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CULTURE AND PSYCHOPATHOLOGY:
SCHIZOPHRENIA AND DEPRESSION AMONG LATINOS AND EURO-AMERICANS

by
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Submitted in partial fulfillment of the requirements for the degree of Doctor of Philosophy

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GRADUATE STUDIES

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SCHIZOPHRENIA AND DEPRESSION AMONG LATINOS AND EURO-AMERICANS

Abstract

by

Vera Lucia Decnop Coelho

Studies have shown that individuals from different cultural backgrounds may differ on how mental illness is conceived and experienced. This study constituted a cross-cultural investigation of mental disorders in two ethnic groups. The illness experience of Latinos and Euro-Americans outpatients diagnosed with schizophrenia and major depression was assessed with a quantitative and qualitative instruments, the Brief Symptom Inventory (BSI), and the Context of Illness Experience Interview (CIEI), respectively.

On the BSI, an inventory that assesses level of symptomatic distress in nine dimensions, patients were compared in the number of symptoms reported (PST), level of general distress (GSI), and pattern of scale elevations. The factor structure of the BSI was also analyzed for the ethnic groups. Latinos were expected to report higher scores on the PST and GSI measures, and
also to report higher level of distress on at least the Somatization dimension.

The results showed a non-significant ethnic difference on number of symptoms reported on the BSI. In relation to level of distress, however, a significant ethnic difference was found, with Latinos scoring higher than Euro-Americans as predicted. On the pattern of scales elevation, Latinos had significantly higher scores than Euro-Americans on Somatization, Obsessive-Compulsive, Anxiety and Phobic Anxiety. However, the results from a multiple regression showed that only Obsessive-Compulsive and Anxiety provided additional contribution to differentiate the ethnic groups.

Significant differences between schizophrenia and depression patients were only found for the Depression and Obsessive-Compulsive scales, with patients with major depression scoring higher than those with schizophrenia.

On the CIBI, patients were compared on their conceptions about the nature of their psychiatric condition, as well as their conceptions about causes of illness and prognosis. As expected, Latinos described their problems significant more often than Euro-Americans as "Nervios", while the opposite occurred in relation to
"Mental Illness", which was more often cited by Euro-Americans. Biological factors were more often accepted by Euro-Americans; however, a significant difference only occurred when Heredity and Chemical Imbalance categories were collapsed.

The participants' views of the effects of illness on self and on family suggested important differences on meanings of illness among Latinos and Euro-Americans, though no statistically significant ethnic differences were found. Patients with major depression tended to emphasize causes associated with life events significantly more often than patients with schizophrenia across both ethnic groups.

The importance of combining quantitative and qualitative data in the present study was emphasized. Finally, the inclusion in the DSM-IV of cultural issues in the assessment of mental disorders was recognized as an important step to the recognition that the experience of mental illness varies across the world.
DEDICATION

To Flora and Nadir.

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CHAPTER I

INTRODUCTION

Over the last two decades, research has provided substantial evidence of the biological basis of major mental disorders. Recent advances in schizophrenia research are present in fields as genetics, neurochemistry and neuroendocrinology, neuropathology, and cognitive functions (Bogerts, 1993; David, 1994; Kendler & Diehl, 1993; Lieberman & Koreen, 1993; Strauss, 1993). The biological basis of mood disorders has also been investigated (e.g., Hippius & Stefanis, 1994; Syvalahti, 1994).

The Influence of Culture on Mental Illness

Despite the investigation of biological determinants of mental disorders worldwide, there is evidence of cross-cultural differences in the way mental illness is conceived, experienced and expressed (Fabrega, 1989; Kirmayer, 1989). That is, conceptions of mental illness by patients, their families and communities, as well as the symptom presentation of individuals may vary in different parts of the world (Angel & Thoits, 1987). The idea that conceptions of mental disorders and the meaning of symptoms may influence the course and outcome of
illness (Jenkins, 1988b; Kleinman, 1988; Waxler, 1977) suggests the relevance of this topic in cross-cultural research.

Marsella et al. (1985) have suggested that cultural factors may affect and modify the behavioral expression of biological processes. "Individuals experiencing a biochemical deficit must still interpret the abnormal experience, translate the experience into active behavior, and respond to the social reaction to that behavior" (Marsella et al., 1985, p. 301).

This notion is consonant with the distinction between disease and illness proposed by Kleinman (1980). While disease refers to a problem involving biological or psychological processes, illness corresponds to the experience and meaning of the perceived disease. In this sense, the experience of illness is culturally shaped, and not necessarily restricted to the person that suffers the disease (Kleinman, 1988).

What comes to clinicians' (or healers in general) attention is, therefore, more than a biological abnormality. It includes the conceptions of patients and relatives about that episode of sickness, which can be quite distinct from the professional's framework in
conceptualizing disease and treatment (Good & Good, 1980). When these "Explanatory Models" of illness are in conflict, treatment may not be viable. Failure to attend to cultural differences in symptoms presentation and conceptions of illness may result in misdiagnosis, dropping out of treatment, and poor outcome (Kleinman, 1980; Koss-Chioino & Canive, 1993; Sue & Sue, 1987; Westermeyer, 1987).

As defined by Kleinman (1980), "Explanatory models (EMs) are notions about an episode of sickness and its treatment that are employed by all those engaged in the clinical process. The interaction between the EMs of patients and practitioners is a central component of the health care" (p. 105). This notion is exemplified with a clinical case, reported by Kleinman (1980). A 40-year-old Chinese man complaining of palpitations, dizziness, and sweating that had worsened over the last few months, was submitted to numerous exams that revealed no abnormality. Mr. Hsu was informed he had no medical disease, and that his problems were "all in the head". He dropped out of care when referred to a psychiatric unit, complaining of not receiving proper treatment. According to Mr. Hsu, he suffered from a "cold" disorder due to loss of semen from
too frequent intercourse with his wife, considerably younger than him.

The influence of culture on biological factors was illustrated more than four decades ago by Zborowski (1952), when investigating responses and attitudes toward pain. He conducted a study in a Veterans Hospital, where four ethnic groups participated: Jews, Italians, Irish, and "Old Americans". The latter were white, usually Protestant, with at least the grandparents being born in the United States, and not identifying themselves with any foreign group.

As part of the results, it was found that patients from the Jewish and Italian groups tended to be very emotional in their responses to pain. They were described as exaggerating the pain experienced and as being very sensitive to pain. It became clear, however, that despite similar reaction to pain, their attitudes toward pain, pain relieving drugs, and doctors were very different.

To the "Old Americans", on the other hand, open expression of pain suffering was considered inadequate. They tended to "help" the team in order to get an adequate treatment. Zborowski (1952) also referred to intra-group variation in pain response, pointing out that
the patient's degree of Americanization, besides his socioeconomic background and religiosity could play a role in shaping different reactions to pain.

Differences in symptoms presentation and expression of distress across cultures have been reported in a number of studies. As an example, the World Health Organization study on schizophrenia (Sartorius et al., 1986), carried out in nine countries, reported differences in illness subtypes. Acute subtype was more often diagnosed in developing countries than in developed ones. The catatonic subtype was diagnosed in approximately 10% of cases in developing countries, and only in a few cases in developed ones. The opposite occurred with hebephrenic subtype: 13% of the schizophrenic patients from developed countries received this diagnosis, in contrast with 4% of patients from the other countries.

The World Health Organization study on depression (WHO, 1983) found that symptoms such as sadness, anxiety, lack of energy and interest, concentration difficulties were present in all the five centers participating in the project. On the other hand, considerable cultural variation in the frequency of symptoms was evident. Guilt
feelings were present in 68% of the Swiss sample, and in only 32% of the Iranian group; Somatization was found in 57% of the patients in Iran, and in just 27% of patients in Canada; While suicidal ideas were reported by 70% of the Canadian sample, a lower percentage (40%) of the Japanese sample experienced this symptom.

Popular Categories of Illness

Although cross-cultural studies have shown that mental disorders such as schizophrenia and major depression can be diagnosed in different societies (Beiser & Iacono, 1990), research has also pointed to syndromes and modes of expressing distress that seem circumscribed to a single culture or a group of cultures, the so-called "Culture-bound syndromes" (Prince & Tcheng-Laroche, 1987). Critiques of this term have proposed either an expansion of its boundaries in order to include all illnesses, physical and psychiatric, or its restriction to illnesses with a psychiatric diagnosis (Low, 1985).

An alternative way of approaching the issue of disorders present in specific cultures is through the notion of "Popular categories of illness", employed by Guarnaccia (1993). This refers to syndromes that are not
restricted to a specific cultural group, being present in a wide range of cultural groups (Davis & Guarnaccia, 1989). In addition, popular categories of illness, as illustrated by Guarnaccia's discussion on "ataques de nervios", cannot be viewed as just culturally-shaped versions of psychiatric disorders.

Considering the importance of folk conceptions to the cross-cultural study of mental disorders, some popular categories of illness, "Nervios", "Ataques de Nervios", "Susto" (Soul Loss), and "Semen Loss" will be briefly reviewed.

"Nervios" (nerves) is an idiom of distress commonly present among Latinos and some other ethnic groups, to express worries about physical and emotional states, as well as changes in the context of family and society (Guarnaccia & Farias, 1988). Symptoms of nervios include headache, trembling, heart palpitations, stomach and appetite disturbance, trouble concentrating, sleep problems, and worrying, according to Guarnaccia, Rubio-Stipec, & Canino (1989).

The study of nerves has been carried out in a variety of communities, where differences in symptoms and the meaning attributed to the problem are present (Low,
1985). Dunk (1989) investigated "nevra" (nerves) among Greek immigrant families in Montreal, finding that this condition referred to a normal expression of social distress in some cases, while in others implied sickness in need of medical intervention. "Nevra" includes loss of control, headaches, dizziness, pain, screaming or shouting, and sometimes throwing things and hitting relatives. Dunk argued that nevra was associated to work conditions, gender relations, and pressures of immigration.

Reports on nerves/nervios have also come from eastern Kentucky (Van Schaik, 1989), a Newfoundland fishing village (Davis, 1989), Costa Rica (Low, 1981), and Salvadorans refugees in the US (Guarnaccia & Farias, 1988; Jenkins, 1991), among other groups. The study of nerves indicates that somatic complaints may be employed as metaphors for personal and social distress (e.g., Guarnaccia, DeLaCancella & Carrillo, 1989; Van Schaik, 1989). With different meanings even in a given culture, nerves can be found at various points on the health-illness continuum: from normal reactions or expressions of negative affect (e.g., Davis, 1989), to indication of illness, related to conditions in need of medical care.
(Dunk, 1989; Jenkins, 1989a).

"Ataques de Nervios" (attacks of nerves) is a culturally recognized way to express emotions associated with grief, anger, family disruption, and migration among Latinos (Guarnaccia, DeLaCancela, & Carrillo, 1989). Acute stressful experiences are expressed by shouting, trembling, heart palpitations, dizziness, fainting, memory loss, and dyspnea, among other symptoms. The person may fall to the ground, presenting seizure-like episodes or lying as if dead (Guarnaccia et al., 1989).

"Susto" (soul-loss) is an illness present in, but not restricted to Latin America. "Literally millions of people ... believe that frightening events ... can prove so overwhelming that one’s soul becomes dislodged and later escapes from ... the human body. Without the soul, sickness will inevitably arise" (Logan, 1993, p. 189). Attempts to link "susto" to a single diagnostic category have failed. It was demonstrated, however, that the onset or presence of soul-loss correlates with self-perceived failure in the person’s social role performance (Logan, 1993).

"Semen Loss Syndrome" has been reported in Asia (Bottero, 1991; Kleinman, 1980), associated with the
belief that a man may become ill when he loses his semen, that implies the loss of vital energy. This may occur through masturbation, 'excessive' sexual activity, or by spontaneous emission of semen. Signs of consumption by semen loss include ..."Sunken" eyes with rings around them, a lifeless look, hollow cheeks and a colorless face..." (Bottero, 1991, p. 305). It is important to have in mind that none of the conditions described above have been equated to psychiatric diagnostic categories, despite some common features with known diagnosis such as anxiety and panic disorder.

Somatic Expression of Distress

The notion of somatization also illustrates the occurrence of cultural differences in illness presentation and expression of distress. Kirmayer (1984) defined somatization as the presentation of physical symptoms in the absence of organic pathology, or the amplification of physical complaints of organic disease. The notion also includes the presentation of bodily related complaints as an expression of psychological or social problems. Somatization is commonly found in developing societies; in industrialized countries, the somatic expression of distress is more common among members of lower social
classes and those with little education (Angel & Guarnaccia, 1989).

Psychologization, on the other hand, occurs when persons with physical or social distress focus on the emotional aspects of their experience, attributing their symptoms to intrapsychic conflicts (Kirmayer, 1989). According to Kirmayer, the dominant culture in North America "...Employs a psychological idiom of distress built on a cultural concept of the person that emphasizes autonomy, individuality, self-reflexivity, expressiveness and a private rhetoric of motives" (Kirmayer, 1989, p. 330).

Somatic symptoms are frequently present in depressive and anxiety disorders, especially in non-Western cultures (Kleinman, 1988). The association of somatic symptoms with depression in the Chinese culture was extensively investigated by Kleinman (1980). In his words, "The somatic idiom for cognizing and expressing depressive feelings among Chinese constitutes that affect as a vegetative experience, entirely distinct from its intensely personal existential quality among middle-class Americans" (Kleinman, 1980, p. 148). As mental illness is heavily stigmatized in the Chinese culture, the somatized
illness behavior was seen as an adaptive mechanism by patients.

Cultural differences were found in studies of North and South American patients with depressive disorder. Mezzich and Raab (1980) compared symptomatology of Peruvian and North American depressive patients. Escobar, Gomez, and Tuason (1983), on the other hand, contrasted depressive symptoms of North American and Colombian patients. Results from both studies showed that, despite similarities in symptom profiles, South Americans had significantly higher scores on somatic symptoms of depression.

In a study conducted in Zimbabwe, Chikara and Manley (1991) found that somatic symptoms were more prominent than mood disturbance among depressive patients. Ebigbo (1982) showed that somatic complaints formed the basis of distress of the mentally ill from different diagnostic categories in Nigeria. Complaints usually included heat in the heart, crawling sensations of worms and ants, headache, heaviness in the head, biting sensation all over the body, among other symptoms.

Racy (1980) described ways in which women in rigidly controlled socially inferior positions in Saudi Arabia...
expressed emotional problems via bodily complaints. Somatic symptoms were seen as morally acceptable, allowing for help-seeking. Symptoms included reference to "galb" (literally heart), head, shoulders, the back, and "nerves". In addition, fatigue and inability to perform household work were frequently mentioned. Somatization was seen as a coded message were the code needed to be broken to allow therapeutic effectiveness (Racy, 1980).

An interesting account of the ways in which South Kanarese Havik Brahmin women in India expressed distress was presented by Nichter (1981). Marital, familial, and social conflicts were communicated by numerous cultural idioms, among which somatic complaints were common. Nichter argued that multiple "idioms of distress" might serve an adaptive function in a specific culture, despite the pathological state of some individuals utilizing particular idioms.

Good (1977) analyzed the occurrence and meanings of "heart distress", a folk category of illness in Iran. Experiences of crisis and distress, such as contraception, pregnancy, old age, interpersonal and economical problems, were expressed as heart distress. It ranged from mild excitation of the heart to chronic
sensations of heart irregularities, fainting, and heart attack. Women in particular, of lower social classes, tended to present this illness.

Therefore, in different countries, somatization is commonly associated with the expression of personal and social distress, as well as with mental disorders. The meaning of these somatic symptoms has to be understood in the cultural context that influences the formation of such forms of expression.

**Conceptions of Mental Illness**

Some authors have addressed the issue of conceptions about mental illness in different ethnic groups. Edgerton (1966), for example, examined conceptions of psychosis in four African societies. He showed that witchcraft or sorcery were considered the major cause of psychosis in only two of these groups, while the other societies tended to attribute the disorder to natural causes, mainly the presence of worms in the brain. All four groups recognized that psychosis could have multiple causes.

Edgerton and Karno (1971) also explored cultural differences on conceptions of mental illness by presenting interviewees with hypothetical psychiatric
cases. While Spanish-speaking Mexican-Americans considered that a mentally ill person would best recover from her/his illness by remaining with the family, English-speaking Mexican-Americans and Anglo-Americans did not agree with such solution. When confronted with a vignette of a young schizophrenic woman, Mexican-Americans predominantly referred to her condition as a "nervous" problem, while Anglo-Americans considered it a "mental" problem.

Jenkins (1988a) further illustrated the influence of culture on the perception of mental disorders. "Nervios" was the most frequent response given by Mexican-American families when inquired on conceptions about their relatives' schizophrenic illness. According to Jenkins, nervios is used by Mexican-Americans referring to a wide range of conditions, from daily problems and family conflicts to mental illness. Used in relation to schizophrenic relatives, the notion of nervios may reinforce family bonds. "By invoking a condition [nervios] that in its milder form is normal and within the range of the socially acceptable, the differences between the ill relative and the rest of the family are minimized" (Jenkins, 1988a, p. 319). Nervios appear,
therefore, as an important folk category in understanding schizophrenia among Latinos.

Jenkins (1988b) has also compared the conceptions of schizophrenia by relatives of Anglo-Americans and Mexican-American schizophrenic patients. A high percentage of Anglo-American relatives (89%) conceived the problem as mental, mentioning psychiatric terms or notions of mind or brain. In contrast, 48% of the Mexican-Americans related the problem with "nervios". Jenkins' work (e.g., 1988a; 1988b) illustrates the applicability of combining quantitative and qualitative approaches to the study of mental illness. Corin and Lauzon (1992) constitute an additional example of this trend.

In summary, there is some evidence of cultural differences in the way mental illness is conceived and experienced, and personal and social distress is expressed. In many instances, somatic complaints communicate more than physical problems, as studies above illustrate. Such expressions of distress may be considered as 'normal' reactions or as pathological, depending on the resources individuals and their cultural group have available to understand and deal with the
conflict (Davis & Guarnaccia, 1989; Katon et al., 1982; Kirmayer, 1989).

**Culture and Rates of Psychopathology**

Cultural differences have been also found in rates of psychopathology. Latinos living in the US, especially Puerto Ricans, seem to experience higher level of distress and psychiatric symptoms than other ethnic groups. Guarnaccia et al. (1990) pointed out that after many years of research, the mental health status of Puerto Ricans was not clearly understood. According to "El Barrio", a social program directed to the Latino community (mainly Puerto Ricans), approximately 40,000 Latinos live in Cleveland, with about 15,000 residing in the Near Westside area. These numbers suggest the relevance of studies on the mental health status of this population.

A few years ago by Guarnaccia et al. (1990) reviewed studies showing that, in comparison with other ethnic groups, Puerto Ricans tend to report a higher number of psychiatric symptoms and more psychological distress. It is still not clear whether the higher rate of psychiatric symptoms reported by Puerto Ricans reflects higher prevalence of psychiatric disorder, or is due to response
style, that is, social and cultural differences in modes of expressing distress (Canino et al., 1987).

Social desirability and acquiescence have been implicated in these differences in symptomatology (e.g., Ross & Mirowsky, 1984). Social desirability is seen as the tendency to deny personal traits that are considered as socially undesirable, and to admit or emphasize socially desirable traits in oneself. Acquiescence, on the other hand, implies the tendency to agree with questions irrespective of their content (Phillips & Clancy, 1970).

Dohrenwend (1966) reported a study of 1,000 adults, including Jewish, African Americans, Irish, and Puerto-Ricans, who completed the 22-item scale from The Midtown Manhattan Study (Srole et al., 1978, cited in Guarnaccia et al., 1990). Puerto-Ricans had a significantly higher rate of impairing symptoms in comparison with other groups. Dohrenwend suggested that the high rate of symptoms among Puerto Ricans could be related to willingness to admit symptoms that are experienced, and/or mode of expressing distress.

Haberman (1970) associated the higher rates of symptomatology among Puerto Ricans with social
desirability. Affirmative answer to psychopathology items was considered as less socially undesirable in the Puerto Rican culture. He suggested the use of different cutoff scores for defining "caseness", whenever multiethnic groups are assessed with symptom scales.

Guarnaccia et al. (1990) presented a different explanation for these differences in reported level of psychopathology. They suggested that the symptoms covered by the 22-item scale utilized in studies of Puerto-Ricans addressed the characteristics of 'nervios', that constitutes an idiom of distress among Puerto Ricans and other Latinos, as previously mentioned. In this sense, Puerto Ricans may have regarded the scale as socially acceptable and culturally meaningful, giving therefore, more affirmative responses.

Differences in rates of psychopathology could be related to cultural factors not adequately considered when an instrument developed in one culture is used to assess mental disorders in different ethnic groups. This idea was illustrated in a study by Guarnaccia, Angel, and Worobey (1989), using the Center for Epidemiologic Studies Depression, CES-D (Radloff, 1977). Based on data from the Hispanic Health and Nutrition Examination
Survey, they compared the factor structure of the CES-D for Cuban-Americans, Mexican-Americans, and Puerto Ricans. Each group yielded a three-factor solution, with a combined affective and somatic factor accounting for the greatest explained variance. This combined factor structure is different from that reported in a similar study with Anglo-Americans, where separate factors for depressed affect and somatic/retarded activity were found (Radloff, 1977).

The different factorial structure of CES-D in the Hispanic and Anglo samples suggests that the instrument was possibly measuring different things in the two groups. As pointed out by Guarnaccia and colleagues (1989), "If the pattern and meaning of symptoms differ significantly for non-Hispanics and Hispanics, we must interpret the symptom reports of Hispanics differently than we do those of non-Hispanics. We must also be cautious in using caseness criteria that are applied to Anglo-Americans" (Guarnaccia et al., 1989, p. 91).

The Puerto Rico Island Study by Canino et al. (1987) clearly indicated that rates of psychopathology are associated with cultural factors. They conducted an epidemiologic survey of the lifetime and six-month
prevalence rates of psychiatric disorders, assessing a representative sample (N=1513) of the population of Puerto Rico with a Spanish version of the Diagnostic Interview Schedule, DIS (Robins, Helzer, Croughan, & Ratcliff, 1981). The DIS constitutes a structured diagnostic instrument, designed to be administered by lay interviewers.

Two types of modifications were made in the DIS, guided by cultural or diagnostic considerations. Type 1 modifications involved some changes in the scoring algorithm. According to Canino et al. (1987), a pilot study had shown that lay interviewers applying the DIS diagnosed dysthymia less often than did clinicians. While the former tended to score certain cultural or religious experiences as psychotic symptoms, the same did not occur with experienced native psychiatrists. Once a psychotic symptom is scored positive in the schizophrenia section of the DIS, the standard DIS algorithms prevent the diagnosis of dysthymia. Better concordance between the lay DIS and clinical diagnosis was obtained when the diagnosis of dysthymia ignored the DSM-III exclusionary criterion of psychotic features (except in cases positive for schizophrenia). Therefore, on the modified dysthymia
diagnosis the exclusion criterion of presence of psychotic symptoms was not considered. Cognitive impairment was the other disorder that was changed in the DIS computer algorithm.

Type 2 modifications, made for obsessive-compulsive disorder and psychosexual dysfunction, were based on diagnostic considerations. Modifications consisted of changes in the interview itself, with the insertion of additional probes or clarification questions.

Canino et al. (1987) showed that, once these culturally grounded changes in assessment were made, the prevalence rates for most psychiatric disorders in Puerto Rico no longer differed significantly from those reported for other ethnic and social class background in the US (data from the Epidemiologic Catchment Area study). Severe cognitive impairment and somatization disorder were found to have slightly higher rates in Puerto Rico though.

Marin, Gamba, and Marin (1992) also investigated response style as a source of differences between ethnic groups. They carried out a secondary analysis with four data sets from Hispanics and Non-Hispanic Whites. The results showed that Hispanics preferred extreme responses
in comparison with non-Hispanic Whites, and also tended to agree with a given item more than the other group (acquiescence).

Two variables were implicated in these differences, acculturation and education. Hispanics subjects had been classified as low or high in acculturation, depending on their score on an acculturation scale. Among Hispanics, the level of acculturation affected extreme and acquiescent responses: more acculturated Hispanics tended to choose such responses less frequently. It was also found that less educated subjects from both ethnic groups, tended to give more extreme answers.

To summarize, although studies have generally reported that Puerto Ricans have higher rates of psychiatric symptomatology in comparison with other ethnic groups, cultural factors seem to be implicated in these differences. Factors such as social desirability, acquiescence, the notion of 'nervios', and level of acculturation have been considered as possible explanations to the reported differences. According to these notions, response style, rather than higher level of psychopathology, would explain the Puerto Rican rates. In particular, the Puerto Rican Island Study (Canino et
al., 1987) has demonstrated the importance of attending to cultural specificities when assessing mental disorders or psychological distress.

The Study

The purpose of the present study was to examine the illness conceptions and experience of psychiatric outpatients, integrating qualitative and quantitative data. Euro-American and Latino (mostly Puerto-Ricans) schizophrenic and depressive patients were assessed with the Brief Symptom Inventory (BSI) and the Context of Illness Experience Interview (CIEI).

