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ETHNOPSYCHIATRIC INTERPRETATIONS OF  
SCHIZOPHRENIC ILLNESS: THE PROBLEM OF  
*NERVIOS* WITHIN MEXICAN-AMERICAN FAMILIES

**ABSTRACT.** Among Mexican-American families, the concept of *nervios* (nerves) serves as a culturally meaningful illness category for a wide range of conditions, including schizophrenic disorders diagnosed according to psychiatric criteria. This article examines the nature and the meaning of *nervios* as a notion used by Mexican-American families to understand the schizophrenic illness of a relative. Family descriptions of the condition are presented and the emotional and symbolic meanings of the concept are discussed. The complex and somewhat ambiguous nature of folk conceptions is evidenced not only by variations in the description of *nervios* but also by the finding that *nervios* is but one way to view schizophrenic illness. It is suggested that a cultural preference for the term *nervios* is linked to the efforts of family members to reduce the stigma associated with a mental illness while also reinforcing the strength of family bonds and solidarity by fostering tolerant inclusion of the family member within the home. It is argued that the concept of *nervios*, and the family emotions that surround this folk label, may mediate the course and outcome of schizophrenic disorder.

Twenty-one year old Sergio reclines on the well-worn couch placed centrally against the back wall of the family living room. Lying on his back with legs crossed, he taps one foot vigorously in the air as he stares at the ceiling above. Now and again, he mutters softly, unintelligibly. His mother enters the room, giving him a start. He snaps at her for coming upon him so suddenly. His mother exhales deeply, saying "Ay, mi hijo, no más que es los nervios" (Oh, my son, it's just your nerves).

INTRODUCTION

Making sense of a mixed array of disturbances in body, mood, thought, and behavior associated with schizophrenia<sup>1</sup> presents a puzzle for families of afflicted individuals. The family's attempt to arrive at an understanding of the problem, however tentative or imperfect it might be, is invariably guided by sociocultural models of illness. The purpose of this paper is to examine indigenous Mexican-American conceptions of what has been identified as schizophrenia according to contemporary psychiatric diagnostic criteria. In particular, this paper examines the concept *nervios* (nerves) as used by relatively unacculturated Mexican-Americans to account for the schizophrenic illness<sup>2</sup> of a family member with whom they live. The following questions will be addressed: What are family interpretations of the nature of their relative's problem, and what terms are used

to refer to it? Do conceptualizations include cultural categories such as mental, nervous, emotional or somatic conditions, or an interrelation of these domains? What is the nature and meaning of folk categories as employed by family members to talk about psychiatric disorder? Finally, how might we account for cultural variations or regularities in family discourse on schizophrenic illness?

### *Societal Conceptions of Mental Disorder*

There have been a number of studies of societal and community conceptions of mental disorder (e.g., Edgerton 1966, 1969; Edgerton & Karno 1971; Estroff 1981; Janzen 1978; Jenkins 1988; Kleinman 1980; Locke 1982; Murphy 1976, 1982; Newton 1978; Scheper-Hughes 1979; Rin & Lin 1962; Townsend 1978, 1979; Waxler 1974). The question addressed in much of this research is whether conceptions of psychoses are universally shared or are culture-specific. White (1982: 72) has noted that "[e]xisting research suggests that major psychoses may be viewed in substantially similar ways cross-culturally, and that the degree of similarity in conceptions of mental disorder across cultures increases with the severity of the disorder . . ." A primary proponent of this position is Murphy (1976) who has argued that major psychiatric disorder is similarly identified and labeled cross-culturally. Murphy has further concluded that "there seems to be little that is distinctively cultural in the attitudes and actions directed toward the mentally ill . . ." (Murphy 1982: 70). Alternative views, however, have been advanced. For example, Townsend (1978) has provided comparative evidence from Germany and the United States illustrating significant differences in conceptions of and attitudes toward mental disorder in these two societies.

Determination of the extent to which conceptions of mental disorder are culture-specific or universal may be possible only insofar as we are able to refine the focus of our questions and the techniques for their investigation. While cultural conceptions, perceptions, beliefs, labels, attitudes, explanations, and responses may be highly interrelated, review of the available cross-cultural literature suggests that researchers are not necessarily talking about comparable features at similar levels of analysis.<sup>3</sup> As White (1982: 73) has noted, "the lack of consensus on such fundamental issues as the similarity of conceptions of schizophrenia or of depression across cultures reflects the lack of adequate methods for the ethnographic description of cultural knowledge of illness."

Others have objected to comparative analyses that assume lexical equivalence of illness terms without examining semantic and culturally

distinctive meanings associated with folk terminology and categories of disease (Fabrega 1982; Good 1977; Good and Good 1982; Kleinman and Good 1985). In particular, many studies of folk conceptions of illness and disease categories have failed to adequately address or incorporate socio-culturally constituted systems of emotional meaning. This is a problem not only because definitions both incorporate and are shaped by emotion concepts, but especially because in non-Western cultures thought and emotion are frequently not mutually exclusive concepts (Lutz 1982). For this reason, contemporary social scientists have begun to critique and modify overly cognitive theories that fail to pay adequate heed to the inherent role of affect in sociocultural phenomena (Lutz 1983; Lutz & White 1986; Myers 1979; Rosaldo 1984; Schieffelin 1983; Solomon 1984). With respect to psychiatric illness, White (1982: 19) has observed that concepts of emotion should "provide a critical focus for comparative research on cultural conceptions of mental disorder."

#### *Family Conceptions of Mental Disorder*

Cross-cultural portraits of family conceptions of and responses to mental disorder have yet to receive sufficient attention in the anthropological literature (Kleinman 1980; Henry 1971; Lin & Lin 1981; Rogler & Hollingshead 1965; Townsend 1979). This is particularly true with respect to actual illness episodes or particular psychiatric disorders occurring within family or kin groups.

While there are cultural continuities between familial and broader societal responses to psychiatric disorder, there are important differences as well. Family members are often in daily contact with the ill individual and formulate their perceptions, labels and responses to the problem on the basis of their immediate and ongoing interaction with their relative. On the other hand, community responses are moulded by less immediate daily contact, and tend to be informed by stereotypic notions of mental illness that more sharply delineate the boundaries of sanity and insanity (Townsend 1979). Additionally, family members' views of mental illness embody a more intimate emotional and symbolic meaning than is typically the case with members of the community. Individuals with strongly familistic identities who are motivated to preserve the solidarity of the family might be expected to view the mental disorder of a relative rather differently than would persons who maintain an individually bounded sense of self and who see family bonds as ascriptive or dissolvable.

*The Role of the Family in Psychiatric Illness Processes*

It is often within the family context that symptoms are initially experienced by the patient and perceived and interpreted by others. Evaluations by family members influence affective and behavioral responses to the problem, decisions to obtain treatment, and the type of treatment sought. In the case of an acute psychotic episode, families often occupy a particularly important role in the health-care seeking process because the ill person may be too disturbed to either recognize a need for care or initiate such efforts. In many developing nations, and in the United States where deinstitutionalization and economic barriers to health care have severely limited the length of hospital stays, the family plays the most prominent role in providing care for psychiatric patients.

The importance of the family is highlighted by recent cross-cultural findings that strongly document variations in the course and outcome of schizophrenia across cultures. The International Pilot Study of Schizophrenia (IPSS) 2-year follow-up of 1202 patients in nine countries revealed that patients from the three developing nations of Nigeria, India, and Colombia had a more favorable course than did patients from the six more industrialized countries of Czechoslovakia, Denmark, Taiwan, the United Kingdom, the United States, and the USSR (World Health Organization 1979). The IPSS investigators concluded that social and cultural factors may play a role in schizophrenic outcome (Sartorius, Jablensky, and Shapiro 1978). In particular, they have suggested that "differences in the intensity of family bonds, in the type of family structure . . . may make it more or less difficult for a schizophrenic patient to return to the community and remain in remission" (World Health Organization 1979: 371).

