSIS OF VARIANCE FOR FACTOR A, AUTHORITARIANISM BY SAMPLE, SEX, AND AGE

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
Main Effects	29470.008	3	9823.336	58.041	0.001
Sample	25225.547	1	25225.547	149.045	0.001
Sex	8.581	1	8.581	0.051	0.999
Age	4.340	1	4.340	0.026	0.999
2-Way Interactions	953.250	3	317.750	1.877	0.143
Sample Sex	511.875	1	511.875	3.024	0.084
Sample Age	0.964	1	0.964	0.006	0.999
Sex Age	626.714	1	626.714	3.703	0.056
3-Way Interactions	14.895	1	14.895	0.088	0.999
Sample Sex Age	14.895	1	14.895	0.088	0.999
Residual	9308.652	55	169.248		
TOTAL	39746.805	62	641.077		

65 cases were processed.
2 cases (3.1%) were missing.

TABLE 37

DESCRIPTION OF SUBPOPULATIONS CRITERION FACTOR B

BENEVOLENCE--BROKEN DOWN BY SAMPLE, SEX, AND AGE

VARIABLE	CODE	VALUE LABEL	SUM	MEAN	STD DEV	VARIANCE	N
FOR ENTIRE POPULATION			2449.000	37.6769	7.9729	63.5664	65
Sample	1.	American	819.000	34.125	7.903	62.462	24
Sex	1.	Male	315.000	35.000	3.317	11.000	9
Age	1.	Under 30	137.000	34.250	4.992	24.917	4
Age	2.	Over 30	178.000	35.600	1.517	2.301	5
Sex	2.	Female	473.000	33.786	10.116	102.336	14
Age	1.	Under 30	343.000	34.300	5.417	29.345	10
Age	2.	Over 30	130.000	32.500	18.771	352.333	4
Sample	2.	Nigerian	1630.000	39.756	7.334	53.789	41
Sex	1.	Male	1015.000	39.038	7.962	63.399	26
Age	1.	Under 30	822.000	39.143	7.206	51.929	21
Age	2.	Over 30	193.000	38.600	11.675	136.301	5
Sex	2.	Female	565.000	40.357	5.839	34.094	14
Age	1.	Under 30	500.000	41.667	5.211	27.152	12
Age	2.	Over 30	65.000	32.500	0.707	0.500	2

TOTAL CASES = 65

TABLE 38

ANALYSIS OF VARIANCE FOR FACTOR B, BENEVOLENCE BY SAMPLE, SEX, AND AGE

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
Main Effects	432.719	3	144.240	2.413	0.075
Sample	307.387	1	307.387	5.142	0.026
Sex	0.315	1	0.315	0.005	0.999
Age	29.921	1	29.921	0.500	0.999
2-Way Interactions	132.194	3	44.065	0.737	0.999
Sample Sex	2.179	1	2.179	0.036	0.999
Sample Age	44.909	1	44.909	0.751	0.999
Sex Age	83.533	1	83.533	1.397	0.241
3-Way Interactions	18.371	1	18.371	0.307	0.999
Sample Sex Age	18.371	1	18.371	0.307	0.999
Residual	3287.980	55	59.781		
TOTAL	3871.263	62	62.440		

65 cases were processed.
2 cases (3.1%) were missing.

The Nigerian sample was more benevolent in its attitude toward the mentally ill than the American sample. Benevolence as defined by the items that make up the factor is the paternalistic, if not authoritarian, variety. For example, patients are seen as being more like children than adults (Item 28) but they should not be laughed at (Item 22). However, patients are still viewed as dangerous (Item 30), a point of view which is shared with Factor A, Authoritarianism. It should occasion little surprise, therefore, that the significantly more authoritarian Nigerian sample also scored significantly higher than the American sample on this measure of benevolence.