The Brief Symptom Inventory

Psychiatric symptomatology in this study had been assessed with the Brief Symptom Inventory (BSI), a 53-item self-report instrument. It constitutes an abbreviated form of the Symptom Checklist (SCL-90-R), a self-report clinical scale developed to be used in different settings (Derogatis, 1977). As the original instrument, the BSI has nine symptom dimensions: Somatization, Obsessive-Compulsive, Interpersonal Sensitivity, Depression, Anxiety, Hostility, Phobic Anxiety, Paranoid Ideation, and Psychoticism (See Appendix 1). In addition, the scale has four items that
are not part of any specific dimension, and were included in the item set due to their clinical significance (Derogatis, 1993). Each item is rated on a five-point scale of distress that ranges from not at all (0) to extremely (4).

Three global indices of distress are derived from the BSI: (1) the Global Severity Index (GSI), that combines information on number of symptoms and intensity of perceived distress. To compute the GSI, the sum of all items is divided by the number of responses (53, if there are no missing items); (2) the Positive Symptom Total (PST), simply a count of symptoms reported by the subject; and (3) the Positive Symptom Distress Index (PSDI), a pure intensity measure, based on the number of symptoms endorsed. It is calculated by dividing the sum of the items values by the PST.

The psychometric properties of the SCL-90 and the BSI have been extensively evaluated (e.g., Boulet & Boss, 1991; Cyr, McKenna-Foley, & Peacock, 1985; Derogatis & Melisaratos, 1983). Their internal consistency and test-retest reliability have been considered good (Broday & Maso, 1991; Derogatis, 1977; Derogatis & Melisaratos, 1983; Noh & Avison, 1992).
Studies on convergent and discriminant validity of the BSI and the SCL-90 have provided evidence of moderate to high correlation with analogous, and also with unrelated measures. In other words, these instruments show adequate convergent validity but low degree of discriminant validity (e.g., Boulet & Boss, 1991; Derogatis, Rickels, & Rock, 1976; Strauman & Wetzler, 1992).

The construct validity of the Symptom Checklist versions has been also investigated (Clark & Friedman, 1983; Dinning & Evans, 1977; Evenson, Holland, Mehta, & Yasin, 1980; Hoffman & Overall, 1978; Strauman & Wetzler, 1992). These factor analytic studies have generally found (a) one factor that accounts for a large amount of variance, and (b) moderate to high intercorrelations of the nine symptom dimensions. Such results have questioned the adequacy of the BSI and SCL-90 as measures of independent domains of symptomatology. Instead, they seem to be measuring a single global distress factor.

An additional issue is related to the cultural validity of assessment instruments, when cross-cultural studies are carried out. Even when the validity of a diagnostic measure, for example, has been established in
one culture, this does not assure its applicability in a
different cultural context. Diagnostic categories derived
in one cultural setting may not be valid elsewhere.

Studies on Expressed Emotion constitute an example
of this point. According to this notion, schizophrenic
relapse could be predicted on the basis of the level of
criticism, hostility, and emotional over-involvement
displayed by close relatives of patients. However, the
assessment of EE outside England and the US presupposes
the existence of criticism, for example, in the culture
where it is being measured (Jenkins, 1992).

As an additional example, hearing voices is usually
considered as a psychotic symptom, that is, an abnormal
phenomenon among North Americans. However, among some
American Indian tribes, auditory experiences occur during
the process of normal bereavement of spouses. The voices
of the spirits calling to the living to join them
constitute expected and common experiences; to interpret
these occurrences as hallucinations, would lack validity
in this cultural group.

In the present study, the comparison of patients on
the BSI aimed the identification of differences on the
symptom expression of the two ethnic groups, focusing on
differences in number of symptoms, intensity, and pattern of symptomatic distress.

The Context of Illness Experience Interview

Information on patients' conceptions of illness came from the Context of Illness Experience Interview, an instrument conceived by Dr. Jenkins that provides qualitative data on cultural meanings associated with mental illness. The first section of the CIBI, Explanatory Models, with which this study was concerned, involves questions about nature, cause, treatment and course of mental disorders. A list of the questions that constitute the CIBI section on Explanatory Models is provided in Appendix 2.

In the first section of the CIBI, the patients' explanatory models (Kleinman, 1980) are elicited. In other words, patients express their conceptions about their mental condition through a sequence of open-ended and forced-choice questions. It is possible to know, for example, if the condition for which the patient is receiving psychiatric treatment is considered as mental illness, nerves / nervios, or another kind of problem.

It is also possible to obtain details on what is considered the main cause or causes of the problem,
according to the patient's point of view. The CIEI also directs the subject's attention to longitudinal aspects of the disorder, with questions on recovery and effects of illness on patients and families. In Chapter II, the CIEI questions will be described in greater detail in relation to the definition of coding categories.

These psychometric and more qualitative approaches, the Brief Symptom Inventory and the Context of Illness Experience Interview, respectively, were seen as complementary strategies to investigate the contribution of culture in shaping the experience of mental illness.

This study represents a secondary analysis of data from a NIMH-funded research project on "Schizophrenia and Depression among Anglos and Latinos" (SADALA). The SADALA project constitutes an ethnographic investigation of sociocultural factors associated with the course of mental disorders, conducted by Dr. Janis Jenkins, Department of Anthropology and Psychiatry, Case Western Reserve University. As part of the SADALA project, patients and relatives were longitudinally followed; the present study, however, focused only on patients' data collected on baseline interviews.

In the study here reported, Latino and Euro-American
psychiatric outpatients with schizophrenia and major were compared on their responses to the Brief Symptom Inventory and the Context of Illness Experience Interview. The following hypotheses were formulated:

A. Symptom Pattern and Severity (BSI):

1. The internal consistency reliability of the BSI would be similarly adequate for both Latinos and Euro-Americans.

2. Latinos would report a higher level of general distress on the BSI as compared to Euro-Americans. General distress was measured by the number of symptoms reported (PST) and by the Global Severity Index (GSI).

3. Latinos and Euro-Americans would differ on their BSI profiles, that is, on their pattern of scales elevation. Latinos were expected to score higher than on Euro-Americans on at least the Somatization dimension.

4. For both ethnic groups the BSI would be more a measure of general distress than a measure of nine independent symptom dimensions.

5. In relation to the diagnostic groups, patients with schizophrenia were expected to score higher than patients with major depression on the Paranoid Ideation and Psychoticism BSI dimensions. On the other hand, patients
with major depression were expected to have higher scores on Depression and Somatization.

B. Cultural Meaning of Illness (CMI):

1. The ethnic groups were expected to differ on how much they would consider their illness as nervous/nerves problem, with Latinos reporting suffering from nerves more often than Euro-Americans would acknowledge having nerves.

2. The ethnic groups were expected to differ on how much they would consider their illness as a mental problem, with Euro-Americans referring to mental illness more often than Latinos.

3. The ethnic groups would differ on their conceptions about causes of illness. Taking into account that in Western developed societies psychiatric disorders are often conceptualized according to the biomedical model, it was expected that Euro-Americans would emphasize the role of biological factors (e.g., heredity, chemical imbalance) more often than Latinos.

4. Latinos and Euro-Americans were expected to differ on how much they referred to somatic aspects of their illnesses. Somatization was expected to be more present in Latinos’ description of their daily life in general or
mental illness.
CHAPTER II
METHODS

Subjects

Seventy-nine patients were included in the present study. Although 40 patients from each ethnic group had been assessed in the SADALA project, one Latino was excluded due to an extensive number of missing items on the Brief Symptom Inventory. The Latino sample was composed by 19 patients with schizophrenia and 20 with major depression, while the Euro-American sample had 20 subjects in each diagnostic group.

Patients inclusion criteria were: (a) Bilateral Puerto-Rican or Euro-American descent; (b) Lower socioeconomic status according to the Hollingshead & Redlich scale (1958), with most subjects being from Classes IV or V; (c) Primary diagnosis of schizophrenia or major depression according to the DSM-III-R criteria, through administration of the SADS-L; (d) Have suffered from a depressive or schizophrenic illness for more than two years prior to time of intake into study; (e) Being outpatients; (f) Between 20 and 55 years of age.

Patient exclusion criteria were: (a) Major substance abuse (drugs/alcohol); (b) Organic conditions (mental
retardation, epilepsy).

The following sociodemographic and psychiatric characteristics were assessed in this study: Age, gender, years of education, social class, marital status, living arrangements, religion, age of illness onset, duration of illness, history of hospitalization and number of hospitalizations. Latino patients were also assessed in their level of acculturation with the Acculturation Rating Scale, ARS by Cuellar, Harris, and Jasso (1980), (as cited in Jenkins, 1990). The scale has 20 items that includes assessment of place of birth, language spoken by person, ethnic/national identity, and cultural participation. Each item is rated from 1 to 5; an average score is calculated based on the 20 items, varying from 1.0 to 5.0. Higher scores indicate higher degree of acculturation.

Table 1 presents the demographic data for the total sample. On average, the group was 38.5 years old (SD=9.2 years), with Latinos being older (M=40.2, SD=9.6) than Euro-Americans (M=36.8, SD=8.5), t(77)=1.68, p=.09. Thirty-six (45.6%) men constituted the sample, similarly divided between Latinos (N=17) and Euro-Americans (N=19), Chi-square (1, N=79)=.12, p=.72.
Most of the patients (68.4%) were classified as V according to the Hollingshead-Redlich Social Class. However, Euro-Americans and Latinos were significantly different on this variable, Chi-square (3, N=79) = 17.3, p<.001. Allocated in class V were 89.7% of the Latinos and 47.5% of the Euro-Americans. A chi-square was also computed by pooling social classes I to IV, against social class V, resulting to be significant, Chi-square (1, N=79)=16.29, p<.001.

While 44.3% of the patients were single, 38% was either married or lived with a partner. Twenty Latinos (51.3%) and 15 Euro-Americans (37.5%) were single, with 14 (35.9%) and 16 (40%), respectively, being married or living with a partner. No significant difference was found in this characteristic.

A significant difference was present in the living arrangements of the ethnic groups, Chi-square (2, N=79)=9.6, p=.007. Approximately half of the patients (50.6%) lived with their spouses or children, with similar percentages for Euro-Americans (50%) and Latinos (51.3%). On the other hand, forty-one percent of the Latinos lived with their parents or siblings during the time of the interviews, in contrast with 17.5% of the
Euro-Americans. Another difference occurred on the 'living with non-relative' category, where 13 Euro-Americans and 3 Latinos had been included.

Most of the subjects (54.4%) in the study were Catholics. The ethnic groups also differed significantly on this factor. Ten percent of the Euro-Americans were Pentecostal, in contrast with 30.8% of the Latinos. Other Christian religions were adopted by 30% of the Euro-American subjects and by only 2.6% of their Latino counterparts, Chi-square (4, N=79)=13.83, p=.007.

In relation to acculturation, the results from two variables, Language spoken and Generation are presented, in addition to the average group score. Twenty-eight (73.7%) of Latinos spoke Spanish only or mostly Spanish. The remaining patients were divided in similarly speaking Spanish and English, speaking mostly English, or English only. In close association with these results, the great majority of Latino patients (84.6%) were not born in the United States. The average score for the Latino sample on the acculturation scale was 1.91.

The demographic characteristics of schizophrenic and depressive patients were also compared (Table 2). Depressive patients were significantly older (M=41.30)
than schizophrenics ($M=35.71$), $t(77)=-2.81$, $p=.006$. Of the 40 patients with major depression, 72.5% were women, while the majority of the schizophrenics (69.4%) were men, Chi-square ($1, N=79)=10.66$, $p=.001$. Most of the schizophrenics were single (61.5%), differing from the depressives, 60% of whom were married, Chi-square ($3, N=79)=20.7$, $p<.001$.

Schizophrenics and depressives patients were also significantly different in social class, Chi-square ($3, N=79)=11.07$, $p=.01$. Fifteen percent of the depressives and none of the schizophrenics were situated in classes I and II. On the other hand, 79.5% and 57.5% of schizophrenics and depressives, respectively, were allocated in class V.

Approximately half of the schizophrenic patients lived in parental household (51.3%), in contrast with only 7.5% of the depressives. On the other hand, a substantial percentage of depressives (75.5%) lived in marital households, while this was the case of 23.1% schizophrenics, Chi-square ($2, N=79)=25.6$, $p<.001$.

The psychiatric characteristics of the total sample are presented in Table 3. The ethnic groups did not differ significantly in any of these variables. The
mental illness had started, on average, at age 21.8 (SD = 8.1), with the values for Euro-Americans and Latinos being 21.3 (SD=7.2) and 22.3 (SD=9.0), respectively, t(77) = .59, p = .55. Psychiatric hospitalization had occurred in 54 out of 79 patients (68.4%), with an average of 5.43 hospitalizations (SD=2.61). Very similar values were found in Euro-Americans (M=5.36, SD=2.78) and Latinos (M=5.52, SD=2.47) on this last variable, t(77) = -.28, p = .73. The mean duration of illness was 16.77 years (SD=8.54), Latinos being ill for a longer period of time (M=17.97, SD=8.56) than Euro-Americans (M=15.60, SD=8.47), t(77) = 1.24, p = .22.

The diagnostic groups were also compared on the psychiatric factors, with results being presented on Table 4. There was a significant difference in history of hospitalization. More than half of the depressives (52.5%) had never been hospitalized, the same being true for only 10.3% of the schizophrenics, Chi-square (1, N=79) = 16.29, p < .001. Depressive patients had been ill for a longer period (M=18.92, SD=9.47) as compared with the other diagnostic group (M=14.56, SD=6.92), t(77) = -2.33, p < .05. No significant difference was present in age of onset for depressives (M=22.45) and schizophrenics.
(M=21.15), ξ(77) = -.71, p = .48.

**Procedure**

The patients were recruited from the following outpatients psychiatric facilities in Cuyahoga and Lorain Counties in Northeastern Ohio: Community Mental Health Centers, Community Hospitals, local outpatients psychiatric services, CPI (Cleveland Psychiatric Hospital), private psychiatrists and psychologists. Only outpatients subjects participated in the study.

In each of the facilities involved the SADALA project was presented and permission to recruit subjects was obtained. Patients were informed about the project by their treating physicians or case managers and asked whether they wished to take part in the study.

There is no information from these clinicians about the percentage of patients that were contacted and declined to participate in the study. Those interested in possibly participating were subsequently contacted by phone by the SADALA project staff and additional information about the study was provided. After being contacted by researcher personnel, approximately 25% of patients declined to take part in the study for reasons that included lack of interest, failure to see how
participation in the study would be of any personal benefit, and no hour available on their daily schedule that would allow participation.

During the first contact, the subject signed an informed consent that explained the nature of the research. Based on chart review, patients with diagnosis of schizophrenia or major depression had been selected for contact. The research diagnosis came, however, from the SADS-L. In addition to Dr. Jenkins, a psychiatric social worker, a psychiatric nurse, and a clinical psychologist were trained in the reliable administration of the instrument.

The qualitative data analyzed in this study were collected through face-to-face audiotaped interviews conducted by the SADALA project staff: in addition to Dr. Jenkins, they included doctoral students in Medical Anthropology, clinical psychologists, a psychiatric social worker, and a registered nurse.

Patients were usually seen in their homes. The interviews were subsequently transcribed verbatim and printed. Latino subjects were interviewed by research assistants fluent in Spanish. After the administration of the SADS-L, each patient was interviewed with the BSI,
the CIEI, the Social-Psychiatric History, and the Acculturation Scale (Latinos only), in that order.

The Brief Symptom Inventory

The BSI, which is usually completed by the subject, was in this case filled out by the interviewer for all patients, considering possible illiteracy or unfamiliarity with such strategy. For each of the 53 BSI items the patient was asked to indicate one of the five options: "Not at all", "A little bit", "Moderately", "Quite a bit", and "Extremely". As previously mentioned, the BSI has nine dimensions: Somatization, Obsessive-Compulsive, Interpersonal Sensitivity, Depression, Anxiety, Phobic Anxiety, Paranoid Ideation, and Psychoticism.

The Context of Illness Experience Interview

The CIEI is an extensive interview that usually takes two or more encounters to be completed. The first section of the CIEI, the Explanatory Models, is usually completed in the first meeting. The interviewer explains that the purpose of the questionnaire is to learn more about the patient's everyday life experience and health. The interviewer also indicates that the focus of the CIEI is on the patient's point of view.
In the CIEI, the interviewer does not introduce psychiatric terms such as mental illness, schizophrenia, or major depression. Instead, the patient is invited to describe his/her current life situation through an open-ended question (See Appendix 2). Subsequently, the patient is questioned about having any health problem and about the mental condition being treated. Only then, notions such as nervous/nerves, mental problem, and emotional problem are addressed. Subsequently, conceptions about cause, treatment and prognosis are elicited, as well as patients’ perceptions about the effects of illness on themselves and on their family members.

**The definition of the CIEI coding categories**

When coding the CIEI questions, the rater was blind to the patients’ diagnosis, except for question 1, where the generation of coding categories started before the blind coding had been decided. The interviews were performed in the language spoken by the patients (English or Spanish) and subsequently transcribed verbatim. Considering that the codings were based on the printed interviews, the investigator was not blind to the patients’ ethnicity.
For each CIBI question, the first step was to select from the transcribed interviews the text corresponding to the patients' answers to that specific question. All these text entries were compiled together for each specific question. A first list of categories was then generated, grouping each specific response by major topics referred to by the patients. Examples of answers were selected for each category and taken, together with problematic cases, for discussion with Dr. Jenkins.

In the process of several encounters, the initial categories were refined until considered adequate to reliably represent that set of responses. All the cases were then coded according to these finalized categories. The coders of the CIBI questions were fluent in reading Spanish and English. It should be also noted that he English translations of the responses in Spanish were checked by Dr. Jenkins and by a native speaker.

The CIBI includes forced-choice and open-ended questions. The following options were defined for the forced-choice questions: "No"; "Don't know"; "Yes"; "Not applicable"; "Missing data"/"Unable to code". Some questions had to include an extra option ("To some extent"), as a function of the responses.
The "Not applicable" option was created to include situations where coding the answer as "Yes" or "No" would not be adequate. On question 9, for example, patients are inquired about several factors that might contribute to their recovery. When asked if "Better family relations" would help, some patients answered "No", adding however, that family relations were already good, and could not be better. A similar decision was made when interviewers did not ask a married person if getting married would help in getting better. Such responses were coded as "Not applicable".

The "Missing data" option was designed to include situations were (1) the question was not formulated by the interviewer or was not corrected formulated; or (2) the patient was unable to respond to the issue being addressed or the answer was not understandable.

In order to make possible the cultural analysis of the qualitative data, coding categories were created on the basis of respondents' answers. The goal of this coding exercise was to categorize patients' responses in accord with their own (emic) standpoint. The reading of some complete CIEI interviews provided a general sense on how issues were approached by interviewers and responded
by patients.

Patients did not tend to answer to the questions formulated in a predictable way, even when "Yes", "No, or "I don’t know" responses were requested. Interviewers, on the other hand, despite having the interview schedule in hand, had sometimes to improvise changes in questions or probe patterns, as a function of the patient’s presentation during the interviews. It is also possible that, as an open-ended interview, the ordering of the CIBI sections sometimes might be inverted, in accord with the patient’s introduction of particular topics.

**Question 1:** "How would you describe your current life situation?"

This initial question was asked to obtain a broad ranging set of data that could address how - in as open-ended fashion as possible - patients would cast the current terms of their lives. One purpose was to assess whether and to what extent patients’ lives were centered on their illness reality.

a) **Illness Categories:**

The final illness categories defined for question 1 were: (1) Mental Illness; (2) Physical Illness; (3) Nervios/Nerves; (4) Illness Unspecified; (5) Illness
Implicit. Possible options were "Yes" or "No" for each category.

The "Mental Illness" category was applied to answers with clear reference to mental disorder through psychiatric terms such as "schizophrenia", "depression", or when the notion of "mental" was present. Examples are: "I'm labeled schizophrenia"; "I think it's because of my mental illness"; "El problema mio es mental" (My problem is mental); "I'm mostly just mentally disabled".

"Physical Illness" implied clear reference to a physical condition, not just to physical symptoms. As examples, multiple sclerosis, thyroid problem, and serious visual impairment were included here.

In these two first categories, "Mental Illness" and "Physical Illness", terms that could indicate mental or physical illness, but could also refer to general life problems, were not included as positive answers. For example, a patient's reference to not sleeping well was not coded as a mental or physical problem, unless the person said so. This was also the case in: "Voy mal" (I feel bad); "So tired and weak"; "Up and down days"; "Not exactly happy, but not exactly sad". Although these comments could sound as symptoms of physical or mental
disorders, or even improvement in psychiatric symptoms, the patients themselves had not clearly related them to disease processes.

It is important to keep in mind that the purpose of the CIBI questions was to elicit the patients' explanatory model of illness. In other words, it is the patient's point of view, as a person suffering from mental illness, that is being assessed in this questionnaire.

The "Nervios" / "Nerves" category included reference to "nervios", "nerviosa", "nerviosismo", "nervous" and analogous terms. Examples of this category include: "La persona que padece de estas cosas de la cabeza y de los nervios... si tuviera una familia como que yo tengo ...pode sobrepasar esa crisis" (The person who suffers from these things of the head and from nerves ... if he/she had a family as I do ... can overcome this crisis); "Yo llevo 10 anos padeciendo de los nervios..." (I have been suffering from nerves for the last ten years).

"Illness Unspecified" applied to answers where illness was clearly mentioned, but no reference to its nature was present. It was not possible, considering only
the information provided in the answer to question 1, if
the person was talking about a mental or a physical
illness. For example: "Mi enfermedad..." (My illness);
"Siempre a sido yo enfermo" (I have been always sick).

"Illness Implicit" constituted an indirect reference
to illness, by means of hospitalization, medication,
treatment in general: "I'm doing all right, taking my
medication, like I'm supposed to do".

The first three illness categories (Mental Illness,
Physical Illness and Nerves/Nervios) were not mutually
exclusive. In other words, if mental illness and physical
illness were reported, the response would be included in
both categories. The same was possible for mental illness
and nervios, for example. On the other hand, a positive
answer in any of the first three categories precluded the
same to occur on Illness Unspecified and Illness
Implicit. In addition, Illness Unspecified was considered
a more broad than the last one, Illness Implicit.

b) Non-Illness Categories:

Considering that a number of answers could not be
included in any of the illness categories, they were
analyzed as "Non-Illness" responses. A variety of
affective tones and content was present in these
responses. The content of responses varied. General statements about the patient's life were coded as "Affect", such as in "I have a good life" or "Sufro mucho..." [I suffer too much]. The additional categories generated in relation to the content of responses were: "Activities", "Relationships", and "Accomplishments".

The first one involves references to any activity performed by the patient such as work, tasks at home, or its absence, as in: "It's sort driving me nuts. I don't do anything." Any response that addressed social relations was coded in the "Relationships" category, as the patient that mentioned her children were having problem with the law, a situation that what was disturbing her. "Accomplishments" include answers that describe aspects in the patient's live that imply improvement from a previous situation, or even statements about the absence of accomplishments in life.

In relation to affective tones, some answers focused on negative aspects of the patients' lives, while others centered on positive components. In addition, mixed responses, with positive and negative comments were also present. Therefore, three affective tones were defined: Negative, Positive, and Mixed (Combined). Each Non-
Illness response was first rated in one of the four content categories (Affect, Activities, Relationship, and Accomplishments) and then, in one of the affective tones: negative, positive and mixed. The answer "I dust and vacuum. I clean. I love to clean" was rated as Activities - Positive; On the other hand, the response: "Life is more bad than average. I wasn't asked to be born" was coded as Affect - Negative. An answer could be rated in more than one category. Appendix 3 describes the coding categories for the Non-Illness responses in question 1.

**Question 2:** "Do you think you have a problem with your health?"

From question 2 on, the interviewer brings up the health/illness issue into discussion. Up to question 4d (see Appendix 2) the CIEI is concerned with the nature of the patient’s suffering. Does he/she see it as a health problem or as a "living" problem, apart from the medical sphere? Is it a physical, a mental, a nervous, or an emotional (or more than one) problem?

In some cases, despite an initial negative remark, the answer to "Do you have a problem with your health" was coded as "Yes", considering the response as a whole. The response "No, just a lot of bronchitis" is an example
of such situation. It was assumed that the sentence meant that, besides the bronchitis, the patient did not have other health problem. Another example is: "De diabetes, pero eso no es nada, eso le da a todo mundo" (Diabetes, but this is nothing, everybody has it) is another example of responses coded as positive.

Question 3: "What do you call your health problem?" / "What do you see ... [psychiatrist, counselor, etc.] for?"

Or "What are you taking medication for?"

In cases where the patient had only answered "Yes" to question 2, "Do you think you have a problem with your health?", the interviewer would further explore this issue by asking her/him to nominate the problem. The final coding categories for question 3 are: (1) Mental Problem; (2) Physical Problem; (3) Nervios / Nerves Problem; (4) Health Habit Problem; (5) Other; (6) Don’t Know. The patient received a "Yes" or "No" in each of these options.