For nearly two decades now, there has been systematic study of specific aspects of family life that may mediate the course schizophrenic illness. Qualitative features of family life — as indexed through the familial emotional climate or "expressed emotion" — are significantly associated with the course and outcome of illness processes among British (Brown, Birley, and Wing 1972; Vaughn and Leff 1976a), Anglo-American (Vaughn et al. 1984), and Mexican-American patients (Jenkins et al. 1986b; Karno et al. 1987). Tolerant, non-critical family environments seem to be conducive to sustained recovery from psychotic episodes, whereas hostile or critical affects portend a poor course of illness.<sup>4</sup> The foregoing studies document striking cultural variations in family attitudes, emotional responses, and styles of coping and adaptation to schizophrenic illness. Within the Mexican-American sample of 109 relatives, the majority (71.6%) were found not to be critical, hostile, or intrusively involved

with the patient. On the contrary, although these families displayed considerable sadness about the problem, there was often a high degree of warmth, tolerance, and acceptance of their ill relative. These data are in marked contrast to "expressed emotion" findings for a comparable sample of Anglo-Americans,<sup>5</sup> whose relatives were typically angry and critical of their ill family members (Jenkins et al. 1986a).

Kleinman has argued that patient and family views, or "explanatory models" of illness, constitute an essential and appropriate part of effective clinical care (Kleinman 1977, 1980). Within contemporary western psychiatric practice, however, family views of disorder do not generally receive serious consideration. One reason for the neglect of family models in clinical practice may be the general accord in psychiatry that schizophrenia is primarily a biogenetically based disease. While this paradigm has clearly advanced biochemical and genetic understandings of the disease, fostering many promising areas of investigation in the various subfields of schizophrenia research, an unfortunate consequence of this focus has been the relegation of sociocultural concerns — such as family views — to the sidelines.<sup>6</sup> Indeed, the current trend in clinical practice has been to consider family models of understanding schizophrenia as essentially irrelevant to the primary tasks of diagnosis and treatment.

Thus, despite several decades of schizophrenia research, including some important cross-cultural work, family interpretations and meanings associated with schizophrenic illness have received scant attention. Within clinical settings, disregard for family views often results in mutual misunderstandings and failed communications between health care professionals and families concerning the nature of illness episodes and their preferred treatment. This conflict in perspectives continues to constitute an important problem in health care.

#### BACKGROUND TO THE STUDY: PATIENTS, RELATIVES AND PROCEDURES OF INVESTIGATION

The data reported here were collected as part of a larger five-year longitudinal study of the influence of family "expressed emotion" on the course and outcome of schizophrenia among Mexican-Americans (COSA-MA: Jenkins, Karno, de la Selva, and Santana, 1986a; Karno et al., 1987, Jenkins et al., 1986b, 1988). The study was designed to extend prior British (Brown, Birley, and Wing 1972; Vaughn & Leff 1976a) and American research (Vaughn et al. 1984) concerning the influence of family "expressed emotion" on the course of an established schizophrenic illness for patients returning home to live with their families following

hospitalization for an acute psychotic episode. In these studies, "expressed emotion" (EE) scales are employed to measure negative affect, i.e., criticism, hostility, or intrusive involvement displayed by relatives in their attitudes and behaviors toward the patient.

Replication of the EE work with an Hispanic population is especially relevant given that throughout the literature on this vast and heterogeneous ethnic group,<sup>7</sup> no single observation is more common than the overwhelming importance of the family for an individual's notion of the self, relations to others, and world view (Clark 1959; Gecas 1976; Keefe & Casas 1980; Murillo 1976; Ramirez & Arce 1981). The strength of nuclear family bonds and extended kin ties has been observed to endure despite processes of acculturation and socioeconomic mobility (Gilbert 1978; Keefe 1979), and major psychiatric disorder within the family (Jenkins, Karno, de la Selva, and Santana 1986a). In a survey study conducted in East Los Angeles, Edgerton and Karno (1971) reported that unacculturated Mexican-Americans believed that a mentally ill person would be most likely to recover if he or she remained with the family; Anglo-Americans, on the other hand, generally saw no benefit to having the patient remain with the family.

In the present Southern California study, data were collected through home visits made to 70 patients and their families. During the first year of the study, Spanish translations and adaptations of methods and procedures were pilot tested and modified according to culturally appropriate, local usage with Mexican-Americans. (A fuller description of this study has been provided elsewhere [Jenkins et al. 1986a; Karno et al. 1987].) Patients' clinical course of illness was monitored for a period of nine months, and key relatives (N = 109) were interviewed using a number of instruments described below.

#### *Patient Selection Criteria*

Patients were recruited from several in-patient psychiatric facilities throughout Los Angeles and Ventura Counties according to the following patient selection criteria: (1) diagnosed as suffering from schizophrenia according to the Ninth Edition of the Present State Examination and DSM-III criteria; (2) of bilateral Mexican descent; (3) between the ages of 18–50 years of age; (4) living with parent, spouse or other close relative(s) prior to and following hospitalization.

*Procedures Completed with Relatives*

Following initial patient screening and diagnostic procedures, the family was contacted to obtain their consent to participate in the study. Key relatives — family members who maintained frequent daily contact with the patients — were then administered the Camberwell Family Interview (CFI),<sup>8</sup> which has been described at length by Brown & Rutter (1966) and Vaughn and Leff (1976b). The CFI is a semi-structured, open-ended interview that inquires into qualitative features of family life, particularly during the three month period prior to the patient's current hospitalization. In particular, the interviewer seeks to elicit relatives' attitudes and behaviors toward the ill family member. The CFI, usually taking one and one-half to two hours to administer, typically yields detailed narratives of family events and descriptions of the emotional atmosphere of the household. The interview is audiotape recorded for later scoring of the "expressed emotion" scales.

From the larger sample of 109 relatives of 70 patients, a sub-sample of 61 family members (of the first 40 patients recruited to the study) were further interviewed to elicit their ethnopsychiatric models of schizophrenic illness. Open-ended inquiry into their conceptions of the illness were probed, including such issues as recognition of the condition, health-care seeking processes, beliefs and feelings about the nature of the problem, its causes, preferred treatment, expected course and outcome, as well as the effects the problem had had upon the family. Inquiries were also made into the specific methods families employed for coping with and adapting to the difficulties generated by living with a relative suffering from schizophrenic illness.

The interviewers did not initially use terms such as "illness," "nerves," "mental disorder," "schizophrenia," and the like. We simply expressed an interest in understanding what type of "problem" family members believed it to be. Following this open-ended query, relatives were asked "Do you think it could be a problem of *nervios*,<sup>9</sup> mental illness, or something else?" Responses included as many combinations of these three categories as the informants felt appropriate, and no attempt was made on the part of the interviewer to limit the rich variation in the answers that were offered. Following this question, relatives were asked to give open-ended descriptions of the nature of *nervios* and mental illness.<sup>10</sup> The present analysis is limited to those portions of the interview bearing upon the respondents' interpretation of the condition as that of *nervios*.

*Patient and Family Background Characteristics*

Sociodemographic and selected clinical characteristics of patients and key relatives are presented in Tables 1—4.

