Health and Mental Health among Mexican American Migrants: Implications for Survey Research

ROBERTA D. BAER

This paper provides an example of the policy implications of the need to understand emic categories. As part of research commissioned by the U.S. Census Bureau, in-depth interviewing on the topic of health and mental health was conducted among Mexican and Mexican-American migrant workers in Florida. It was found that perceptions of these topics differ from the biomedical model, but are somewhat similar to the categorizations elicited from a sample of white middle class, highly educated urbanites. These results suggest that at least for this domain, standard demographic variables, such as ethnicity, level of education, language, and income seem to be less critical than is the lay/professional distinction. The biomedical categories used in survey research may be inappropriate not only for ethnic minorities, but also for the mainstream population.

Key words: US Census, Mexican Americans, mental health: US, Florida

nthropologists strongly advocate the use of Aethnographic research prior to the construction of quantitative research instruments, such as closed survey questionnaires. Yet when asked to justify this approach to those outside of anthropology, we often fall back on vague statements of "emic" and "etic," and the need to understand minority views and categories of experience. Often it can be hard to generate concrete examples of the policy implications of the need to understand emic categories. This paper focuses on data on crosscultural understandings of mental health, collected as a part of research commissioned by the US Census Bureau. It is rare that an organization involved in survey research seeks anthropological input on the development of a new survey instrument. In the present case, the results were quite surprising both in terms of the usefulness of the general demographic categories commonly used by survey researchers, as well as in terms of the ethnic categories favored by anthropologists. These findings suggest that more research on lay/professional differences in categorization of experience is necessary to improve the quality of data collected through broad based survey

The impetus for the research described here was the revision by the National Center for Health Statistics (NCHS) of the core

interview used in the National Health Interview Survey (NHIS), the new version of which was to be implemented in 1995. The NHIS is used to annually survey approximately 50,000 households on their mental and physical health, use of health care, immunizations, knowledge of AIDS, cancer prevention. and a variety of related topics. The National Center for Health Statistics is the main source of health statistics for the US; these data are used to establish policies, to set priorities, and to monitor the national health situation. The Census Bureau was asked by NCHS to initiate research on language and terminology used to discuss mental health and disease in various cultural communities throughout the country. It was recognized that in the original framing of many of the questions and formats traditionally used, few attempts had been made to ensure that these were appropriate for diverse cultural and socioeconomic situations.

The research discussed here was, thus, one part of a larger research effort by the US Bureau of the Census to aid in the design of the new mental health module for the National Health Interview Survey. In-depth, qualitative research on conceptions of health and mental health was conducted among several low literate populations, as well as among middle class urbanites. This paper reports the results of ethnographic interviewing among Mexican and Mexican American migrant workers in Florida.

A number of questions have been raised about the mental health status of Mexican Americans, due to their apparent lack of need for services and their relative absence from mental health treatment facilities (cf. Casas and Keefe 1978; Schreiber and Homiak 1981). This paper addresses four questions related to the larger issue with which the Census Bureau was concerned,

Roberta D. Baer is an Associate Professor of Anthropology at the University of South Florida. She is appreciative of the help on this project provided by Dennis Penzell, Marlene Riviera, Minerva Rodriguez, and the rest of the staff of the Ruskin Migrant Health Center, Alayne Unterberger, and Claire Cassidy.

i.e., measuring mental health status in this population

- 1) How is the domain of health and mental health categorized by this population?
- 2) How does this population perceive and understand standard questions used to measure prevalence of the major biomedically categorized mental illnesses?
- 3) How do conceptions of this domain compare with those of middle class Americans?
- 4) What are the implications of these patterns for survey research on this topic?

Background

MIGRANT WORKERS

Migrant workers are defined by the Migrant Health Act of 1962 as individuals whose principal employment is in agriculture on a seasonal basis (Martaus 1986). It is estimated that at least 800,000 migrant workers are in the United States, of which more than 75% are Mexican or Mexican American. The East Coast migrant stream moves from Florida northward along the east coast, to New York and New England (Martaus 1986). This population was chosen for investigation in that it has been observed that less educated Mexican Americans, particularly those from rural backgrounds, have very little understanding of psychotherapy; "psychiatry and most psychotherapy generally fall outside the economic and social reality of the poorer Hispanic population" (Bach-y-Rita 1982:31).

The population addressed in this study - Mexicans and Mexican Americans --- works during the spring, winter, and fall seasons in southern Hillsborough County, a rural area of west central Florida. Some of the population lives in Florida year round, picking tomatoes in Nov/Dec. and May/June; others work in Florida those few months and then follow the East Coast migrant stream north to North Carolina and New York to pick crops there, while others return to home bases in Texas and northern Mexico. The majority of the population was born in northern Mexico, with the remainder from Texas or Florida. A previous study (Baer and Bustillo 1993) reports mean educational levels of about six years. Mean household incomes (with household sizes of 6 persons) were \$10,065 per year. While that study accessed the population through the migrant health clinic, it found that the population also retains an active use of folk medical healers. Baer and Bustillo (1993) noted that none of the over 250 cases of symptoms considered by those interviewed to be "folk illnesses" were treated at the health center.

HEALTH AND MENTAL HEALTH

The literature on mental health among Mexican Americans has several main themes, revolving around the hypothesized greater need for mental health services in this population, due to stress created by poverty, acculturation pressures, language barriers, discrimination, etc. However, under-representation of Mexican Americans in mental health facilities and low rates of psychosis have been the usual pattern documented (Schreiber and Homiak 1981).

One explanation suggested for low utilization of mental

health services is the role of the family among Mexican Americans in protecting the mental health of individuals (Briones et al. 1990): however, documentation of this is limited. Two other hypotheses are stressed in the literature and further discussed below. The first is that Mexican Americans perceive mental health problems differently than does the rest of the population. The second is that the psychological tests used to measure incidence of mental illness may not capture what is occurring among this population.

Perception and Evaluation of Health and Mental Health

The first issue addressed is how this population perceives health in general, and more specifically mental health. A person in good physical health is so defined on the basis of adequate functioning, the absence of pain, and a robust body (Schreiber and Homiak 1981; Martaus 1986). Illnesses may be caused by hot/cold imbalance. They may also be due to emotional causes (such as worry, sadness, or anger; these causes of illness are seen primarily in females). Germs are also believed to be a cause of illnesses, particularly for those with a 7th grade or higher education in the United States (Martaus 1986).

A study of self- and physician-assessed health for Mexican Americans showed a great deal of disagreement between the respondents and the physicians, particularly for those who were interviewed in Spanish. For this group, the physicians assessed 80% as being in excellent or very good health. But only 15% of the respondents considered their health to be excellent or very good (Angel and Guarnaccia 1989). The Spanish speaking respondents also reported higher levels of depression, a pattern possibly related to the lack of separation between psychological and physical senses of self. In this population, high levels of affective distress are interpreted as a sign of negative physical health.

In addition to ailments recognized by biomedicine, Mexican tradition recognizes a number of folk illnesses, such as susto, mal puesto, and nervios. These folk illnesses have psychological symptoms. It has been suggested that since treatment for folk illnesses may be in the hands of folk healers, fewer of them may come to the attention of biomedical mental health providers (Schreiber and Homiak 1981).

Susto is caused by a frightening experience, which may cause the departure of the soul from the body. While recent studies have shown clear organic signs associated with susto (Baer and Bustillo 1993; Baer and Penzell 1993; Rubel et al. 1984), earlier studies tended to assume the primacy of psychiatric processes in such Mexican folk illnesses (Browner et al. 1988).

Mal puesto (witchcraft), is used as a diagnosis only after other diagnoses have been found to be inappropriate. It causes insanity and can be used to label schizophrenic reactions and other psychotic disorders. Symptoms include suspicious, moody, or other strange behavior (Schreiber and Homiak 1981).

Jenkins (1988) has suggested that Mexican Americans use the label nerves (nervios) to label schizophrenia. This has the result of masking a stigmatized condition with a label that is culturally acceptable, as well as minimizing differences between the rest of the family and the sick person. Somatic complaints of the sick individual are also emphasized. Jenkins (1988) found that the term nervios is used for everyday problems causing distress, serious family conflict, as well as schizophrenia. Thus, nervios in its milder forms is completely normal, i.e., generalized

malaise; the schizophrenic relative is merely seen as being a more severe form of the problem. Problems associated with the diagnosis of *nervios* included irritability, hopelessness, nervousness, depression, physical effects, and difficulty in functioning in social or occupational roles. *Nervios* was seen by respondents as being more common in women (Jenkins 1988).

The folk category, nervios, thus, seems to include symptoms defined biomedically as schizophrenia, anxiety, depression, and panic disorders. Nervios, however, is not used to describe individuals who have psychotic symptoms, such as delusions and hallucinations (Jenkins 1988).