When the psychiatric diagnosis (mental condition) was not mentioned in the answer, the interviewer would ask, "What do you see ... [the psychiatrist, counselor, etc.] for?", or "What are you taking medication for?" In the same way, this question was asked when the patient
had given a negative response to question 2, as the following example shows: "No. [And what are you seeing K. for?] The reason was depression."

At this point, any reference to symptoms was considered as indication of health problems, because the question clearly directed the patient to this topic. The "Health Habit Problems" category was created to include situations such as eating disorders, smoking, using drugs and drinking. It also included a case where the patient affirmed having a hygiene problem, that is, in keeping his place clean.

Another case example is provided next. After the patient cited her health problems, low blood pressure and side effects from medication, the interviewer asked what she was taking Lethorazine for. "Yeah, I take that and I take Stelazine." [What do you take that for?] "Keep my head and my mind calm, keep me controlled." [I see] "I have a temper. Sometimes I get violent." [Do you consider that a health problem?] "No, it's poor behavior. Bad behavior." [This behavior problem that you say you have, do you have a name for it?] "It's lack of training. I gotta control." With his interventions, the interviewer was trying to clarify how the patient defined her
problem. Subsequently, she would deny having nervous, mental, or emotional problem.

**Question 4a:** "Do you think you have a problem with your nervios (nerves)?"

At this point, the patient was directly questioned about nerves/nervios problems. Some examples of affirmative and negative responses are presented: "Only to the extent that I have the irritable bowel. To me, that's a nervous problem" (YES); "Si, estoy enfermo de los nervios, pero siempre ha sido, pero no tan enfermo" (Yes, I am sick with (from) nervios, but I have always been, but not that much sick) (YES); "I get nervous, I do not call that a problem, because I am 35 years old. As we wear our bodies, we get a little weaker, we get older" (NO).

**Question 4b:** "Do you think you have a problem with your mental health?"

As in the previous question, the patient was directly inquired about having a mental problem. Examples of answers are: "Yeah, just a slight one, not much. ... It's not bad as that [before] ... Just once in a while the urge hits me ... that somebody's after me or something like that" (YES); "I don't think there's
nothing wrong with my mental health either" (NO).

**Question 4c:** "Do you think there is a difference between a problem of nerves (nerves) and a mental problem?"

**Question 4d:** "Do you think there is a difference between an emotional problem and a mental problem?"

An examination of the CIBI interviews revealed that these two questions had not been asked to all patients, nor were they formulated in a constant way. Considering that an objective comparison of answers was compromised, to some extent, questions 4c and 4d were not analyzed as the other ones - by definition of coding categories, inter rater reliability, and statistical comparison of ethnic groups. Instead, what will be reported in the Results is the general trends suggested by the data.

**Question 5:** "What do you think has caused your [health] problem?"

At this point it was reasonably clear what the patient considered the nature of the problem to be, and the interviewer would turn to the patients' conceptions of its cause or causes. The final categories for this question are presented in Appendix 3. In some cases, the patients would start by saying "I don't know" or "I have no idea". However, after the interviewer's intervention
showing that the study was concerned with their point of view, some patients would express their ideas. In other cases, after saying they did not know the cause, patients would spontaneously provide their conception on causes of problem.

Examples of answers and respective categories are: "A veces yo pienso que porque yo, solo me pongo a pensar porque yo tengo que pasar por esto, y Jesus Cristo murio para ensearnos a morir.." [Sometimes I wonder why me, I just think why do I have to go through all this, and Jesus Christ died to teach us to die]; "I think I’m a very extremely oversensitive person. I don’t take criticism well" (EXISTENTIAL/PSYCHOLOGICAL response).

"Bueno, mucho pensar, pensamiento" [Well, too much thinking]; "No me acuerdo, no se ... me vi que estaba pensando demasiado, estaba pensando demasiado en el fin del mundo, me pasaba leyendo la Biblia, el apocalipsis..." [I don’t remember, I don’t know ... I realized that I was thinking too much, I was thinking too much about the end of the world, I was reading the Bible, the apocalypse...] (THINKING TOO MUCH). As this response illustrates, the patients would sometimes state they did not know the cause, and later be able to express their
ideas on the topic.

**Question 6:**

After the patient had presented her/his own conceptions about causes of problem, the interviewer would present a list of possible causes, to be answered according to the forced-choice options (See Appendix 2).

**Question 7:** "Do you think you will get better or recover from your .... (term used by patient)?

Besides the forced-choice options used in other questions, an additional one, "To some extent" was defined based on the responses to this question. A few patients explicitly stated that their recovery would not be complete, such as in: "Well, I think I will get a lot better. I think I have gotten a lot better, but I think I’ll always be somewhat dysfunctional." "Not all the way. Most of the way, but not all the way..."

As in previous questions, it was not the mere use of "Yes" or "No" by the subject that would define an answer as positive or negative. Only the context would provide indication for coding the response. In a case, when asked if she would get better, the patient answered: "Yeah". (Yeah?) "I think so. I don’t know." Later she said, "I thing I am getting better", and described her
accomplishments. This answer was coded as "YES".

An example of a response coded as "DON'T KNOW": "I'm not sure. I think it's something that might come in cycles. So, I anticipate that I might have it again, later in my life." At that point, she considered she had not a mental problem. Or as in "Who knows? That's a hard question to answer. I might get to feeling better, but who knows if I'll ever get well?"

**Question 8:** "What kind of things might help you get better?"

The purpose of this question was to elicit the patients' conceptions on what would contribute to their improvement or recovery. In a number of cases, the patients would mention that they were getting better, and enumerated the factors implicated in that process. The final categories for this question are described in Appendix 3.

Some examples of responses and respective categories are presented next: "I think the medication helped a lot. That's pretty important" [TREATMENT]; "I just think understanding your problem, and being able to deal with it. Understanding what's going on when it happens, that's made a big difference" [SELF-CHANGE]; "I'd say I'd
probably be a lot better off if I would get married." [RELATIONSHIP]; "Yo creo que yo consiguiendo trabajo, que tenga la mente ocupada..." (I think that finding a job, keeping my mind busy...) [ACTIVITY].

Question 9:

A list of factors that might help in recovery was then presented to the patient (See Appendix 2), and the forced-choice options applied to the answers.

Question 10: "How has your problem/illness affected you? What are the main effects that your illness has had on you and your life?"

The final categories for this question are presented in Appendix 3. Examples of some of the coding categories are: "It’s impede my progress in a human vein. It’s prevented me from making goals. It’s totally destroyed my ambitions" [EFFECTS ON GOALS, WORK, ETC.]. "I don’t like leaving the house. I don’t like to socialize, even with my children"; "A veces quisiera estar sola, no hablar con nadie, que nadie me moleste" (Sometimes I would like to be alone, not to talk to anyone, and not be disturbed by anyone) [LOSS OF SOCIAL RELATIONS/ISOLATION].

Question 11: "Do you feel that your illness has had much of an impact on your family?"
Responses to this question were coded according to the target(s) of the illness effects, that is, parents, children, spouse, siblings, as mentioned by the patient. When no specification was provided by the patient in relation to which family member was affected, answers were coded as "EFFECTS ON FAMILY IN GENERAL" (See Appendix 3). Some examples of categories are provided next. "Si, a ellos, porque ellos sufren muchísimo cuando estoy así con la enfermedad esa.. pues no se sienten contentos cuando me ven así.. se sientan tristes..." [EFFECTS ON FAMILY IN GENERAL].

"Everything’s the same. Yeah, ’cause my boys don’t know what happened, what went on. So, I don’t know. It hasn’t done anything to me. Can I keep a secret? (Uh hum) I mean, they know when I was in the hospital and all that, but I just don’t want them to know why" [NO EFFECTS ON FAMILY].

"Si, a mi mama y a mi papa le afecto mucho. Pues que ellos se preocupan mucho por mi, les preocupa mucho mi enfermedad." (Yes, my mother and father were affected a lot. They worry too much for me, they worry about my illness) [EFFECTS ON PARENTS]. "Oh, yeah. My wife in particular. If I’m down, she is down, I can see just a
major change in her... just in our sex life. We really
don’t have one. That’s been a problem." [EFFECTS ON
SPouse].

Reliability of the CIEI Questions

After the coding categories had been established for
all CIEI questions, the reliability of the ratings was
assessed. A graduate student not familiar with the
development of the coding categories was the second
judge, with whose ratings those of the investigator were
compared.

The reliability of each CIEI question was assessed
separately. For each question, the coding categories were
presented in detail to the second rater. The responses
from a few patients were then rated together as a rating
exercise, until the coder reported having a fair
understanding of the coding scheme.

Subsequently, ten cases were randomly selected and
rated separately by the second rater and the results
compared with those from the first rater, using the
Cohen’s Kappa, a statistic that evaluates proportion of
agreement against the level expected by chance. As
presented in Table 5, the inter-rater reliability
coefficients ranged from .70 to 1.0.
A second round of ratings was performed on question 3, that had .70 of agreement between raters. After going through the problematic cases, a second set of cases was randomly chosen, rated and the kappa coefficient calculated once more. The level of agreement remained as before, that is, .70.
CHAPTER III
RESULTS

A. The Brief Symptom Inventory.

Seven of the 39 Latino subjects had been interviewed in English, because this was the language they usually spoke. In order to assess if the language spoken by the Latino patients would affect the results, two Latino subgroups were compared on the number of symptoms reported on the BSI (PST) and on a measure of general distress (GSI): (1) those who answered the questionnaires in Spanish, and (2) those who answered them in English.

T-tests for independent samples with unequal number of cases were calculated, with no significant differences being found (PST, $t(7.5) = -.28$, $p=.78$; GSI, $t(7.31) = - .49$, $p=.64$. Therefore, the Latino sample was treated as a group, being contrasted with the Euro-Americans.

The internal consistency reliability of the BSI symptom dimensions was the first hypothesis to be addressed. It had been hypothesized that the nine scales would be similarly reliable for both Euro-American and Latino patients, that is, no significant difference was expected between the ethnic groups in their reliability indices.
To examine the internal consistency reliability of the BSI dimensions the Cronbach coefficient alpha was computed for each scale, and the ethnic groups compared. Table 6 presents these data. Reliability coefficients ranged from a low of .63 (Psychoticism) to .84 (Somatization) in the Latino sample, and from .66 (Paranoid Ideation) to .87 (Somatization) among Euro-Americans. The coefficient alpha for Euro-Americans and Latinos in each scale was compared with a Z-test for correlations (Bruning & Kintz, 1987). No significant difference was found, the highest Z value being .59. The reliability analysis of the BSI in this population shows that the nine scales have fair to good internal consistency, that is, the items that constitute each dimension seem to be reasonably homogeneous. In addition, each BSI scale is basically measuring its domain with comparable homogeneity in both the Euro-American and the Latino samples.

The review of the literature had shown that Hispanics tend to acknowledge a higher number of symptoms in psychiatric inventories in comparison to other ethnic groups. To confirm whether this occurred in this population as well, Latinos and Euro-Americans were
compared on their Positive Symptoms Total (PST), a count of symptoms endorsed by the subjects on the BSI.

T-scores were calculated and groups compared. Considering the possibility that women could acknowledge a higher number of symptoms than men (Derogatis, 1993), gender was included in the analysis. A gender x ethnicity x diagnosis ANOVA was computed. No significant main effects or interactions were present.

However, as may be seen in Table 7, there was a trend for the diagnostic groups to differ ($p=.070$), and for an ethnicity x diagnosis interaction to be significant ($p=.062$). The tendency to a significant ethnicity x diagnosis interaction is apparent from Table 8: a comparison of the PST means for Latinos and Euro-Americans schizophrenics and depressives, revealed that Latino depressives had higher scores than the other three groups.

Subjects were also compared on the Global Severity Index (GSI), that combines information about number of symptoms and intensity of distress on the BSI inventory. A gender x ethnicity x diagnosis ANOVA was computed, having GSI T-scores as the dependent variable. The only significant difference occurred between the ethnic
groups, Latinos scoring higher (M=58.0) than Euro-Americans (M=52.4), F(1, 71)=5.94, p=.017.

The next hypothesis on the BSI addressed the pattern of scales elevation of Euro-Americans and Latinos. The ethnic groups were expected to differ across the BSI dimensions, with Latinos scoring higher than Euro-Americans on at least Somatization. The BSI dimensions mean scores for Euro-Americans and Latinos, by diagnosis and gender are provided in Table 9.

A comparison of means with a gender x ethnicity x diagnosis MANOVA revealed no main effect for gender, nor interactions with gender. On the other hand, as shown in Table 10, significant results were found for an ethnicity x diagnosis interaction, as well as main effects for ethnicity and diagnosis. Based on these findings, univariate F-tests were performed to investigate in which dimensions significant differences were present, with results being displayed in Table 11.

1. Somatization

As predicted, there was a significant difference between Latinos and Euro-Americans on this dimension, F(1, 71)=7.65, p<.01, with the former group scoring higher (M=61.8) than the latter (M=53.9). This ethnic
contrast was qualified by a significant ethnicity x diagnosis interaction, $F(1, 71)=7.95$, $p<.01$. Inspection of Table 12 shows that Latino depressives scored much higher on Somatization than the other groups, the means of which were virtually equal. A comparison of the Latino depressives’ mean against the combination of the other three means revealed a significant difference ($t(77)=4.94$, $p<.001$).

2. Obsessive-Compulsive

The means on the Obsessive-Compulsive scale were significantly different for both ethnic and diagnostic groups (See Table 13 for the BSI dimensions means by ethnicity and diagnosis). Latinos scored higher than Euro-Americans ($M=58.1$ and $M=50.0$, respectively), $F(1, 71)=10.61$, $p<.01$. In relation to diagnosis, depressive patients scored higher ($M=57.1$) than schizophrenics ($M=50.8$), $F(1, 71)=4.24$, $p<.05$.

3. Interpersonal Sensitivity

There was no significant difference in any of the factors studied for Interpersonal Sensitivity.

4. Depression

There was a significant difference between the diagnostic groups in this dimension, with depressive
patients scoring higher ($M=54.7$) than schizophrenics ($M=47.8$), as could be expected, $F(1, 71)=6.39$, $p<.05$ (Please refer to Table 13). No additional significant differences were present.

5. Anxiety

As occurred with Somatization, the ethnic groups differed and there was an Ethnicity x Diagnosis interaction on Anxiety ($F(1, 71)=4.93$, $p<.05$). Latinos’ scores on anxiety ($M=56.2$) were higher than Euro-Americans’ ($M=47.5$), $F(1, 71)=13.56$, $p<.001$. The mean for Latino depressives on this dimension ($M=61.2$) was much higher in comparison with the other group means combined ($M=48.6$). This difference was tested, resulting to be significant ($t(77)=5.76$, $p<.001$).

6. Hostility

In the Hostility scale, a significant Ethnicity x Diagnosis interaction was present. As in the case of Anxiety, the mean for Latino depressives ($M=59.8$) differed significantly from the other group means combined ($M=50.0$), $t(77)=4.26$, $p<.001$.

7. Phobic Anxiety

A significant difference on ethnicity occurred in this dimension, with Latinos scoring higher ($M=62.0$) than
8. Paranoid Ideation

There were no significant differences in the Paranoid Ideation scale.

9. Psychoticism

The two diagnostic groups had very similar scores on the Psychoticism scale, as shown in Table 12. No ethnic differences were present for this dimension.

Additional analyses were carried out with the BSI dimensions. In order to assess how good the nine scales were in differentiating schizophrenic from depressive patients, a discriminant function was computed. As presented in Table 14, the results showed that among Latinos, the diagnostic groups could be differentiated by five scales: Somatization, Obsessive-Compulsive, Depression, Anxiety, and Hostility. Euro-Americans schizophrenics and depressives, on the contrary, could not be discriminated by any of the nine BSI dimensions.

To further investigate to what extent ethnicity contributed to differences on the BSI dimensions, a hierarchical multiple regression was computed. The four scales where significant ethnic differences had occurred were included: Somatization, Obsessive-Compulsive,
Anxiety, and Phobic Anxiety. For each scale, the sum of the other eight scales was entered as an independent variable, followed by ethnicity (independent variable), to predict the target scale.

In the case of Somatization, the results of the multiple regression showed that ethnicity does not contribute to the scores on this dimension, after the patients' complaints in all other scales are taken into account. In relation to the Obsessive-Compulsive scale, ethnicity was found to contribute to the patients' scores, even when holding constant the contribution of the other scales. Similar results were found for the Anxiety dimension.

The results on Phobic Anxiety were similar to those on Somatization. When the tendency to complain about symptomatic distress is taken into account, ethnicity does not have a special contribution to the patients' scores on this scale.

To conclude the study on the pattern of BSI scales elevation in Euro-Americans and Latinos, an item-level exploratory analysis was carried out for the dimensions where significant differences had occurred on diagnosis, ethnicity, and their interaction (Please see Table 11).
Significant ethnicity x diagnosis interactions had occurred on Somatization, Anxiety, and Hostility. Considering that in these scales Latino depressives had scored significantly higher than the other groups, the item analysis was carried out by comparing the Latino depressive group mean with the other three, using the Tukey HSD test (See Table 15 for the results).

From the seven items that constitute the Somatization scale, Latino depressives scored significantly higher than the other groups in six of them, "Faintness or dizziness", "Pain in the heart or chest", "Nausea or upset stomach", "Trouble getting your breath", "Hot cold spells", and "Weak in parts of the body". All Anxiety items were significantly different: "Nervousness or shaking inside", "Scared for no reason", "Felling fearful", "Feeling tense or keyed up", "Spells of terror or panic", and "Restless". And last, on Hostility, significance was found in four of its five items, "Temper outbursts", "Having urges to beat, injure, or harm someone", "Having urges to break or smash things", and "Getting into frequent arguments".

Euro-Americans and Latinos were compared on Obsessive-Compulsive and Phobic Anxiety symptoms, with
results being reported in Table 16. The other two scales were differences had occurred, Somatization and Anxiety, were previously analyzed as part of the ethnicity x diagnosis interaction. Significant differences were present in four of the six Obsessive-Compulsive items: "Trouble remembering things", "Difficult making decisions", "Mind going blank", and "Trouble concentrating". In addition, a marginal significance (p=.056) was found for "Having to check and double-check what you do" ("Compulsive"). On the Phobic Anxiety scale three items, "Feeling afraid in open spaces", "Avoiding certain things, places, and activities", and "Feeling nervous when left alone", were significantly different for Euro-Americans and Latinos. In both dimensions and respective items, Latino patients scored higher than the Euro-Americans.

Possible differences between the diagnostic groups were analyzed for the Obsessive-Compulsive and Depression scales. Only two out of six items from the first dimension were significantly different, that is, "Difficulty making decisions" and "Trouble concentrating". On the Depression scale, the ethnic groups differed significantly in four items, "Feeling
blue", "No interest in things", "Feeling hopeless about the future", and "Feelings of worthlessness". In all symptoms reported above, depressive patients scored higher than schizophrenics.

The last hypothesis on the BSI inventory was related to its factor structure. Derogatis and colleagues (Derogatis, Lipman, & Covi, 1973; Derogatis & Melisaratos, 1983) claimed that the BSI and its longer version, the SCL-90, provide information on the patient’s psychological status in nine independent dimensions. However, as reported in Chapter I, studies have questioned this proposition, suggesting instead that the BSI and the SCL-90 are measures of general distress, rather than measures of nine different symptom clusters.

To test the hypothesis that the BSI would be a measure of general distress in the ethnic groups, a principal components factor analysis was performed. Considering the number of subjects in the study, a scale-level analysis was considered appropriate.

A one-factor solution was found for both ethnic groups, based on a scree test. In the Latino group, this first factor accounted for 62.2% of the total variance, while in Euro-Americans the first factor accounted for
74.9% of the total variance. Factor loadings for both ethnic groups are reported in Table 17. A coefficient of congruency was calculated for these loadings, with the result being .95.

B. The Context of Illness Experience Interview (CIBE).

The results for each CIBE question are presented next. The chi-square tests are described for the ethnic groups, in addition to the significant differences on diagnosis. The content of the responses is also examined, and examples presented to illustrate patients' understanding of their illness situation. The definition of the categories for each CIBE question was provided in Chapter II (Methods) and the list of categories is presented in Appendix 3.

The responses from Question 1, "How would you describe your current life situation?" were coded in "Illness" and "Non-illness" categories.

Description of Life Situation in Terms of Illness

A total of 46.8% of patients described their life situation in terms of illness, from one of five categories: Mental Illness, Physical Illness, Nervios/Nerves, Illness Unspecified, and Illness Implicit. Patients could be coded in more than one illness
category. For each option, they received a YES or NO coding. The responses from only two patients were coded in more than one category, Mental and Physical Illness in a case, and Mental and Nervios in other.

The ethnic groups were compared on their answers to this question, and the results are also presented in Table 18. The Chi-square tests are not independent, considering that patients could be included in more than one category. The same approach was used for all subsequent questions were more than one category could be mentioned by the patient.

As shown in Table 18, there was not a significant ethnic difference on the number of illness responses. However, when each category is considered, several significant differences are found. The first illness category reported on Table 18 is "Mental Illness" was present in the characterization of life of 13 patients (16.5%). From this 13 patients, ten (25%) were Euro-Americans and three (7.7%) were Latinos, Chi-square (1, N=79)=4.30, p<.05. Those Euro-Americans diagnosed with schizophrenia that explicitly mentioned mental illness on question 1 referred to a stigmatized condition, either by the patient himself/herself or by peers. Examples of such
responses are presented next.

A 34 years old Euro-American male (#16) reported: "In the past ten years, I’ve lost two jobs. I think it’s because of my mental illness. (...) And the person I worked with wouldn’t work with me because I was taking pills retarded people take. And he said, ‘We’re normal people, we can’t work with you.’ So I lost that job."

In another case, the patient, a 27 years old Euro-American female (#1) stated: "I think my life’s boring. I really do. I look at all my sisters and brothers, and see how far they’ve come. I feel like I’m a failure after them. And that’s terrible to think of myself that way, but that’s how I think. (...) Well, they’re in school, they work, and they drive. I don’t drive, I can’t work. (And what prevents you from doing those things?) My disease ... schizophrenia."

A 31 years old Euro-American male (#56) declared: "I think things are okay, but nobody will hire me for a job. I get harassed by other mentally ill people." In a different case, the patient, a 26 years old Euro-American male (#32) was talking about a play he would go to the next day: "It deals with how you deal with being made fun of. The situation there of being mentally ill, and how
you get made fun of, and how you deal with it." The same patient complained about his neighborhood: "Kids come and bother me. Knocking at the window, making fun of me, calling me names."

In yet another example, a 32 years old Euro-American male (#28) referred to "disability" several times when answering question 1. Therefore, among the six Euro-American patients with schizophrenia who mentioned mental illness on this first question, stigma appeared in the description of life of five of them.

Four Euro-Americans with major depression referred to mental illness in question 1, by means of the term "depression". The answer of a 35 years old female (#83) is an illustration: "The depression is the hard part. It's like living in a roller coaster. You're up and you're down, and I always seem to be mostly down. It's like I can't reach the top. And I find myself ... little things that I have to do, it's like ... little tasks, I just, I don't know. I can't deal with. I try. You know, and override it, but sometimes I can't. I think that's the worst part, dealing with the depression."

All three Latino patients that referred to mental illness in answering question 1 had a diagnosis of
schizophrenia. In the case of a 30 years old male (#65) stigma was mentioned: "Fair. (What do you mean, fair?) You know, like a ...I...I'm different from other people, you know. (In what way?) My...my mental problem, I guess. (What exactly you mean by that?) Schizophrenic, you know. ...That's a disease that... people get...some people get...a lot of people get it."

The other two Latino patients talked about their illness in different terms. In one of them, a 48 years old female (#19), her life situation was described as: "En el momento? En una parte tranquila, porque no tengo problemas. Para mi el problema mío es mental, sabe? Que no es una cosa que ...sino que lo llevo en la cabeza, en la mente. Que puedo estar un momento bien, pero que igual, que hay noches que duermo bien, pero hay noches que quedo toda la noche sin dormir. Me pongo a leer la Biblia y a ver television ... cuando no me quedo a oscuras, a solas sentada." [At this moment? On one hand I am fine, because I do not have problems. I think that my problem is mental, you know? It is not something that... I have it in my head. At times I feel good, some nights I sleep well, but there are nights that I stay awake all night long. I read the Bible and watch TV ... or
I just sit alone in the dark.

The other Latino patient, a 55 years old male (#29) stated: "Aunque a pesar de lo que me ha pasado, no me quejo, porque la compañía que tengo es buena. La ayuda que ella me ha dado, porque yo encuentro que la persona que padece de estas cosas de la cabeza y de los nervios, si tuviera una familia como, que la que yo tengo, comprension de todo mundo, pode sobrepasar esa crisis." [Despite what happened to me I do not complain, because I have a good partner (wife?). The help she has given to me ... I think that a person who suffers "head things" and "nervios", and has a family like I do, and has comprehension from everybody, may overcome the crisis].

The second category reported in Table 18 is "Physical Illness", mentioned by four (10%) Euro-Americans and no Latino patient, Chi-square (1, N=79) = 4.10, p<.05. Heart problem, multiple sclerosis, thyroid problem, and severe visual deficiency were the physical conditions mentioned in question 1.