As can be seen, the majority of the patients were Catholic and resided in parental households of lower socioeconomic status. Socioeconomic status (SES) was calculated for the head of household employing occupational and educational criteria outlined by Hollingshead and Redlich,<sup>11</sup> in which levels IV and V indicate the lower SES strata. The mean size of household was six persons, and most of the families had regular contact with large networks of extended kin. Mean number of

TABLE 1  
Sociodemographic Characteristics of Mexican-American Patients  
(N = 40)

	N	%
Sex		
Female	16	40.0
Male	24	60.0
Mean Age (SD)	27.0 (7.7)	
Marital Status		
Married	7	17.5
Single	29	72.5
Separated	3	7.5
Divorced	1	2.5
Religion		
Catholic	34	85.0
Protestant	1	2.5
Apostolic	3	7.5
Other	2	5.0
Mean years of Education (SD)	8.7 (3.9)	
Socioeconomic Status (Hollingshead & Redlich)		
I	0	0.0
II	0	0.0
III	1	2.5
IV	18	45.0
V	21	52.5
Family Type		
Parental	28	70.0
Sibling	5	12.5
Marital	7	17.5
Mean Household Size (SD)	6.25 (3.2)	

TABLE 2  
Selected Clinical Characteristics of Mexican-American Schizophrenic Patients  
(N = 40)

	N	%
Mean Length of Illness (SD) (Years)	5.0 (4.0)	
Mean number of Hospitalizations (SD)	3.2 (2.5)	
Age at Onset		
10—15	3	7.5
16—20	14	35.0
21—30	19	47.5
over 30	4	10.0
Recent Medication		
No	31	77.5
Yes	9	22.5

TABLE 3  
Sociodemographic Characteristics of Mexican-American Relatives  
(N = 61)

	N	%
Sex		
Female	36	59.0
Male	25	41.0
Mean Age (SD)	46.0 (14.9)	
Marital Status		
Married	38	62.3
Single	11	18.0
Separated	2	3.3
Widowed	5	8.2
Divorced	5	8.2
Living with Significant Other	0	0.0
Relationship to patient		
Mother	26	42.6
Father	14	23.0
Sibling	13	21.3
Spouse	7	11.5
Other	1	1.6

hospitalizations for the patients was three and the mean length of illness was five years (calculated from the time of the initial onset of psychotic symptoms to the present hospitalization). During the month prior to the

TABLE 4  
Cultural Characteristics of Mexican-American Patients and Relatives

	Patients (N = 40)		Relatives (N = 61)	
	N	%	N	%
Mean Acculturation Score (SD)	2.3 (0.9)		1.9 (0.9)	
Language Use				
Spanish Only/Predominantly	19	47.5	41	67.2
Bilingual	15	37.5	13	21.3
Mostly English	5	12.5	7	11.5
Only English	1	2.5	0	0.0
Generation Mexican-descent				
First	28	70.0	43	70.5
Second	7	17.5	11	18.0
Third	4	10.0	4	6.6
Fourth	0	0.0	2	3.3
Fifth	1	2.5	1	1.6

current hospitalization, the majority of the patients had not been taking anti-psychotic neuroleptic medications.

The majority of key relatives reported upon here were first-generation immigrant *Mexicanos* who were primarily or solely Spanish-speaking, and relatively unacculturated. Acculturation scores were calculated using the acculturation scale developed by Cuellar, Harris and Jasso (1980). On this scale, a score of "1" indicates a recent immigrant of Mexican identity and cultural orientation as a monolingual Spanish-speaker, whereas a score of "5" signifies an identification with Anglo-American culture and monolingual use of English.

#### CONCEPTIONS OF THE PROBLEM: *NERVIOS*, MENTAL ILLNESS, AND OTHER TROUBLES

The results presented here will include data from (1) open-ended inquiries into the relatives views of the nature of the problem; (2) forced choice inquiry into labeling the problem as "*nervios*," "mental illness" (*enfermedad mental*) or "something else" (*algo diferente*), and (3) open-ended descriptions of the nature of *nervios*.

1. *What kind of problem is it?* The responses to open-ended queries into the nature of the problem yielded responses which varied in complexity and specificity, and not infrequently relatives entertained more than one

notion as to the type of problem that was afflicting their relative. Moreover, the views of several relatives were expressed in tentative terms, revealing that their understandings of the problem were uncertain, ambiguous, and sometimes contradictory. While some relatives chose to provide descriptions that included a specific label or term for the nature of the illness, others preferred not to do so, focusing instead on a particular behavior or situation they considered to be the difficulty. The following examples will help to convey both the tenor of the responses and the methodological difficulties in categorizing them exclusively as "*nervios*," "mental," or "other." It will also be noted that the data reveal interrelations and overlapping of the three categories.

I would say it is *nervios*, I don't know. I've thought of many things, that it could be a blow to the head, it could be *nervios*, it could be that a vein doesn't circulate blood to her head . . . it could be too much sugar that she ate, her blood is very special. It doesn't circulate to her head. But I don't know.

*Nervios*. An understanding of ours. It's something. Something has affected him. He doesn't feel very secure with us.

Well, very *nervioso* (nervous). If someone says something to him he becomes very upset, very angry. Well, with *nervios*, I too am *nervioso*. He won't be silent when someone tells him something that is for his own good. He likes to sleep, he doesn't like to go out, to go out to see a girlfriend.

He was overcome by his *nervios*. He's not well in his head. Because of this, he is ill, weak brain.

It's her *nervios*. She's very hot-tempered.

I don't know. She's not well mentally. It could be illness, her mind is confused. It's *nervios*.

He has no problem. Only that he sleeps. That's the only problem. Until 10:00 or 11:00 in the morning he sleeps . . . at night he goes to sleep at 9:00. . . . It's normal that he sleeps because he has a problem with *nervios*.

He is sick in the head. A relative from Mexico said that someone has bewitched him. He went to the home of a *curandero* from Mexico, but was unable to greet him properly. He turned yellow and he couldn't greet him. And he become pale. It's more than his *nervios*. I think it's something else, some witchcraft.

I don't know. For one thing, he's not well. He needs to recuperate his mind.

His mind doesn't function . . . for periods he is well and other times he's very ill. His brain is damaged.

She feels hopeless, desperate. She feels angry.

Terms offered most often were, in order of frequency: *nervios* (included in 36% of the responses); a problem of the mind, brain or head (21%); illness (16%); specific behaviors or problems (12%) that characterize a problem of *nervios* as described below. In addition, there were a few (2–3) characterizations which can be subsumed under each of the

following specific terms: witchcraft, schizophrenia, depression, personality defects (e.g., stubborn, overly ambitious), family problems, psychological problems, trauma, inactivity or inability to do housework, and physical problems. There was also one mention of homosexual experiences that a father regarded as the primary problem. As indicated above, many relatives stated that they were unsure or did not know what the problem was, or made more than one mention of the type of problem (e.g., *nervios* and mental, which were double-coded). Finally, several relatives stated that there was no problem now or that a marked improvement had occurred.

Despite this variety of responses, *nervios* is the most commonly offered interpretation. Use of the term *nervios* in combination with particular behaviors and affects that were viewed as comprising this condition (as described subsequently in the interview with informants) accounted for 48% of the responses. The two other major categories were mental and illness problems. It should be noted, however, that in responding to this question relatives were sometimes specific in ways that nonetheless avoided discrete labels for the problem.

TABLE 5  
Mexican-American Relatives' Conceptions of Problem as  
*Nervios*, Mental Illness, or "Other" Categories  
(N = 61)

<i>NERVIOS</i>		
	N	%
No	20	32.8
Yes	41	67.2
Totals	61	100.0
MENTAL ILLNESS		
	N	%
No	45	73.8
Yes	16	26.2
Totals	61	100.0
OTHER		
	N	%
No	44	72.1
Yes	17	27.9
Totals	61	100.0

2. *Could the problem be one of nervios, mental illness, or something else?* Answers supplied to this question are illustrated in Table 5. Two-thirds (67%) of the family members asserted that their ill relative suffered from a problem of *nervios*, whereas only 26% maintained the problem was one of mental illness. Another 28% of relatives classified the problem as "something else." As will be discussed further below, some relatives had mixed conceptions of the nature of the difficulty, combining two of the categories.