Finkler found that rural Mexicans used the term nervios to refer to "a wide variety of emotional problems, physical symptomology, and existential conditions experienced in the entire body" (Finkler 1989). In a study of Mexican American widows, Kay and Portillo (1989) found that the more bicultural the woman, the less she was troubled by nervios. Somatic symptoms associated with nervios included rash, depression (decaida), tiredness, feeling cold, and tremors. Non-somatic symptoms associated with nervios included fear, worry (mortificación), anguish, anger, separation sorrow (tirisia) loneliness, disorientation, feeling empty, confusion, and a feeling of being in the way (Kay and Portillo 1989). However, it is the latter set of non-somatic symptoms which primarily distinguish nervios.

Other studies have focused on other aspects of differential perception and evaluation of mental health issues by Mexican Americans, often with unclear or contradictory results. Methodological problems have been another problem with this type of research; for instance, one study lumped together responses of "sick" and "mentally ill" as having the same meaning (Parra 1987).

A more anthropological approach to this issue was taken by Newton (1978). He found a conceptual system in which the concepts of emotional and mental problems represented successive stages in the course of mental disorders. Emotional problems were viewed as being less serious, but potentially could lead to mental problems. It is suggested that in this population, emic perceptions of mental health which differ from those of the dominant society may be important variables contributing to under-utilization of mental health services.

Measuring Incidence of Mental Health Problems

Other data suggest that the true incidence of mental health problems is higher than has been reported, and that family support is not able to completely protect members from feelings of powerlessness and depression (Schreiber and Homiak 1981). Thus, another major focus of research is the actual incidence of mental illness in this population and how it can best be measured. Results of these studies (Golding et al. 1990; Golding and Burnam 1990a, 1990b; Warheit et al. 1985; Salgado de Synder et al. 1990a; 1990b, Burnam et al. 1984; Vega et al. 1984; Montgomery et al. 1990) are often contradictory, and they generally fail to describe emic perspectives of mental illness.

Methodology

Two sets of in-depth interviews — at the end of June and in the middle of September — were conducted at the Ruskin

Table Respondents' Interpretations of Questions (s)

Question	Interpretation
"You feel tired out for no good reason"	"tired out because of
"You sleep much more than usual"	
"Your muscles feel tense, sore or aching"	
"You feel depressed"	
"Your face feels hot and flushed"	
"You feel your heart pound or race	
without exercising"	
"You have a much bigger appetite than usual"	"because I'm not working and am
	around the house and more food"
	"because I was visiting my family last
	month and they treated me well"
"You sleep much more than usual"	"because I'm not working now, so I
	don't have to get up so early"
"You feel so sad that nothing could cheer you up"	"when a close family member dies"
"You feel dizzy"	"due to medication for high blood pressure
"You have trouble falling asleep"	"due to a bad cough"
"You never feel full of energy"	"due to being eight months pregnant"

Migrant and Community Health Center in Ruskin, Florida. The interviews were designed to provide in-depth ethnographic information about understanding of the domain of mental illness. The clinic at which the research took place provides low cost health and mental health service to the migrant population. The first interview presented a series of descriptions of mental illnesses, based on questions from the National Survey of Health and Stress (NSHS). This survey instrument was developed by the University of Michigan Survey Research Center, and has been used since 1990. It is designed to provide accurate national information on current and lifetime emotional disorders. For example, in asking about depression the following question was used: "I would like you to think about a person who for two weeks or more, feels sad or depressed almost everyday, or who loses his/her interest in the things that he/she always liked to do." And, for panic, "I would like you to think about a person who all of a sudden feels frightened, anxious or very uneasy in situations when most people would not feel that way." In addition, respondents were asked if they had a name for the condition described, how a person with that condition behaved, what forms of treatment should be used, and if they themselves had ever had this condition. Good and bad health were also discussed, and respondents were asked whether they were in good or bad health.

The second interview was divided into two parts. The first part probed for general concepts of health and mental health, and any distinctions between them. Also explored were the folk categories of la locura (craziness) and nervios (nerves). The second part of the interview tested questions provided by the Census Bureau. Respondents were asked the questions, as well as debriefed after the interview to determine their understanding and interpretation of the questions. The questions were to be answered "most of the time," "some of the time," "a little of the time," or "none of the time." Examples of the types of questions included in this inventory (and respondents' interpretations of the meaning of this questions — a topic which will be addressed below) are given in Table 1.

Both sets of interviews were administered in Spanish, except in those few cases (2 first interviews and 3 second interviews)

Table 2. Sample Population

Interview #1		Interview #2			
Age	Educa	tion	Age	Educa	ation
Up to 35 Years of	f Age				
Males (n=5)			Males (n=7)		
18	7	M	25	- 11	U
33	9	M	30	12	U ·
32	9	U	22	3	M
21	5	M	33	1	М
23	8	U	31	3	M
			24	12	U
			32	2	U
Mean:	25	7.6	28	6	
Females (n=8)		Females (n=5)		
34	2	M	29	13	М
32	13	M	18	4	M
21	9	บ	29	9	М
าว	4	U	26	6	М
	9	M	26	6	М
	9	M			
21	8	Ū			
22	12	M			
Mean: 28	8.3			26	
Older Than 35	Years of a	Age			
Males (n=4)	•		Males (n=3)		
39	11	M	36	0	
46	6	U	57	6	M
62	1	M	62	0	
45	0			_	
Mean: 48	4.5				
Females (n=	3		Female (n=5)		
45	3	М	46	2	М
54	6	M	39	5	М
53	Ö		48	4	U
- +	•		44	0	•
			64	Ŏ	
Mean: 50.6	3		48	2.2	

Key: M=Educated in Mexico: U=Educated in the US

where the respondent expressed a preference for English. The first interview and the first part of the second interview were translated into Spanish by the author, and then back translated. The second part of the second interview — the Census Bureau Inventory Pretest — (see Table 1) was provided in Spanish by the Census Bureau, having been translated from the English, and then back translated.

Translations of excerpts from the interviews presented below were done by the author. Where significant Spanish phrases were used which might be useful for purposes of comparing terms across Hispanic groups, for validity, or for the information of readers, these phrases are given in Spanish, and an English translation provided in parentheses.

Results

THE POPULATION

Each set of in-depth interviews was administered to 20 respondents; the total number of different individuals who

participated in the study was 40. Attempts were made to sample equally among older males, younger males, older females, and younger females. No further criteria were used, and as a result, some individuals who were visiting the clinic for physical or mental health problems were included, as well as were some well individuals who accompanied them. The questionnaires being developed by the Census Bureau will be designed to be administered to a representative sample of the population as a whole. Therefore, no individuals were climinated from this study based on their health status.

The population in each set of interviews is given in Table 2. Mean age of the total population was 35 years. Mean level of education was 5.9 years. The majority of the population had received their schooling in Mexico; only one fourth (10) had attended school in the United States. Sixty percent of the population worked or had worked as farmworkers, on average for 12 years. Those who were not so employed worked in landscaping or nurseries, childcare, construction, golf course maintenance, or housework. Mean household size was 4.4 persons.

PERCEPTION AND EVALUATION OF HEALTH AND MENTAL HEALTH

Good Health/Bad Health

Good health was broadly interpreted by the respondents; many of their descriptions included characteristics which might be biomedically defined as those of good mental health. This is another indication of the lack of separation seen between mental and physical health in this population. A person in good health was described as being happy, active, smiling, working, talkative, never sick, and never feels bad.

Bad health is also described in a mixture of physiological and psychological terms, including sad, crying, depressed, mean, lethargic, sick, tired, angry, distant, weak-looking, nervous, and difficult to be around. Even in the case of illnesses such as diabetes, the psychological aspects are emphasized:

Depends on the sickness they have. With diabetes, they get upset, fight with their kids. High blood pressure sufferers act that way too. You can tell by their way of looking at you and by the way they talk. You can tell if someone is sickly by their face.

Aliments which did not interfere greatly with daily life were not perceived as indicating bad health. A person able to continue normal activities is not really considered to be in bad health, even though a serious aliment may be diagnosed:

My father-in-law had diabetes and died last year.. He was fine but he began to lose his health. He died quickly and didn't suffer. He could continue many of his activities for a long time.

One older woman, who felt herself to be in bad health, stressed her continued ability to perform expected tasks:

Yes, now I'm old. I do what I need to. I have a tired body but I'm not in bed and I take care of the [grand]children.

Mental Illness-Definition and Differences from Illness

Mental illness was defined commonly using the term crazy (*loco*):

The mind is sick, they are sick, crazy, loco. They suffer from nervios and lose their minds. They are crazy. Don't think in right ways. It's when your mind goes — you think in bad ways. The brain doesn't work, neurons don't fire. The person feels trastornado (upset). Its called laguna mental (mental gap or mental blank space) in Mexico.