On Factor C, Mental Hygiene Ideology, the mean, 42.41 of the American sample was higher than the mean, 39.82 of the Nigerian sample, although the difference was not significant (Tables 39 and 40). This means that the American sample's attitude towards the mentally ill was more in keeping with tenets of modern mental health knowledge than that of the Nigerian, although the difference between the two samples was not statistically significant. The items in this factor suggest that mental illness is an illness like any other (Item 15) and is amenable to treatment (Item 35). In addition, patients are seen as capable of skilled labor (Item 40) and should have something to say about the way the hospital is run (Item 11). Although there was no significant difference between the samples, the sample by sex interaction

TABLE 39

DESCRIPTION OF SUBPOPULATIONS CRITERION FACTOR C, MENTAL HEALTH IDEOLOGY

BROKEN DOWN BY GROUP, BY SEX, BY AGE

VARIABLE	CODE	VALUE LABEL	SUM	MEAN	STD DEV.	VARIANCE	N
FOR ENTIRE POPULATION			2651.0000	40.7846	7.3602	54.1729	65
Sample	1.	American	1018.000	42.417	7.247	52.515	24
Sex	1.	Male	371.000	41.222	6.379	40.695	9
Age	1.	Under 30	143.000	35.750	3.862	14.917	4
Age	2.	Over 30	228.000	45.600	4.037	16.301	5
Sex	2.	Female	607.000	43.357	8.092	65.479	14
Age	1.	Under 30	450.000	45.000	5.055	25.556	10
Age	2.	Over 30	157.000	39.250	13.251	175.583	4
Sample	2.	Nigerian	1633.000	39.829	7.345	53.946	41
Sex	1.	Male	1031.000	39.654	7.610	57.916	26
Age	1.	Under 30	839.000	39.952	7.117	50.648	21
Age	2.	Over 30	192.000	38.400	10.310	106.301	5
Sex	2.	Female	549.000	39.214	6.387	40.797	14
Age	1.	Under 30	488.000	40.667	4.942	24.425	12
Age	2.	Over 30	61.000	61.000		84.500	2

TOTAL CASES = 65

TABLE 40

ANALYSIS OF VARIANCE FOR FACTOR C, MENTAL HEALTH IDEOLOGY, BY SAMPLE, SEX, AGE

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
Main Effects	174.421	3	58.140	1.203	0.317
Sample	142.019	1	142.019	2.939	0.088
Sex	1.159	1	1.159	0.024	0.999
Age	37.018	1	37.018	0.766	0.999
2-Way Interactions	452.721	3	150.907	3.123	0.032
Sample Sex	123.657	1	123.657	2.559	0.112
Sample Age	177.349	1	177.349	3.670	0.057
Sex Age	363.584	1	363.584	7.523	0.008
3-Way Interactions	29.922	1	29.922	0.619	0.999
Sample Sex Age	29.922	1	29.922	0.619	0.999
Residual	2658.008	55	48.327		
TOTAL	3315.072	62	53.469		

65 cases were processed.
2 cases (3.1%) were missing.

was significant at the .05 level. American female subjects obtained a significantly higher mean on Factor C than their Nigerian counterparts. The attitude of American female subjects under the age of 30 toward the mentally ill was more in keeping with the modern humanistic trends in mental health than that of a comparable sample of Nigerian females.

Factor D, Social Restrictiveness, emphasizes the need to impose restrictions on the rights of mental patients both during and after hospitalization for the protection of society. Thus, patients should be prevented from marrying (Item 39); indeed they should be prevented from having children by a painless operation (Item 13). After hospitalization, former patients must be denied the right to employment as baby sitters (Item 45). As predicted, the Nigerian subjects were more willing to impose restrictions on the rights of patients than their American counterparts. The Nigerian sample's mean, 30.39 was significantly higher (.001 level) than the mean, 22.28, of the American sample. The interaction of sample and age was significant at the .006 level with the Nigerian subjects under 30 scoring significantly higher than American subjects under 30 (Tables 41 and 42).

Factor E, Interpersonal Etiology, reflects the attitude that mental illness arises from interpersonal experiences, particularly deprivation of parental love (Item 1) and attention (Item 2), and that mental illness is caused by a need to avoid problems (Item 4). There was no significant difference