The fact that *nervios* emerges as the most commonly employed term by Mexican-Americans in both the open-ended descriptions and the forced choice inquiry into relatives' conceptions, highlights it as a salient folk category employed for understanding schizophrenia. The higher percentage using *nervios* in the "forced-choice" question could be associated with the cultural appeal of this term. It could be that relatives overcame an initial reticence to state what they considered to be a culturally appropriate term for the illness. In light of the cultural salience of this label, the nature and meaning of *nervios* will now be addressed. Following this discussion, some of the other conceptions of the problem that were held by relatives are briefly presented.

3. *Descriptions of the nature of nervios.* Generally, the term *nervios* is utilized by *Mexicanos* and Mexican-Americans to encompass a wide range of troubling states or conditions. Beyond its usage as an idiom of distress for everyday problems *and* serious family conflict, the word is also employed by family members to label and understand schizophrenia, as has been documented above. These cases of *nervios* were typically reported to be far more severe illness conditions, beyond the control of the individual.

Reference is sometimes made either explicitly or implicitly to fundamental differences in persons' susceptibility or vulnerability to emotional, physical and mental problems associated with *nervios*. Some persons' nervous systems are considered to be fragile, open, or susceptible and/or their brains are considered to be *débil* (weak) or *delicado* (delicate). These people are said to be particularly affected by family conflict or turmoil. (Conversely, strong nerves enable one to be strong, to manage pressures, and to cope with life situations and family roles.)

As was true of the qualitative responses of relatives with respect to the naming of the problem, the open-ended responses varied when relatives were asked "What do you think a problem of *nervios* is? How would you describe a problem of *nervios*?" Despite this variation in response, it was nonetheless evident that family members of individuals with schizophrenic

illness regard *nervios* as a distinctive and recognizable illness syndrome that is comprised of diverse signs and symptoms. In talking about the condition, informants spoke of specific kinds of behaviors that characterize it, and from these descriptions patterns of symptoms and behaviors and sub-categories of *nervios* emerged. While some of the relatives' attributions centered on only one type of *nervios*, the categories are not mutually exclusive. The categories which emerged, sometimes explicitly used by informants, were not necessarily culturally elaborated and remained implicit within informants' responses.

Two principal categories were invoked with equal frequency. In the first, described by over one-third of relatives, the person who suffers *nervios* is said to be *una persona muy corajuda* (an easily angered or quick-tempered person). Such a person has a tendency to be quarrelsome and is irritable, "touchy," sensitive, volatile, or hotheaded: the least little thing can send this person into a tizzy. He or she is likely to engage in emotional outbursts, shouting and screaming, or flailing about. This category was the most frequently described by male relatives.

The next category, equally often mentioned as the foregoing, was defined by descriptions of *nervios* as a condition in which a person is said to suffer the following kinds of problems: was "uptight" or tense; suffered sleeping or eating disturbances; was nervous, worried, fearful, jittery, frustrated, desperate, or overwhelmed; shook and trembled; felt insecure. Such persons are sometimes said to need medication. In contrast to individuals described in the first category, persons falling into the second category do not necessarily express emotion in angry outbursts. To the contrary, the difficulty that such persons have is in trusting others so that he or she could "open up" to relatives about problems rather than keeping everything "bottled up" inside. This category was most commonly mentioned by women.

The next three most commonly mentioned conditions that characterize types or categories of *nervios* include feelings of sadness, depression, or being dispirited; physical effects associated with the condition; and lastly, grave difficulties in social interaction or functioning in social and/or occupational roles. Among the physical effects associated with the condition are problems of dizziness, feeling badly all over or feeling something bad throughout one's system, feeling pain in the brain or neck. These persons are frequently thought to need medication.

Another set of problems associated with *nervios* includes intensely dysphoric emotions in which the person feels *desesperada* (hopeless or desperate), *frustrado* (highly frustrated) or overwhelmed. Persons included in this category are said to be especially vulnerable to severe *ataques de*

*nervios* (attacks of nerves). They seem to be overcome by pressures or stresses and unable to control their emotions. The prominent affect is high anxiety. In contrast to the first category mentioned above, in which a person is prone to emotional outbursts, the focus here is on how the ill person feels rather than on how he or she behaves. Descriptions of what has gone wrong include mention of the "brain becoming uncontrollable," that there has been an "explosion in the brain," or their "brain has been attacked." Even so, uncontrolled behavior does not necessarily follow. It may be that the individuals become completely overwhelmed and seem as though they are stunned or very depressed. Unlike the worried, tense person of the second category described above, who still may be able to manage to function in some areas of their life, such persons are said to be completely unable to cope with their problems. This stage of *nervios* is very serious, for such individuals have totally lost control over their emotions and have no inkling as to how they can resolve their problems.

Finally, some relatives emphasized *nervios* as a condition in which the person is essentially confused. Such persons do not seem to know themselves or others who should be familiar. They cannot reason or figure things out, nor do they give sensible answers to questions asked of them. Rather, they often say quite strange things. The condition of *nervios* prevents this person from behaving normally or interacting easily with others.

While the various descriptions of *nervios* presented above exhibit qualitative differences in emphasis, they do encompass common features. Loss of control appears to be an especially important component. Except for the category of *corajuda*, the focus is typically on the state or condition of the ill person him/herself, rather than how the condition affects others. Also, the cultural category of *nervios* is an embodied illness conception that collapses distinctions between body and mind, nerves and emotion. Finally, problems of *nervios* tend to befall certain kinds of persons, i.e., weak, vulnerable, delicate, sensitive, or "high strung" persons. Mexican-American folk conceptions of *nervios* are, therefore, significantly linked to notions of persons and temperament.

#### *Gender Differences in Conceptions of Nervios*

Male relatives were most likely to report the category of *corajuda*, or quick-tempered. This may reflect a concern for the importance of family harmony and the problem that is posed when such socially inappropriate and disruptive emotional displays occur. As the family members who are

charged with the task of preserving order and discipline within the family, males — and in particular fathers — may feel this sort of behavior to be highly objectionable and thus more worthy of their attention.

Descriptions of *nervios* as a problem in which the person is tense, unable to sleep, worried, or emotionally overwhelmed were most commonly reported by women. The sort of problems that are reported here are more appropriately female — in particular mothers' — concerns. A woman's response to this kind of difficulty is often to attempt to seek the distressed person's confidence and to discuss with them their worries or problems. In addition to this emotionally nurturing role which women take on, they are also typically charged with the responsibility of directly caregiving actions such as offering the ill person food, massage, clean clothes, or company. Thus, examination of the two most commonly employed descriptions of *nervios* reveals the interrelation of familial roles, cultural values, and the interpretation of symptom behaviors and illness conditions.

Furthermore, there were differences in the application of cultural categories (*nervios* vs. mental illness) according to the gender of both the relative and the patient. Female relatives were more likely to consider the problem of an ill male family member to be mental illness rather than *nervios*; conversely, female relatives considered *nervios* more appropriate to female patients. Similarly, male relatives invariably responded that the problem female family members suffered from was *nervios*. Their descriptions of male patients were somewhat more likely to indicate a problem of mental illness rather than *nervios*.

### *Nervios, Mental Illness, and Other Conceptions*

The majority of relatives maintained that *nervios* and mental illness are distinct maladies.<sup>12</sup> However, as reported for Mexican-Americans by Newton (1978) and Puerto Ricans by Rogler and Hollingshead (1965), others thought that the relationship between *nervios* and mental illness involves a developmental sequence of severity. Some troubles encompassed by the term *nervios* are perceived as more serious than others, and it is possible that a moderate problem can progressively develop into an extremely severe illness. For example, the person who is *desesperada* suffers a more serious condition than does someone who is tense, worried, jittery, and the like. If severe enough and left untreated, *nervios* can lead to mental illness. Furthermore, a serious case of *nervios* can cause one to lose one's mind or have a mental breakdown. This sort of condition is especially serious since a consequence of mental breakdown may be that

one's brain or mind may thereafter be in a weakened and delicate state. A person in such a state is highly susceptible to having *ataques de los nervios* (attacks of nerves) whenever circumstances become too stressful. When this occurs, the afflicted individual is said to require intensive family attention and care. Further alleviation of the symptoms or severity of the condition should be sought through medical assistance, particularly in the form of medication.