The next category, "Nervios/Nerves", on the other hand, was referred to by 17.9% of patients, all of whom were Latinos, Chi-square (1, 79) = 7.87, p<.01. As stated by a 47 years old male diagnosed with schizophrenia
Yo llevo 10 anos padeciendo de los nervios." [I have suffered from nervios for the last 10 years]. A 49 years old female with major depression (#46) reported: "Yo no puedo estar donde hagan problemas, porque me pongo bien nerviosa." [I cannot be where problems are, because I get very nervous]. Another patient, a 33 years old male with schizophrenia (#69) replied: "Estos dias he estado un poquito malo, un poquito nervioso, nervioso, sera eso, todo un nerviosismo, muchacho... me deberian de estar llevando al hospital." [During the last days I am feeling a little bad, a little nervous, nervous, such a nervousness, man .. they should be taking me to the hospital].

"Illness Unspecified" was mentioned by five Latinos and two Euro-Americans, a non-significant difference. These answers implied reference to an illness without clear indication of its nature, as in the answer of a 53 years old Latino depressive male (#4): "No podria decir que estoy bien, pues yo tengo mi problema. Eso me molesta, mis enfermedades." [I could not say I am feeling well because I have my problem. This upsets me, my infirmities." Or as the 34 years old Euro-American male diagnosed with schizophrenia (#23) stated, "With my
illness I wouldn't be able to hold a normal job."

Finally, significantly more Euro-Americans had their answers coded in the "Illness Implicit" category (N=7, 17.5%) than Latinos did (N=1, 2.6%), Chi-square (1, N=79) = 4.84, p < .05. Among the Euro-American patients, the response from a 38 years old male diagnosed with schizophrenia (#74) was: "I'm doing all right, taking my medication as I am supposed to do, trying to stay out of the hospital." Patients usually made reference to medication or another treatment. The only Latino patient included in this category, a 25 years old male with schizophrenia (#51) referred to: "Trying to find myself... being okay... staying out of trouble. The medication is helping me out."

Description of Life Situation in Non-Illness Terms

The life situation of 45.6% of the total sample was described in "Non-Illness" terms, that is, their responses were not coded in any of the illness categories mentioned above (Table 18). As described in Chapter II, answers were coded in respect to Content (Affect, Activities, Relationships, and Accomplishments) and Affective tones (Negative, Positive, and Combined). Results for the Non-Illness responses are provided in
Table 19. No significant ethnic difference was present in these responses. Some examples are provided next.

A 38 years old Euro-American with major depression (#10) had his answer coded as Accomplishments-Positive: "Things are going pretty good. Work’s is okay, you know, I have up and downs. I just got married a year and a half ago. I have a 12 year old stepdaughter who stays with us part of the time. I just bought a new house a year ago. In general, things are going pretty good."

Another patient, a 29 years old Latino female with major depression stated: "Lo mismo, lo mismo [the same, the same], everyday, nothing changes, the same boring old things, over and over. Sometimes I find myself so sick and tired of this life, you know?" (Affect-Negative).

The Presence of Health Problems (Question 2):

When directly asked, "Do you think you have a problem with your health?", 78.5% (N=62) of the patients acknowledged having a health problem. The percentage of affirmative answers for Latinos and Euro-Americans was 71.8% (N=28) and 85.0% (N=34), respectively. A total of 13 patients (16.5%) denied having any health problem, being 17.9% (N=7) of Latinos and 15% (N=6) of Euro-Americans. No significant difference was found on this
question.

Patients' Nomination of Their Problems (Question 3): "What do you call your health problem?" Follow-up probes were: "What do you see your [clinician] for?" or "What do you take medication for?"

As displayed in Table 20, more than half of the sample (54.4%) nominated their health problem as "Mental Illness". However, while Mental Illness was mentioned by nearly three quarters of Euro-Americans (72.5%), this was the case for 35.9% of Latinos, a significant difference, Chi-square (1, N=79) = 10.66, p<.01.

Some patients would mention mental illness immediately after answering positively to question 2. This 34 years old Euro-American male with a diagnosis of schizophrenia (#24), when asked 'Do you think you have a problem with your health?', replied: "Yes, I have a mental illness. Schizophrenia." Or as in the answer: "Solamente mental sera" [It is only mental], provided by a 52 years old Latino female patient suffering from major depression (#18).

When referring to a physical problem, or when affirming having no health problems, patients were questioned about their mental condition with one of the
probes cited above. The following passage from a 26 years old Euro-American male with a diagnosis of schizophrenia (#32) illustrates such situation: (Interviewer: Do you have a problem with your health?) "Hygiene-wise, yes. Because I’m having trouble keeping my place clean. (And what are they giving you the medication for?) To help relieve me of some of my schizophrenia." An additional example comes from a 32 years old Euro-American female with the same diagnosis as the patient above (#62): "Yeah, smoking. And I like to eat too much. Also laryngitis. (You told me you had been in CPI a few times) I have been. An awful lot of times. (What was that for?) Well, I .. let’s see. I talk to myself. And I smoke too much... the bedroom starts talking to myself in the corners. Chase my kids out ... (Do you have a name for your problem?) Schizophrenia. (And what is that?) That’s some kind of disease I have in my brain... think that people are bothering me. And I bother them."

This last quotation illustrates the interviewer’s attempt to obtain the patient’s understanding of her health situation. Initially, health habits and physical problems were described, and when directly probed about hospitalizations, the patient mentioned her mental
illness, that is, schizophrenia and its symptoms.

As displayed in Table 20, thirty-one (39.2%) out of 79 patients mentioned "Physical Illness" when inquired about their health problems (question 3). No significant difference was found between the ethnic groups on this category, mentioned by 18 (45%) Euro-Americans and 12 (30.8%) Latinos. Answers included physical conditions such as hernia, ulcer, diabetes, anemia, cancer, degenerative arthritis, obesity, high cholesterol level, emphysema, and bronchitis, among others.

"Nervios" was regarded as the health problem of 24.1% (N=19) of the patients when answering question 3, all of whom were Latinos (See Table 20). In other words, there was a significant difference on this variable, with 48.7% of Latinos and no Euro-American nominating their illness as Nervios/Nerves, Chi-square (1, N=79)=25.65, p<.001. According to a 44 years old female patient diagnosed with schizophrenia (#80), "Yo siempre he sido nerviosa desde 19 años. De momento estoy bien y de momento me da como desmayo o algo así. Por la tarde, a veces estoy bien contente, a veces estoy triste así." [I have been always nervous since I was 19. One moment I am fine, and the next moment I faint or something like that.
In the afternoon, sometimes I feel happy, sometimes I am sad. An additional example is provided by a 45 years old female with major depression (#34): "Problema de salud? Bueno, esto siempre existe. Bueno, este .. ademas de los nervios, estoy preocupada porque creo que tengo el colesterol alto, muy alto." [A health problem? Well, that always exists. Well, uhm.. besides nervios, I am worried because I think I have high, very high cholesterol]. A marginal significant difference occurred between the diagnostic groups on Nervios, mentioned by more patients with depression (N=13, 32%) than patients with schizophrenia (N=6, 15.4%), Chi-square (1, N=79)=3.16, p=.075.

A significant ethnic difference was also found in "Health Habits" problems, reported by eight Euro-Americans and one Latino, Chi-square (1, N=79)=5.94, p<.05. Health habits problems included basically cigarette smoking and eating disturbances, besides a description of a hygiene problem. In the only Latino case, the patient reported smoking and drinking too much coffee (Table 20).

The "Other" category contained responses that did not simply fit in one of the four previous categories. A
46 years old Euro-American female diagnosed with major depression (#71) answered to the question, 'What are you seeing P. for?' by saying: "She's a counselor. She comes and talks to me. Finds out how I am between doctor visits." A 25 years old Latino male with schizophrenia (#51) answered: "I needed medication, that's why. (What kinds of things the medication treats?) It let's me relax. Be myself."

Patients' Responses on Problems with Nerves/Nervios (Question 4a)

When specifically asked if they had Nervios/Nerves problems, the majority of the patients (N=50, 63.3%) answered affirmatively. There was a higher percentage of such responses from Latinos (N=30, 76.9%) in comparison with those from Euro-Americans, (N=20, 50%), difference that approached significance, Chi-square (79) = 7.05, p=.070.

Patients' Responses on Mental Problems (Question 4b)

The majority of the sample (N=50, 63.3%) also claimed having mental health problems when directly inquired. The difference between Euro-Americans' (N=27, 67.5%) and Latinos' (N=23, 59.0%) affirmative answers was not significant.
As previously mentioned, questions 4c and 4d were analyzed differently from the other questions, due to methodological concerns. The general trends suggested by the data are presented next and the number of answers in each category in displayed on Tables 21 and 22. No statistical analysis was carried out on these answers.

**Differences and Similarities: Nerves/Nervios and Mental Problems (Question 4c)**

The responses from one Euro-American patient could not be included in the analyses of both questions 4c and 4d, due to recording problems. From a total of 39 Euro-Americans, 27 were asked the question involving the comparison between Nerves and Mental problems. In the case of Latinos, the answers from one patient also had to be excluded for the same reason mentioned above. From a sample of 38 patients, 36 Latinos were inquired about Nervios and Mental problems. The answers modalities are presented next (See Table 21).

a. Mental problems and nerves are similar notions:

Among the Euro-Americans who equated Mental problems and Nerves (N=7), explanations were provided by some patients. That was the case of a 26 years old male with schizophrenia (#32), when the interviewer asked: 'Why
they [mental problems and nerves] are the same?': "Well, they are in some way with me. Like when I’m by myself and I think of problems I had in the past. I get very nervous. Thoughts come up to my head and I don’t want them to. I get very nervous when those thoughts hit."

In another case with the same diagnosis as above, the 31 years old male (#56) reported: "No, because I think they’ve proven that it’s just nerves. That your brain waves go faster or something like that. They give you the medicine to slow down your brain waves." A 41 years old female with major depression (#90) responded: "I think people say that [nerves] when they have a mental illness. People think when they are anxious, they’re nervous. I think it’s mental illness."

Nine Latinos considered Mental problems and Nervios as similar notions. An example comes from a 33 years old male diagnosed with schizophrenia (#69): "Si. Es igual, tu sabes, el problema de la cabeza son una cosa, es igual." (Yes. It is the same, you know, the problem in the head is just one thing, it is the same). A 30 years old male with schizophrenia (#65) answered to the intervention ‘Is this mental problem anything like nerves?’ by saying: "Nervios. Yeah, bad nerves. That’s
why I'm taking medication ... for my nerves. And to calm me down."

b. Mental problems and Nerves/Nervios are different:

Seven Euro-Americans considered Mental and Nerves as different problems. Nerves was described as "Shaking", "Anxiety", "Sort of a real physical problem", "It goes away", "You cannot relax", "Hyper". Mental, on the other hand, meant "A biochemical type of thing", "It's much more serious", "It's all the time, an on-going thing", "Feelings of hopeless, shame and guilt".

Among Latinos, on the other hand, Nervios and Mental were considered as distinct processes by sixteen patients. As occurred with Euro-Americans, "Mental" was described as a more serious problem, an enduring condition. It was related to becoming crazy, to memory problems, to a process that does not stop, as "thinking too much", sometimes. It was also seen as an incapacitating problem, not allowing the person to go out alone, for example.

Nervios, on the contrary, tended to be defined as transient problems, usually located in the physical body, and manifested as stomach disturbances, headaches, shaking, lack of control, and depression. According to a
41 years old female with major depression (#2), "Nervios es una cosa que me dan de momento y de momento se me calman y vuelve de eso como que viaja el estomago y todo el cuerpo." [Nervios is something that comes and goes, then it comes again. It like travels through my stomach and all over the body].

Another illustration of nervios is provided by a 44 years old female also suffering from depression (#3): "Hay veces que estoy bien, pero hay veces que amanezco que si una tasa cojo, una tasa se me cae... Cuando uno esta enfermo de los nervios, hay veces que amanece bien, a veces no amanece bien. Pero no es una cosa de volverme loca .. o de que se me vaya la mente. A veces me siento sola, depressed. Los nervios a mi me da mucha depresion.. porque estoy sola." [Sometimes I feel fine, but sometimes I wake up in a way that, if I take a glass, it falls down... When someone has nervios, there are times when the person wakes up feeling well, and sometimes does not. But it is not that I will go crazy... or I will lose my mind. Sometimes I feel lonely, depressed. Nervios gives me depression... because I am lonely].

In only one Latino case, a 52 years old male diagnosed with schizophrenia (#48), Nervios was seen as
worse than mental, explained as "Porque los nervios no dejan hacerle nada a uno" (Because nervios don’t let you do anything).

c. Mental and Nerves are different but related:

Four Euro-Americans conceived Mental and Nerves as different but related notions. An example is provided by a 43 years old male patient with schizophrenia (#9): "I can be sick with schizophrenia, but I won’t be nervous, I won’t shake. But .. it seems like when I’m upset, then I hear the voices more, so that’s how it’s connected". A 38 years old male with depression (#10) answered: "Well, I think they’re different, but they can be related. A nervous condition can be purely physical, but it can also be brought on by stress or worrying about things. (And about mental problems?) What would bring it on? I have no idea. It could be past history ... it could be based on things that have happened to him before, or it could be a chemical imbalance." No Latino answer was included in this category.

Two Euro-Americans did not know how to answer the question. In addition, it was not possible to code four answers, because the question was not asked in the predicted way, or the answer was not clear. An example of
a Not Possible to Code answer is provided by a 46 Euro-
American female diagnosed with depression (#71), that was
asked: "Do you have any nervous or emotional problem?"
"Just trying to commit suicide." (And what do you call
that?) "I guess you'd call it emotional." (When you say
emotional, would you say that's like a nervous problem or
problem with your nerves? "Well, I'm usually down in the
dumps. And it could happen for, you know, no reason. Just
like one minute I'm fine, and the next minute, I'm flying
off the handle."

Five patients in the Latino group did not know how
to answer this question, and three responses could not be
coded. The next passage, from a 42 years old male
diagnosed with schizophrenia (#41), illustrates a "Not
Possible to Code" response: (Interviewer: Cree que hay
una diferencia entre un problema de nervios y un problema
mental? [Do you think there is a difference between a
nerves problem and a mental problem?]) "El nervio, el
nervio, los nervios que yo estoy enfermo, pero esto se me
esta sanando ahora. Hoy, hoy con esta conversacion me
estoy sanando..." [I am sick with nervios, but this is
going better. Today, today with this conversation, I am
going better].
Euro-American patients in this sample did not seem to have a typical understanding about the relationship of Mental problems with Nerves. Answers were divided in considering these conditions as similar, different, or different but related. Latinos, on the contrary, often differentiated Nervios from Mental problems. Nearly 45% of the patients who were asked this question said so.

Differences and Similarities: Mental and Emotional Problems (Table 22)

Twenty-nine out of 39 Euro-Americans were inquired about the relationship between Emotional and Mental problems. The same happened with 24 patients from the Latino sample (N=38).

a. Mental and Emotional are similar:

Six Euro-Americans viewed Mental and Emotional as similar problems. Not much was usually said about this resemblance. This response occurred in only three Latinos patients, as in the case of a 25 years old male (#39) with major depression: "I think it all adds up to the same thing... because that comes from your mind."

b. Mental and Emotional are different:

From the 29 Euro-Americans who were asked question 4d, 13 patients differentiated Emotional from Mental
problems. Mental problems were described as: Confusion in mind or intellect; Thinking being distorted, disrupted and messed up; Sickness; Chemical imbalance; Mental retardation; Brain malfunctioning; A problem that exists independent of external stimuli.

Emotional problems, on the other hand, were mainly associated with external factors, responses to life events. Inability to deal with feelings, up and downs, family problems, crying, transitory problems, feeling lower, overreaction to events, and depression were also mentioned.

For the Latino patients who considered Mental and Emotional as different (N=8), the former was seen as a more serious condition; Mental is more "dangerous" than an emotional problem; One has mental problems for all his/her life; The mind controls the person, not the opposite; A person that has mental problem is "Someone that cannot seriously live ... born with it". Mental was also associated with memory problems. Emotional problem, on the contrary, was related to feelings such as the death of a loved one, a strong emotion, a transitory process, and also to social problems.

Three Euro-Americans patients did not know how to
answer this question, and it was not possible to code the answers of four subjects. In relation to the Latinos, six patients did not how to answer the question about Mental and Emotional problems, and four responses could not be coded. The last situation is illustrated by the case of a 26 years old Latino female with a diagnosis of schizophrenia: (Interviewer: Crees que tienes un problema emocional o mental? [Do you think you have an emotional or a mental problem?] "Fuera de control..." [With no control..] (Que te sentis a veces fuera de control?) [Do you feel sometimes with no control?] "Uhhum."

It is important to mention that, in each ethnic group, three patients considered Nerves, Mental, and Emotional problems as being similar.

Among Euro-Americans, the notion of Emotional problems seems to be more clearly distinct from Mental problems, an idea expressed by 44.8% of the patients who were asked the specific question. Latinos, on the other hand, showed less clarity in this respect. For example, while eight patients differentiated these notions, six did not know how to compared them.

"Emotional" and "Mental" appear to be more familiar notions to Euro-Americans than "Nerves" is. In the case
of Latinos, "Nervios" seems to be the familiar term.

It should be noted that much more Latinos were asked to compare Nervios and Mental problems than Euro-Americans were. Fourteen Latinos, on the other hand, were not asked to compare Mental with Emotional problems. In addition, the reasons for the similarity between terms (nerves and mental; emotional and mental) were somewhat taken for granted by interviewers and patients, if compared with the reasons for their difference, somewhat explored.

It may be asked whether "Nervios" and "Emotional" could be considered as different terms for similar processes among Latinos and Euro-Americans, respectively. Answers provided by both ethnic groups suggest that this is not the case. Nervios/Nerves problems tend to be more often described as symptoms experienced in the body, while Emotional is often related to situational problems, that is, to feelings/emotions associated with life events.

**Patients' Conceptions on Causes of Illness (Open-ended question 5)**

Among the factors described by patients as possible causes of their illness on question 5, the ethnic groups
were significantly different on "Family Conflicts". As reported in Table 23, while 35.0% of Euro-Americans attributed their illness to family conflicts, only 15.4% of Latinos considered so, Chi-square (1, N=79)=4.01, p<.05.

Problems in childhood were the most common cause included in the Family Conflicts category. A 35 years old Euro-American female with major depression (#83) stated: "Well, my childhood wasn’t all that good either. My mother and father fought physically, and then my older brothers had to protect my mother." As this 34 years old male with schizophrenia reported, "I had a pretty crazy child life. My father would get angry with me a lot, and my mother was pretty strict. My dad hit me a lot." A Latino patient (41 years old, major depression, #2), described that she saw when her father killed a man when she was eight years old, and this memory does not leave her. As another Latino patient (a 29 years old, major depression, #37) reported, she was raised by alcoholic grandparents and had a very difficult childhood.

In addition to childhood problems, conflicts with their own children were mentioned by one patient in each ethnic group. In general, there was not a major ethnic
difference in patients’ responses to this category. On diagnosis, in the contrary, depressives reported significantly more family problems (N=14, 35%) than schizophrenics (N=6, 15.4%) did, Chi-square (1, N=79)=4.02, p<.05.

"Marital Conflicts" were similarly described by Euro-Americans and Latinos. A not surprising difference in diagnosis occurred, with depressives having more problems in this area (N=10, 25%) than schizophrenics (N=3, 7.7%), Chi-square (1, n=79)=4.30, p<.05.

The "Death" of significant others as a possible cause of illness was mainly reported by Latinos. Included in this category is the report by a Latino patient (55 years old male with major depression, #57) that he had killed his wife and had not seen his young children after this event.

From the seven Euro-Americans that associated their illness with "Sexual/Physical Abuse", two cases were of physical abuse by husband. The five additional cases referred to sexual abuse by family members (father and brother) and other persons, including a baby-siter. The Latino cases include a sexual abuse by an uncle and by a step-father. Depressive patients considered this category
significantly more (N=8, 20%) than schizophrenics (N=1, 2.6%), Chi-square (1, N=79)=5.94, p<.05.

"Addictions" as possible causes of illness were reported by six Latinos and three Euro-Americans. Drugs were mentioned in three responses, alcohol in two of them, and coffee in one. In the last case, the coffee was seen as responsible for the insomnna, not for the symptoms that motivated hospitalization. An answer by a 35 years old Latino male, diagnosed with schizophrenia (#50) is: "Drugs... I've taken just about all of them. Sniffing glue, gasoline, paint, paint solvent, heroin, some pills, amphetamines, LSD, marijuana. (Any one more than the others?) LSD."

All Euro-American cases included in the Addiction category referred to drug use, in addition to alcohol, in a patient's report. A 32 years old female with a diagnosis of schizophrenia (#62) answered: "Smoking. I used to go in a room and smoke marijuana. I did a pretty good number on that when I first started. (Did you smoke a lot?) I did. I couldn't breathe or nothing. I was stuffed. My head was stuffed. (When was the last time you smoked marijuana?) One month ago. (And you think that caused your schizophrenia?) I'm pretty sure it did."
There was a marginal significant difference between the diagnostic group on Addictions, with schizophrenics referring to this category more often (N=7, 17.9%) than depressives (N=2, 5%), Chi-square (1, N=79)=3.28, p=.07.

"Health-Related" causes among Euro-Americans included: the use of diet pills, not sleeping, not eating, the medication the patient was taking, a car accident (hitting head), severe visual deficiency, and hitting head "too many times" when young. Latinos mentioned anemia, diabetes, surgeries, delivery, illnesses, and eating plaster off the wall. According to this last patient, a 25 years old male with major depression (#39), "When I was a child I ate plaster off the wall, and the doctor said that I was going to have side effects from that, when I grow older...I didn't know that was true 'til now."

Although a significant ethnic difference was not present on "Biologic" factors, there was a trend in the expected direction, with Euro-Americans considering this category more often (N=7, 17.5%) than Latinos did (N=2, 5.1%), Chi-square (1, N=79)=2.99, p=.08. There were also variations in the content of this set of answers. Biological causes implied heredity for both Latino
patients, that did not seem sure about their ideas: "Pero no se, a la mejor, soy de herencia" [I don't know, maybe it is inherited] "I don't know ... es la herencia."

On the other hand, Euro-Americans were equally divided between considering the cause as "heredity" or as "chemical imbalance", in addition to the following answer (a 36 years old male with schizophrenia, #61): "Ah, I'm not sure, they seem to think more or less, not only from all the trouble and problems I've been in, but more or less from a fiber that's in your brain, I heard. I heard that there are fibers in there, that your brain passages, your brain waves are a little bit different than usual. That works with the chemistry."

"Working/Financial" problems were considered as possible causes of illness in this population. As this 42 years old Latino male with schizophrenia stated, "Yo no se, este ... el trabajo de noche. No me gustaba y los ojos se me pegaran a hinchar... Que ya empeza la cabeza, la mente a hacerme debil y a cada dia se me ponia mas debil y eso fue lo que me enfermo." [I don't know... the work at night (working at night?) I did not like that, and my eyes became swollen ... my head, my mind became weak and each day weaker, This is what made me ill] A 34
years old male Euro-American with a diagnosis of schizophrenia (#16) said: "Well, I was working pretty hard at work..." Financial problems were reported by two Euro-American patients.

Factors mentioned by four or less patients in the whole sample were collapsed and reported as "Other Causes", with the following categories being included: Stress/Pressure; Failure to accomplish goals; Frightening or fearful situations; Thinking too much; Immigration; Existential/Psychological issues; Supernatural causes; The illness in itself; and Boredom.

As it can be seen in Table 23, more Latinos than Euro-Americans referred to factors included as "Other Causes". Some causes were mostly or exclusively mentioned by Latinos: "Thinking too much" and "Fearful situations", by three Latinos and no Euro-Americans. "Immigration" and "Boredom" were each cited by a single Latino patient. "Stress" was mentioned by three Euro-Americans and no Latino subject. "Supernatural forces", by three Latinos and two Euro-Americans. The "Illness in itself" was mentioned by three Latinos and one Euro-American, while "Failure to accomplish goals", by a patients from each group. Finally, "Existential/Psychological" issues were
mentioned by one Latino and two Euro-American patients.

A significant diagnostic difference was present on "Other Causes". Schizophrenic patients mentioned them more (N=16, 41%) than depressives (N=8, 20%), Chi-square (1, N=79)=4.13, p<.05. All five patients who mentioned Supernatural Forces were schizophrenics, the same occurring with Thinking Too Much and Fearful Situations.

An last, significantly more Euro-Americans did not know what the cause of their health problem was (17.5%), in comparison with Latinos (2.6%), Chi-square (1, N=79)=4.84, p<.05.

Based on the answers to question 5, the illness experience of Latinos seems to be associated with a more broad range of causes in comparison with the Euro-Americans'. The fact that some categories were mainly devised to include Latino cases (Thinking Too Much, Fearful Situations, Immigration, and Boredom) is an example of the diversity of causes in this ethnic group. In addition, the fact that seven Euro-Americans did not know, or were not able to present their conception about causes of illness when first asked, is interesting. Despite having access to more information from better educational and socioeconomic levels, and being exposed
to theories of illness etiology, several Euro-Americans in this study had no clear thoughts, at least initially, about the origins of their mental problems.