TABLE 41

DESCRIPTION OF SUBPOPULATIONS CRITERION FACTOR D, SOCIAL RESTRICTIVENESS

BROKEN DOWN BY SAMPLE, SEX, AGE

VARIABLE	CODE	VALUE LABEL	SUM	MEAN	STD DEV	VARIANCE	N
FOR ENTIRE POPULATION			1781.0000	27.4000	7.1257	50.7752	65
Sample	1.	American	535.000	22.292	5.630	31.694	24
Sex	1.	Male	231.000	25.667	5.362	28.750	9
Age	1	Under 30	108.000	27.000	7.483	56.000	4
Age	2.	Over 30	123.000	24.600	3.507	12.300	5
Sex	2.	Female	283.000	20.214	5.071	25.720	14
Age	1.	Under 30	215.000	21.500	4.673	21.833	10
Age	2.	Over 30	68.000	17.000	5.164	26.667	4
Sample	2.	Nigerian	1246.000	30.390	6.180	38.194	41
Sex	1.	Male	769.000	29.577	6.736	45.374	26
Age	1.	Under 30	622.000	29.619	7.352	54.048	21
Age	2.	Over 30	147.000	29.400	3.647	13.301	5
Sex	2.	Female	441.000	31.500	5.019	25.192	14
Age	1.	Under 30	387.000	32.250	4.575	20.932	12
Age	2.	Over 30	54.000	27.000	7.071	50.000	2

TOTAL CASES = 65

TABLE 42

ANALYSIS OF VARIANCE FOR FACTOR D, SOCIAL RESTRICTIVENESS BY SAMPLE, SEX, AGE

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
Main Effects	968.480	3	322.827	9.305	0.001
Sample	652.564	1	652.564	18.810	0.001
Sex	17.850	1	17.850	0.515	0.999
Age	46.097	1	46.097	1.329	0.253
2-Way Interactions	252.754	3	84.251	2.429	0.074
Sample Sex	155.705	1	155.705	4.488	0.036
Sample Age	2.153	1	3.153	0.062	0.999
Sex Age	30.706	1	30.706	0.885	0.999
3-Way Interactions	5.267	1	5.267	0.152	0.999
Sample Sex Age	5.267	1	5.267	0.152	0.999
Residual	1908.095	55	34.693		
TOTAL	3134.596	62	50.558		

65 cases were processed.
2 cases (3.1%) were missing.

between the means of 22.58 for the American sample and 25.71 for the Nigerian sample (Tables 43 and 44). However, the interaction of sample by age was significant at the .006 level with Nigerian subjects over 30 more strongly in favor of the view that mental illness has its etiology in problems in interpersonal experiences than a comparable group of American subjects.

Discussion

These results may be partly reflective of the differences in the treatment procedures of the two hospitals from which the samples were drawn. On Factors A and D that measure what may be subsumed under a general heading of attitudes about the treatment of patients, significant differences existed between the attitudes of both samples. The tendency of the Nigerian subjects to advocate restrictions and control on the rights of patients seem to reflect the way patients are presently being treated at Aro Hospital.

In contrast to conditions obtaining in this country (U.S.) where for the last decade there has been a gradual phasing out of state hospitals with their de facto social obligation to protect society from the mentally ill, Aro Hospital still functions as a long term custodial hospital center for the mentally ill. There seems to be no active

TABLE 43

DESCRIPTION OF SUBPOPULATIONS, CRITERION VARIABLE E

BROKEN DOWN BY SAMPLE, BY SEX, BY AGE

VARIABLE	CODE	VALUE LABEL	SUM	MEAN	STD DEV	VARIANCE	N
FOR ENTIRE POPULATION			1574.0000	24.2154	6.9045	47.6718	65
Sample	1.	American	542.000	22.583	6.136	37.645	24
Sex	1.	Male	188.000	20.889	5.840	34.111	9
Age	1.	Under 30	89.000	22.250	6.344	40.250	4
Age	2.	Over 30	99.000	19.800	5.891	34.700	5
Sex	2.	Female	336.000	24.000	6.312	39.846	14
Age	1.	Under 30	252.000	25.200	5.633	31.734	10
Age	2.	Over 30	84.000	21.000	7.789	60.667	4
Sample	2.	Nigerian	1032.000	25.171	7.218	52.095	41
Sex	1.	Male	644.000	24.769	6.878	47.305	26
Age	1.	Under 30	490.000	23.333	6.414	41.134	21
Age	2.	Over 30	154.000	30.800	5.805	33.701	5
Sex	2.	Female	354.000	25.286	7.937	62.989	14
Age	1.	Under 30	286.000	23.833	6.834	46.697	12
Age	2.	Over 30	68.000	34.000	11.314	128.000	2