TABLE 6  
Single and Dual Conceptions of the Problem by  
Mexican-American Relatives

	Mexican-Americans (N = 61)	
	N	%
<i>Nervios</i> only	29	47.5
<i>Nervios</i> and Mental Illness	5	8.2
<i>Nervios</i> and Other	7	11.5
Mental Illness only	10	16.4
Mental Illness and Other	1	1.6
Other Only	9	14.8
All	0	0.0
Totals	61	100.0

Table 6 provides data on the varying combinations of responses given by relatives. Of the 41 relatives (or 67%) who said that the problem was one of *nervios*, five persons believed mental illness to also be part of the problem. These relatives considered the illness to be either a combination of *nervios* and mental illness or to straddle the border between the two. Several relatives coupled the problem of *nervios* with some other problem, such as blood sugar levels and poor circulation, witchcraft, being "overly ambitious," "destiny at birth," trauma, or drugs (marijuana). Another 15% of the relatives felt that neither mental illness nor *nervios* were really the problem. These informants reported singular difficulties associated with drugs and stressful family relations.

While these notions may involve theories of etiology, it is important to note that the relationship between concepts and causal models can vary. For example, one mother believed that her son's problem was solely related to the marijuana he smoked. If he were able to stay away from this drug, he would have no (other) problems. Yet another father claimed that smoking marijuana was "the straw that broke the camel's back" in that his

son suffered from weak nerves that were unable to withstand the strain of such an agent. Another father attributed his son's problem to the fact that his son had had homosexual experiences. This father felt so disgraced by his son's behavior that he stated flatly that any other problem would have been preferable.

A minority of relatives (10, or 16%) reported the problem to be strictly one of mental illness, as opposed to *nervios* or any other kind of difficulty. These relatives often stated that the severity or long-standing nature of the family member's illness that had gone beyond that of *nervios* warranted this label. In a few of these cases, the ill relative had been particularly menacing towards or had physically assaulted relatives. Yet the low frequency of this latter response was striking, and as stated above the dominant view emphasized the presence of *nervios*.

### *The Meaning of Nervios and the Nature of Family Conceptions*

*Nervios* is popularly employed to refer to a broad and diverse range of distressing emotional states and illness phenomena. In Mexican-American and other Hispanic cultures (Low 1981, 1985; Guarnaccia in press), it is understood as a condition that quite normally afflicts adults who are experiencing difficult life circumstances. These include problems associated with family life and social relations with others, occupational conflicts, immigrant and non-documented legal status, low income, and racial prejudice and discrimination.

At the most general level, use of the term *nervios* by Mexican-Americans when referring to schizophrenia represents an attempt to apply a broad, commonly employed, and culturally meaningful folk label to a perplexing disorder. Most families have difficulty in applying the term mental illness to their relative's condition because to be truly "crazy" (*loco*) implies that the person has lost all reason, is totally out of touch with reality, completely out of control, and potentially unpredictable and violent. Terms for these states can sometimes imply that there is little or no hope, no possible recovery, and no cure. However, most of the ill relatives' conditions are perceived not to fit such stereotypic portraits of "craziness" (*locura*), and terms denoting mental illness are therefore inapplicable or uninformative for families (cf. Townsend 1979). The sister of one male relative offered the following reason why the problem should properly be termed *nervios* and not mental illness: "If something was wrong with his mind he wouldn't understand anything. He'd just talk away. Most of it has to be his nerves, because he's so uptight. He just doesn't relax. His feelings are bottled up inside. . . . There's a lot of ways your

nerves attack you . . . I guess I've learned to control my nerves, instead of having them control me. And with my brother it's different. They control him." Since her brother experienced fluctuations in the course of his illness in which he sometimes seemed his "old self" and was perceived as often being able to converse, think, and feel more or less "normally," a label of mental illness did not seem appropriate.

As Edgerton (1969) has observed, cases of mental disorder which are not seen as being both severe *and* chronic are not straightforward matters, particularly where families are concerned. Considerable sociocultural negotiation is often involved (Edgerton 1969). In light of the degree of stigma that is perceived to attach to certain terms, a major point of negotiation for families concerns the label to be applied to the illness. Stigma in this instance involves not only the social status of the individual him/herself, but other significantly invested persons as well, i.e., the family. Use of the term *nervios* affords a cultural protection not offered by other terms for mental illness, which are considerably more threatening. In their study of schizophrenia among Puerto Ricans, Rogler and Hollingshead (1965) reported that both relatives and the afflicted individual go to great lengths to consider the problem as one of *nervios* rather than *locura* (craziness). As we have seen, Mexican-Americans also prefer the term *nervios*. This was particularly the case when relatives were offered a specific choice between use of this term and that of mental illness.

However prominent a role stigma plays in shaping family interpretations of the problem, the meaning of *nervios* is to be discovered in a variety of other emotional and symbolic features of Mexican-American culture. As underscored earlier, family identity is central to Mexican-Americans. Attempts to retain close bonds in the face of serious or chronic illness are facilitated through notions of *nervios*. By invoking a condition that in its milder forms is normal and within the range of the socially acceptable, the differences between the ill relative and the rest of the family are minimized. In the descriptions of *nervios*, several relatives reported that they, too, suffered from this problem, although in a milder form. This perspective serves to reinforce and affirm family bonds by casting the ill person as one who is "just like us only more so."<sup>13</sup>

Furthermore, as the descriptions of *nervios* demonstrated, beliefs about differences in persons are manifested in conceptions of illness conditions. Some persons, for example, seem to have innately weak nervous systems or brains, leaving them vulnerable to disease. These individuals, it is thought, should be cared for and protected within the context of the family.

The condition of *nervios* is also consonant with core cultural values and

ideals that define the role of the family in social life and affirm the image of the family as a harmonious unit in which relations are marked by support and trust (*confianza*). These values were evident in the two most commonly mentioned forms of *nervios*: the quick-tempered person and the worried, withdrawn person who is unable to "open up." In the first of these forms, culturally inappropriate outbursts of frequent, uncontrolled anger and irritability seriously strain the ideal of a smooth-functioning, tranquil family group. And in the latter case, a person is unable to avail him/herself of the familial supports that are otherwise available to the troubled person by sharing worries with trustworthy kin. Thus, conceptions of psychiatric disorder can be seen as reinforcing cultural rules by identifying their mode of violation.

Moreover, world views of unacculturated Mexican-Americans, which incorporate aspects of Catholic belief, give great weight to the notion that existence inevitably entails suffering. Many tragic and difficult circumstances befall persons in this world and the most one can do is to bear (*aguantar*) such situations as well as possible. This observation should in no way be taken to mean that Mexican-Americans are resigned to the problem or fatalistically inclined, as has been suggested by some authors (e.g., Kiev 1968). Such an interpretation cannot be supported in the light of persistent efforts on the part of families to actively seek care and a "cure" for their relatives' condition. Hope plays a large role in the formulation of relatives views: *nervios* is considered a far more curable and manageable illness than is a mental disorder.

### *Folk Categories and Psychiatric Disorder*

Researchers have long been concerned with the issue of how folk categories might correspond to or "map onto" psychiatric diagnostic categories. These approaches are problematic, however, insofar as they exclusively emphasize clinical signs and symptoms (Good & Good 1982; Hughes 1985). An alternative approach to analyzing the way folk categories are constituted can be elaborated given the above analysis of *nervios*. The following three issues can be proposed as essential to the cultural constitution of illness categories: (1) differential cultural emphases of symptom profiles; (2) the role of emotion in folk categories; and (3) the broad ambiguous nature of folk categories.