Possible Causes of Illness: Forced-Choice Options (Question 6)

Following the open-ended question on causes of problems, patients were confronted with a list of possible causes that required "Yes", "No", or "Don't Know" answers. No significant difference was found between Latinos and Euro-Americans on this question. From the options presented to the patients, "Past Family Problems" (As an adult) was the causal factor most accepted by the whole sample, with 63.3% of the patients responding affirmatively to this option (See Table 24). A marginally significant difference on diagnosis was present on this variable, accepted by more depressives (N=31, 77.5%) than schizophrenics (N=19, 48.7%), Chi-square (1, N=79)= 7.05, $p=.070$.

Other factors were also highly sanctioned as determinants or contributors to the patients' illnesses. That was the case of "Past Family Problems" (As a child), and "Traumatic or Frightening Events", considered by more than half of the sample, followed closely by "Personal
Losses", "Heredity", and "Chemical Imbalance". "Economic" problems were significantly more accepted by depressives (N=21, 52.5%) than by schizophrenics (N=8, 20.5%), Chi-square (1, N=79)=13.02, p<.01. The same occurred with "Personal Losses, with 24 (60%) depressives and 11 (28.2%) schizophrenics accepting this option, Chi-square (1, N=79)=9.35, p<.05. Finally, "Stress" was also endorsed as a possible cause by more depressives (N=30, 70%) than schizophrenics (N=17, 43.6%), Chi-square (1, N=79)=12.94, p<.01.

One option, "Could you have gotten it from anyone?" (designated as "Contagious" on Table 6), was rejected by a large percentage (83.3%) of patients who were asked this question. It was probably associated with an infectious conception of mental illness, and not popular in this sample. It is interesting to note that 31.6% of the patients were not asked this question.

Patients' Opinion on Illness Recovery (Question 7)

The results show that, when asked "Do you think you will get better or recover from your [name used by patient]?", the majority of the patients (N=45, 57%) responded positively. Although a significant difference was not present between the ethnic groups, Latinos tended
to believe in their improvement more often (64.1%) than Buro-Americans (50%) did. If the cases that considered they would get better "To Some Extent" are also counted as affirmative responses, the majority of both groups would believe in their recovery or improvement (69.2% of Latinos and 62.5% of Buro-Americans). On the other hand, 16 (20.3%) patients did not know if they would ever get better or recover from their illness.

Factors That Contributed to Illness Recovery (Open-Ended Question 8)

In their answers to question 8, patients could express their beliefs on what could help them, or what was already helping them in the recovery process. No significant ethnic difference was found in this question. As shown in Table 25, among the factors estimated as contributors to illness recovery, "Treatment" was the most frequently cited, with 54.4% of the patients referring to this topic.

Medication was the most cited treatment modality, with 15 patients in each ethnic group referring to drugs when answering the question. Among these patients, four Latinos overtly criticized their current treatment, as in this 41 years old female patient with major depression
(#2): "Unas pastillas que mejoren, porque esas pastillas no me estan haciendo nada, nada, nada." [Some pills that make me better, because these ones don't do anything to me, anything, anything] An additional example from a 31 years old female with schizophrenia (#22) is: "Que me quiten las pastillas y que me den otro medicamento, si me tienen que dar otro. I'm gonna try for the shot." [They should stop the pills and give me another medication, if they need to give me another one].

Among the 15 Euro-Americans that mentioned medication were included five patients who, despite not criticizing the current treatment, expected for something better, such as the answer from a 49 years old male with a diagnosis of schizophrenia (#44): "A miracle drug." Or as the 43 years old male schizophrenia patient (#9) answered: "Unless they come up with some new drug or ... (Do you feel like there's a chance that they might develop some new drug that will work?) Yes." A last example comes from a 38 years old male with major depression (#10): "Besides finding the right drug..."

Psychological interventions such as counseling, support groups were present in the responses of seven Euro-Americans and only two Latinos. Compliance with
clinicians orders and appointments was mentioned by two patients in each ethnic group. Participation in AA programs was part of the recover process of three Euro-Americans. In addition, one Latino mentioned a visit to a neurologist, because his problem was seen as neurologic, and one Euro-American believed shock therapy would probably help him to sleep.

The next highly cited group of factors was "Relationships", mentioned by 26.6% of the patients. A variety of situations was presented, including getting married, having a child, improving relations with relatives, and the present support from relatives. The content of responses from both ethnic groups was basically similar. One exception was the answer from a 50 years old Euro-American female with major depression (#30): "Probably if any of the kids never come back to live with me. That's sound cruel, doesn't it? I love them, but gosh ..."

"Activities" were cited by 21.5% of the whole sample. That is, being involved in work, study, and other occupations was seen as important to the recovery of more than 1/5 of the patients. It is interesting to see that a group of patient still consider the possibility of
working. Four Latinos explicitly mentioned they would like to work, as this 29 years old male with schizophrenia (#47) stated: "Trabajando de ayudante de carpinteria... en fin, en una cosa que yo pueda estar empleado." [Working as a carpenter's helper ... in something that I could be employed]. Another example is the 52 years old female diagnosed with depression (#18) that answered: "Yo creo que conseguindo trabajo, que tenga la mente ocupada, tu sabes, que me canse." [I think that getting a job, keeping my mind busy, you know, to get tired]. A 25 years old male with depression (#39) declared: "If I finished school... if I had a job, like working in an office or something."

Some Latino answers illustrate the importance of feeling valuable to the recovery process: "I’m pretty well on my way right now. Working" (35 years old, male, schizophrenia); A 50 years old male with schizophrenia described: "Y estoy activo en casa y todo, muy activo, contento y dispuesto a ayudar el necesitado" [I am active at home, very active, happy and ready to help those who need]; and a last example, from a 53 years old male, suffering from depression (#4): "Yo me empuesto hacer algo en casa, y eso, siempre." [I have decided to
do things at home, always] To learn English and learn how to sew are the plans of two additional Latino patients.

Among the Euro-Americans, two patients stated they would like to work. One, a 43 years old male with schizophrenia (#9), said: "I think if I had an occupation, just something part time ... or that I could build up maybe to full term...". The other patient, a 31 years old male with schizophrenia (#56) mentioned: "Keeping busy. Keeping more busy will help me get better. Going to school or working or something." Two patients referred to their paid jobs; an additional one told she takes care of her grandchild, helping therefore, her family. The remaining patients referred to studying or being active in general.

According to 13.9% of the patients, "Self-Changes" should occur in order to facilitate their improvement. More Euro-Americans (N=8) considered their role in their own improvement than Latinos (N=3), not a significant difference. A 46 years old Euro-American female with depression stated: "A lot of work on my part, I think. Not getting upset, not letting things bother me that much." A 32 years old Euro-American female answered: "It
would help if I could talk about it more. I don’t talk. So... I suppose if I could do that I’d get further."

Examples from the Latino sample include a 44 years old female with a diagnosis of schizophrenia (#80) that affirmed: "Y yo misma poniendo de mi parte, porque antes yo no hablaba con la gente, ni nada, con nadie, porque no me gustaba, pero ahora no, ahora yo hablo con mis amigas." [And doing my part, because I did not talk to people before, nothing, with nobody, because I did not like that. But not now, now I talk to my friends] Another example is the answer from an 48 years old female, diagnostic of major depression (#19): "Yo pienso que el estar tranquila puede ayudar de una parte. A veces me pongo a leer y eso para sentirme un poco mas tranquila." [I think that being calm may help, in part. Sometimes I read to feel more calm]. Buro-Americans seem to more inclined to believe that there are things they can personally do to help their recovery.

"Social Activities" were considered as important to recovery by 12.7% of the total sample. The basic idea of the category was to include answers that considered the importance of distractions to illness improvement. Latinos and Buro-Americans expressed themselves in
similar terms. The answer from a 38 years old Euro-American diagnosed with schizophrenia (#74) is an illustration of the category: "I think if I went out more and had more fun, I'd be a lot better. Go see friends, be around girls." A 52 years old male diagnosed with schizophrenia (#48) reported: "Si, por lo menos entretenirme, uno sin algo de hacer, entretenimiento..., pero uno solo hace así aburrido." [Yes, at least to entertain myself. Without having something to do, entertainment... one, alone, gets bored]. An additional example from a Latino patient, a 45 years old female with major depression (#34) expressed: "A veces este... salir como al parque y eso, talvez, yo diria al lago ... como una terapia, eso mejora mucho. No es decir que me cure, sino que uno puede mejorar." [Sometimes ...to go like to a park, maybe, to the lake ... as a therapy, that helps. I am not saying this would cure me, but one can get better].

The other categories, Environmental, Religious, and Economic factors were considered by less than 10% of the patients.
List of Factors that Might Contribute to Illness Recovery (Question 9)

Following the answers to the open-ended question on what would help illness recovery, patients were offered a list of possible contributing factors. Results are displayed in Table 26.

Euro-Americans and Latinos were significantly different in three causal factors: (a) "Medical, Psychiatric, or Psychological Treatment"; (b) "Religious Involvement"; and "Will Power/Volition". The first group of factors was considered as helpful by 36 (92.3%) Latinos and by 23 (57.5%) Euro-Americans, Chi-square (1, N=79)=13.02, p<.01. Religious involvement was accept as possible cause of illness by 32 (76.9%) Latinos and by 19 (42.5%) Euro-Americans, Chi-square (1, N=79)=12.67, p<.01. And last, 32 (82.1%) Latinos and 21 (52.5%) Euro-Americans confirmed the importance of Will Power in their recovery process, Chi-square (1, N=79)=10.27, p<.05.

Patients recognized the contribution of several factors, especially of "Medication" (79.7%), "Better family relations" (54.4%), "Having an occupation" (46.8%), and "Having more friends" (39.2%). A marginal significant diagnostic difference was present on this
last factor, chosen by more schizophrenics (N=20, 51.3%) than depressives (N=11, 27.5%), Chi-square (1, N=79)=7.24, p=.06.

"Getting married" or having a partner was considered by nearly a quarter of the sample (24.1%), with Latinos accepting this option more often than Euro-Americans. Significantly more were schizophrenics (N=14, 35.9%) than depressives (N=5, 12.5%) chose this factor, Chi-square (1, N=79)=13.87, p<.01. In reality, the only category not accepted by patients as a source of help was the work of faith healers, "curanderos", and similar practitioners.

To complete the CIEI section I on Explanatory Models of Illness, two open-ended questions addressed the effects of illness on patients' life and on their families.

**Effects of Illness on Patients (Question 10)**

In what concerns to the patients themselves, all answers referred to negative consequences of illness, with the exception of one case. This 34 years old Euro-American female with major depression (#14) stated: "It's made me a stronger person, for one, I think, going through these problems. And when people have problems, I can identify with them in a lot of ways. Maybe I can give
them a suggestion or they can give me a suggestion."

No statistically significant differences were found between the ethnic groups on this question, as shown in Table 27. However, several categories deserve comments.

"Physical Effects", cited by 20.2% of patients, tended to assume different characteristics in the two ethnic groups. Latinos answers included reference to somatic symptoms as: nausea, headaches, breathing problems, shaking, and stomach discomfort. An example from a 30 years old male with a diagnosis of schizophrenia (#53) is: "[Nervios] A veces no me dejan comer, se me hace un nudo en el estomago y yo no como .. dejo de comer y estoy semanas sin comer por los nervios."

"[Sometimes they [nervios] do not let me eat, I feel a knot in my stomach and I do not eat.. I stop eating, I do not eat for weeks, because of nervios]. The additional patients made allusion to nonspecific effects on the body, loss of physical strength, a skin problem, and sleeping problems.

The Euro-American answers included weight gain, aging, decreased energy, and three cases of sleeping problems. Therefore, Latinos emphasized somatic symptoms in their answers, while this was not present among Euro-
Americans. This is an important difference between the ethnic groups, being the most clear reference to somatic symptoms by Latinos on the CIBI.

"Loss of Social Relations/Isolation" was cited by 21.5% of the sample, with answers being similar in content in the two ethnic groups. Patients described not wanting to leave their houses, not wanting to see people in general, and the loss of friends and other relationships. A marginal significant difference was present here, with more depressives (N=12, 30%) reporting this effects than schizophrenics (N=5, 12.8%), \(X(1, N=79) = 3.45, p = .06\).

In "Effects on Goals", mentioned by 29.1% of the patients, a clear divergence was present in the content of Latinos and Euro-Americans responses. Complaints about not being able to work, followed by interruption of studies, were common among Latinos. This is illustrated by a 31 years old female patient with schizophrenia (#22) that stated: "Ah, lo mas peor que he estado es que no me pueda trabajar. Eh, no puedo terminar los estudios. Y que I feel like I’m out, out of something, work, es que no puedo hacer nada." [The worse thing is that I cannot work. I cannot finish my studies. ... I cannot do
anything]. Only one patient in this ethnic group (a 55 years old male diagnosed with schizophrenia, #29) made allusion to life goals: "A veces la enfermedad no lo deja a uno ser importante." [Sometimes the illness prevents the person from being important].

Euro-Americans, on the other hand, made several remarks about the illness effects on their career plans and goals, besides the comments on problems at work. Some examples are provided. A 34 years old male with major depression (#12) reported: "It’s impede my progress in a human vein. It’s prevented me from making goals. It’s totally destroyed my ambitions." A 30 years old male with depressive illness remarked: "Well, I mean, it had just kept me.. I shouldn’t say it has kept me back... I regard myself as a classic under-achiever... a mediocre person, where I could be a lot more. I have more talent to be more than I have ... especially in the work arena." Another example comes from a 32 years old male suffering from schizophrenia(#28): "I’d say, they affected... my ability to work and get a successful high paying career like I could have if I had, didn’t have schizophrenia." An additional illustration is provided by a 43 years old male with schizophrenia (#9): "Well, when I finished
college, my goal was to be a family man, and sort of a normal American dreams. Get married, have a family, own a house. Well, all that's been destroyed, so it's had a great effect on my goals."

The ethnic groups presented a similar description about "Loss of Interest/Motivation". "Yo no tengo interes de que pase nada, no tengo ambiciones de nada" [I am not interested in anything, I have no ambitions], was the description of a 52 years old female diagnosed with major depression (#31). Another patient, a 52 years old female also diagnosed with major depression (#18) remarked: "Me quita el deseo de vivir." [It takes away my desire to live] "I never felt like doing anything when I was depressed."

Among Euro-Americans, a 35 years old female with major depression (#83) stated: "Well, I don't want to do anything...There's times .. I just feel so depressed and so bad ... it's like .. it's so hard to like function and focus and do it. Ah, it's affected our sex life. I have none." It is important to notice that this category was mentioned by depressive (N=10) patients only, a highly significant difference, X(1, N=79)=11.16, p<.001.

As Table 27 indicates, "Negative Self-View/Emotion"
was the most common group of illness effects, cited by 40.5% of the whole sample. A number of responses were included in this category, whenever reference was made to negative self descriptions or to negative emotions evoked by the illness. Several Latinos described these effects in general terms as: "Bien mal" [Very bad]; "A mi todito fue malo" [Everything went wrong, for me]; "Estaba bien mala, bien mala, bien nerviosa" [I was feeling very bad, very bad, very nervous]. Specific emotions were mentioned by Latino patients such as "desconfianza" [mistrust], "descontrol" [lack of control], "miedo" [fear], "agresividad" [aggression], "anger", "inferior", "dependable", "verguenza" [shame], and "bad mood".

Euro-Americans tended to provide more details about this self-transformation as a consequence of illness. "It affected my ability to take care of myself. But sometimes I feel jealous of people who don’t have schizophrenia" (32 years old, male). A 50 years old female patient with a diagnosis of depression stated: "Probably I could have been a better mother. Better wife, better grandmother." An additional example is provided by a 47 years old female, with major depression (#75): "Well, I’m not happy... Before I got depressed and all this, I was a lot
happier about life... Nothing seemed to bother me this much, I wasn’t angry to anybody. Now, everything bothers me." On a general sense, both Euro-Americans and Latinos were similarly eloquent in expressing the negative consequences of illness in their lives.

Additional responses, not clearly related to the previous categories were included as "Other Effects". They included Death-related effects; Positive effects; No effects; Complaints about hospitalizations and positive symptoms; and Focus on family. Answers from these categories are briefly presented next.

As stated by a Latino patient, a 45 years old female with major depression (#34), the illness "A veces es tan fuerte que .. uno quisiera estar hasta muerta." [Sometimes it is so hard that I would like to be dead]. One Latino patient (29 years old, male, schizophrenia, #47) denied experiencing any significative effect of illness: "Fijate, no me ha afectado mucho. Pero ... he estado en proceso de mejoramiento y desearia salir mejor de la enfermedad." [Look, it did not affect me very much. But ... I am in process of getting better, and I wish I could overcome this].

Complaints/comments about positive symptoms or
hospitalizations, present in four Euro-American and one Latino answers, is illustrated by a 32 years old Euro-American male with schizophrenia (#28), that expressed: "There's the hassle of ...you know, like, and the discomfort of hear, having a problem coming on with schizophrenia, like the voices... " As mentioned in the previous page, one Euro-American patient referred to a positive effects of illness on himself. Finally, two Latinos and one Euro-American focused on their families when answering the question.

**Effects of Illness on Family (Question 11)**

As explained on the previous chapter, the coding categories for this question referred to the targets of illness effects. As occurred in the preceding question, answers essentially described negative effects of illness, in this case, on relatives. No significant ethnic differences were found on Effects of Illness on Family.

As presented in Table Q28, 21.5% of patients did not specify which family members they were referring to in their answers, coded as "Family". Although Latinos and Euro-Americans had similar number of responses in this category, eight and nine, respectively, a noticeable
difference was present in how each group described these effects on "Family".

Among Latinos, the predominant topics were "worry" and "suffering", considered as the primary effects on their families. This is shown in the response by the 31 years old female with schizophrenia (#22): "Yes. They used to be nervous, they didn’t sleep. They didn’t want to eat, crying all the time. They worry too much." The answer by a 49 years old (#46) female with major depression is another example: "Ajah, a ellos porque ellos sufren muchísimo cuando estoy así con la enfermedad esa ... pues no se sienten contentos cuando me ven así .. se sienten tristes." [Yes, them, because they suffer very much when I am like that, with this illness... they don’t feel happy when they see me like that.. they are sad].

A 47 years old male with schizophrenia (#58) expressed: "Ah, pues sí, porque la familia ha sufrido mucho comigo. Cada vez que me tienen que hospitalizar y me llevar alla despues, ellos tienen que ir, todos los dias visitar y todo.." [Yes, because my family has suffered a lot with me. Each time I am hospitalized they have to go, everyday to visit me and everything ...]. One last example (A 25 years old, male, schizophrenia) is:
"Yeah, 'cause they all care for me...they all worry about me."

Two Latino patients presented a different perspective. According to one of them (30 years old, female, with schizophrenia, #55), she goes to places with her family, and soon wants to leave: "Entonces ellos se ponen incomodos." [Then, they become upset (?)]. The other Latino patient (A 35 years old, male, schizophrenia, #50) started by saying "They're all for me", but added "I'm a pretty big impact here."

(Interviewer: In a good way, bad way?) "Maybe both."

(What's good?) "This will be an experience they'll never forget. Maybe they'll stay off of drugs, younger kids here. I certainly hope so." (Is there anything bad about how you are now?) "I'm a pretty big disturbance. I'm always telling everybody what they should be doing... I think my temper has gone to the kids."

In the case of Euro-Americans, on the other hand, themes were more spread, from worrying and concern to resentment and anger. As the response by a 45 years old female diagnosed with schizophrenia (#63) shows: "They worry about me getting sick. They call me on the phone..." A different example is provided by a 38 years
old male with schizophrenia (#74): "Yes, I think it has. I think it’s kind of put them on edge with me. That they’re a little bit mad at me, you know. I would say I have managed to do that." Another patient (34 years old, male, schizophrenia, #16) described his family as upset, as a consequence of a drug study he was in, with no improvement: "I think they have to give it time to find the right medication for me." A 50 years old female with major depression (#79) remarked: "Yes, I know it has. I guess for a while, I was a bitch on wheels: very argumentative, demanding. I feel bad that I put them through so much..."

"Parents" were also cited in 21.5% of the responses. The answers on this category followed the same pattern described in relation to "Family in General". There was a comparable number of responses in both ethnic groups, but the topic of the concerns was diverse. Latinos tended to report feelings of worry, suffering, and care by their parents. A 50 years old male with a diagnostic of schizophrenia (#52) reported: "A mi madre fue la que le afecto, que yo al ausentarme por ese tiempo, pues ella pensaba y sufria." [It affected my mother, because during my absence, she was thinking and suffered].
A somewhat exception was present in the description of a Latino patient (39 years old, female, schizophrenia, #88): "Bueno, mi mama nunca queria que yo me casara, entiendes? Porque ella decia ..que tenia que ser un hombre ..compreensivo, paciente, porque soy tremenda, dejame decirle." [Well, my mother didn’t want me to get married, you know? Because she said ... that it would need to be an understanding and patient man, because I am terrible, let me tell you].

Euro-Americans, as in the "Family" responses mentioned above, described a diversity of feelings/emotions they presumed were present in their parents: "strain", "tension", "arguing", "yelling", "frustrating", "resentment", and other ones. A 22 years old male diagnosed with schizophrenia (#60) described: "My mom, she used to hate herself, because she thought she’d done something to me. Now that she found out, she doesn’t, no longer hate herself." About his father he said: "He was disappointed. He thought I was bright intelligent boy, nothing would go wrong." As could be expected, significantly more schizophrenics (N=12, 30.8%) referred to Effects on Parents when compared with depressives (N=5, 12.5%), Chi-square (1, N=79)=3.90, $p<.05$. 
"Effects on Children" were present in 19% of patients' responses. Latinos' children were described by patients as worrying, helpful, but sometimes as also complaining about the parent's behavior. Some patients were concerned that their children had or would have similar problems. In reality, this was present in both ethnic groups.

An example from a 44 years old patient with major depression (#3) is provided: "A veces si, dicen 'Mami, tu eres nerviosa'. Quiza de esta manera como yo he sido, pues ellos se han creado asi tambien nerviosos, ellos son nerviosos tambien.. Ellos parecen que cojieron todos esos nervios mios... todos lo tres son nerviosos." [Sometimes, yes. They say, 'Mom, you are nervous.' Maybe the way I have been...because they were raised like this, also nervous, they are nervous too. It seems that they got all my nervousness... All of them are nervous].

Euro-American children were seen by the patients as experiencing a range of emotions as the Latino children were. "The kids worried a lot when I was in the hospital, and .. now they're sort of afraid to come to me with things and ask me stuff. They always go to their dad" (A 32 years old, female patient with major depression, #25).
A 24 years old female diagnosed with schizophrenia reported: "I'd say my son, D. He thinks they're rats too. I tell him, 'Don't go in there. There are rats in there.' And I got him believing that there are rats. So, I do have... I do honestly believe that I'm affecting him... (Does he seem real scared and all?) Oh, yeah. He won't go in this kitchen. He won't even go in the bathroom."

Sometimes the patient emphasizes his/her changes toward the children, as in: "When I start feeling the pressure and everything, I sometimes get a little sharp with the kids as far as yelling. I can raise my voice pretty loud... you can see their eyes get wider" (A 44 years old, Euro-American male, with major depression, #8). Or as in the answer by a 33 years old female with major depression (#68): "Toward my kids, 'cause when I'm depressed, I don't hug them enough. I don't want to be bothered with them, I lose my temper with them."

Depressive patients reported more effects on their children (N=11, 27.5%) than schizophrenics did (N=4, 10.3%), an expected result, Chi-square (1, N=79)=3.81, p=.050.

"Spouses" were seen as affected in 17.7% of the
cases. In both ethnic groups, they were described as similarly affected by the patient's illness. Absence of sexual life was reported by Latinos and Euro-Americans. Two Latino patients considered that their husbands had also nervous, possibly as a consequence of their illness. As could also be predicted, more depressives (N=11, 27.5%) than schizophrenics (N=3, 7.7%) considered this effect, Chi-square (1, N=79)=5.31, p<.05.

In contrast with the results from the previous question, were all the patients reported being affected by the illness, 15.2% of the sample reported no effects of illness on family members.

**Summary of the CIBI Results by Ethnicity**

When describing their life situation, Euro-Americans tended to provide more illness responses than Latinos. Significantly more Mental Illness, Physical Illness and Illness Implicit were mentioned by Euro-Americans, while Nervios was only cited by Latinos. Euro-Americans reported having more health problems than Latinos, but the difference was not significant.

Again, when asked about their health problems or the problems they were receiving treatment for, Euro-Americans had significantly more Mental and Health Habits
Problems than Latinos. Nervios, on the contrary, was cited exclusively by Latinos, a highly significant ethnic difference. However, when directly asked about Mental and Nerves/Nervios problems, the majority of the Latino and Euro-American groups responded positively.