TOTAL CASES = 65

TABLE 44

ANALYSIS OF VARIANCE FOR FACTOR E, INTERPERSONAL IDEOLOGY BY SAMPLE, SEX, AGE

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
Main Effects	173.248	3	57.749	1.365	0.262
Sample	129.600	1	129.600	3.064	0.082
Sex	47.738	1	47.738	1.129	0.293
Age	72.217	1	72.217	1.707	0.194
2-Way Interactions	404.739	3	134.913	3.190	0.030
Sample Sex	3.817	1	3.817	0.090	0.999
Sample Age	349.966	1	349.966	8.274	0.006
Sex Age	0.459	1	0.459	0.011	0.999
3-Way Interactions	12.142	1	12.142	0.287	0.999
Sample Sex Age	12.142	1	12.142	0.287	0.999
Residual	2326.277	55	42.296		
TOTAL	2916.406	62	47.039		

65 cases were processed.
2 cases (3.1%) were missing.

psychotherapeutic program, and treatment is confined to the administration of psychoactive drugs.

In America, there seems to be a shift from the use of large state mental hospitals built away from the city to short-term treatment facilities which are a part of general medical hospitals (e.g. Jackson Park Hospital) and to community mental health centers. (Aro Hospital is 7 miles from the city of Abeokuta, while Jackson Park Hospital is located right in the middle of Chicago's Southside).

The shift from custodial care in state mental hospital to community care in the United States has brought with it not only a change in treatment but a change in attitudes of the public and psychiatric professionals towards the mentally ill as well. Mental illness is seen as capable of alleviation in a relatively short time, therefore, treatment of the mentally ill is viewed as better than custodial care.

It seems that some of the cross-national differences can be explained from an understanding of the differences in the belief systems of the two national samples. Among the Yorubas, all misfortunes and all illnesses and death, except that from old age, are believed to be caused by supernatural influences. The source of mental illness is most often attributed to another human being who is driven by jealousy or anger and therefore invokes the powers of the supernatural causing these powers to inflict mental illness on the patient. Given this belief system, which is adhered to by both educated and

uneducated Nigerians (Lambo, 1960), it occasions little surprise that our Nigerian sample viewed mental illness as a form of sickness to be feared. The advocation of restrictions on the rights of patients may be a way of dealing with the fear of the mentally ill.

In America, on the other hand, misfortune, illness, and death are most often attributed to natural causes. Mental illness is most often attributed to psycho-social or biological causes which are viewed as amenable to treatment.

An obvious caution in interpreting the present findings is that the two groups were different on a number of demographic variables, such as, age, sex and ratio, education, and occupation, which are purported to contribute significantly to attitudes towards mental illness. However, these demographic differences are true reflections of the characteristics of the populations from which the subjects were drawn and not methodological artifacts. It may be concluded, therefore, that the present findings are a function of intercultural differences.

There are two methodological problems inherent in this kind of inquiry. In the first place, the scope and content of the term "mental illness" are difficult to define. Mental illness is an amorphous term that embraces many disparate behaviors and psychiatric conditions. It may be difficult to measure attitude towards mental illness since the potential respondents' attitudes may vary according to their individual definitions of the concept. Attitudes towards mental illness in two or

more cultures, may be a function of the differences in the definitions of mental illness in the cultures under investigation, rather than actual variations or lack of them in attitudes between the cultures.

The results of Study One suggest that there are more similarities than differences in the behavior of patients in Nigeria and U.S. at the point of entry into treatment. It may be assumed that since the behaviors considered maladaptive are similar in the two cultures, the definitions of mental illness will also be similar. However, it is possible that the term mental illness evokes some culturally defined stereotypes which have their origin in fiction rather than the actual observation of the mentally ill in the cultures under consideration. Moreover, attitudes may be determined by the degree to which the mentally ill person's behavior is unpredictable, the personal characteristic (e.g. age, sex, social class) of the person displaying the behavior, the particular type of behavior or symptom involved, and the extent to which violence is an issue.

Future cross-cultural studies of attitudes towards mental illness should attempt to operationalize the term mental illness. One promising technique was used by Shirley Star in her studies of degree to which the public recognized certain behaviors as manifestations of mental illness. She formulated six case histories, each describing in simple, non-technical language a different pattern of maladaptive

behavior. The cases included a depressed neurotic, an alcoholic, a juvenile delinquent, a phobic-compulsive neurotic, a simple schizophrenic, and a paranoid schizophrenic (Joint Commission on Mental Illness and Health, 1961). These type of case histories may be presented in culturally relevant ways to individuals in the two or more cultures under investigation. After the presentation of each case history, the respondents could be administered an attitude scale such as the OMI. The personal characteristics of the individuals described in the case histories may be varied to study the effects of these variables (age, sex, race, and social class) on attitudes.