1. For social or interpersonal reasons folk categories may both highlight certain features of psychopathology and downplay others. Descriptions of *nervios* seem to include some aspects of schizophrenia as understood in

clinical symptom profiles. For the *corajuda* or quick-tempered category, the families could be responding to a symptom commonly believed by clinicians to be a possible part of schizophrenia, i.e., irritability. Other categories include clinically recognized symptoms such as acute anxiety, agitation, worry, depression, eating and sleep disorders, and disorientation. What is quite striking about these composite descriptions of *nervios* conditions is the complete absence of particular psychotic symptoms, such as hallucinations and delusions.<sup>14</sup>

This observation should not be taken to mean that Mexican-Americans do not recognize nor consider their relatives' hallucinatory behavior or delusional thinking as unusual — they clearly do. The diagnostic criteria used in this study required that these patients had evidenced hallucinatory and delusional behavior. Such behavior is not central to *nervios* as applied by informants to their relatives' problem, however, and inattention to the more florid psychotic symptoms allows for the adoption of *nervios* and avoidance of stigma associated with "mental" labels. Thus preference for the term *nervios*, despite multiple psychiatric hospitalizations, can partially be understood as a psychological defense (i.e., denial) against the problem of mental illness. Family members' propensity to deny or minimize the presence of hallucinations or delusions is well known in clinical practice (Bleuler 1978), and has been documented cross-culturally among the Chinese (Lin & Lin 1981) and the Irish (Scheper-Hughes 1987). The efforts of families to account for this problem are, therefore, largely constrained by their attempts to explain away behaviors that are outside of the range of ordinary behavior. As Lin and Lin (1981) have noted for the Chinese family, love and denial are two emotions that often go hand in hand for families coping with the problem of mental illness.

2. Much more than previously recognized, emotion plays a prominent role in how indigeneous categories of mental illness are constituted. It will be recalled that emotions displayed by the Mexican-American relatives frequently were those of sadness, warmth, and hope. While some relatives were primarily angry about the illness, most were profoundly saddened by it. Ratings of "expressed emotion" revealed that the majority (72%) were not found to be critical, hostile, or intrusively involved with the patient (Karno et al. 1987). Instead, relatives frequently voiced expressions of sadness such as *tristeza*, *pena*,<sup>15</sup> and *lastima*.

Family sadness about an ill relative may lead to the adoption of relatively benign labels such as *nervios*. Indeed, the concept of *nervios* may incorporate emotional themes of sadness. Since severe cases of *nervios* are generally not considered blameworthy or within an individual's control, the person who suffers its effects is deserving of sympathy,

support, and special treatment by virtue of their "delicate" condition. The complex of cultural notions including sadness, *nervios*, and tolerance, then, provides the cultural logic in terms of which unacculturated Mexican-American families adapt to schizophrenic illness through sympathetic inclusion. As described above, the families in this study did not adopt the much more severely stigmatizing label for "craziness," *loco*. As a *loco*, the individual is considered to be completely and dangerously out of control with virtually no chance of recovery. So feared and detested is the *loco* in Mexican and Mexican-American culture that they fall prey to extreme cultural criticism and social ostracism (Newton 1978). These family patterns of response are in marked contrast to Irish-Americans, for example, whose families quickly adopt the label of "mental" for their ill relatives following hospitalization. Adoption of the heavily stigmatized term "mental" in Irish and Irish-American culture leads to virtually complete family rejection and abandonment (Scheper-Hughes 1979; 1987).

3. While there is cultural patterning to indigenous concepts of illness, clearly there is also a good deal of ambiguity, variation, complexity, and disagreement (cf. Kleinman 1980). It will be recalled that the open-ended question format indicated that approximately one-half of the Mexican-American relatives considered the problem to be *nervios*-related in some way. When directly asked to comment on whether *nervios* could be the problem, however, two-thirds of the relatives believed this to be the case. As discussed earlier, while these data raise interesting methodological issues, they also point to substantial intra-cultural variability in family conceptions of schizophrenia.

It is also important to note that *nervios* may apply not only to psychiatric illness conditions such as schizophrenia but also to depression, anxiety or panic disorders. Sufficient breadth of inclusion criteria are associated with *nervios* to encompass a wide range of conditions. In addition, the fact that schizophrenic disorders assume many forms requires that cultural categories provide a wide cultural umbrella to cover the numerous variations the disease may take. Given the fluctuations in the course and severity of schizophrenic symptoms, folk categories must provide dynamic accommodation for such phenomena.

The nature of this ambiguity is that the same indigenous category such as *nervios* can be applied in multiple contexts and have different meanings in each context: e.g., generalized malaise, episodic *ataques* (attacks), or schizophrenia. This means that a concept like *nervios* can be used as a tool or resource allowing open-ended interpretations of or strategies for dealing with distress. Despite this broad ambiguity the concept as applied

in any particular context may have greater or lesser specificity, as we have shown by documenting specific sub-types of *nervios* and regularities in patterns of signs and symptoms when applied to schizophrenia (e.g., *corajuda*). A portion of the coherence of folk views of psychiatric disorders within Mexican-American culture and across cultures (Low 1985) may be related to the behavioral manifestations and expression of disease processes involving neurochemical changes (Fabrega 1982).

The above three points address an issue raised by Good & Good (1982) and Fabrega (1970) concerning the nature of folk illness categories such as *nervios*. Use of the term *nervios* seems to reflect concerns for the moral standing, social relations, role functioning, and emotional and physical well-being of the ill person and the family. Thus, the meanings of folk categories of illness represent a complex set of interrelations, as Good (1977: 27) has noted.

The meaning of a disease category cannot be understood simply as a set of defining symptoms. It is rather a "syndrome" of typical experiences, a set of words, experiences, and feelings which typically "run together" for the members of a society. Such a syndrome is not merely a reflection of symptoms linked with each other in natural reality, but a set of experiences associated through networks of meaning and social interaction in a society.

Precisely because of this embeddedness of folk categories in networks of meaning and interaction, they are of potential import for the understanding of cross-cultural variations in the course and outcome of mental disorder. While such an influence of conceptions has to date not been empirically investigated, it has been the subject of speculation (Estroff 1982; Kleinman 1980; Rin & Lin 1962; Townsend 1979; World Health Organization 1979). The Mexican-American outcome study reported upon here contributes to our understanding of this problem. Not only are there striking cross-cultural differences in "expressed emotion" profiles, but it is also apparent that such attitudes are associated with the course of schizophrenia (Jenkins et al. 1986a, 1986b; Karno et al. 1987). Insofar as the present paper has shown that folk conceptions of illness are one of the determinants of expressed emotion, it is reasonable to hypothesize that folk conceptions also play a substantial role in mediating the course and outcome of schizophrenic disorder.

#### ACKNOWLEDGEMENTS

I wish to acknowledge the support of Marvin Karno, M.D., Principal Investigator of the research project "Course of Schizophrenia among Mexican-Americans." The research reported upon here was supported by the National Institute of Mental Health, Grant MH-33502 and 39011. I

am grateful for the dedicated research assistance of Patricia Urbina, Mariana Lopez, and Aurora de la Selva. For their insightful and critical reviews of this paper, special thanks go to Thomas J. Csordas, Dona Davis, Byron J. Good, Peter Guarnaccia, Sharon L. Sabsay, and Steven Zimmerman.