Abnormal behavior, including mental retardation, was also noted.

There was strong agreement that a difference exists between an illness (enfermedad) and a mental illness (enfermedad mental), and the respondents interpreted the unspecified term for illness, enfermedad, not to include mental illness. The difference between the two types of problems was that illness can be cured, but mental illness cannot. Perhaps this is part of the stigma associated with mental illness in this population:

If you have an illness, you're sick, you can get well. A mental illness you have all your life.

Respondents were familiar with names for a variety of illnesses. However, few knew specific terms to use for examples of "mental illness," although the younger females suggested the terms "cerebral palsy" and "mongoloids" (an indication of the limited range of conditions the term "mental illness" covered for those interviewed).

Folk Terms for Mental Health Problems

Nervios was recognized by ninety five percent of the respondents were familiar with the term nervios:

Nervios is when you have problems and you can't figure it out, you're nervous. Get very hysterical, yell instead of talking calmly. Nerves, somebody that can only take so much of something. Only so much patience.

Behavior associated with *nervios* was yelling and being worried (younger males), being angry and afraid (older males), anger, feeling badly, and "hysteria" (younger females), and impatience and insomnia (older females). There was not any consensus among the respondents as to the cause of *nervios*, although money, food, work problems and accidents were noted as possible causes. Recommended treatments included talking to someone or getting medical or psychiatric help. Several felt that physicians could give medication to control *nervios*. When asked to label *nervios* as an illness, mental illness, problem, condition, or part of normal life, most respondents were divided between the labels illness (*enfermedad*) (32%), mental illness (26%), and part of normal life (26%).

La locura (craziness) was recognized by 85% of the respondents, although they were not really sure on the definition of the term. Some responses included:

A change that is more than nervios. A person goes crazy. A person who is ill in the mental faculties.

Behavior associated with *la locura* included aggression, yelling, acting dangerous (younger men), acting abnormal.

childlike, and dangerous (younger women), and don't know what they are doing (older women); the older men didn't know of specific behavior associated with la locura. The cause of la locura was believed to be child abuse, heredity, accident, brain tumors, thinking too much (which "weakens the mind"), and "the nerves get on edge, and the body can't resist."

Recommended treatments included psychiatric treatment and medical attention. Several respondents felt that there was no cure for this problem. Another differentiated between types of la locura: "Need to go to a psychiatric hospital. There are weak and strong locuras. There are some that don't get cured — they commit suicide." When asked which label applied to la locura (illness, mental illness, problem, condition, or part of normal life), 33% considered it an illness, 28% called it a problem, and 28% used the term mental illness. No respondent felt that la locura was a part of normal life.

Respondents were asked to rank order la locura, nervios, illness, and mental illness. Mental illness was felt to be the most serious, followed by la locura. Nervios was next, with illness being considered the least serious. They were also asked to classify anxiety, depression and fear as either a problem, a condition, nervios, or just a part of normal life (Table 3). Anxiety and fear tended to be considered nervios. while depression tended to be viewed as a physical illness.

MEASURING MENTAL HEALTH USING NSHS QUESTIONS

With respect to the NSHS-based questions, there seems to be a risk of a high level of false positives in this population. Respondents tried very hard to "please" the interviewers and to generate positive examples of the descriptions of the mental health problems described to them. People stretched the interpretations of many of the questions, such as reporting that they had been scared to sing in front of the class on one occasion as a child, as an example of a phobia.

There was also a great deal of identification with the situations described as "simple phobia." In particular, there was specific identification by nearly every respondent with fears of snakes, spiders, storms, thunder and lightening, all common and dangerous parts of the lives of these people. Most of those interviewed, with the exception of the older women, reported having suffered from these types of fears:

I don't like water because I almost drowned as I tried to save a child who jumped in a river. He was holding on to me and dragging me down. I took in a lot of water. That child is grown now and he says he owes me his life. He gives me gifts now and then.

With me, I was thrown into water as a child and it made me afraid of the water. You need to teach babies when they are young [to swim], then they aren't afraid.

Yes, many years ago, I worked at a place where they killed small animals and I fainted. I went back to work the next day.

Additionally, respondents who resided in households in which any serious physical or mental health problems were present had a tendency to see the ill person as having many of the mental health problems. This was seen in households where a husband/father had diabetes and high blood pressure, where

Table 3 Emic Categorization Selected Mental Illnesses

Anxiety	Depression	Panic	
350		ranic	
25%	20%		
25%	5%		
10%	_	3370	
20%		150%	
5%	50%	1370	-
10%	20%	10%	
	5%		
100%	100%	100%	
	10% 20% 5% 10%	25% 5% 10% — 20% — 5% 50% 10% 20% — 5%	25% 5% 55% 10% — 15% 5% 50% — 10% 20% 10% — 5% —

a husband had major depression and secondary alcoholism, as well as in a case where a husband was diagnosed with anxiety and alcohol abuse; the latter two diagnoses were provided by the clinical psychologist at the clinic.

I was also able to obtain the diagnoses for those respondents who were mental health patients at the clinic. One male diagnosed as paranoid schizophrenic was incapable of giving coherent answers to the questions. In a second case, in which the husband had been diagnosed as having major depression and secondary alcoholism, the wife reported positively for many of the mental health problems for him, and negatively for herself (even though she had been living with this depressed, former alcoholic for over 30 years). The third case was a man in his twenties, being treated for anxiety (due to the death of one infant, and a second child born prematurely who was still critically ill), with a secondary diagnosis of alcohol abuse. The husband was more discriminating in his responses, with positive responses for the anxiety items, and negative ones to the other items. His wife indicated that she felt that he had many of the other mental health conditions. It appears that people being seen at the clinic for mental health problems do not seem to respond positively to the questions which ask if they have these problems.

MEASURING MENTAL HEALTH USING THE CENSUS BUREAU INVENTORY PRETEST

Understanding of Response Categories

Respondents interpreted in many ways the formal-choice categories: "most of the time," "some of the time," "a little of the time," and "none of the time". Not only was the median for "a little of the time" greater than the median for "some of the time," but the ranges of all of the terms were quite broad, creating large amounts of overlap. What one respondent categorized as "a little of the time" might easily have been the same period of time that another respondent labeled "most of the time." This pattern suggests that it will be difficult to collect accurate data in this population using this response format, and in particular, these phrases.

Understanding of Questions

Table 1 lists some of the questions and how the respondents indicated in the de-briefing that they had understood the questions. Several of the items may have been answered differently by this population, because some items were related

to the specific type of work and lifestyle of these people. Respondents' daily lives called for long hours of outdoor physical labor, often under conditions of high heat and humidity. Work may not be available at all times, or in sufficient quantity to adequately provide for one's family's needs. As such, people commonly have "muscles [that] feel tense, sore or aching", "feel [their] heart pound or race without exercising", and "[their] face[s] feel...hot and flushed." A man who described himself as having "seven children and [no] work or money" not surprisingly identified with the statement "you feel depressed."

Physical illness also affected responses, as in the case of the person who felt dizzy due to his medication for high blood pressure. Other explanations of responses related to physical illnesses included one woman, who is now divorced (her husband left her with 10 small children), who said that she had felt "physically tense or shaky" and her "muscles felt tense, sore, or aching" when she was married because she suffered from nervios. Another respondent with diabetes felt that his illness was what caused him to respond positively to the questions, "you feel restless," "your thoughts come more slowly than usual," "you feel tired out for no good reason, "you feel that everything was an effort," "you feel inferior or not as good as other people," "you feel physically tense or shaky," and negatively to "you feel full of energy."

In addition, about 20 other questions were not understood by at least some of the respondents, for example, "you have a smaller appetite than usual," "you feel full of energy," "you have trouble making simple decisions."

Discussion

Respondents had a great deal of trouble with the interviews. but not because they did not understand the questions (with the exception of part 2 of interview 2-the Census Bureau Inventory Pretest). Rather, their ideas and formulations of this domain of existence were so different from the way these issues were categorized by the NCHS that the questions seemed irrelevant to their lives and very "distant" from their daily concerns.

Good and bad health (not defined by the interviewer as specifically mental or physical) may be indicated by psychological state. People who were in good health were described as happy and talkative, while those in bad health were said to be angry, depressed, and sad. Thus, the lines drawn by the dominant society and the biomedical community between mental and physical health may not be perceived by this population.

The older men were the least likely to recommend going to a doctor or psychiatrist for mental health problems. Their approach was to get on with one's life and solve the problems which caused the condition. However, the general pattern seen in this population as a whole was not to stress the use of biomedical mental health services as a way of dealing with these types of problems.