Secondly, the findings of investigations such as the one reported are limited by the low correlation between attitudes, as measured by paper and pencil questionnaires like the OMI, and actual behaviors (Wicker, 1969). For example, a psychiatric staff member's attitude about a violent and assaultive patient may vary according to his/her proximity to the patient. It may be easier to endorse items on a paper and pencil test, that, patients like the one described, be treated "therapeutically" and without coercion than to actually respond in this manner when confronted by this type of patient. Situational factors may detract from the strength of the relationship between a particular attitude and actual behavior in numerous ways. One solution to this problem may

be to conduct more naturalistic observation of staff members in the two locations under investigation. Besides the prohibitive expense of this type of study, the researcher has very little control of the variables. There is a need to supplement the type of naturalistic observation with small scaled laboratory studies that allow the researcher to manipulate the important variables. One approach may be to employ actors to play the parts of the mentally ill patients described in the Star Vignettes.

SUMMARY

A CROSS-CULTURAL COMPARISON OF THE SYMPTOMS OF MALADAPTIVE FUNCTIONING AND THE ATTITUDES OF PSYCHIATRIC STAFF MEMBERS TOWARD MENTAL ILLNESS IN NIGERIA AND THE UNITED STATES OF AMERICA

In most of the empirical studies of symptoms of maladaptive functioning across cultural lines to date, a great deal of effort was focused on comparing the symptoms of residential or hospitalized psychiatric patients in the two or more populations under investigation. However, there are a host of factors some of them noncultural, for example, differences in the amounts or types of medication administered and differences in staff attitude towards their charges at the two locations, that may result in the attenuation or exacerbation of symptoms after hospitalization. The present investigation is a comparison of the behaviors of Nigerian and U.S. psychiatric patients in the community prior to seeking help in the hospital and a study of the attitudes of psychiatric staff members in the two countries toward the mentally ill.

It was hypothesized that Nigerian patients would display more maladaptive behaviors, especially socially obstreperous behaviors, than a comparable sample of U.S. patients. It was also hypothesized that staff members in Nigeria would be more socially restrictive in attitude toward the mentally ill than their American counterparts.

The relatives of 69 Nigerian (Yoruba) and 43 Black American patients of lower socio-economic backgrounds were administered the Relatives' Rating Inventory of Patients' Symptoms and Social Behavior. The Nigerian sample was administered a Yoruba translation of the inventory. The reliability and validity of the translation was established in a pretest.

The application of the analysis of variance revealed no significant differences between the two samples on the measures of general psychopathology and social obstreperousness. There was a substantial amount of similarity in the symptomatology of both national samples. The hypothesized differences were not supported. One explanation for this finding was that individuals from lower socioeconomic backgrounds share a certain amount of common experiences and hence develop similar coping strategies. Other plausible explanations are offered.

The Opinions About Mental Illness scale was administered to psychiatric staff members in both countries. Nigerian staff members were significantly more socially restrictive in attitude toward the mentally ill than a comparable sample of Americans.

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APPENDIX A

APPENDIX A

THE RELATIVES' RATING INVENTORY OF SYMPTOMS AND SOCIAL BEHAVIOR

Scale Format			
1	2	3	4
never	sometimes	often	always

1. Has trouble sleeping
2. Gets very self critical, starts to blame himself for things
3. Cries easily
4. Feels lonely
5. Acts as if he has no interest in things
6. Is restless
7. Has periods where he can't stop moving or doing something
8. Just sits
9. Acts as if he doesn't have much energy
10. Looks worn out
11. Feelings get hurt easily
12. Feels that people don't care about him
13. Does the same thing over and over again without reason
14. Passes out
15. Gets very sad, blue
16. Tries too hard
17. Needs to do things very slowly to do them right.
18. Has strange fears
19. Afraid something terrible is going to happen
20. Gets nervous easily
21. Jittery
22. Worries or frets
23. Gets sudden fright for no reason
24. Has bad dreams
25. Acts as if he sees people or things that aren't there.
26. Does strange things without reason
27. Attempts suicide
28. Gets angry and breaks things
29. Talks to himself
30. Acts as if he has no control over his emotions
31. Laughs or cries at strange times
32. Has mood changes without reason
33. Has temper tantrums
34. Gets very excited for no reason
35. Gets very happy for no reason
36. Acts as he doesn't care about other people's feelings
37. Thinks only of himself