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#### NOTES

- <sup>1</sup> For purposes of this paper, I assume schizophrenia to be a diagnostic entity with relatively patterned sets of experiential and behavioral features. The cross-cultural validity of this diagnostic category, however, has yet to be definitively established. The debate over the status of schizophrenia as a culturally constructed category as opposed to an empirical disease entity has been summarized by Barrett (MS.).
- <sup>2</sup> I employ the distinction between illness and disease outlined by Kleinman (1980: 72–73):  
*Disease* refers to a malfunctioning of biological and/or psychological processes, while the term *illness* refers to the psychosocial experience and meaning of perceived disease. . . . But also included in the idea of illness are communication and interpersonal interaction, particularly within the context of the family and social network. . . . Disease affects single individuals, even when it attacks a population; but illness most often affects others as well (e.g., family, social network, even at times an entire community).
- <sup>3</sup> Edgerton (1969), however, has usefully distinguished three stages in the recognition of mental illness, those of perception, labeling, and action.
- <sup>4</sup> This effect is particularly pronounced when observed in combination with regular adherence to neuroleptic medication regimens (Vaughn and Leff 1976a; Vaughn et al. 1984, Karno et al. 1987; Jenkins et al. 1986b).
- <sup>5</sup> The term “Anglo-American,” while currently employed in the literature, is nonetheless an unsatisfactory one. The Anglo-American patients and their families I refer to here are all Caucasian Americans, predominantly of European ancestry, who are English-speakers.
- <sup>6</sup> Areas of biogenetic research have been varied, including genetic transmission, biochemistry, psychophysiology, information and attentional processing, psychopharmacology, visual tracking, cognitive and attentional deficits (cf. Wynne, Cromwell, and Matthyse 1978; Gottesman & Shields 1982).
- <sup>7</sup> The 1980 United States Census of Population revealed that over 14.6 million Hispanics reside in the United States. The largest segment (60%) of the sizeable group are Mexican in origin. These census statistics are, however, widely believed to underestimate the number of undocumented Mexicans residing in the United States. Thus, the estimate contained in the 1978 President’s Commission on Mental Health of some 23 million Hispanics in the United States is probably a more valid approximation. Recent numbers of economic and political refugees from throughout Central America have undoubtedly increased even the larger population estimate.
- <sup>8</sup> Interviewers were research staff for the project “The Course of Schizophrenia among Mexican Americans,” and included the author, Aurora de la Selva, Mariana Lopez, and Martha Magana.
- <sup>9</sup> The majority of interviews were completed in Spanish. For the convenience of the reader, I have provided English translations of terms for mental illness; however, I do

not use English terms for *nervios* since "nerves" is an unsatisfactory translation, and the primary purpose of this paper is to define the meaning of *nervios* for Mexican-Americans.

- <sup>10</sup> A forthcoming publication will contrast these data on mental illness with analyses completed for an Anglo-American sample of 47 key relatives of schizophrenic patients similarly diagnosed and studied.
- <sup>11</sup> Social class indices were calculated using the "Two Factor Index of Social Position," developed by Hollingshead and Redlich. Five levels are differentiated through use of occupational and educational criteria. The highest social class position is designated by "I" whereas the lowest SES ranking is indicated by a "V."
- <sup>12</sup> Seven informants reported that there was essentially no difference between *nervios* and mental illness.
- <sup>13</sup> Although used within the context of understanding sociocultural aspects of mental retardation, I owe the characterization of "just like us only more so" to Dr. Jim Turner (personal communication).
- <sup>14</sup> Such symptoms *are* included, however, as part of descriptions of conditions of mental illness. Like *nervios*, these conceptions are complex and therefore beyond the scope of this article.
- <sup>15</sup> Tousignant (1984) has provided an elegant portrayal of the expression of *pena* in Ecuador.

#### REFERENCES

- Barrett, R.  
Ceremonies of Clinical Writing: The Documentary Construction of Schizophrenia. *Culture, Medicine, & Psychiatry*, in press.
- Bleuler, M.  
1978 *The Schizophrenic Disorders: Long-Term Patient and Family Studies*. New Haven and London: Yale University Press.
- Brown, G. W., J. L. T. Birley, and J. K. Wing  
1972 Influence of Family Life on the course of Schizophrenic Disorders: A replication. *British Journal of Psychiatry* 121: 241-258.
- Brown, G. and M. Rutter  
1966 The Measurement of Family Activities and Relationships: A methodological study. *Human Relations* 19: 241-263.
- Cuellar, I., L. C. Harris, and R. Jasso  
1980 An Acculturation Scale for Mexican American Normal and Clinical Populations. *Hispanic Journal of Behavioral Sciences* 2(3): 199-217.
- Davis, D. L.  
1987 Newfoundland Nervosity: Victorian Legacy or Thoroughly Modern Folkway? *Medic. Anthropol.* in press.
- Edgerton, R. B.  
1969 On the "Recognition" of Mental Illness. *In Changing Perspectives in Mental Illness*. S. Plog and R. B. Edgerton, eds., New York: Holt, Rinehart and Winston.  
1966 Conceptions of Psychosis in Four East African Societies. *American Anthropologist* 68: 408-425.
- Edgerton, R. B., and M. Karno  
1971 Mexican-American Bilingualism and the Perception of Mental Illness. *Archives of General Psychiatry* 24: 286-290.
- Estroff, S.  
1982 Long Term Psychiatric Clients in an American Community: Some Sociocultural Factors in Chronic Mental Illness. *In Clinically Applied Anthropology: Anthro-*

- pologists in Health Science Settings. N. J. Chrisman and T. W. Maretzki, eds., Dordrecht, Holland: D. Reidel Publishing Co.
- 1981 *Making it Crazy: An Ethnography of Psychiatric Clients in an American Community*. Berkeley: University of California Press.
- Fabrega, H.
- 1982 *Culture and Psychiatric Illness: Biomedical and Ethnomedical Aspects*. In *Cultural Conceptions of Mental Health and Therapy*. A Marsella and M. White, eds., Dordrecht, Holland: D. Reidel Publishing Co.
- 1970 *On the Specificity of Folk Illnesses*. *Southwest Journal of Anthropology* 26: 305—314.
- Gecas, V.
- 1976 *Self-Conceptions of Migrant and Settled Mexican-Americans*. In *Chicanos: Social and Psychological Perspectives*. C. A. Hernandez, M. J. Haug, and N. N. Wagner, eds., St. Louis: C. V. Mosby Company.
- Gilbert, J. M.
- 1978 *Extended Family Integration among Second-Generation Mexican Americans*. In *Family and Mental Health in the Mexican American Community*, J. M. Casas and S. E. Keefe, eds., Los Angeles: Spanish Speaking Resource Center, University of California, Los Angeles.
- Good, B. J.
- 1977 *The Heart of What's the Matter: the Semantics of Illness in Iran*. *Culture, Medicine and Psychiatry* 1: 25—58.
- Good, B. J., and M. J. Del Vecchio Good
- 1982 *Toward a Meaning-Centered Analysis of Popular Illness Categories: "Fright Illness" and "Heart Distress" in Iran*. In *Cultural Conceptions of Mental Health and Therapy*. A. Marsella and G. White, eds., Dordrecht, Holland: D. Reidel Publishing Co.
- 1981 *The Meaning of Symptoms: A Cultural Hermeneutic Model for Clinical Practice*. In *The Relevance of Social Science for Medicine*, L. Eisenberg and A. Kleinman, eds., Dordrecht, Holland: D. Reidel Publishing Co.
- Gottesman, I. I., and J. Shields
- 1982 *Schizophrenia: The Enigmatic Puzzle*. Cambridge: Cambridge University Press.
- Guarnaccia, P.
- 1987 *Ataques de Nervios: An Idiom of Distress in the Latino Community*. *Medic. Anthropol.*, in press.
- Henry, J.
- 1971 *Pathways to Madness*. New York: Vintage.
- Hughes, C.
- 1985 *Culture-Bound or Construct-Bound? The Syndromes and DSM-III*. In *The Culture-Bound Syndromes: Folk Illnesses of Psychiatric and Anthropological Interest*. R. Simons and C. Hughes, eds., Dordrecht, Holland: D. Reidel Publishing Co.
- Janzen, J. M. (with the collaboration of W. Arkinstill, M.D.)
- 1978 *The Quest for Therapy in Lower Zaire*. Berkeley: University of California Press.
- Jenkins, J. H.
- 1988 *Conceptions of Schizophrenia as a Problem of Nerves: A Cross-Cultural Comparison of Mexican-Americans and Anglo-Americans*. *Social Science and Medicine* 26(12): 1233—1244.
- Jenkins, J. H., M. Karno, A. de la Selva, F. Santana
- 1986a *Expressed Emotion in Cross-Cultural Context: Familial Responses to Schizophrenic Illness Among Mexican-Americans*. *Schizophrenia: Family Assessment and Intervention*, Springer Verlag.