My initial recommendations to the Census Bureau were that some revision of the proposed questions would be in order, in particular, clarification of the wording of the questions so that the broad interpretations seen in Table 1 would not be possible. But a more serious problem was the range of interpretation of the response categories by these respondents. I suggested that these categories should be given in terms of number of days



(i.e., 2-3 days, a week, a month, etc.), as opposed to the vague quantifiers (i.e., some of the time, most of the time, etc.), which became even more vague in the minds of those interviewed.

However, given the lack of congruence between the biomedical and emic models of this domain, I was extremely pessimistic about the possibilities of designing a survey instrument which would accurately measure mental health among this population in any kind of units which the biomedical community would find interpretable or useful. Further, I reasoned, the population I had studied was very small, in relation to the US population as a whole. Mexican Americans were a larger demographic unit, but there was no reason to assume that there was any similarity between the migrant workers and that entire group, which is much more educated, Englishspeaking, and of a higher income level. As such, I anticipated that creation of an instrument which would accurately measure mental illness among migrant workers was beyond what could reasonably be expected of a group such as the Census Bureau, which would not focus on such tiny segments of the US population as a whole.

Therefore, it was with great surprise that I reviewed the findings of Cassidy (1992, 1993), who conducted similar research for the Census Bureau among a sample of white, middle class, highly educated urbanites (mostly college educated and beyond) in the Washington, DC area. Few populations could be more different from the migrant workers studied in Florida, and few populations could be more similar "to those of the experts who officially define mental health conditions, and create mental health questionnaires" (Cassidy 1993:5). Cassidy's interviewees were a very verbal group, and while familiar with the biomedical model, at least half had sought out alternative types of health care. In addition, of the total sample of 32, twelve had received psychotherapy. As such, they were familiar with the jargon and assumptions of professional therapy.

Cassidy had predicted that her population would share the knowledge and attitudes about mental health of the professionals. This was not the case; her lay informants "actively normalized the symptoms that specialists medicalize" (Cassidy 1993:5). Despite (or because of?) their familiarity and direct experience with the professional categories of mental health, they largely rejected this categorization system. Her interpretation of the lay informants' conceptualization of this domain not only differs from that of the professionals, but is similar to my interpretation of that of the Mexican migrant workers in Florida. Both interpretations of the emic models feature more of a continuum, as opposed to the dichotomous states of illness and health characteristic of the specialist, or biomedical model.

This pattern suggests that a key difference in the understanding of this domain may be based on a lay/professional dichotomy. Based on the data from these two studies, standard demographic differences, such as ethnicity, language, education, and income level, seem to be much less critical.

Problems in lay understanding of professional mental health categories have been noted by other researchers as well. For example, Miller (1993) has discussed problems with definitions of borderline personality disorder, as understood and interpreted by both therapists and patients. Miller (1993) found that "most of the therapists contacted for...[her] study used an idiosyncratic definition of borderline personality and not that found in DSM-

III-R. They were even not sure of the eight DSM-III-R diagnostic criteria" (Miller 1993:11). In addition, she felt that the category "has meaning for clinicians, but not for patients...It is not a popular illness category...The participants in this study [ten white Anglo-Saxon Protestants, raised in middle or lower middle class households] did not identify closely with their psychiatric diagnosis...They perceived themselves as inherently flawed, but until they were in psychiatric care, they did not perceive their condition or malaise as a sign of illness" (Miller 1993:215-216).

Other authors have stressed the need for a change in DSM III categories to include culture bound syndromes, such as nervios. Otherwise, "research will remain a kind of colonial imposition of Western categories on experiences, some of which are shared but many of which differ in important ways" (Guarnaccia et al. 1990:1455). While I do not want to argue against culturally relevant instruments to measure mental, or any kind of health, the larger issue is that the standard instruments used to measure mental health do not appear to reflect categories meaningful even for the mainstream population. Rather than an imposition of Western categories on ethnic minorities, the instruments seem to represent the imposition of professional categories on the lay population as a whole. And while many differences persist between the ways this area of life is categorized among Mexican migrant workers and middle class urbanites, they do seem to share more with each other than either group does with the biomedical professionals.

Conclusions

Perceptions of health and mental health among the Mexican and Mexican American migrant workers studied differ from those of the biomedical model. Good health and bad health are often described using characteristics which might be biomedically defined as those of good (or bad) mental health. Physical ailments which do not interfere greatly with daily life are not considered indications of bad health. While mind and body are more closely linked than in the biomedical model, respondents did not believe that a mild physical health problem would necessarily indicate mental or emotional problems. The converse was also considered to be possible. However, in the case of a serious physical ailment, emotional and/or mental consequences were considered possible and not unlikely.

Mental illness is considered to be indicated by abnormal behavior, acting crazy, and is felt to be, unlike physical illness. irreversible (as in the case of mental retardation). While respondents had a variety of names for illnesses, for the most part, they knew few names for "mental illnesses." The familiarity of the middle class American population with therapy, psychology, and psychological/psychiatric terminology is not shared by this group.

Nervios is a label which covers many conditions considered biomedically to be mental illnesses. However, most respondents did not consider nervios to be a mental illness. La locura was not felt to be a part of normal life, yet only 28% considered it to be a mental illness A mental illness is considered to be more serious than la locura, nervios, and physical illnesses, which with the perception of mental illness as an incurable condition, perhaps leads to the reluctance to use this label.

Anxiety was not viewed as "a problem" by many, preferring to label it nervios; similarly for phobias, nervios was the preferred term. Depression, on the other hand was considered by many to be an illness. Few felt that appropriate treatment for phobias or anxiety included use of mental health professionals, although a few mentioned this as a possible approach to depression, along with use of physicians.

Measurement of incidence of mental illness in this. population may not be truly accurate because of the types of instruments currently being used to measure it, as well as cultural characteristics of the population. The approach based on NSHS questions appears to lead to false positives among the healthy population and false negatives among the mentally ill population. The proposed "inventory approach with vague quantifier response categories" suffers from too high a reading level, unclear questions, unintelligible questions, and interpretation of response categories that varied greatly from individual to individual within this cultural group. This pattern has also been reported for other cultural groups (Schaeffer 1991). In addition, she suggests that variation may occur between cultural groups, which would make this approach difficult to use in the US population as a whole.

Finally, the results of this research and that of Cassidy (1992, 1993) suggest a number of interesting hypotheses, which might be investigated further. At least for the domain of mental health (and perhaps others as well), standard demographic variables such as ethnicity, level of education, language, and income seem to be less critical than is the lay/professional distinction. Current survey instruments designed to measure mental health do not accurately reflect the mental health of either mainstream or minority populations, due to the use of professional and biomedical rather than lay categories. More surprisingly, instruments appropriate for middle class Anglos are also likely to be acceptable for Mexican migrant farmworkers if not encumbered by inappropriate biomedical categories. In the conceptualization of this area of life experience, the Mexican migrant workers and the middle class urbanites seem to share more with each other than either group does with biomedicine.

However, because of the small sample size in this study, tied to a methodology of in-depth interviewing, additional research is needed to investigate further the hypotheses about conceptualizations of mental health among these populations. An example would be to determine how middle class Mexican Americans, conceptualize mental health, and then compare those results with those of people of similar ethnicity (Mexican American migrant workers), and with those of people of different ethnicity but similar income and educational levels (e.g. White or African-American middle class urbanites).

The larger issue suggested by these two studies, as well as that of Miller (1993) — the importance of the lay/professional distinction — is also worthy of further investigation. Lay people of many different cultural backgrounds may share the "normalizing" tendencies seen in this study. Therefore, survey instruments which incorporate this perspective (perhaps using non-dichotomous categories such as: "OK," "needs some help to be OK again," "not OK, and will never be, but is able to live more or less like other people," and "not OK and will never be and is not able to live like other people") may be more useful in accurately measuring mental health and illness in our increasingly multi-cultural society than are the instruments currently in use. The lay/professional distinction may be more

critical than those of income, educational level, language, and/ or even ethnicity. In addition, lay/professional differences in conceptualization may go beyond the domain of mental health, and be important for understanding behavior in areas such as physical health and food consumption and nutrition (Baer and Cassidy 1991).

Finally, this study offers a concrete example of the need to do in-depth ethnographic pilot research before committing to a larger survey. So much of what we know — or at least think we know — is based on survey research; it would be comforting to be sure that our policies and programs are based on data with solid grounding in reality.

REFERENCES CITED

Angel, Ronald and Peter Guarnaccia

1989 Mind, Body, and Culture: Somatization Among Hispanics. Social Science and Medicine 12:1229-1238.

Bach-Y-Rita, George

1982 The Mexican American: Religious and Cultural Influences. In Mental Health and Hispanic Americans: Clinical Perspectives. Rosina Becerra, M. Karno, and J. Escobar, eds. Pp. 29-40. New York: Grune and Stratton, Inc.