Scale Format			
1	2	3	4
never	sometimes	often	always

38. Shows his feelings
39. Generous
40. Thinks people are talking about him
41. Complains of headaches, stomach trouble, other physical ailments
42. Bossy
43. Acts as if he's suspicious of people
44. Argues
45. Gets into fights with people
46. Is cooperative
47. Does the opposite of what he is asked
48. Stubborn
49. Answers when talked to
50. Curses at people
51. Deliberately upsets routine
52. Resentful
53. Envious of other people
54. Friendly
55. Gets annoyed easily
56. Critical of other people
57. Pleasant
58. Gets along well with people
59. Lies
60. Gets into trouble with the law
61. Gets drunk
62. Is dependable
63. Is responsible
64. Doesn't argue (talk) back
65. Obedient
66. Shows good judgment
67. Stays away from people
68. Takes drugs other than recommended by hospital or clinic
69. Shy
70. Quiet
71. Prefers to be alone
72. Needs a lot of attention
73. Behavior is childish
74. Acts helpless
75. Is independent
76. Moves about very slowly
77. Moves about in a hurried way
78. Clumsy; keeps bumping into things or dropping things
79. Very quick to react to something you say or do.

Scale Format			
1	2	3	4
never	sometimes	often	always

80. Very slow to react
81. Gets into peculiar positions
82. Makes peculiar movements
83. Hands tremble
84. Will stay in one position for a long period
85. Loses track of day, month, or year
86. Forgets his address or other places he knows well
87. Remembers the names of people he knows well
88. Acts as if he doesn't know where he is
89. Remembers important things
90. Acts as if he's confused about things, in a daze
91. Acts as if he can't get certain thoughts out of his mind
92. Acts as if he can't concentrate on one thing
93. Acts as if he can't make decisions
94. Talks without making sense
95. Hard to understand his words
96. Speaks clearly
97. Refuses to speak at all for periods of time
98. Speaks so low you cannot hear him
99. Speaks very loudly
100. Shouts or yells for no reason
101. Speaks very fast
102. Speaks very slowly
103. Acts as if he wants to speak but can't
104. Keeps repeating the same idea
105. Keeps changing from one subject to another for no reason
106. Talks too much
107. Says that people are talking about him
108. Says that people are trying to make him do or think things he doesn't want to
109. Talks as if he committed the worst sins
110. Talks about how angry he is at certain people
111. Talks about people or things he's very afraid of
112. Threatens to injure certain people
113. Threatens to tell people off
114. Says he is afraid that he will injure somebody

Scale Format			
1	2	3	4
never	sometimes	often	always

115. Says he is afraid that he will not be able to control himself
116. Talks about strange things that are going on inside his body
117. Says how bad or useless he is
118. Brags about how good he is
119. Says the same thing over and over again
120. Complains about people and things in general
121. Talks about big plans he has for the future.
122. Says or acts as if people are after him
123. Says that something terrible is going to happen
124. Believes in strange things
125. Talks about suicide
126. Talks about strange sexual ideas
127. Gives advice without being asked.

APPENDIX B

RELATIVE'S RATING OF PATIENT SYMPTOMS AND SOCIAL BEHAVIOUR: RRI:

		Rara	Lẹẹkọọkan	Nigba-Pupọ	Ni gbogbo Igba
1.	Àtisùn a máa fa wàhálà lọ́wọ́				
2.	Ńkan ki í tẹ ẹ lọ́rùn, a máa dá ara rè lẹbi fún ohun ti o ba selẹ				
3.	Kì i gbe sunkún (Ẹkún ki i pẹ gbọn ọn)				
4.	A máa ro ṣe bi i pe oun nikan lo wa laiye (Alasokan ni).				
5.	A máa ṣe bi i pe kò si nkan kan ti o bìkítà fun				
6.	Ara rè kì i balè				
7.	Àkókò kan a máa wà fun un ninú eyi ti kì i le e gbé je e				
8.	A sa jókó sa a				
9.	A máa ṣe bi ẹni ti kò ni okun ninú (A máa ṣe bi onileéré)				
10.	A máa wo bi ẹni ti o ti sisẹ ti o ti rẹ e				
11.	Èniyàn ki i pẹ mu u binu				
12.	A máa ro pe ko si ẹni ti o bikita fun oun				
13.	A máa tun nkan kan náà ti o ba nṣe nigba igba lainidi				
14.	A máa dákú				
15.	Inu rẹ a máa baje				
16.	A máa gbiyanju pupọ ju				
17.	O nilo ki o fi pèlépèlé ṣe nkan ki àyọrisí ńkan náà le dara				
18.	A máa boru lainidi				
19.	Ẹrù a máa ba a pe nkan kan to buru yio selẹ				
20.	A máa gbọn pèpè				
21.	Òjòjò a tete máa mu un				
22.	A máa pa ara rè laiyà				
23.	Ẹrù a máa ba a lainidi				
24.	A máa la àlá burúkú				
25.	A máa ṣe bi i ẹni ti ó wẹjú (A máa ṣe bi i pe oun n ri nkan tabi eniyan ti ko si nibẹ)				
26.	A máa ṣe nkan ti èniyàn ko lero pe o yẹ kóse bẹẹ ni ko ni si ìdí pàtàkì ti ó fi se bẹẹ				
27.	O gbiyanju lati pa ara rẹ				
28.	Bi inu ba nbi i yio máa fọ nkan (f'gba f'awo)				

.../2

		Rara	Lẹẹkọọkan	Nigba-Pupọ	Ni gbogbo Igba
29.	A máa ba ara rẹ sọrọ (A máa sòrò si ara rè)				
30.	A máa huwa bi i pe ko ni akoso lori iṣesi rẹ				
31.	Akoko èrin rẹ ki i ba ti araiye mu				
32.	Ìwò ojú rẹ ma nyi pada lainidi				
33.	A máa binu bi Ẹhànnà				
34.	Ara máa n wa a lainidi				
35.	Inú rè a máa dun lainidi				
36.	A máa huwa aibikita fun èrò èlòmíràn				
37.	Ti ara rè nikan ni i rò				
38.	A máa fi ìmò rẹ han				
39.	O lawọ				
40.	A máa ro pe awọn eniyan ńsòrò oun				
41.	Igba gbogbo ni i ma wijọ; oni ori nro mi; ọla èdò ndun mi				
42.	A máa fẹ jẹ gàba le eniyan lori				
43.	A máa huwa bi i pe ko fi ọkan tan enikẹni				
44.	A máa jiyàn				
45.	A máa ba eniyan ja				
46.	Je Oluranlọwọ				
47.	Ohun ti ẹ ba ni ki o máa ṣe ni i ṣe				
48.	Olórí-kunkun ni				
49.	Dahun bi wọn ba nba sọrọ				
50.	A máa s'epe fun eniyan				
51.	A máa mò ọ mò da èto ru				
52.	Kun fun ibinu				
53.	Ojoju eniyan ni				
54.	Yara ma nsọrẹ				
55.	Inu ki i pẹ bi i				
56.	Ki i ṣe ki o máa ri ohun da hè si				
57.	Eni rere				
58.	O lọ ba eniyan gbe				
59.	A máa puro				
60.	A máa ru'fin				
61.	A máa mu ọti para				
62.	O se fọkantẹ				
63.	O ṣe e gbẹkẹle				
64.	Ki i jiyan				
65.	A máa gboran				