- Jenkins, J. H., M. Karno, A. de la Selva, F. Santana, C. Telles, S. Lopez, and J. Mintz  
1986b Expressed Emotion, Maintenance Pharmacotherapy, and Schizophrenic Relapse Among Mexican-Americans. *Psychopharmacology Bulletin* 22(3):
- Karno, M., J. H. Jenkins, A. de la Selva, F. Santana, C. Telles, S. Lopez, and J. Mintz  
1987 Expressed Emotion and Schizophrenic Outcome among Mexican-American Families. *J. of Nervous and Mental Disease* 175(3): 143—151.
- Keefe, S.  
1979 Urbanization, Acculturation, and Extended Family Ties: Mexican Americans in Cities. *American Ethnologist* 6: 349—369.
- Keefe, S. E., and J. M. Casas  
1980 Mexican Americans and Mental Health: A Selected Review and Recommendations for Mental Health Service Delivery. *American Journal of Community Psychology* 8(3): 303—325.
- Kiev, A.  
1968 *Curanderismo: Mexican-American Folk Psychiatry*. New York: Free Press.
- Kleinman, A.  
1980 *Patients and Healers in the Context of Culture: An Exploration of the Borderland between Anthropology, Medicine, and Psychiatry*. Berkeley: University of California Press.  
1977 Rethinking the Social and Cultural Context of Psychopathology and Psychiatric Care. In *Renewal in Psychiatry: A Critical Rational Perspective*. T. Manschreck and A. Kleinman, eds., Washington, D.C.: Hemisphere Publishing Co.
- Kleinman, A. and B. Good  
1985 *Culture and Depression*. Berkeley: University of California Press.
- Lin, T. Y., and M. C. Lin  
1981 Love, Denial and Rejection: Responses of Chinese Families to Mental Illness. In *Normal and Abnormal Behavior in Chinese Culture*. A. Kleinman and T.-Y. Lin, eds., Dordrecht, Holland: D. Reidel Publishing Co.
- Locke, M.  
1982 Popular Conceptions of Mental Health in Japan. In *Cultural Conceptions of Mental Health and Therapy*. A. Marsella and G. White, eds., Dordrecht, Holland: D. Reidel Publishing Co.
- Low, S.  
1985 Culturally Interpreted Symptoms or Culture-Bound Syndromes: A Cross-Cultural Review of Nerves. *Social Science and Medicine*. 21(2): 187—196.  
1981 Meaning of Nervios: A Sociocultural Analysis of Symptom Presentation in San Jose, Costa Rica. *Culture, Medicine and Psychiatry* 5: 25—47.
- Lutz, C.  
1983 Parental Goals, Ethnopsychology, and the Development of Emotional Meaning. *Ethos* 11(4): 246—262.  
1982 The Domain of Emotion Words on Ifaluk. *American Ethnologist* 9(1): 113—128.
- Lutz, C. and G. White  
1986 The Anthropology of Emotions. *Ann. Rev. Anthropol.* 15: 405—36.
- Murillo, N.  
1976 The Mexican American Family. In *Chicanos: Social and Psychological Perspectives*. C. A. Hernandez, M. J. Haug, & N. N. Wagner, eds., St. Louis: The C. V. Mosby Company.
- Murphy, J.  
1982 Cultural Shaping and Mental Disorders. *Deviance and Mental Illness*. W. R. Grove, ed., Beverly Hills: Sage Publications.  
1976 Psychiatric Labeling in Cross-Cultural Perspective. *Science* 191: 1091—1028.

- Myers, F.  
1979 Emotions and the Self: A Theory of Personhood and Political Order among Pintupi Aborigines. *Ethos* 7(4): 343–370.
- Newton, F.  
1978 The Mexican American Emic System of Mental Illness: An Exploratory Study. *In* Family and Mental Health in the Mexican American Community, J. M. Casas and S. E. Keefe, eds., Los Angeles: University of California, Los Angeles Spanish Speaking Mental Health Resource Center.
- Ramirez, O. and C. Arce  
1981 The Contemporary Chicano Family. *In* Explorations in Chicano Psychology. A. Baron, ed., New York: Praeger Publishers.
- Rin, H. and T.-Y. Lin  
1962 Mental Illness among Formosan Aborigines as Compared to Chinese in Taiwan. *Journal of Mental Science* 108: 134–145.
- Rogler, L. and A. Hollingshead  
1965 Trapped: Families and Schizophrenia. New York: John Wiley and Sons Publishers.
- Rosaldo, M.  
1984 Toward an Anthropology of Self and Feeling. *In* Culture Theory: Essays on Mind, Self, and Emotion. R. Shweder and R. LeVine, eds., Cambridge: Cambridge University Press.
- Sartorius, N., A. Japlesky, and R. Shapiro  
1978 Cross-Cultural Differences in the Short-Term Prognosis of Schizophrenic Psychosis. *Schizophrenia Bulletin* 4: 102–113.
- Scheper-Hughes, N.  
1987 'Mental' in 'Southie': Individual, Family, and Community Responses to Psychosis in South Boston. *Culture, Medicine, and Psychiatry* 11(1): 53–78.  
1979 Saints, Scholars, and Schizophrenics: Mental Illness in Rural Ireland. Berkeley: University of California Press.
- Schieffelin, E.  
1983 Anger and Shame in the Tropical Forest: On Affect as a Cultural System in Papua New Guinea. *Ethos* 11(3): 181–191.
- Solomon, R. C.  
1984 Getting Angry: the Jamesian theory of emotion in anthropology. *In* Culture Theory: Essays on Mind, Self, and Emotion. R. A. Shweder and R. LeVine, eds., Cambridge: Cambridge University Press.
- Tousignant, M.  
1984 *Pena* in the Ecuadorian Sierra: A Psychoanthropological Analysis of Sadness. *Culture, Medicine, and Psychiatry* 8: 381–398.
- Townsend, J.  
1978 Cultural Conceptions and Mental Illness. A comparison of Germany and America. Chicago: University of Chicago Press.  
1979 Stereotypes of Mental Illness: A Comparison with Ethnic Stereotypes. *Culture, Medicine, and Psychiatry* 3(3): 205–229.
- Vaughn, C. and J. Leff  
1976a The Influence of Family and Social Factors on the Course of Psychiatric Illness. *British Journal of Psychiatry* 129: 125–137.  
1976b The Measurement of Expressed Emotion in the Families of Psychiatric Patients. *British Journal of Social and Clinical Psychology* 15: 157–165.
- Vaughn, C., K. Snyder, S. Jones, W. Freeman, and I. Falloon  
1984 Family Factors in Schizophrenic Relapse: A California replication of the British research on expressed emotion. *Archives of General Psychiatry* 41: 1169–1177.

Waxler, N.

- 1974 Culture and Mental Illness: A Social Labeling Perspective. *Journal of Nervous and Mental Disorders* 159: 379—395.

White, G.

- 1982 The Ethnographic Study of Cultural Knowledge of "Mental Disorder." *In* Cultural Conceptions of Mental Health and Therapy. A Marsella and G. White, eds., pp. 69—95. Dordrecht, Holland: D. Reidel Publishing Co.

Wynne, L., R. Cromwell, and S. Matthyse

- 1978 *The Nature of Schizophrenia: New Approaches to Research and Treatment*. New York: John Wiley and Sons.

World Health Organization

- 1979 *Schizophrenia: An International Follow-up Study*. Chichester: John Wiley and Sons.