Baer, Roberta D. and Marta Bustillo

1993 Biomedical Correlates of Mexican Folk Illness: Susto and Mal de Ojo. Medical Anthropology Quarterly 7(1):90-100.

Baer, Roberta D. and Claire Cassidy

1991 Belly Laughs: Cartoons as Reflections of Popular Cognition about Scientific Nutrition. Paper presented at the Meetings of the American Anthropological Association, New Orleans, LA.

Baer, Roberta D. and Dennis Penzell

1993 Susto and Pesticide Poisoning Among Florida Farmworkers. Culture, Medicine & Psychiatry 17:321-327.

Briones, David, Peter Heller, H. Paul Chalfant, Alden Roberts, Salvador Aguirre-Hauchbalum, and Walter Fattijt.

1990 Socioeconomic Status, Ethnicity, Psychological Distress, and Readiness to Utilize a Mental Health Facility. American Journal of Psychiatry 147(10):1333-1340.

Browner, C.H., Bernard Ortiz de Montellano and Arthur Rubel

1988 A Methodology for Cross-Cultural Ethnomedical Research. Current Anthropology 29(5):681-689.

Burnam, M. Audrey, Diane Timbers, and Richard Hough

1984 Two Measures of Psychological Distress among Mexican Americans, Mexicans, and Anglos. Journal of Health and Social Behavior 25:24-33.

Casas, J. Manuel and Susan E. Keefe

1978 Family and Mental Health in the Mexican American Community. Los Angeles: Spanish Speaking Mental Health Research Center.

Cassidy, Claire

1992 Belief and Attitudes about Mental Health and Illness of White Middle-Class Americans. Report for the Center for Survey Methods Research, US Bureau of the Census, Washington, DC.

1993 A Million Ways to be Health: Middle Class Normalization of Specialist Mental Health Constructs. Paper presented at the Meetings of the American Anthropological Association, Washington, DC.

Finkler, Kaja

1989 The Universality of Nerves. In Gender Health and Illness, Dona Davis and Setha M. Low, eds. New York: Hemisphere Publishing Corporation, pp. 171[79]-179[87].

Golding, Jacqueline and M. Audrey Burnam

1990a Immigration, Stress, and Depressive Mexican American Community, Journal Mental Disease 178(3):161-171.

1990b Symptoms in a of Nervous and Stress and Social Support as Predictors of Depressive Symptoms in Mexican Americans and Non-Hispanic Whites. Journal of Social and Clinical Psychology 9(2):268-287.

Golding, Jacqueline, Marvin Karno and Carolyn Rutter

1990 Symptoms of Major Depression Among Mexican Americans and Non-Hispanic Whites. American Journal of Psychiatry 147(7):861-866.

Guarnaccia, Peter, Byron Good, and Arthur Kleinman

1990 A Critical Review of Epidemiological Studies of Puerto Rican Mental Health. American Journal of Psychiatry 147(11):1449-1456.

Jenkins, Janis

1988 Ethnopsychiatric Interpretations of Schizophrenic Illness: The Problem of *Nervios* within Mexican American Families. Culture, Medicine and Psychiatry 12:301-329.

Kay, Margarita and Carmen Portillo

1989 Nervios and Dysphoria in Mexican American Widows. In Gender, Health, and Illness, Dona Davis and Setha M. Low eds. Pp. 273[181]-293[201]. New York: Hemisphere Publishing Corporation,

Keefe, Susan

1978 Why Mexican Americans Underutilize Mental Health Clinics: Fact and Fallacy. *In Family and Mental Health in the Mexican American Community, J. Manuel Casas and Susan E. Keefe, eds. Pp. 91-108. Los Angeles: Spanish Speaking Mental Health Research Center.*

Martaus, Therese

1986 The Health-Seeking Process of Mexican American Migrant Farmworkers. Home Healthcare Nurse, 4(5):32-38.

Miller, Sharon

1993 Borderline Personality Disorder: An Anthropological Perspective. Ph.D. dissertation, University of South Florida, Tampa.

Montgomery, Gary, Bill Arnold, and Sergio Orozco

1990 MMPI Supplemental Scale Performance of Mexican Americans and Level of Acculturation. Journal of Personality Assessment 54(1&2):328-342. Newton, Frank

1978 The Mexican American Emic System of Mental Illness: An Exploratory Study. In Family and Mental Health in the Mexican American Community, J. Manuel Casas and Susan E. Keefe, eds. Pp. 69-90. Los Angeles: Spanish Speaking Mental Health Research Center.

Parra, Fernando

1987 Perceptions of Mental Illness in Mexico: A Descriptive Study in the City of Chihuahua. The International Journal of Social Psychiatry 33(4):270-276.

1984 Susto: A Folk Illness. Berkeley: University of California Press.

Rubel, Arthur, Carl W. O'Neil, and Rolando Callado-Ardon

Salgado de Snyder, V. Nelly, Richard Cervantes and Amando Padilla 1990a Migration Y Estres Postraumatico: El Caso De Los Mexicanos Y Centroamericanos en Los Estados Unidos. Acta Psquit. Psicol. Amer. Lat. 36(3-4):137-145.

1990b Gender and Ethnic Differences in Psychosocial Stress and Generalized Distress Among Hispanics. Sex Roles 22(7/8):441-453

Schaeffer, Nora Cate

1991 Hardly Ever Or Constantly? Group Comparisons Using Vague Quantifiers. Public Opinion Quarterly 55:395-423.

Schreiber, Janet and John Homiak

1981 Mexican Americans. In Ethnicity and Health Care. Alan Harwood, ed. Pp. 264-336. Cambridge: Harvard University Press.

Vega, William, George Warheit, Joanne Buhl-Auth, and Kenneth Meinhardt

1984 The Prevalence of Depressive Symptoms among Mexican Americans and Anglos. American Journal of Epidemiology 120:592-607.

Warheit, George J., William A. Vega, Joanne Auth, and Kenneth Meinhardt

1985 Mexican American Immigration and Mental Health: A Comparative Analysis of Psychosocial Stress and Dysfunction. In Stress and Hispanic Mental Health: Relating Research to Service Delivery. William A. Vega and Manuel R. Miranda, eds. Pp. 76-109. Rockville, MD: US Dept. of Health Services. Health and Mental Health among Mexican American migrants: Implications for Survey Research

h among Mexican American Migrants: Implications for Survey Research

ROBERTA D. BAER

This paper provides an example of the policy implications of the need to understand emic categories. As part of research commissioned by the U.S. Census Bureau, in-depth interviewing on the topic of health and mental health was conducted among Mexican and Mexican-American migrant workers in Florida. It was found that perceptions of these topics differ from the biomedical model, but are somewhat similar to the categorizations elicited from a sample of white middle class, highly educated urbanites. These results suggest that at least for this domain, standard demographic variables, such as ethnicity, level of education, language, and income seem to be less critical than is the lay/professional distinction. The biomedical categories used in survey research may be inappropriate not only for ethnic minorities, but also for the mainstream population.

Key words: US Census, Mexican Americans, mental health:US. Florida

nthropologists strongly advocate the use of Aethnographic research prior to the construction of quantitative research instruments, such as closed survey questionnaires. Yet when asked to justify this approach to those outside of anthropology, we often fall back on vague statements of "emic" and "etic," and the need to understand minority views and categories of experience. Often it can be hard to generate concrete examples of the policy implications of the need to understand emic categories. This paper focuses on data on crosscultural understandings of mental health, collected as a part of research commissioned by the US Census Bureau. It is rare that an organization involved in survey research seeks anthropological input on the development of a new survey instrument. In the present case, the results were quite surprising both in terms of the usefulness of the general demographic categories commonly used by survey researchers, as well as in terms of the ethnic categories favored by anthropologists. These findings suggest that more research on lay/professional differences in categorization of experience is necessary to improve the quality of data collected through broad based survey research.

The impetus for the research described here was the revision by the National Center for Health Statistics (NCHS) of the core interview used in the National Health Interview Survey (NHIS), the new version of which was to be implemented in 1995. The NHIS is used to annually survey approximately 50,000 households on their mental and physical health, use of health care, immunizations, knowledge of AIDS, cancer prevention. and a variety of related topics. The National Center for Health Statistics is the main source of health statistics for the US; these data are used to establish policies, to set priorities, and to monitor the national health situation. The Census Bureau was asked by NCHS to initiate research on language and terminology used to discuss mental health and disease in various cultural communities throughout the country. It was recognized that in the original framing of many of the questions and formats traditionally used, few attempts had been made to ensure that these were appropriate for diverse cultural and socioeconomic situations.

The research discussed here was, thus, one part of a larger research effort by the US Bureau of the Census to aid in the design of the new mental health module for the National Health Interview Survey. In-depth, qualitative research on conceptions of health and mental health was conducted among several low literate populations, as well as among middle class urbanites. This paper reports the results of ethnographic interviewing among Mexican and Mexican American migrant workers in Florida.