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	Rara	Lẹẹkọọkan	Nigba Pupọ	Ni gbogbo Igba
66. A máa ronu lẹtọ				
67. A máa da dí				
68. A máa mu ogun ti ki i ṣe eyi ti wọn fun ni ile iwosan				
69. A máa tiju				
70. O dakẹjẹ ẹ				
71. A fẹ máa dá wà				
72. O fẹ ki eniyan máa da si ọrọ oun pupọ				
73. O huwa bi ọmọde				
74. O nṣe bi ẹni ti o fẹ iranlọwọ				
75. O le e da duro				
76. Ki i kanju rin				
77. A máa kanju rin				
78. Ko ja fáfá to; a máa kọlu nkan ni akọlu kọgba, nkan a si máa bọ lọwọ rẹ pupọ				
79. O yara lati fesi				
80. O lọra lati fesi				
81. A máa ṣaaba ṣe nkan ọtọ				
82. A máa ṣaaba rin ni ọna ara				
83. Ọwọ rẹ a máa gbọn				
84. O le e wa ni ipo kan náà lai pa ara da				
85. A máa gbàgbé ọjọ, osu ati ọdun				
86. A máa gbagbe adirẹsi rẹ ati awọn ibomiran ti o mọ dáa dáa				
87. Nranti orukọ awọn eniyan ti o mọ dáa dáa				
88. A máa ṣe bi ẹni wipe ko mọ ibi ti o wa				
89. Nranti nkan ti o ṣe pataki				
90. A máa se bi ẹni pe nkan ru u loju				
91. A máa ṣe bi ẹni ti nro àròkàn				
92. A máa ṣe bi wipe ko le pọkanpọ si ọnà kan				
93. A máa ṣe bi wipe ko le e da ipinnu ṣe				
94. A máa sọrọ ti ko mu ọgbọn dani				
95. Ọrọ rẹ ki i tete ye ni				
96. A máa sọrọ gaara (A máa sọrọ yékéyéké				
97. A máa wo ṣun un lẹẹkọọkan				
98. Ma kun sọrọ ti eniyan ki i fi i gbọ ọ				
99. A máa sọrọ soke katakata				

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	Rara	Lọọkọọkan	Nigba Pupọ	Ni gbogbo Igba
100. A máa pariwo tabi ki o ke mọ eniyan lainidi				
101. Enu rẹ ya ju lọrọ				
102. Ko le e yanu sọrọ				
103. A máa ṣe bi pe o ni ohun ti o fẹ sọ sugbọn ko le e sọ ọ				
104. Nkan kan náà ni i ma tẹnumọ				
105. A máa ti ọrọ kan fo mọ ọrọ miran lainidi				
106. Ọrọ rẹ pòjù				
107. A máa sọ pe awọn eniyan ńsòrò oun				
108. A máa sọ pe awọn eniyan fẹ fi ipá mu oun lati ṣe ohun ti oun kò fẹ ṣe e				
109. A máa sọrọ bi i pe o ti ṣẹ ẹṣẹ to burú julọ laiyé yi				
110. A máa sọ bi inu ti nbi oun to si awọn kan				
111. A máa sọ awọn nkan tabi awọn eniyan ti eru wọn nba a				
112. A máa leri pe oun yio ṣe awọn kan leṣe				
113. A máa leri pe oun yio 'damu' awọn eniyan (A máa leri pe oun yio sọ fun awọn kan ki wọn ba ara wọn da sọhun				
114. A máa sọ pe èrù nba oun ki oun ma ṣe ẹnikẹni leṣe				
115. A máa sọ pe eru nba oun pe oun le ma le ko ara oun ni ijanu				
116. A máa sọ nipa awọn iṣẹlẹ ti nṣẹlẹ si ninu ara				
117. A máa sọ bi iwa oun ti burú to ati bi oun ko ti wulo to				
118. A máa janu pe ko si iru oun meji				
119. O le e sọ nkan kan náà leẹmẹwa				
120. Ki i wa lairi wi nigba kan				
121. A máa sọrọ nipa eto to ga ti oun ni fun ọjọ iwájú				
122. A máa sọrọ tabi huwa bi i pe awọn kan nwa iṣubu rẹ				
123. A máa sọ pe nkan kayefi yio ṣẹlẹ				
124. Orisirisi nkan ajeji lo gbagbọ				
125. A máa sọrọ lori ki enia pa ara rẹ				
126. Orisirisi aṣa lori tọkunrin tobinrin lo po lẹnu rẹ				
127. A máa fẹ fun eniyan ni ìmòràn lori ọrọ ti a ko fi lọ ọ				

APPROVAL SHEET

The dissertation submitted by Supo Laosebikan has been read and approved by the following committee:

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The final copies have been examined by the director of the dissertation and the signature which appears below verifies the fact that any necessary changes have been incorporated and that the dissertation is now given final approval by the committee with reference to content and form.

The dissertation is therefore accepted in partial fulfillment of the requirements for the degree of Doctor of Philosophy.

December 13, 1976
Date

Director's Signature