On the questions about the relationship between Mental, Nerves/Nervios, and Emotional problems, it seemed that while Euro-Americans tended to more clearly distinguish Mental from Emotional problems, for the Latinos this occurred between the notions of Mental and Nervios. Nervios and Emotional seem to be considered as different notions for both Latinos and Euro-Americans. While Emotional was often associated with feelings connected with life events, Nervios was basically situated in the body, as "shaking" exemplifies.

The results of the open-ended question on Causes of Illness (question 5) showed only two significant differences: on Family Conflicts, cited more often by Euro-Americans, and "Don't Know" responses, also more common among Euro-Americans. Biological Factors were not significantly higher among Euro-Americans as had been predicted. However, there was a trend in this direction. Death-related factors were mainly mentioned by Latinos,
what also occurred with some of the factors included as "Other" causes.

When confronted with a list of possible causes (Question 6), both ethnic groups endorsed several of these options, including Past Family Problems (as a child and as an adults) Traumatic Events, Personal Losses, Disillusionment, among others. When the answers from Heredity and Chemical Imbalance are combined as biological factors, a significant ethnic difference occurs, with Euro-Americans accepting them more than Latinos.

The majority of the total sample believed in Illness Recovery or Improvement. Latinos answered more positively to this question (#7) when compared with Euro-Americans. However, this difference was not significant. Subsequently, several factors were spontaneously described as contributors to illness recovery (question 8). Treatment was highly cited by both groups, specially Euro-Americans, and the importance of Relationships, Activities, Social activities, and Self-changes was also highlighted by patients, among other factors.

When confronted with a forced-choice list of factors that could help recovery (question 9) three factors were
significantly different in the ethnic groups: Medical/psychological/Psychiatric treatment, Religious involvement, and Will power. All three cases were endorsed more often by Latinos. Except for "healers in the community", all additional factors were fairly accepted by patients from both ethnic groups.

Patients were asked about the Effects of Illness on themselves and on their family members. No significant ethnic differences occurred in these questions (#10 and 11). However, differences were present in the content of some response categories, briefly described next.

In relation to Effect on Self (question 10), the ethnic groups differed in the content of Physical Symptoms. Latinos emphasized somatic complaints, what was not present among Euro-Americans. Divergence also occurred in relation to Effects on Goals. While Latinos complained about not being able to work and study, Euro-Americans provided a more sophisticated version of negative effects on their career goals, life plans in other words. On Negative Self-View/Emotion, Euro-Americans were inclined than Latinos to give more detailed descriptions of such consequences, although described as similarly negative for both ethnic groups.
Other categories were described, as Loss of social relations, Lack of motivation/interest, Medication side effect, and others.

On the last CIBI question, on Effects of Illness on Family, differences in content of responses occurred in the categories Family in General and Parents. Latinos’ descriptions of these effects emphasized feelings of worry and suffering by relatives. Euro-Americans, by contrast, represented their family and parents as experiencing a more broad range of emotions, including worry, anger, resentment, etc. In addition, spouses, children, and siblings were also cited as suffering effects from the patient’s illness, and similarly reported by Euro-Americans and Latinos.

Summary of CIBI Results by Diagnosis

Not many diagnostic differences were present on the CIBI. In relation to Causes of Illness (question 5) three factors were significantly more cited by patients with major depression: Family Conflicts, Marital Conflicts, and Sexual/Physical Abuse. On the other hand, Other Causes were significantly more described by patients with schizophrenia. In addition, a marginally significant difference occurred on Addictions, reported more often by
patients with schizophrenia.

In relation to the list of causes presented to the patients (question 6), those with major depression endorsed significantly more Economic Problems, Personal Losses and Stress. There was also a marginal significance favoring depressives on Past Family Problems as an adult.

When confronted with the list on factors that could help recovery (question 9), patients with schizophrenia, that are most often single in this study, were significantly more inclined to indicate the importance of Getting Married or being involved in a relationship to their improvement. A marginal significance on Having More Friends occurred on the same direction.

From the effects of illness on patients, Loss of Motivation/Interest was only mentioned by patients with depression, a significant difference. Considering that this is a main symptom of major depressive disorder, it interesting to observe that the CIEI could obtain these reports through an open-ended question.

On the last question (#11), Effects of Illness on Family, the diagnostic groups differed on three categories: Parents, Spouses, and Children. As could be expected, spouses and children were more mentioned by
patients with major depression, while parents were present in the descriptions by patients with a diagnosis of schizophrenia.
CHAPTER IV
DISCUSSION

The present study was based on the observations that individuals from different cultural backgrounds may experience distress and mental disorders in different ways. Conceptions of mental illness are not uniform around the world, and patients' symptomatic expression transcend the biological basis of mental disorders. In the study reported here the illness experiences of Latino and Euro-American patients diagnosed with schizophrenia and major depression were examined on the basis of their responses to the Brief Symptom Inventory (BSI) and the Context of Illness Experience Interview (CIBI).

Latinos have been described in the literature as reporting more symptoms and/or experiencing higher level of distress on psychiatric inventories (Canino et al., 1987). Their distress tends to be expressed by means that include or even emphasize somatic symptoms (Angel & Guarnaccia, 1989). The present study shows both similarities and differences in Latinos' and Euro-Americans' conceptions and experience of their mental illness. To a lesser degree, the results also provide information on diagnostic contrasts. Ethnicity and
diagnosis are addressed next, followed by a commentary on the use of quantitative and qualitative data in cross-cultural studies of mental disorders.

Comments on Ethnicity

Taking into account the results from patients' data on both the BSI and the CIBI, it is not possible to make a simple statement that, in this population, Latinos experience higher level of symptomatology and distress than Euro-Americans. If the BSI results actually point to Latinos' higher rates of distress, the CIBI data allow us to question if such conclusion is not too simple.

The use of both a quantitative and a qualitative assessments in this cross-cultural study provided an opportunity to observe how differences may occur as a function of the nature of the assessment instruments. The BSI, a self-report inventory that intends to measure the level of symptomatic distress in clinical and 'normal' populations, was in the present case administered by the interviewer to avoid problems due to illiteracy or unfamiliarity with similar instruments. Therefore, it was administered in the context of an interview.

Even so, the BSI is distinct from the CIBI, that is directed to patients' conceptions about their psychiatric
condition. The CIBI includes open-ended and forced-choice questions that usually complement each other and provide a vast amount of information. The completion of the whole questionnaire takes from two to several encounters. On the CIBI, patients may reveal details that give meaning to their answers, which a multiple choice instrument does not allow. The BSI and the CIBI disclose different parts of the patients' experience with their mental illness. In this section, the major BSI findings are initially discussed, followed by those from the CIBI.

The hypothesis that Latinos would report a higher number of symptoms (PST) on the BSI in comparison to Euro-Americans was not confirmed as such. Despite studies showing that Hispanics in general, and Puerto-Ricans in particular tend to report more psychiatric symptoms than other ethnic groups (e.g., Guarnaccia et al., 1990), the results from this study did not corroborate those findings.

On the other hand, a trend for a significant ethnicity x diagnostic interaction on number of symptoms (PST) showed that Latino depressives reported higher number of symptoms on the BSI, in comparison to Latino schizophrenics, Euro-American depressives, and Euro-
American schizophrenics. It is possible, therefore, that instead of Latinos in general, those suffering from major depression tend to report more symptoms in psychiatric inventories such as the Brief Symptom Inventory.

Some epidemiological studies can be mentioned in a tentative search for data that could corroborate or refute the hypothesis that Latino depressives may report more symptoms. Data from the Epidemiologic Catchment Area study, ECA (Robins & Regier, 1991) showed that the lifetime prevalence of major depression among Hispanics was somewhat lower than that of whites. The one-year prevalence for major depression was a little higher for Hispanics in comparison with whites, but not significantly different. The majority of Hispanics were, however, of Mexican heritage, with Cubans and Puerto-Ricans being much less represented.

The epidemiologic survey carried out in Puerto Rico (Canino et al. 1987), found rates of major depression comparable with those from the ECA results. On the other hand, the Hispanic Health and Nutrition Examination Survey (as cited in Guarnaccia et al., 1990) revealed a higher prevalence of major depression episode, based on the Diagnostic Interview Schedule (DIS), among Puerto-
Ricans in New York than among Cubans-Americans or Mexican-Americans. However, Guarnaccia and colleagues reminded the reader that Puerto Ricans in New York tend to be more socially disadvantaged than other Latino groups.

From these epidemiology studies there is no clear indication that Latinos suffer from more psychopathology than other ethnic groups. Canino et al. (1987) also questioned the conclusion that Puerto Ricans have unusually high rates of mental illness from studies that assessed psychiatric symptoms without explicit connection to diagnostic systems.

The idea that Latinos tend to report higher level of symptomatic distress in comparison with other ethnic groups was confirmed in the present study by the results on the Global Severity Index. The GSI indicated that Latinos experienced significantly higher level of distress than their Euro-American counterparts on the BSI.

In relation to the nine BSI dimensions, it was predicted that Latinos would score higher than Euro-Americans at least on Somatization. This hypothesis was confirmed. In addition, Latinos scored significantly
higher than Euro-Americans on Obsessive-Compulsive, Anxiety, and Phobic Anxiety dimensions. In two of them, Somatization and Anxiety, an ethnicity x diagnosis interaction was also present, with Latino depressives exhibiting significantly higher scores than the other groups. The same interaction and results occurred with Hostility.

However, the results from the multiple regression as presented on page 68, showed that, from the four BSI scales where significant ethnic differences had occurred, only two, Obsessive-Compulsive and Anxiety, could provide an additional contribution to differentiating Latinos and Euro-Americans. Therefore, the BSI does not appear as a good instrument for contrasting Latinos and Euro-Americans in distinct dimensions of symptomatic distress.

And last, an item-level analysis on scales where only significant ethnic differences had occurred (Obsessive-Compulsive and Phobic Anxiety) indicated that Latinos had higher scores in most symptoms. An item-level analysis on the ethnicity x diagnosis interaction on Somatization, Anxiety, and Hostility showed Latino depressives with significantly higher scores. To summarize, Latinos, and in some situations Latino
depressives, tended to report higher level of distress on the BSI. Considering that 75% of the Latino depressives were women, these results also suggest that in this ethnic group women tend to experience or complain more about symptomatic distress.

The results from the factor analysis confirm the hypothesis that the BSI is more a measure of general distress then a measure of nine different symptom dimensions, in both Latinos and Euro-Americans.

At least two group of explanations may be evoked to approach the findings that Latinos, and in some situations Latino depressives have higher level of reported distress on the BSI. The higher BSI scores could suggest that (1) Latinos really suffer from higher level of psychopathology; or (2) A particular response style would lead Latinos to culturally elaborate their report of distress, that would be in fact similar to those from different groups. Each of these hypotheses is addressed next.

In relation to the first hypothesis, a number of factors could most probably influence the rates of psychiatric disorder among Latinos. Their condition as immigrants in the United States, racial prejudice, their
social isolation, and low socioeconomic status are some examples. According to Guarnaccia et al. (1990), "Puerto Ricans in New York experience greater socioeconomic pressures than other Hispanics and are one of the most disadvantaged ethnic group in the United States" (p. 1455).

However, both "social causation" and "social selection" theories are referred to when efforts are made to understand these possible contributors to psychopathology. In relation to immigration, for example, Dohrenwend (1966) pointed out: "Does the impact of the strange environment produce disorder, or are sick people more likely to migrate?" (p. 14). Therefore, an association between sociodemographic characteristics and mental disorders still does not allow for a conclusion about cause and effect.

In respect to the second group of explanations, that higher level of reported distress is associated with response style, "social desirability" is one of the factors that could be implicated. According to this notion, if the BSI items were not seen as socially undesirable by Puerto Ricans, they would be more willing than Euro-Americans to admit the intensity of their
symptom distress. In the previously cited study by Dohrenwend (1966), four ethnic groups were compared, African-Americans, Jewish, Irish, and Puerto-Ricans. Contrary to what occurred with Puerto Ricans, African Americans' answers were close to the norms of the Jewish and Irish groups. African Americans were seen as possibly resisting to admit characteristics they judged as socially undesirable. According to Dohrenwend's argument, Puerto Ricans in his study seemed to consider symptoms as less social undesirable than the other groups did - probably because they were more common in this ethnic group, what could actually indicate higher rates of psychopathology.

Guarnaccia et al. (1990) had a distinct explanation for these results. They suggested that the 22-item scale used in some Puerto Rican studies included several items representative of nervous, what had possibly lead Puerto-Ricans to respond more positively to the inventory. This possibility was examined in the present study. Four of the eight symptoms described by Guarnaccia, Rubio-Stipec, and Canino (1989) as related to nervous are present on the Brief Symptom Inventory: stomach disturbance ("Nausea or upset stomach" on the BSI), appetite disturbance
("Poor appetite"), sleep problems ("Trouble falling asleep"), and "Trouble concentrating".

A comparison of the ethnic groups on these four symptoms revealed only one significant difference, on "Trouble concentrating", with Latinos scoring higher than Euro-Americans. Therefore, there is no evidence that higher level of reported distress by Latinos on the BSI could be connected with the presence of nervios in the inventory. It is not clear, on the other hand, how well these four symptoms represent the notion of nervios. For example, "Trouble falling asleep" may not the best way to assess sleep problems that are mentioned as part of nervios.

As a different explanation associated with response style, Latinos could have reported higher level of distress on the BSI due to a tendency to prefer extreme responses in comparison with non-Hispanic whites, as suggested by Marin et al. (1992). Level of acculturation of Latinos and education were implicated by Marin et al. in these differences.

In these 'response-style' hypotheses therefore, cultural factors appear as possibly affecting higher reported rates of symptomatic distress. As pointed out by
Guarnaccia et al. (1990), "Culture structures how people respond to symptom questions and how they organize symptoms into syndromes" (p.1452).

It should be mentioned that the Latinos that constituted the sample are mostly Puerto Ricans. Therefore, the implications of this study should not be extended to other Latino groups, that could have distinct experiences with mental illness.

When it comes to the CIEI, there is no evidence that Latinos experience more distress than Euro-Americans. There is a tendency for Euro-Americans to report more problems. Euro-Americans mentioned significantly more mental and physical illness when describing their life situation. They also affirmed having health problems more often than Latinos. The nomination of their problems included significantly more mental illness, physical illness, and health habits problems in comparison with Latinos’ emphasis on nervios. Euro-Americans also reported more causes for their illness, and accepted suggested causes more often than Latinos did.

Causes of illness were addressed with an open-ended and a forced-choice question (#5 and #6). Family Conflicts were significantly more cited by Euro-
Americans. There was a marginally significant difference on Biologic Factors, more often mentioned by Euro-Americans. On question 6, if the categories Heredity and Chemical Imbalance are combined as "Biological" factors, the difference between the ethnic groups is significant at the .01 level. This confirms, to some extent, that the hypothesis that Euro-Americans would emphasize biological causes of mental illness was correct, and probably reflects the current advance in the United States of biological perspectives in the etiology and treatment of mental disorders.

In the next paragraphs, results from the CIBI questions involving recovery from illness (questions # 7 to # 9) are discussed. When asked, "Do you think you will get better or recover from your ...(illness)?", Latinos responded more positively than Euro-Americans, a nonsignificant difference, however. In the subsequent question (#8) "What do you think would help you get better or recover from your ...(illness)?", Euro-Americans spontaneously described more factors than Latinos. Finally, when a list of possible factors that could affect recovery was presented to the patients, Latinos accepted significantly more three of them:
Medical, Psychiatric, and Psychological Treatment; Religious Involvement; and Will Power. In general, more Latinos endorsed the options than Euro-Americans.

The results from these three questions on recovery do not show a clear pattern; neither Latinos nor Euro-Americans exhibited a homogeneous view about their future, an optimistic or pessimistic one. Were Euro-Americans generally more aware of the limitations in recovering from a psychiatric disorder? Could a higher level of information about mental illness lead Euro-Americans to cite possible factors implicated in recovery, even if not applying to their case?

Latinos were inclined to agree with more of the factors suggested by the interviewer in helping recovery, presented on question 9. This higher acceptance of the interviewer's suggestion could be an example of what Marin et al. (1992) described as "acquiescence", a tendency to agree with options, independent of their content. Question 9 is unique in the sense that the interviewer "offers" several options that may be seen as facilitating the recovery process. According to Ross and Mirowsky (1984), giving socially desirable responses might be more common in social groups that are relatively
powerless. This is certainly the case of this Latino sample.

Factors that could help the patient in getting better/recovering were not similarly mentioned or accepted within each ethnic group. On question 8, both Euro-Americans and Latinos spontaneously cited "Treatment" more than any other factor. On question 9, Euro-Americans gave priority to "Medication" as a source of help, while Latinos similarly accepted Medication, Medical, Psychiatric or Psychological Treatment, Religious Involvement, and Will Power. Although the numbers are probably too similar to allow inferences, it could be questioned if Euro-Americans did not divide contributors to recovery as being "Medication" x "Other" factors, while Latinos tended to "spread" their hope in different domains.

Considering that Latino patients are from lower social class in comparison with Euro-Americans, they could have mentioned economic improvement as being important for their recovery (question 8). This was not the case. Even when questioned about causes of illness, patients did not spontaneously allude to this issue. When specifically asked about causes of illness, Economic
Problems were similarly endorsed by both ethnic groups. Although economic concerns are certainly part of Latinos' life, they were not spontaneously considered as causes of illness. These results suggest that culturally distinct groups may ultimately weigh different factors in their lives when trying to explain and deal with mental illness.

It is surprising how much Latinos massively denied the importance of "Healers in the community" ("Curanderos", Espiritistas") to the process of illness recovery. Based on data from an epidemiological survey in Puerto Rico, Hohmann et al. (1990) found that 18% of the population of the island had consulted a spiritist at least once. According to the authors, estimates from clinical samples showed that from 30% to 80% of patients had visited a spiritist at some point. Harwood (1987) pointed out that spiritism is common among Puerto Ricans and that "Consulting a spiritist is a culturally accepted method for coping with spiritually caused problems" (p. 201). The findings about this issue in the present study suggest that visiting spiritists or admitting the influence of a spiritual domain in illness was not regarded as a socially accepted practice of Latinos in
the United States.

There were no significant differences in the number and modalities of Effects of Illness on Self and Effects on Family described by the ethnic groups on questions 10 and 11. Latinos volunteered a few more effects on both situations. Some points in these questions deserve being commented on, however.

In relation to Effects on Self, Euro-Americans and Latinos presented a clearly articulated and comparable description of the numerous ways or domains in which their illness had severe negative consequences, many of them possibly permanent. Despite this general similarity, differences occurred, as for example, in the category "Physical Effects". While Euro-Americans described sleeping problems, weight gain, aging and decreased energy, Latinos emphasized the presence of somatic symptoms in their lives. These spontaneously mentioned symptoms constitute an additional evidence that bodily complaints tend to occur among Latino patients associated with the experience of distress or mental illness. As previously noted, the BSI also confirmed this hypothesis.

An interesting ethnic difference occurred on Effects on Goals, a category of question 10 on Effects on Self.
While Latinos focused on their inability to work and study, Euro-Americans described more strongly the illness consequences on their life goals and career plans. It is possible that a high expectation of professional success among Americans, as members of a developed society, represents an extra onus to persons with mental illness. Not being able to perform specialized functions could influence Euro-American patients to feel in a marginal social position.

Patients' descriptions of Effects on Family displayed an important distinction on how the ethnic groups assume their family members in general and parents had been affected. Latinos highlighted feelings of suffering and worry by these relatives, while the broader range of reactions mentioned by Euro-Americans suggested more conflictive relationships. "Worry" and "suffering" could be part of a culturally expected role of relatives caring for persons with mental illness among Latinos. Results from interviews with family members in the SADALA project will certainly shed some light on this topic.

Comments on Diagnosis

The diagnostic groups could be expected to differ on three BSI scales, Depression, Paranoid Ideation, and
Psychoticism, because these dimensions represented symptoms cluster related to Major Depression and Schizophrenia. The results showed that, on the Depression scale, a significant diagnostic difference was present, with patients with major depression scoring higher than those with schizophrenia; this difference was also significant in four of the six Depression items. Therefore, this scale seems to be reasonably good in differentiating depressive from schizophrenic patients.

Paranoid Ideation and Psychoticism, on the other hand, did not discriminate patients with schizophrenia from those with depression in either ethnic groups. In reality, no significant difference nor interaction were associated with these two dimensions. Clark and Friedman (1983) had reported that the SCL-90 profiles of psychiatric outpatients with anxiety, depression, and schizophrenia were very similar. In this sense, Paranoid Ideation and Psychoticism do not seem adequate in discriminating patients with depression from those with schizophrenia.

In addition to the Depression scale, the only other dimension that significantly differentiated the two diagnostic groups was Obsessive-Compulsive, where
patients with major depression scored higher. Even so, only two out of six items had a diagnostic difference also favoring depressive patients. The BSI does not seem very useful to discriminate diagnostic groups, what is probably in accord with its more real status as a measure of general distress than of different symptom clusters.

Not many significant diagnostic differences were present on the CIBI in this study. It is interesting, however, that some environmental (life events-related) problems were emphasized by patients with depression in the questions related to causes of illness. In the open-ended question 5, patients with depression mentioned significantly more Family Conflicts, Marital Conflicts, and Sexual/Physical Abuse than those with schizophrenia. In question 6, those with depression reported significantly more Economic Problems, Personal Losses, and Stress as causes of illness than those in the other diagnostic group.

A marginal significant difference was present for Past family Problems as an adult, also favoring patients with depression. Despite the increasing advance in biological theories of mood disorders, life events seem to be considered as the preponderant causal factors in
major depression disorder in this population.

Patients with schizophrenia tended to believe, significantly more often than those with depression, that Getting Married would contribute to their improvement. The majority of schizophrenia patients in this sample were never married. Despite wishing a marital relationship, these patients most probably face serious problems in establishing them.

Loss of interest/motivation, a basic symptom in major depression by the American Psychological Association Diagnostic and Statistical Manual of Mental Disorders (1994), was mentioned by 1/4 of depressive patients as an Effect of Illness on Self. It is not clear if these subjects referred to past or present experiences, allowing us to suppose that, despite being on medication, some depressive patients are still symptomatic.

**Socioeconomic Differences and Mental Illness**

It has to be considered that the ethnic groups differed significantly in Social Class, with Latinos being less favored than Euro-Americans. The differences between these groups on the BSI and on the CIRI have therefore to be balanced with the possibility that social
class might influence rates of psychopathology. According to the ECA studies (Robins & Regier, 1991), for example, schizophrenia is nearly five times more common in the lower socioeconomic level than in the higher one. On the other hand, the ECA results did not show a clear association between mood disorders and social economic level. Differences that may be thought of as resulting from cultural specificities, could in reality be associated with social and economic contrasts between Latinos and Euro-Americans.

Quantitative and Qualitative Data

Quantitative studies may suggest that more accurate material is collected about participants, as discrete information is assessed. The process of data collection and analysis is more straightforward and the interpretation of the results seems to be a clear procedure. It is assumed that subjects can provide information about themselves, being able to choose from multiple options what represents their point of view.

However, the analysis of qualitative data showed that subjects are not completely sure about their ideas and positions, and that contradictions are not rare. The CIEI results illustrate how complex it is to access
patients' conceptions of life and illness. There is, certainly, an expectation that patients can talk for themselves, presenting their self-knowledge through open-ended and complementary questions. Some could argue that difficulties may occur due to the fact that, in this study, subjects are chronic psychiatric patients that may lack cognitive abilities to face such complex questions and express coherently their point of view. This is possibly true. However, it could be also argued that even "normal" individuals would have problems in responding to questions such as "How would you describe your current life situation?"

The encounter of patient and interviewer for the completion of the CIEI has a clinical dimension where participants affect each other's behavior. In the same way as patients may fear exposing their intimate thoughts or even avoid discussing topics that would touch painful or disturbing memories, interviewers may change the scheduled questions and their approach in response to unpredicted situations. As an illustration, when asked "What do they have you on Haldol for?", the patient's response, an Euro-American male with schizophrenia (#89), was: [Outburst] "YOU TELL ME! You know, I would like some
answers about that. Man, there’s nothing .. there’s never been anything wrong with me. (...) There’s nothing missing from me. I don’t know what the hell I’m on medication for. (So what did they tell you?) Who knows? They don’t tell you. I got a biopsy done on my lip. And the doctor that did the surgery told me what my diagnosis was. (What did he say?) And no other doctor would tell me. (What did the doctor say?) Or they just never did. Paranoid schizophrenia."

Later, the patient would insist that there was nothing wrong with him, denying any nerves or mental problems. Some questions, for example about effects of illness on his life, were not asked to this patient. In this sense, the interview schedule is adapted to what the real situation permits.

As mistakes can be made in problematic interviews, the same occur in respect to the coding of qualitative data on the CIBI. There is always the chance of misinterpreting the patients’ words. As an example, some responses to question 1 that were not coded in any of the illness categories, made reference to suffering, sadness, crying or other feelings. The risk, on the one hand, was to underscore possible real references to psychiatric
symptoms. On the other hand, negative expressions of live events could be wrongly interpreted as mental illness.

Such dilemma is faced by psychiatry itself. As Kleinman (1988) and Marsella et al. (1985) pointed out, depression can be a psychiatric disorder, a symptom, or a normal reaction. There is always the risk of diagnosing as depression or dysthymia situations associated with poverty, physical illness, social exploitation, etc.