A number of questions have been raised about the mental health status of Mexican Americans, due to their apparent lack of need for services and their relative absence from mental health treatment facilities (cf. Casas and Keefe 1978; Schreiber and Homiak 1981). This paper addresses four questions related to the larger issue with which the Census Bureau was concerned.

Roberta D. Baer is an Associate Professor of Anthropology at the University of South Florida. She is appreciative of the help on this project provided by Dennis Penzell, Marlene Riviera, Minerva Rodriguez, and the rest of the staff of the Ruskin Migrant Health Center, Alayne Unterberger, and Claire Cassidy.

- .e., measuring mental health status in this population
- 1) How is the domain of health and mental health categorized by this population?
- 2) How does this population perceive and understand standard questions used to measure prevalence of the major biomedically categorized mental illnesses?
- 3) How do conceptions of this domain compare with those of middle class Americans?
- 4) What are the implications of these patterns for survey research on this topic?

Background

MIGRANT WORKERS

Migrant workers are defined by the Migrant Health Act of 1962 as individuals whose principal employment is in agriculture on a seasonal basis (Martaus 1986). It is estimated that at least 800,000 migrant workers are in the United States, of which more than 75% are Mexican or Mexican American. The East Coast migrant stream moves from Florida northward along the east coast, to New York and New England (Martaus 1986). This population was chosen for investigation in that it has been observed that less educated Mexican Americans, particularly those from rural backgrounds, have very little understanding of psychotherapy; "psychiatry and most psychotherapy generally fall outside the economic and social reality of the poorer Hispanic population" (Bach-y-Rita 1982:31).

The population addressed in this study - Mexicans and Mexican Americans - works during the spring, winter, and fall seasons in southern Hillsborough County, a rural area of west central Florida. Some of the population lives in Florida year round, picking tomatoes in Nov/Dec. and May/June; others work in Florida those few months and then follow the East Coast migrant stream north to North Carolina and New York to pick crops there, while others return to home bases in Texas and northern Mexico. The majority of the population was born in northern Mexico, with the remainder from Texas or Florida. A previous study (Baer and Bustillo 1993) reports mean educational levels of about six years. Mean household incomes (with household sizes of 6 persons) were \$10,065 per year. While that study accessed the population through the migrant health clinic, it found that the population also retains an active use of folk medical healers. Baer and Bustillo (1993) noted that none of the over 250 cases of symptoms considered by those interviewed to be "folk illnesses" were treated at the health center.

HEALTH AND MENTAL HEALTH

The literature on mental health among Mexican Americans has several main themes, revolving around the hypothesized greater need for mental health services in this population, due to stress created by poverty, acculturation pressures, language barriers, discrimination, etc. However, under-representation of Mexican Americans in mental health facilities and low rates of psychosis have been the usual pattern documented (Schreiber and Homiak 1981).

One explanation suggested for low utilization of mental

health services is the role of the family among Mexican Americans in protecting the mental health of individuals (Briones et al. 1990); however, documentation of this is limited. Two other hypotheses are stressed in the literature and further discussed below. The first is that Mexican Americans perceive mental health problems differently than does the rest of the population. The second is that the psychological tests used to measure incidence of mental illness may not capture what is occurring among this population.

Perception and Evaluation of Health and Mental Health

The first issue addressed is how this population perceives health in general, and more specifically mental health. A person in good physical health is so defined on the basis of adequate functioning, the absence of pain, and a robust body (Schreiber and Homiak 1981; Martaus 1986). Illnesses may be caused by hot/cold imbalance. They may also be due to emotional causes (such as worry, sadness, or anger; these causes of illness are seen primarily in females). Germs are also believed to be a cause of illnesses, particularly for those with a 7th grade or higher education in the United States (Martaus 1986).

A study of self- and physician-assessed health for Mexican Americans showed a great deal of disagreement between the respondents and the physicians, particularly for those who were interviewed in Spanish. For this group, the physicians assessed 80% as being in excellent or very good health. But only 15% of the respondents considered their health to be excellent or very good (Angel and Guarnaccia 1989). The Spanish speaking respondents also reported higher levels of depression, a pattern possibly related to the lack of separation between psychological and physical senses of self. In this population, high levels of affective distress are interpreted as a sign of negative physical health.

In addition to ailments recognized by biomedicine, Mexican tradition recognizes a number of folk illnesses, such as susto, mal puesto, and nervios. These folk illnesses have psychological symptoms. It has been suggested that since treatment for folk illnesses may be in the hands of folk healers, fewer of them may come to the attention of biomedical mental health providers (Schreiber and Homiak 1981).

Susto is caused by a frightening experience, which may cause the departure of the soul from the body. While recent studies have shown clear organic signs associated with susto (Baer and Bustillo 1993; Baer and Penzell 1993; Rubel et al. 1984), earlier studies tended to assume the primacy of psychiatric processes in such Mexican folk illnesses (Browner et al. 1988).

Mal puesto (witchcraft), is used as a diagnosis only after other diagnoses have been found to be inappropriate. It causes insanity and can be used to label schizophrenic reactions and other psychotic disorders. Symptoms include suspicious, moody, or other strange behavior (Schreiber and Homiak 1981).

Jenkins (1988) has suggested that Mexican Americans use the label nerves (nervios) to label schizophrenia. This has the result of masking a stigmatized condition with a label that is culturally acceptable, as well as minimizing differences between the rest of the family and the sick person. Somatic complaints of the sick individual are also emphasized. Jenkins (1988) found that the term nervios is used for everyday problems causing distress, serious family conflict, as well as schizophrenia. Thus, nervios in its milder forms is completely normal, i.e., generalized

malaise; the schizophrenic relative is merely seen as being a more severe form of the problem. Problems associated with the diagnosis of *nervios* included irritability, hopelessness, nervousness, depression, physical effects, and difficulty in functioning in social or occupational roles. *Nervios* was seen by respondents as being more common in women (Jenkins 1988).

The folk category, nervios, thus, seems to include symptoms defined biomedically as schizophrenia, anxiety, depression, and panic disorders. Nervios, however, is not used to describe individuals who have psychotic symptoms, such as delusions and hallucinations (Jenkins 1988).

Finkler found that rural Mexicans used the term nervios to refer to "a wide variety of emotional problems, physical symptomology, and existential conditions experienced in the entire body" (Finkler 1989). In a study of Mexican American widows, Kay and Portillo (1989) found that the more bicultural the woman, the less she was troubled by nervios. Somatic symptoms associated with nervios included rash, depression (decaida), tiredness, feeling cold, and tremors. Non-somatic symptoms associated with nervios included fear, worry (mortificación), anguish, anger, separation sorrow (tirisia) loneliness, disorientation, feeling empty, confusion, and a feeling of being in the way (Kay and Portillo 1989). However, it is the latter set of non-somatic symptoms which primarily distinguish nervios.

Other studies have focused on other aspects of differential perception and evaluation of mental health issues by Mexican Americans, often with unclear or contradictory results. Methodological problems have been another problem with this type of research; for instance, one study lumped together responses of "sick" and "mentally ill" as having the same meaning (Parra 1987).

A more anthropological approach to this issue was taken by Newton (1978). He found a conceptual system in which the concepts of emotional and mental problems represented successive stages in the course of mental disorders. Emotional problems were viewed as being less serious, but potentially could lead to mental problems. It is suggested that in this population, emic perceptions of mental health which differ from those of the dominant society may be important variables contributing to under-utilization of mental health services.

Measuring Incidence of Mental Health Problems

Other data suggest that the true incidence of mental health problems is higher than has been reported, and that family support is not able to completely protect members from feelings of powerlessness and depression (Schreiber and Homiak 1981). Thus, another major focus of research is the actual incidence of mental illness in this population and how it can best be measured. Results of these studies (Golding et al. 1990; Golding and Burnam 1990a, 1990b; Warheit et al. 1985; Salgado de Synder et al. 1990a; 1990b, Burnam et al. 1984; Vega et al. 1984; Montgomery et al. 1990) are often contradictory, and they generally fail to describe emic perspectives of mental illness.

Methodology

Two sets of in-depth interviews — at the end of June and in the middle of September — were conducted at the Ruskin

Table Respondents' Interpretations of Questions (s)

Question	Interpretation
"You feel tired out for no good reason"	
"You sleep much more than usual"	
"Your muscles feel tense, sore or aching"	
"You feel depressed"	
"Your face feels hot and flushed"	
"You feel your heart pound or race	
without exercising"	
"You have a much bigger appetite than usual"	"because I'm not working and am
	around the house and more food"
	"because I was visiting my family last
	month and they treated me weil"
"You sleep much more than usual"	"because I'm not working now, so I
	don't have to get up so early"
"You feel so sad that nothing could cheer you up	""when a close family member dies"
"You feel dizzy"	"due to medication for high blood pressure"
"You have trouble failing asleep"	"due to a bad cough"
"You never feel full of energy"	"due to being eight months pregnant"

Migrant and Community Health Center in Ruskin, Florida. The interviews were designed to provide in-depth ethnographic information about understanding of the domain of mental illness. The clinic at which the research took place provides low cost health and mental health service to the migrant population. The first interview presented a series of descriptions of mental illnesses, based on questions from the National Survey of Health and Stress (NSHS). This survey instrument was developed by the University of Michigan Survey Research Center, and has been used since 1990. It is designed to provide accurate national information on current and lifetime emotional disorders. For example, in asking about depression the following question was used: "I would like you to think about a person who for two weeks or more, feels sad or depressed almost everyday, or who loses his/her interest in the things that he/she always liked to do." And, for panic, "I would like you to think about a person who all of a sudden feels frightened, anxious or very uneasy in situations when most people would not feel that way." In addition, respondents were asked if they had a name for the condition described, how a person with that condition behaved, what forms of treatment should be used, and if they themselves had ever had this condition. Good and bad health were also discussed, and respondents were asked whether they were in good or bad health.

The second interview was divided into two parts. The first part probed for general concepts of health and mental health, and any distinctions between them. Also explored were the folk categories of la locura (craziness) and nervios (nerves). The second part of the interview tested questions provided by the Census Bureau. Respondents were asked the questions, as well as debriefed after the interview to determine their understanding and interpretation of the questions. The questions were to be answered "most of the time," "some of the time," "a little of the time," or "none of the time." Examples of the types of questions included in this inventory (and respondents' interpretations of the meaning of this questions — a topic which will be addressed below) are given in Table 1.

Both sets of interviews were administered in Spanish, except in those few cases (2 first interviews and 3 second interviews)

Table 2 Sample Population

	Interview #1		Inte	Interview #2		
	Age	Educ	ation	Age	Edu	cation
Up to 3.		of Age				
Males	s (n=5)			Males (n=7)		
	18	7	M	25	11	U
	33	9	М	.30	12	U
	32	9	U	22	3	M
	21	5	М	.33	i	M
	23	8	U	31	3	M
				24	12	U
				32	2 6	U
Mean:		25	7.6	28	6	
Fema	iles (n=	8)		Female (n=5)		
	34	2	M	29	13	М
	32	13	М	18	4	M
		9	U	29	9	M
	32	4	U	26	6	M
	31	9	M	26	6	M
	32	9	M			
	21	8	U			
	22	12	M			
Mean:	28	8.3			26	7.6
Older 1	Than 35	Years of a	ire			
	s (n=4)	•		Males (n=3)		
	39	11	M	36	0	
	46	6	U	57	6	M
	62	1	M	62	0	
	45	0				
Mean:	48	4.5				
Fem:	ales (n=	3)		Females (n=5)		
	45	3	M	46	2	М
	54	6	M	39	5	M
	53	0	- ·	48	4	ប
				44	0	
				64	Ō	
Mean:	50.6			48	2.2	
				U-Educated in the U		

Key: M=Educated in Mexico: U=Educated in the US

where the respondent expressed a preference for English. The first interview and the first part of the second interview were translated into Spanish by the author, and then back translated. The second part of the second interview — the Census Bureau Inventory Pretest — (see Table 1) was provided in Spanish by the Census Bureau, having been translated from the English, and then back translated.

Translations of excerpts from the interviews presented below were done by the author. Where significant Spanish phrases were used which might be useful for purposes of comparing terms across Hispanic groups, for validity, or for the information of readers, these phrases are given in Spanish, and an English translation provided in parentheses.

Results

THE POPULATION

Each set of in-depth interviews was administered to 20 respondents; the total number of different individuals who

participated in the study was 40. Attempts were made to sample equally among older males, younger males, older females, and younger females. No further criteria were used, and as a result, some individuals who were visiting the clinic for physical or mental health problems were included, as well as were some well individuals who accompanied them. The questionnaires being developed by the Census Bureau will be designed to be administered to a representative sample of the population as a whole. Therefore, no individuals were eliminated from this study based on their health status.

The population in each set of interviews is given in Table 2. Mean age of the total population was 35 years. Mean level of education was 5.9 years. The majority of the population had received their schooling in Mexico; only one fourth (10) had attended school in the United States. Sixty percent of the population worked or had worked as farmworkers, on average for 12 years. Those who were not so employed worked in landscaping or nurseries, childcare, construction, golf course maintenance, or housework. Mean household size was 4.4 persons.

PERCEPTION AND EVALUATION OF HEALTH AND MENTAL HEALTH

Good Health/Bad Health

Good health was broadly interpreted by the respondents; many of their descriptions included characteristics which might be biomedically defined as those of good mental health. This is another indication of the lack of separation seen between mental and physical health in this population. A person in good health was described as being happy, active, smiling, working, talkative, never sick, and never feels bad.

Bad health is also described in a mixture of physiological and psychological terms, including sad, crying, depressed, mean, lethargic, sick, tired, angry, distant, weak-looking, nervous, and difficult to be around. Even in the case of illnesses such as diabetes, the psychological aspects are emphasized:

Depends on the sickness they have. With diabetes, they get upset, fight with their kids. High blood pressure sufferers act that way too. You can tell by their way of looking at you and by the way they talk. You can tell if someone is sickly by their face.

Aliments which did not interfere greatly with daily life were not perceived as indicating bad health. A person able to continue normal activities is not really considered to be in bad health, even though a serious aliment may be diagnosed:

My father-in-law had diabetes and died last year. He was fine but he began to lose his health. He died quickly and didn't suffer. He could continue many of his activities for a long time.

One older woman, who felt herself to be in bad health, stressed her continued ability to perform expected tasks:

Yes, now I'm old. I do what I need to. I have a tired body but I'm not in bed and I take care of the [grand]children.

Mental Illness-Definition and Differences from Illness

Mental illness was defined commonly using the term crazy (*loco*):

The mind is sick, they are sick, crazy, loco. They suffer from nervios and lose their minds. They are crazy. Don't think in right ways. It's when your mind goes — you think in bad ways. The brain doesn't work, neurons don't fire. The person feels trastornado (upset). Its called laguna mental (mental gap or mental blank space) in Mexico.

Abnormal behavior, including mental retardation, was also noted.

There was strong agreement that a difference exists between an illness (enfermedad) and a mental illness (enfermedad mental), and the respondents interpreted the unspecified term for illness, enfermedad, not to include mental illness. The difference between the two types of problems was that illness can be cured, but mental illness cannot. Perhaps this is part of the stigma associated with mental illness in this population:

If you have an illness, you're sick, you can get well. A mental illness you have all your life.

Respondents were familiar with names for a variety of illnesses. However, few knew specific terms to use for examples of "mental illness," although the younger females suggested the terms "cerebral palsy" and "mongoloids" (an indication of the limited range of conditions the term "mental illness" covered for those interviewed).

Folk Terms for Mental Health Problems

Nervios was recognized by ninety five percent of the respondents were familiar with the term nervios:

Nervios is when you have problems and you can't figure it out, you're nervous. Get very hysterical, yell instead of talking calmly. Nerves, somebody that can only take so much of something. Only so much patience.

Behavior associated with *nervios* was yelling and being worried (younger males), being angry and afraid (older males), anger, feeling badly, and "hysteria" (younger females), and impatience and insomnia (older females). There was not any consensus among the respondents as to the cause of *nervios*, although money, food, work problems and accidents were noted as possible causes. Recommended treatments included talking to someone or getting medical or psychiatric help. Several felt that physicians could give medication to control *nervios*. When asked to label *nervios* as an illness, mental illness, problem, condition, or part of normal life, most respondents were divided between the labels illness (*enfermedad*) (32%), mental illness (26%), and part of normal life (26%).

La locura (craziness) was recognized by 85% of the respondents, although they were not really sure on the definition of the term. Some responses included:

A change that is more than *nervios*. A person goes crazy. A person who is ill in the mental faculties.

Behavior associated with *la locura* included aggression, yelling, acting dangerous (younger men), acting abnormal.

childlike, and dangerous (younger women), and don't know what they are doing (older women); the older men didn't know of specific behavior associated with *la locura*. The cause of *la locura* was believed to be child abuse, heredity, accident, brain tumors, thinking too much (which "weakens the mind"), and "the nerves get on edge, and the body can't resist."