A few words are said about the use of the BSI and the CIEI in cross-cultural studies, limitations and advantages. The Brief Symptom Inventory, despite not differentiating diagnostic groups, may help identify individuals or groups with higher levels of general symptomatic distress. The inventory is simple to administer and score, and the interpretation of the results against subject norms is straightforward (Derogatis, 1993). However, the BSI is limited in the cases where a more broad picture of the patient’s experience of illness is essential. The Context of Illness Experience Interview can provide such information, helping elucidate how the person situates himself or herself in the past, present, and future reality of illness. A great investment in the CIEI
application, analysis, and interpretation of data is required, especially if the focus of attention is on the material from the open-ended questions. In a research setting, each measure contributes with an aspect of the person's self view, assisting investigators to get a better estimate of his/her life.

Nervios and Mental Illness

"Nervios" appear as an important notion for Latinos, corroborating literature on the topic. Nervios is not necessarily similar to mental problems, that was usually seen by Latinos, and also by Euro-Americans, as a more severe condition. Nearly 50% of the Latino patients defined their problems as Nervios, described as a wide range of experiences: shaking, stomach and eating problems, headaches, transitory reactions, lack of control, sleeping problems, anxiety, crying, irritability, "losing one's mind", and "seeing things" (hallucinations). Therefore, Nervios cannot be simply equated with schizophrenia, mood disorders, anxiety, panic attacks, and somatoform disorders, among other disorders.

As suggested by Jenkins (1988a) when investigating schizophrenia among Mexican-Americans, the notion of
Nervios may help reduce the distance between patients and relatives, and possibly their relation to the community. Concepts as "Nervios" among Puerto Ricans and "Emotional" among Euro-Americans, distinct notions in this population, do not seem to have the strong negative connotation that the term Mental Illness convey. Mental Illness was very much associated with brain or biological dysfunctions, with an enduring condition, conceptions that may also have an enduring psychological and/or social effect on individuals. However, while some Latino patients described their problems as "nervios", Euro-Americans could not consider they had just "emotional" problems, leaving them with the option of being "mentally ill".

Final Comments

The contribution of cultural factors to mental disorders has been recently recognized in the DSM-IV (1994), widely used in the United States to diagnose persons from different cultural background and ethnicities. This is certainly an advance in relation to the position that psychiatric categories generated in the Western developed world can be universally applied, because mental disorders are universal. In such
perspective, little consideration is given to particular modes of expressing distress and dealing with mental illness.

The inclusion of culture-bound syndromes in the DSM-IV represents an important step to the recognition that mental illness, despite its biological constitution or predisposition, finds expression in individuals immersed in particular social and cultural contexts.

The consideration of cultural factors in mental disorders will probably increase attention to errors in diagnosis and treatment plans. As stated by Sue and Sue (1987), "Cultural differences provide a challenge to researchers and to clinicians performing personality assessments or clinical interviews with ethnic minority clients" (p. 486).

In addition, attention to variation in the illness experience of individuals from different ethnic backgrounds should not obscure the recognition that within-group divergences most probably occur and need to be investigated.
REFERENCES


Appendix 1

BSI Dimensions and Items

1. SOMATIZATION (SOM): Reflects distress originating from perceptions of bodily dysfunction. Complaints center on respiratory, gastrointestinal, and cardiovascular systems. Pain and discomfort of the gross musculature and other somatic equivalents of anxiety are included (Items 2, 7, 23, 29, 30, 33, and 37).

2. OBSESSIVE-COMPULSIVE (O-C): Focus on thoughts, impulses, and actions that are experienced as irresistible by the individual, but are of an unwanted nature (Items 5, 15, 26, 27, 32, and 36).

3. INTERPERSONAL SENSITIVITY (I-S): Items are centered on feelings of personal inadequacy and inferiority, especially in comparison with others (Items 20, 21, 22, and 42).

4. DEPRESSION (DEP): The dimension reflects a range of signs and symptoms of clinical depression. Symptoms of dysphoric mood and affect are included, as well as lack of motivation and interest in life (Items 9, 16, 17, 18, 35, and 50).

5. ANXIETY (ANX): Nervousness and tension are represented in this dimension, besides panic attacks and feelings of
terror. Somatic correlates of anxiety are also included (Items 1, 12, 19, 38, 45, and 49).

6. HOSTILITY (HOS): Thoughts, feelings, and actions characteristic of anger are present in this dimension (Items 6, 13, 40, 41, and 46).

7. PHOBIC ANXIETY (PHOB): Items focus on manifestations of phobic behavior: signs of a fear response to a person, place, object, or situation disproportionate to the stimulus (Items 8, 28, 31, 43, and 47).

8. PARANOID IDEATION (PAR): The dimension is concerned with paranoid behavior as a disordered mode of thinking, represented by delusions, grandiosity, suspiciousness, hostility, and fear of loss of autonomy (Items 4, 10, 24, 48, and 51).

9. PSYCHOTICISM (PSY): A graduated continuum from mild interpersonal alienation to florid psychotic status is represented in the Psychoticism dimension (Items 3, 14, 34, 44, and 53).
Appendix 2

CIEI questions: Section I, Explanatory Models

1. How would you describe your current life situation?
2. Do you think you have a problem with your health?
3. What do you call your health problem?
4a. Do you think you have a problem with your nerves?
4b. Do you think you have a problem with your mental health?
4c. Do you think there is a difference between a problem of nerves (nervios) and a mental problem?
4d. Do you think there is a difference between an emotional problem and a mental problem?
5. What do you think has caused your current (health) problem(s)?
6. Now I am going to run through a list of things that may have contributed to or caused your current (health) problems. I would like to know whether you think any of these may have been a cause of your problem.
   a. Current family problems
   b. Past family problems
      As an adult
      As a child or adolescent
   c. Heredity or genetic factors
d. Economic worries or problems

e. Drugs or alcohol

f. Supernatural or psychic forces, the devil or Satan

g. A frightening or traumatic event

h. Personal losses or tragedies

i. Disillusionment with a person (or people)

j. Chemical imbalance in the brain

k. Anything else that you think has contributed to your current health problem?

l. Could you have gotten it from anyone?

You mentioned several things that you think may have caused or contributed to your health problem, including .... [interviewer summarize factors mentioned by the patient]. Which of these things do you think is the most important factor contributing to the problem?

7. Do you think you will get better or recover from your ___________ [mental illness]?

8. What kinds of things might help you to get better?

9. I am going to read you a list of things that sometimes help people get better and I would like you to tell me whether you think any of these would help you.

a. Medication
b. Medical, psychiatric, psychological treatment

c. Better family relations

d. Having more friends

e. Working

f. Other healers in the community (e.g., faith healers, psychics, astrologists, etc.)

g. Religious involvement

h. Getting married (or having a girlfriend/boyfriend)

i. Will power, strong desire or volition.

10. How has your problem/illness affected you? What are the main effects that your illness has had on you and your life?

11. Do you feel that your illness has has much of an impact on your family?
Appendix 3

CIEI Open-Ended Questions: Coding Categories

I) Question 1: How would you describe your current life situation?
   a. Mental Illness: Use of terms such as mental illness, mental problem, schizophrenia, depression, mentally ill, etc.
   b. Physical Illness: Reference to illnesses such as diabetes, hypertension, heart condition, etc.
   c. Nervios/Nerves: Nervios, "nervioso", nervous, etc.
   d. Illness Unspecified: Illness, "enfermedad", etc.
   e. Illness Implicit: Hospitalization, medication, any kind of treatment.
   f. Description of life in non Illness terms, according to the five first categories.
   g. Missing Data / Unable to Code.

Non-Illness Responses Categories:
   a) Affect (Negative, Positive, or Combined).
   b) Activities (Negative, Positive, or Combined).
   c) Relationships (Negative, Positive, or Combined).
   d) Accomplishments (Negative, Positive, or Combined).
II) Question 3: What do you call your health problem?
Probes: What do you see your doctor (counselor, etc.) for? / What do you take medication for?
   a. Mental Illness (e.g., Mental problem, brain/cerebral problem, schizophrenia, depression, psychiatric symptoms)
   b. Physical Illness (e.g., diabetes, hypertension, anemia, physical symptoms)
   c. Nerves / Nerves
   d. Health Habits (Drinking, smoking, eating)
   e. Other
   f. Don’t Know
   g. Missing Data / Unable to Code

Question 5: "What do you think has caused your current health problem?"
   a. Family conflicts: With parents, siblings, children
   b. Marital conflicts: Spouse, Partner, Boyfriend
   c. Death of relatives or significant others
   d. Sexual / physical abuse in childhood, adolescence, or adulthood
   e. Addictions (alcohol, drugs, smoking, coffee)
   f. Work-/Financial-related problems.
   g. Biological causes (Hereditay, chemical imbalance, etc.)
h. Health-related issues (Illnesses, surgeries, delivery, eating plaster off the walls, accidents)
i. Stress / pressure in general
j. Struggle to succeed, failure to accomplish goals
k. Frightening, threatening, distressful, or fearful situations
l. Thinking too much
m. Existential / psychological issues
n. Immigration to the US
o. "Nerves", "mental", "schizophrenia" (Cause of illness is referred to as the illness itself; illness was always present)
p. Absence of activities, boredom
q. Supernatural forces (God, Devil, Witchcraft)
r. Don’t know
s. Missing Data / Unable to Code.

IV) Question 8: "What do you think would help you get better?"
a. Treatment:
   Medication; Psychological/Psychosocial treatment;
   Compliance with clinicians’ directions; Participation in AA programs; Shock therapy; Treatment by another medical
specialty, etc.

b. Health-Related Factors:

Eating properly; Exercising; Lose weight; Stop smoking; Stay sober; Get rest; Avoid drugs, etc.

c. Relationships:

Getting married or having a partner; Having a child; Support from family members/Friends; Having a friend; Better relations with relatives; The present relationship with their children, etc.

d. Activities:

Go back to school or work; Having an occupation; Staying active/busy, etc.

e. Social Activities:

Trips; Have distractions/fun (parks, go out more, etc.)

6. Environment /Stress:

Avoid stress; A less stressful environment; A good neighborhood, etc.

7. Self Changes:

Factors that involve the patient's investment, such as: Learn how to deal with situations; Have a better understanding of the illness; Talk more with family and doctor; Learning how to be assertive.
8. Economic Factors:
   Financial improvement in general.

9. Religious Factors:
   Praying; Faith is God’s help in recovery.

V) Question 10: "How has your problem/illness affected you? What are the main effects that your illness has had on you and your life?"

a. Physical symptoms: Weight gain; not able to eat; sleeping problems; aging; shaking; loss of physical strength.

b. Side effects from medication; complaints about medication.

c. Loss of social relations/Isolation: Loss of friends; No social activities as before; Desire to be left alone; No involvement with their own children; Confinement to their home.

e. Effects on goals: Destruction of "dreams", projects; Interruption of work, career, study.

f. Lack of motivation: No interest in things, no ambitions; Difficulty in doing things.

g. Negative self/emotion: Poor self-image; Unhappiness; Loneliness; Anger; Bad mood; Lack of control; Aggression;
No joy in life; Negative self-statements; General negative self-comments; Fears.

h. Other: Desire to die; Positive effect; Not much effect; Focus on family; Complaint/comments about positive symptoms/hospitalization.

i. Don’t know.

j. Missing data / Unable to code.

VI) Question 11: "Do you feel that your illness has had much of an impact on your family?"

a. Effects on family in general: Patient does not refer to any specific relative when answering the question.

b. Effects on Parents: Extra strain on them; Complaints; Disappointment; Tension between parents and patient, etc.

c. Effects on Siblings: Fear, fighting, etc.

d. Effects on Spouse: Sexual problems; Stress on spouse, etc.

e. Effects on Children: Children are not treated well; Children become distant from parent; Children worry about parent; Children complain about arguing, fighting, etc.

f. No effects.

g. Good effects on family.

h. Don’t know.

i. Missing data / Unable to code.
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| V | 19 (47.5)
| 6 (15.0) |
| Gender: Male (N, %) |  |
| 40.3 (9.6) | 36.8 (8.5) |
| 6 (15.0) |
| 17 (43.5) | 19 (47.5) |
| 36 (45.6) | 54 (68.4) |
| Age (M, SD) |  |
| 40 (69.7) | 19 (47.5) |
| 6 (15.0) | 5.4 (68.4) |

**Table 1**

Demographic Characteristics of the Total Sample (N=79) by Ethnicity
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NOTE: ** = \( p < 0.01 \); *** = \( p < 0.001 \)
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<td>16</td>
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**

None  Other  Other Christian  Catholic  Pentecostal

Religion (N, %)

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<thead>
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<th>Characteristic</th>
<th>Total</th>
<th>Euro-Americans</th>
<th>Latinos</th>
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<tr>
<td></td>
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</tr>
<tr>
<td>Characteristic</td>
<td>Schizophrenic (N=39)</td>
<td>Depressedes (N=40)</td>
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</tr>
<tr>
<td>-------------------------------</td>
<td>----------------------</td>
<td>-------------------</td>
<td></td>
</tr>
<tr>
<td>Age (M, SD)</td>
<td>35.7 (8.6)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gender: Male (N, %)</td>
<td>25 (64.1)</td>
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</tr>
<tr>
<td>Social Class (N, %)</td>
<td>11 (27.5)</td>
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<tr>
<td>I &amp; II</td>
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<td>1</td>
<td></td>
</tr>
<tr>
<td>III</td>
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<tr>
<td>IV</td>
<td>7</td>
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<td></td>
</tr>
<tr>
<td>V</td>
<td>31 (79.5)</td>
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</tr>
<tr>
<td>(57.5) (5)</td>
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<tr>
<td>(12.5) (5)</td>
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Table 2

Demographic Characteristics of the Total Sample (N=79) by Diagnosis
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<th>Household Type (N, %)</th>
<th>Non-Relative</th>
<th>Spouse/Children</th>
<th>Parental/Step</th>
<th>Single</th>
<th>Married/Partner</th>
<th>Divorced/Separated</th>
<th>Widowed</th>
</tr>
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<tbody>
<tr>
<td>6 (15.0) (N=40)</td>
<td>10 (25.6)</td>
<td>9 (23.1)</td>
<td>20 (51.3)</td>
<td>4</td>
<td>2 (5.1)</td>
<td>7 (17.9)</td>
<td>-</td>
</tr>
<tr>
<td>31 (77.5)</td>
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<td></td>
<td></td>
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<tr>
<td>3 (7.5)</td>
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</tr>
<tr>
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<td>12 (27.5)</td>
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<td></td>
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<td>Depressive</td>
<td>Schizophrenics</td>
<td>Characteristic</td>
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</tr>
<tr>
<td>------------</td>
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<td>----------------</td>
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<td></td>
<td></td>
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<td></td>
</tr>
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<td>Other</td>
<td>Catholic</td>
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<td></td>
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<td>Penitentiary</td>
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<td></td>
</tr>
<tr>
<td>2 (12.8)</td>
<td>7 (17.9)</td>
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<td>8 (20.0)</td>
<td>5 (23.0)</td>
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<td></td>
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<tr>
<td>20 (50.0)</td>
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<td>9 (22.5)</td>
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<td>(N=39)</td>
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<td>----------------------------------------</td>
<td>--------</td>
<td>--------</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Pseudo-normal</td>
<td>Total</td>
<td>Total</td>
<td></td>
<td></td>
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<td></td>
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<tr>
<td>Prevalence of History of Hospitalization</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Duration of Illness (M, SD)</td>
<td>16.8 (8.5)</td>
<td>18.0 (8.5)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hospitalization (M, SD)</td>
<td>5.4 (2.6)</td>
<td>5.4 (2.8)</td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age of Onset (M, SD)</td>
<td>25 (6.1)</td>
<td>25 (6.8)</td>
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Table 3: Psychiatric Characteristics of the Total Sample (N = 79) by Birthicity
<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Depresses (N=39)</th>
<th>Schizophrenics (N=40)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age of onset (M, SD)</td>
<td>21.1 (6.5)</td>
<td>22.4 (9.4)</td>
</tr>
<tr>
<td>Duration of Illness (M, SD)</td>
<td>14.5 (6.9)</td>
<td>18.9 (9.5)</td>
</tr>
<tr>
<td>Hospitalization: (N, %)</td>
<td><strong>4</strong></td>
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Table 5

Inter-Rater Reliability Coefficients for the CIEI Questions

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<tr>
<th>CIEI Question</th>
<th>Kappa Coefficient</th>
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<td>1</td>
<td>0.77</td>
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<tr>
<td>2</td>
<td>1.00</td>
</tr>
<tr>
<td>3</td>
<td>0.70</td>
</tr>
<tr>
<td>4a</td>
<td>1.00</td>
</tr>
<tr>
<td>4b</td>
<td>0.81</td>
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<tr>
<td>5</td>
<td>0.90</td>
</tr>
<tr>
<td>6</td>
<td>0.85</td>
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<td>7</td>
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<td>8</td>
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<td>9</td>
<td>0.78</td>
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<td>0.74</td>
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<tr>
<td>11</td>
<td>0.91</td>
</tr>
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<td></td>
<td>BSI Dimension</td>
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<td>-------</td>
<td>---------------</td>
</tr>
<tr>
<td></td>
<td>Paranoid Ideation</td>
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<tr>
<td></td>
<td>Phobic Anxiety</td>
</tr>
<tr>
<td></td>
<td>Hostility</td>
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<td></td>
<td>Anxerty</td>
</tr>
<tr>
<td></td>
<td>Depression</td>
</tr>
<tr>
<td></td>
<td>Sensitivity</td>
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</tbody>
</table>

Table 6
<table>
<thead>
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<th>Source of Variation</th>
<th>Sum of Squares</th>
<th>Mean Square</th>
<th>F</th>
<th>P</th>
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</thead>
<tbody>
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<td>Gender (G)</td>
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<td>1.32</td>
<td>.255</td>
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<td>Ethnicity (E)</td>
<td>452.195</td>
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<td>3.09</td>
<td>.070</td>
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<tr>
<td>Diagnosis (D)</td>
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<td>5.079</td>
<td>5.08</td>
<td>.123</td>
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<td>G x E</td>
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<td>4.800</td>
<td>4.80</td>
<td>.062</td>
</tr>
<tr>
<td>G x D</td>
<td>152.361</td>
<td>3.088</td>
<td>3.09</td>
<td>.025</td>
</tr>
<tr>
<td>E x D</td>
<td>480.036</td>
<td>4.800</td>
<td>4.80</td>
<td>.114</td>
</tr>
<tr>
<td>G x E x D</td>
<td>133.567</td>
<td>1.302</td>
<td>1.32</td>
<td>.255</td>
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Note: Degrees of Freedom: 1 (Except for Error term: 71).

Table 7: Positive Symptoms Total (PST) by Ethnicity, Diagnosis and Gender: ANOVA (N=72).
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<tr>
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<th>Female</th>
<th>Male</th>
<th>Female</th>
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<th>Female</th>
<th>Male</th>
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<th>Male</th>
<th>Female</th>
<th>Male</th>
<th>Female</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>Combined</td>
<td>59.7</td>
<td>53.7</td>
<td>56.2</td>
<td>57.2</td>
<td>55.1</td>
<td>50.6</td>
<td>52.1</td>
<td>49.8</td>
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<td></td>
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</tr>
<tr>
<td>Americans</td>
<td>50.6</td>
<td>47.7</td>
<td>54.5</td>
<td>52.4</td>
<td>49.5</td>
<td>50.7</td>
<td>54.7</td>
<td>48.7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Puerto</td>
<td>51.6</td>
<td>57.4</td>
<td>53.6</td>
<td>53.6</td>
<td>52.4</td>
<td>50.7</td>
<td>50.7</td>
<td>50.7</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Latinos</td>
<td>59.8</td>
<td>61.2</td>
<td>60.5</td>
<td>60.5</td>
<td>61.5</td>
<td>60.5</td>
<td>60.5</td>
<td>60.5</td>
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**Table 8**

### Depressive Symptoms Total (PSY) in Latino and Puerto-American Schizophrenic and Depressive Patients (Mean T-Scores and Number of Subjects)

<table>
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<tr>
<th></th>
<th>Total</th>
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<tbody>
<tr>
<td>Depressive Symptoms</td>
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</tr>
<tr>
<td>Schizophrenic</td>
<td></td>
</tr>
<tr>
<td>Combined</td>
<td></td>
</tr>
<tr>
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<tr>
<td>Female</td>
<td></td>
</tr>
<tr>
<td>Male</td>
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<tr>
<td>Female</td>
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<tr>
<td>Male</td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td></td>
</tr>
<tr>
<td>Dimension</td>
<td>Male</td>
</tr>
<tr>
<td>--------------------</td>
<td>------</td>
</tr>
<tr>
<td>Paranoia</td>
<td></td>
</tr>
<tr>
<td>Phobic Anx.</td>
<td>57.0</td>
</tr>
<tr>
<td>Hostility</td>
<td>51.0</td>
</tr>
<tr>
<td>Anxiety</td>
<td>51.9</td>
</tr>
<tr>
<td>Depression</td>
<td>47.9</td>
</tr>
<tr>
<td>Interp. Sense.</td>
<td>50.4</td>
</tr>
<tr>
<td>Obs. Com. Anx.</td>
<td>55.4</td>
</tr>
<tr>
<td>Somatization</td>
<td>57.7</td>
</tr>
</tbody>
</table>

(528) Dimensions x Scores: Means by Ethnicity x Diagnosis x Gender
<table>
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<tr>
<th>Effect</th>
<th>Value</th>
<th>Approx. p Value</th>
<th>Error of Hypoth.</th>
<th>Statistic</th>
<th>Significance</th>
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</thead>
<tbody>
<tr>
<td>G x E</td>
<td>0.6</td>
<td>0.05</td>
<td>6.31</td>
<td>0.04</td>
<td>0.04</td>
</tr>
<tr>
<td>G x D</td>
<td>0.6</td>
<td>0.05</td>
<td>6.31</td>
<td>0.04</td>
<td>0.04</td>
</tr>
<tr>
<td>E x D</td>
<td>0.6</td>
<td>0.05</td>
<td>6.31</td>
<td>0.04</td>
<td>0.04</td>
</tr>
<tr>
<td>G x E</td>
<td>0.6</td>
<td>0.05</td>
<td>6.31</td>
<td>0.04</td>
<td>0.04</td>
</tr>
<tr>
<td>G x D</td>
<td>0.6</td>
<td>0.05</td>
<td>6.31</td>
<td>0.04</td>
<td>0.04</td>
</tr>
<tr>
<td>E x D</td>
<td>0.6</td>
<td>0.05</td>
<td>6.31</td>
<td>0.04</td>
<td>0.04</td>
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</tbody>
</table>

Table 10: PSI Dimensions T-Scores: Gender x Brinfectivity x Diagnosis MANOVA (N=79)
<table>
<thead>
<tr>
<th>NOTE: * = p&lt;.05; ** = p&lt;.01; *** = p&lt;.001</th>
</tr>
</thead>
<tbody>
<tr>
<td>10  11.9  12  14.5  14.7  14.1</td>
</tr>
<tr>
<td>4.1  4.5  2.2  3.0  4.38* 71.1  4.0</td>
</tr>
<tr>
<td>2.2  2.1  7.4  7.9* 70.7  1.68  1.77</td>
</tr>
<tr>
<td>2.2  7.4  7.4  7.4  7.4  7.4  7.4</td>
</tr>
<tr>
<td>4.9.3  4.9.3  4.9.3  4.9.3  4.9.3  4.9.3  4.9.3</td>
</tr>
<tr>
<td>9.6  9.7  9.6  9.6  9.6  9.6  9.6</td>
</tr>
<tr>
<td>0.7  0.7  0.7  0.7  0.7  0.7  0.7</td>
</tr>
<tr>
<td>3.5  3.5  3.5  3.5  3.5  3.5  3.5</td>
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<tr>
<td>7.4  7.4  7.4  7.4  7.4  7.4  7.4</td>
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</table>

Table II

Univariate R-Tests Associated with BSI Multivariable Tests (N=79)
<table>
<thead>
<tr>
<th></th>
<th>Schizophrenic</th>
<th>Depressive</th>
<th>Schizotypal</th>
<th>Somatization</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dimensions</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Latitudes</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>52.4</th>
<th>52.3</th>
<th>62.9</th>
<th>55.1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Paranoid</td>
<td>51.9</td>
<td>55.7</td>
<td>64.3</td>
<td>57.8</td>
</tr>
<tr>
<td>Phobic Anx.</td>
<td>53.9</td>
<td>55.7</td>
<td>69.8</td>
<td>59.6</td>
</tr>
<tr>
<td>Hostility</td>
<td>50.3</td>
<td>50.5</td>
<td>61.2</td>
<td>50.9</td>
</tr>
<tr>
<td>Anxety</td>
<td>48.4</td>
<td>46.6</td>
<td>57.1</td>
<td>48.3</td>
</tr>
<tr>
<td>Depression</td>
<td>47.0</td>
<td>57.2</td>
<td>69.1</td>
<td>52.0</td>
</tr>
<tr>
<td>Interp. Sense</td>
<td>53.0</td>
<td>49.1</td>
<td>56.8</td>
<td>52.0</td>
</tr>
<tr>
<td>OB. Computation</td>
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<td>47.4</td>
<td>61.5</td>
<td>54.6</td>
</tr>
<tr>
<td>Somatization</td>
<td>53.4</td>
<td>54.4</td>
<td>62.4</td>
<td>54.8</td>
</tr>
</tbody>
</table>

Table 12: PSI Dimensions T-Scores: Means for Latitudes and Euro-Americans by Diagnoses.
<table>
<thead>
<tr>
<th></th>
<th>Depression</th>
<th>Schizophrenia</th>
<th>Bipolarity</th>
<th>Lateqnauro-Amrricane</th>
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</thead>
<tbody>
<tr>
<td>52.6</td>
<td>53.6</td>
<td>52.3</td>
<td>53.9</td>
<td></td>
</tr>
<tr>
<td>53.9</td>
<td>56.7</td>
<td>53.0</td>
<td>56.9</td>
<td></td>
</tr>
<tr>
<td>59.1</td>
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<td>54.0</td>
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<td>55.0</td>
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<td>50.4</td>
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<td>56.2</td>
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<td>54.7</td>
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<tr>
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<td>50.8</td>
<td>50.0</td>
<td>58.1</td>
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<td>54.6</td>
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</tbody>
</table>

**Table 13**
Table 14. Significance of Discriminant Function (p) for Differentiating Schizophrenics from Depressives in Latino and Euro-American Outpatients

<table>
<thead>
<tr>
<th>BSI Dimension</th>
<th>Latinos</th>
<th>Euro-Americans</th>
</tr>
</thead>
<tbody>
<tr>
<td>SOM</td>
<td>.001</td>
<td>.817</td>
</tr>
<tr>
<td>OBS</td>
<td>.030</td>
<td>.122</td>
</tr>
<tr>
<td>SENS</td>
<td>.170</td>
<td>.260</td>
</tr>
<tr>
<td>DEP</td>
<td>.004</td>
<td>.115</td>
</tr>
<tr>
<td>ANX</td>
<td>.002</td>
<td>.566</td>
</tr>
<tr>
<td>HOST</td>
<td>.004</td>
<td>.947</td>
</tr>
<tr>
<td>PHOB</td>
<td>.291</td>
<td>.664</td>
</tr>
<tr>
<td>PARA</td>
<td>.603</td>
<td>.247</td>
</tr>
<tr>
<td>PSYCH</td>
<td>.526</td>
<td>.974</td>
</tr>
</tbody>
</table>

**Note. Latinos:** Canonical correlation = .81; \( p = .001 \)
Correct classification of schizophrenics: 89.5%
Correct classification of depressives: 95%
Total percentage = 92.3%.

**Euro-Americans:** Canonical corr. = .58; \( p = .13 \)
Correct classification: Schiz. = 80%; Depressives = 75%;
Total percentage = 77.5%.
<table>
<thead>
<tr>
<th>Factor/Scale/Item</th>
<th>Lat. Dep't (M)</th>
<th>Other Groups (M)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weakparts</td>
<td>1.29</td>
<td>2.65</td>
</tr>
<tr>
<td>Numbness</td>
<td>1.60</td>
<td>2.20</td>
</tr>
<tr>
<td>Hiccups</td>
<td>1.17</td>
<td>2.40</td>
</tr>
<tr>
<td>Shortbreath</td>
<td>1.18</td>
<td>1.95</td>
</tr>
<tr>
<td>Nausea</td>
<td>1.15</td>
<td>2.60</td>
</tr>
<tr>
<td>Pathophobia</td>
<td>1.03</td>
<td>2.45</td>
</tr>
<tr>
<td>Fatigue</td>
<td>3.78</td>
<td>2.75</td>
</tr>
</tbody>
</table>

**Somatization**

**Rtnicity x Diagnosis**
<table>
<thead>
<tr>
<th>Anxiety Item</th>
<th>Factor/Scale Item</th>
<th>Other Groups (M)</th>
<th>Lat. Dep. (M)</th>
<th>T</th>
</tr>
</thead>
<tbody>
<tr>
<td>Restless</td>
<td>Restless</td>
<td>4.90</td>
<td>1.68</td>
<td>3.15</td>
</tr>
<tr>
<td>Tense</td>
<td>Tense</td>
<td>4.27</td>
<td>0.97</td>
<td>2.25</td>
</tr>
<tr>
<td>Peerful</td>
<td>Peerful</td>
<td>3.47</td>
<td>1.84</td>
<td>2.95</td>
</tr>
<tr>
<td>Scared</td>
<td>Scared</td>
<td>3.87</td>
<td>1.53</td>
<td>2.60</td>
</tr>
<tr>
<td>Nervous</td>
<td>Nervous</td>
<td>4.87</td>
<td>1.34</td>
<td>2.90</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3.79</td>
<td>2.00</td>
<td>3.10</td>
</tr>
</tbody>
</table>
other groups (N) = (Latino Schizophrenics + Euro-American Depr. + Euro-American Schiz.

**NOTE.** Lat. Depr. (M) = Mean of the Latino Depressive group in each item.

<table>
<thead>
<tr>
<th>Factor/scale/item</th>
<th>Other groups (M)</th>
<th>Lat. Depr. (M)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Argument</td>
<td>2.73 **</td>
<td>1.70</td>
</tr>
<tr>
<td>Urgency</td>
<td>4.79 ***</td>
<td>1.95</td>
</tr>
<tr>
<td>Urgency</td>
<td>2.93 **</td>
<td>1.60</td>
</tr>
<tr>
<td>Urgency</td>
<td>4.32 **</td>
<td>2.65</td>
</tr>
<tr>
<td>Irritability</td>
<td>4.16 ***</td>
<td>2.45</td>
</tr>
<tr>
<td>Irish</td>
<td>1.42</td>
<td>2.01</td>
</tr>
</tbody>
</table>

*p < .05; ** = p < .01; *** = p < .001.

DEGREES OF FREEDOM = 75.
| ** | 8.08 | 1.70 | 2.24 |
| ** | 8.08 | 1.55 | 2.46 |
| *** | 11.86 | 1.40 | 2.49 |
| 7.77 | 1.25 | 1.84 |
| 2.71 | 1.70 | 2.23 |
| ** | 8.29 | 1.85 | 2.72 |

<table>
<thead>
<tr>
<th>Component</th>
<th>Misdemeanor</th>
<th>Deception</th>
<th>Computer</th>
<th>Blocked</th>
<th>Remember</th>
</tr>
</thead>
<tbody>
<tr>
<td>13.67</td>
<td>4.22</td>
<td>2.68</td>
<td>3.12</td>
<td>1.74</td>
<td>2.71</td>
</tr>
</tbody>
</table>

**Table 16**

Note: The table above represents the results of an item-level analysis for ethnicity and diagnosis: Post-Hoc Tests.
** ** 4.4 ** 10.0**
6.9 1.20
1.93 1.25
9.60 1.02

** Notes: * p < 0.05; ** p < 0.01; *** p < 0.001.

<table>
<thead>
<tr>
<th>**</th>
<th>NETTLE</th>
<th>CROWD</th>
<th>AVOIDANT</th>
<th>REACTIV</th>
<th>AGORAPHOBIA</th>
</tr>
</thead>
<tbody>
<tr>
<td>**</td>
<td>1.92</td>
<td>2.20</td>
<td>2.05</td>
<td>1.74</td>
<td>1.87</td>
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<tr>
<td>1.3</td>
<td>2.12</td>
<td>1.25</td>
<td>1.25</td>
<td>1.25</td>
<td>1.25</td>
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<td>9.6</td>
<td>6.90</td>
<td>6.90</td>
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<td>6.90</td>
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</table>

**PHOBIC ANXIETY**

<table>
<thead>
<tr>
<th>Factor/Scale/Item</th>
<th>Latinos (N=39)</th>
<th>Euro-Americans (N=49)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.02</td>
<td>2.12</td>
<td>F.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-----</td>
<td>---</td>
<td>-----</td>
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<tr>
<td>**</td>
<td></td>
<td>5.35</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>1.15</td>
</tr>
<tr>
<td></td>
<td>**</td>
<td>8.77</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2.85</td>
</tr>
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</tr>
<tr>
<td></td>
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Concentration

Mild/hand

No detections

Computative

Blocked

Remember

Obs. Computative

Diagnosis

<table>
<thead>
<tr>
<th>Factor/Scale/Item (N=40)</th>
<th></th>
<th>Depressives (N=39)</th>
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<tr>
<td></td>
<td></td>
<td>Schizophrenics</td>
</tr>
<tr>
<td>p</td>
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<tr>
<td></td>
<td>(N=40)</td>
<td>(N=39)</td>
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<tr>
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<td>--------</td>
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<tr>
<td>Factor/Scale/Item</td>
<td>Depressives</td>
<td>Schizophronec</td>
</tr>
<tr>
<td></td>
<td>p</td>
<td></td>
</tr>
<tr>
<td>Worthlessness</td>
<td>5.53</td>
<td>2.20</td>
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<tr>
<td>Hopelessness</td>
<td>6.65</td>
<td>2.45</td>
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<td>Interet</td>
<td>4.25</td>
<td>2.22</td>
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<tr>
<td>Blue</td>
<td>41.46</td>
<td>2.90</td>
</tr>
<tr>
<td>Lonely</td>
<td>1.57</td>
<td>2.60</td>
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<tr>
<td>Suicidal</td>
<td>0.43</td>
<td>0.50</td>
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Note: * = p > 0.05; ** = p > 0.01; *** = p > 0.001.
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<td>84</td>
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<td></td>
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</tbody>
</table>

| (5.60, 62%) | (6.74, 74.9%) |
| Factor 1 | Factor 1 |
| BSI Dimension | BSI Dimension |
| Puro-Amercianos | Latinos |

Table 17: Principal Components for the BSI Dimensions
<table>
<thead>
<tr>
<th>Note</th>
<th>Local Illness Responses</th>
<th>Missing Data</th>
<th>Nonillness Responses</th>
<th>Illness Immunized</th>
<th>Illness Unreported</th>
<th>Nervous/nerve</th>
<th>Physical Illness</th>
<th>Mental Illness</th>
</tr>
</thead>
<tbody>
<tr>
<td>36</td>
<td>7.4560</td>
<td>16.4000</td>
<td>4.175</td>
<td>2.6</td>
<td>3.128</td>
<td>7.179</td>
<td>8.513</td>
<td>3.410</td>
</tr>
<tr>
<td>35</td>
<td>8.1012</td>
<td>7.1750</td>
<td>2.510</td>
<td>8.8</td>
<td>0.100</td>
<td>7.179</td>
<td>2.510</td>
<td>0.177</td>
</tr>
<tr>
<td>34</td>
<td>8.9120</td>
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<td>0</td>
<td>0</td>
<td>7.179</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>33</td>
<td>8.9120</td>
<td>4.1000</td>
<td>0</td>
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<tr>
<td>32</td>
<td>13.1650</td>
<td>0</td>
<td>0.100</td>
<td>0</td>
<td>0</td>
<td>7.179</td>
<td>0</td>
<td>0</td>
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</table>

<table>
<thead>
<tr>
<th>Categories</th>
<th>(% N)</th>
<th>(N)</th>
<th>(N)</th>
<th>(N)</th>
</tr>
</thead>
<tbody>
<tr>
<td>(6)</td>
<td></td>
<td>(N=79)</td>
<td>(N=40)</td>
<td>(N=40)</td>
</tr>
<tr>
<td>Latino-Americans (N=40)</td>
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<td></td>
<td></td>
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<tr>
<td>(9)</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

Open-Ended Description of Current Life Situation (N=79)

Table 18
<table>
<thead>
<tr>
<th>Achievements</th>
<th>4</th>
<th>3</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accomplishments</td>
<td>5</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Activities</td>
<td>10</td>
<td>6</td>
<td>7</td>
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<tr>
<td>Affect</td>
<td>12</td>
<td>11</td>
<td>12</td>
</tr>
</tbody>
</table>

(N=36) (N=20) (N=16) Categories

Latinos
Europeans
Amerindians

Open-ended description of life situation in non-11th grade Terms (N=36)

Table 19
<table>
<thead>
<tr>
<th>Category</th>
<th>Latinos (N=39)</th>
<th>Euro-Americans (N=40)</th>
<th>All (N=79)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical Illness</td>
<td>12, 30.8</td>
<td>8, 20.6</td>
<td>14, 35.9</td>
</tr>
<tr>
<td>Mental Illness</td>
<td>14, 35.9</td>
<td>19, 48.7</td>
<td>19, 48.7</td>
</tr>
<tr>
<td>Nervous/Verities</td>
<td>19, 48.7</td>
<td>12, 30.8</td>
<td>14, 35.9</td>
</tr>
<tr>
<td>Other Health Habits</td>
<td>2, 5.1</td>
<td>2, 5.1</td>
<td>2, 5.1</td>
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<td>Don't know</td>
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<td>2, 5.1</td>
<td>2, 5.1</td>
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<tr>
<td>Meeting/Unable to Cod</td>
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<td>2, 5.1</td>
<td>2, 5.1</td>
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<td>5, 6.3</td>
<td>3, 7.5</td>
<td>2, 6</td>
<td>2, 6</td>
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<td>9, 11.4</td>
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<td>1, 2.6</td>
<td>1, 2.6</td>
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<td>19, 24.1</td>
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<td>0, 0</td>
</tr>
<tr>
<td>31, 39.2</td>
<td>19, 47.5</td>
<td>8, 20.6</td>
<td>14, 35.9</td>
</tr>
<tr>
<td>43, 54.4</td>
<td>29, 72.5</td>
<td>12, 30.8</td>
<td>14, 35.9</td>
</tr>
</tbody>
</table>
Note. Not statistically analyzed.

<p>| | | | | | |</p>
<table>
<thead>
<tr>
<th></th>
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<tr>
<td>3, 8.3</td>
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<td>5, 13.8</td>
<td>2, 7.4</td>
<td>Don't know</td>
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<tr>
<td>0</td>
<td>4, 14.8</td>
<td>Different but related</td>
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<tr>
<td>16, 44.4</td>
<td>7, 25.9</td>
<td>Mental &amp; Nerves different</td>
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<td></td>
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<tr>
<td>9, 25.0</td>
<td>7, 25.9</td>
<td>Mental = Nerves/Nervous</td>
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<td></td>
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</tbody>
</table>

Euro-Americans (N=27) Latitons (N=36) Categories

Comparison of Mental and Nerves/Nervous Problems (N=63)

Table 21
**NOTE. Not specifically analyzed.**

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
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<tbody>
<tr>
<td>4, 16.6</td>
<td>4, 13.8</td>
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<td>6, 25.0</td>
<td>3, 10.3</td>
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<tr>
<td>8, 33.3</td>
<td>13, 44.8</td>
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<tr>
<td>3, 12.5</td>
<td>6, 20.7</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Categories</th>
<th>Comparison of Mental and Emotional Problems (N=53)</th>
<th>Euro-Americans (N=29) Barriers (N=42)</th>
</tr>
</thead>
</table>

Table 22
<table>
<thead>
<tr>
<th>Note</th>
<th>* = p &gt; .05</th>
</tr>
</thead>
<tbody>
<tr>
<td>8, 10.1</td>
<td>7, 17.5</td>
</tr>
<tr>
<td>24, 30.4</td>
<td>9, 22.5</td>
</tr>
<tr>
<td>8, 10.1</td>
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<td>7, 17.5</td>
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<td>7, 17.5</td>
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<td>6, 7.6</td>
<td>1, 2.5</td>
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<tr>
<td>13, 16.5</td>
<td>8, 20.0</td>
</tr>
<tr>
<td>20, 25.3</td>
<td>14, 35.0</td>
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<table>
<thead>
<tr>
<th>Causes</th>
<th>Rate Among (N=39) Burmese (N=40) All (N=79)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Don't Know</td>
<td>Other Causes</td>
</tr>
<tr>
<td>Work/Fracture</td>
<td>Biological</td>
</tr>
<tr>
<td>Health-Related</td>
<td>Addictions</td>
</tr>
<tr>
<td>Physical/Abuse</td>
<td>Death</td>
</tr>
<tr>
<td>Marital Conflict</td>
<td>Family Conflict</td>
</tr>
</tbody>
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Table 23: Causes of Illness According to Partner's Conceptions (N=79)
<table>
<thead>
<tr>
<th>Event</th>
<th>13, 33.3</th>
<th>16, 41.0</th>
<th>19, 47.5</th>
<th>21, 53.8</th>
<th>24, 60.0</th>
<th>24, 60.2</th>
<th>24, 60.2</th>
<th>26, 66.7</th>
<th>28, 72.2</th>
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</thead>
<tbody>
<tr>
<td>Current Family Problems</td>
<td>31, 39.2</td>
<td>00, 50.0</td>
<td>00, 50.2</td>
<td>32, 42.0</td>
<td>34, 55.0</td>
<td>36, 45.6</td>
<td>38, 53.2</td>
<td>44, 65.0</td>
<td>44, 65.2</td>
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<tr>
<td>Past Family Problems (Adult)</td>
<td>26, 66.7</td>
<td>24, 60.2</td>
<td>24, 60.2</td>
<td>24, 60.2</td>
<td>24, 60.2</td>
<td>24, 60.2</td>
<td>24, 60.2</td>
<td>24, 60.2</td>
<td>24, 60.2</td>
</tr>
<tr>
<td>Past Family Problems (Child)</td>
<td>24, 60.2</td>
<td>24, 60.2</td>
<td>24, 60.2</td>
<td>24, 60.2</td>
<td>24, 60.2</td>
<td>24, 60.2</td>
<td>24, 60.2</td>
<td>24, 60.2</td>
<td>24, 60.2</td>
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<tr>
<td>Economic</td>
<td>8, 20.5</td>
<td>10, 25.0</td>
<td>15, 37.5</td>
<td>14, 35.9</td>
<td>14, 35.9</td>
<td>14, 35.9</td>
<td>14, 35.9</td>
<td>14, 35.9</td>
<td>14, 35.9</td>
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<tr>
<td>Heredity</td>
<td>36, 45.6</td>
<td>38, 53.2</td>
<td>42, 63.3</td>
<td>42, 63.3</td>
<td>42, 63.3</td>
<td>42, 63.3</td>
<td>42, 63.3</td>
<td>42, 63.3</td>
<td>42, 63.3</td>
</tr>
<tr>
<td>Drugs</td>
<td>42, 63.2</td>
<td>42, 63.2</td>
<td>42, 63.2</td>
<td>42, 63.2</td>
<td>42, 63.2</td>
<td>42, 63.2</td>
<td>42, 63.2</td>
<td>42, 63.2</td>
<td>42, 63.2</td>
</tr>
<tr>
<td>Supernatural Forces</td>
<td>9, 32.1</td>
<td>11, 27.7</td>
<td>15, 37.5</td>
<td>14, 35.9</td>
<td>14, 35.9</td>
<td>14, 35.9</td>
<td>14, 35.9</td>
<td>14, 35.9</td>
<td>14, 35.9</td>
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<tr>
<td>Personal Losses</td>
<td>16, 41.0</td>
<td>19, 47.5</td>
<td>21, 53.8</td>
<td>24, 60.0</td>
<td>24, 60.2</td>
<td>24, 60.2</td>
<td>24, 60.2</td>
<td>24, 60.2</td>
<td>24, 60.2</td>
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<tr>
<td>Distillation</td>
<td>16, 41.0</td>
<td>19, 47.5</td>
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<td>24, 60.0</td>
<td>24, 60.2</td>
<td>24, 60.2</td>
<td>24, 60.2</td>
<td>24, 60.2</td>
<td>24, 60.2</td>
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<tr>
<td>Chemical Imbalance</td>
<td>35, 44.3</td>
<td>38, 55.0</td>
<td>41, 64.6</td>
<td>44, 74.2</td>
<td>44, 74.2</td>
<td>44, 74.2</td>
<td>44, 74.2</td>
<td>44, 74.2</td>
<td>44, 74.2</td>
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</table>

Possible Causes:

<table>
<thead>
<tr>
<th>Latitudes (N=39) Phase-American (N=40) All</th>
<th>Latitudes (N=39) Phase-American (N=40) All</th>
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<tbody>
<tr>
<td>213</td>
<td>213</td>
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Table 24: Possible Causes Preceded to the Partents (N=79)
**Note**: No statistically significant results.

<table>
<thead>
<tr>
<th></th>
<th>14</th>
<th>17.7</th>
<th>10</th>
<th>25.0</th>
<th>4</th>
<th>10.3</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>4</td>
<td>5.1</td>
<td>2</td>
<td>5.1</td>
<td>2</td>
<td>5.1</td>
</tr>
<tr>
<td>Stress</td>
<td>47</td>
<td>59.5</td>
<td>26</td>
<td>65.0</td>
<td>21</td>
<td>53.6</td>
</tr>
</tbody>
</table>

*possible causes: Inclusions (n=39); Euro-Americans (n=40)*
<table>
<thead>
<tr>
<th>Score</th>
<th>Life Change</th>
<th>ADL</th>
<th>Barthel</th>
<th>Activities</th>
<th>Recovery</th>
<th>Income</th>
<th>Religion</th>
<th>Education</th>
<th>Income</th>
<th>Employment</th>
<th>Alcohol</th>
<th>Smoking</th>
<th>Education</th>
</tr>
</thead>
<tbody>
<tr>
<td>43.4</td>
<td>24.0</td>
<td>74.7</td>
<td>91.5</td>
<td>84.0</td>
<td>93.8</td>
<td>73.0</td>
<td>86.5</td>
<td>80.3</td>
<td>81.0</td>
<td>91.5</td>
<td>74.0</td>
<td>62.5</td>
<td>86.5</td>
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</tbody>
</table>

Table 25: Partner Gen. Factors That Could Help Illness Recovery (N=779)
<table>
<thead>
<tr>
<th>Factors That Could Help Recovery, Presented by Interviewer (N=79) (All N=79)</th>
<th>Factors (N=40) B.i.u.-Amercans (N=39)</th>
<th>Percentages</th>
</tr>
</thead>
<tbody>
<tr>
<td>* 53, 67.1</td>
<td>21, 52.2</td>
<td>32, 82.1</td>
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<tr>
<td>** 19, 24.1</td>
<td>31, 64.6</td>
<td>32, 76.9</td>
</tr>
<tr>
<td>* 6, 7.6</td>
<td>4, 10.0</td>
<td>2, 5.1</td>
</tr>
<tr>
<td>** 37, 46.8</td>
<td>17, 42.5</td>
<td>20, 51.3</td>
</tr>
<tr>
<td>31, 39.2</td>
<td>14, 35.0</td>
<td>17, 43.6</td>
</tr>
<tr>
<td>43, 54.4</td>
<td>23, 57.5</td>
<td>20, 51.3</td>
</tr>
<tr>
<td>** 59, 74.7</td>
<td>23, 57.5</td>
<td>36, 92.3</td>
</tr>
<tr>
<td>63, 79.7</td>
<td>32, 80.0</td>
<td>31, 79.5</td>
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</table>

NOTE: * = P<.05; ** = P<.01
**Note:** No significant ethnic differences.

<table>
<thead>
<tr>
<th>Ethnic</th>
<th>Variable</th>
<th>Effect Size (N=39)</th>
<th>Euro-American (N=40)</th>
<th>All (N=79)</th>
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</thead>
<tbody>
<tr>
<td>4'5.1</td>
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<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3'8</td>
<td>Don't Know</td>
<td>2'5.1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>13'16.4</td>
<td>Other Effects</td>
<td>5'12.8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>32'40.5</td>
<td>Negative Self/Emotion</td>
<td>5'20.3</td>
<td></td>
<td></td>
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<tr>
<td>9'11.4</td>
<td>Lack of Motivation/Interest</td>
<td>4'10.3</td>
<td></td>
<td></td>
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<tr>
<td>23'29.1</td>
<td>Effect on Goals</td>
<td>8'20.5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>17'21.5</td>
<td>Loss of Relation/Isolation</td>
<td>9'23.1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4'5.1</td>
<td>Medication Side Effects</td>
<td>2'5.1</td>
<td></td>
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<tr>
<td>16'20.2</td>
<td>Physical Effects</td>
<td>6'15.0</td>
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Table 27: Self-Reported Effects of Illness (N=79)
<table>
<thead>
<tr>
<th>Note: No significant ethnic differences.</th>
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</thead>
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<td>2, 5.0</td>
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<td>0</td>
</tr>
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<td>1, 2.6</td>
</tr>
<tr>
<td>Good Effect</td>
</tr>
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<td>11, 13.9</td>
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<td>5, 12.5</td>
</tr>
<tr>
<td>6, 15.4</td>
</tr>
<tr>
<td>NO EFFECT</td>
</tr>
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<td>15, 17.5</td>
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<td>7, 17.5</td>
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<td>7, 17.9</td>
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<td>SPOUSE</td>
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<tr>
<td>FAMILY IN GENERAL</td>
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</table>

<table>
<thead>
<tr>
<th>Effects of Illnesses on Family (N=79)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Effect of Illnesses on Family (N=79)</td>
</tr>
</tbody>
</table>

Table 28