Recommended treatments included psychiatric treatment and medical attention. Several respondents felt that there was no cure for this problem. Another differentiated between types of la locura: "Need to go to a psychiatric hospital. There are weak and strong locuras. There are some that don't get cured — they commit suicide." When asked which label applied to la locura (illness, mental illness, problem, condition, or part of normal life), 33% considered it an illness, 28% called it a problem, and 28% used the term mental illness. No respondent felt that la locura was a part of normal life.

Respondents were asked to rank order la locura, nervios, illness, and mental illness. Mental illness was felt to be the most serious, followed by la locura. Nervios was next, with illness being considered the least serious. They were also asked to classify anxiety, depression and fear as either a problem, a condition, nervios, or just a part of normal life (Table 3). Anxiety and fear tended to be considered nervios, while depression tended to be viewed as a physical illness.

MEASURING MENTAL HEALTH USING NSHS QUESTIONS

With respect to the NSHS-based questions, there seems to be a risk of a high level of false positives in this population. Respondents tried very hard to "please" the interviewers and to generate positive examples of the descriptions of the mental health problems described to them. People stretched the interpretations of many of the questions, such as reporting that they had been scared to sing in front of the class on one occasion as a child, as an example of a phobia.

There was also a great deal of identification with the situations described as "simple phobia." In particular, there was specific identification by nearly every respondent with fears of snakes, spiders, storms, thunder and lightening, all common and dangerous parts of the lives of these people. Most of those interviewed, with the exception of the older women, reported having suffered from these types of fears:

I don't like water because I almost drowned as I tried to save a child who jumped in a river. He was holding on to me and dragging me down. I took in a lot of water. That child is grown now and he says he owes me his life. He gives me gifts now and then.

With me. I was thrown into water as a child and it made me afraid of the water. You need to teach babies when they are young [to swim], then they aren't afraid.

Yes, many years ago, I worked at a place where they killed small animals and I fainted. I went back to work the next day.

Additionally, respondents who resided in households in which any serious physical or mental health problems were present had a tendency to see the ill person as having many of the mental health problems. This was seen in households where a husband/father had diabetes and high blood pressure, where

Table 3. Emic Categorization Selected Mental Illnesses

	Mental Illness Description			
Category	Anxiety	Depression	Panic	
A problem/condition	25%	20%	20%	
Nervios	25%	5%	55%	
La locura	10%	_		
Part of normal life	20%	_	15%	
An illness	5%	50%	_	
Don't know/misc.	10%	20%	10%	
Mental illness	-	5%	_	
Total	100%	100%	100%	

a husband had major depression and secondary alcoholism, as well as in a case where a husband was diagnosed with anxiety and alcohol abuse; the latter two diagnoses were provided by the clinical psychologist at the clinic.

I was also able to obtain the diagnoses for those respondents who were mental health patients at the clinic. One male diagnosed as paranoid schizophrenic was incapable of giving coherent answers to the questions. In a second case, in which the husband had been diagnosed as having major depression and secondary alcoholism, the wife reported positively for many of the mental health problems for him, and negatively for herself (even though she had been living with this depressed, former alcoholic for over 30 years). The third case was a man in his twenties, being treated for anxiety (due to the death of one infant, and a second child born prematurely who was still critically ill), with a secondary diagnosis of alcohol abuse. The husband was more discriminating in his responses, with positive responses for the anxiety items, and negative ones to the other items. His wife indicated that she felt that he had many of the other mental health conditions. It appears that people being seen at the clinic for mental health problems do not seem to respond positively to the questions which ask if they have these

Measuring Mental Health Using the Census Bureau Inventory Pretest

Understanding of Response Categories

Respondents interpreted in many ways the formal-choice categories: "most of the time," "some of the time," "a little of the time," and "none of the time". Not only was the median for "a little of the time" greater than the median for "some of the time," but the ranges of all of the terms were quite broad, creating large amounts of overlap. What one respondent categorized as "a little of the time" might easily have been the same period of time that another respondent labeled "most of the time." This pattern suggests that it will be difficult to collect accurate data in this population using this response format, and in particular, these phrases.

Understanding of Questions

Table 1 lists some of the questions and how the respondents indicated in the de-briefing that they had understood the questions. Several of the items may have been answered differently by this population, because some items were related

to the specific type of work and lifestyle of these people. Respondents' daily lives called for long hours of outdoor physical labor, often under conditions of high heat and humidity. Work may not be available at all times, or in sufficient quantity to adequately provide for one's family's needs. As such, people commonly have "muscles [that] feel tense, sore or aching", "feel [their] heart pound or race without exercising", and "[their] face[s] feel...hot and flushed." A man who described himself as having "seven children and [no] work or money" not surprisingly identified with the statement "you feel depressed."

Physical illness also affected responses, as in the case of the person who felt dizzy due to his medication for high blood pressure. Other explanations of responses related to physical illnesses included one woman, who is now divorced (her husband left her with 10 small children), who said that she had felt "physically tense or shaky" and her "muscles felt tense, sore, or aching" when she was married because she suffered from nervios. Another respondent with diabetes felt that his illness was what caused him to respond positively to the questions, "you feel restless," "your thoughts come more slowly than usual," "you feel tired out for no good reason. "you feel that everything was an effort," "you feel inferior or not as good as other people," "you feel physically tense or shaky," and negatively to "you feel full of energy."

In addition, about 20 other questions were not understood by at least some of the respondents, for example, "you have a smaller appetite than usual," "you feel full of energy," "you have trouble making simple decisions."

Discussion

Respondents had a great deal of trouble with the interviews, but not because they did not understand the questions (with the exception of part 2 of interview 2-the Census Bureau Inventory Pretest). Rather, their ideas and formulations of this domain of existence were so different from the way these issues were categorized by the NCHS that the questions seemed irrelevant to their lives and very "distant" from their daily concerns.

Good and bad health (not defined by the interviewer as specifically mental or physical) may be indicated by psychological state. People who were in good health were described as happy and talkative, while those in bad health were said to be angry, depressed, and sad. Thus, the lines drawn by the dominant society and the biomedical community between mental and physical health may not be perceived by this population.

The older men were the least likely to recommend going to a doctor or psychiatrist for mental health problems. Their approach was to get on with one's life and solve the problems which caused the condition. However, the general pattern seen in this population as a whole was not to stress the use of biomedical mental health services as a way of dealing with these types of problems.

My initial recommendations to the Census Bureau were that some revision of the proposed questions would be in order, in particular, clarification of the wording of the questions so that the broad interpretations seen in Table 1 would not be possible. But a more serious problem was the range of interpretation of the response categories by these respondents. I suggested that these categories should be given in terms of number of days



(i.e., 2-3 days, a week, a month, etc.), as opposed to the vague quantifiers (i.e., some of the time, most of the time, etc.), which became even more vague in the minds of those interviewed.

However, given the lack of congruence between the biomedical and emic models of this domain, I was extremely pessimistic about the possibilities of designing a survey instrument which would accurately measure mental health among this population in any kind of units which the biomedical community would find interpretable or useful. Further, I reasoned, the population I had studied was very small, in relation to the US population as a whole. Mexican Americans were a larger demographic unit, but there was no reason to assume that there was any similarity between the migrant workers and that entire group, which is much more educated, Englishspeaking, and of a higher income level. As such, I anticipated that creation of an instrument which would accurately measure mental illness among migrant workers was beyond what could reasonably be expected of a group such as the Census Bureau. which would not focus on such tiny segments of the US population as a whole.

Therefore, it was with great surprise that I reviewed the findings of Cassidy (1992, 1993), who conducted similar research for the Census Bureau among a sample of white, middle class, highly educated urbanites (mostly college educated and beyond) in the Washington. DC area. Few populations could be more different from the migrant workers studied in Florida. and few populations could be more similar "to those of the experts who officially define mental health conditions, and create mental health questionnaires" (Cassidy 1993:5). Cassidy's interviewees were a very verbal group, and while familiar with the biomedical model, at least half had sought out alternative types of health care. In addition, of the total sample of 32, twelve had received psychotherapy. As such, they were familiar with the jargon and assumptions of professional therapy.

Cassidy had predicted that her population would share the knowledge and attitudes about mental health of the professionals. This was not the case; her lay informants "actively normalized the symptoms that specialists medicalize" (Cassidy 1993:5). Despite (or because of?) their familiarity and direct experience with the professional categories of mental health, they largely rejected this categorization system. Her interpretation of the lay informants' conceptualization of this domain not only differs from that of the professionals, but is similar to my interpretation of that of the Mexican migrant workers in Florida. Both interpretations of the emic models feature more of a continuum, as opposed to the dichotomous states of illness and health characteristic of the specialist, or biomedical model.

This pattern suggests that a key difference in the understanding of this domain may be based on a lay/professional dichotomy. Based on the data from these two studies, standard demographic differences, such as ethnicity, language, education, and income level, seem to be much less critical.

Problems in lay understanding of professional mental health categories have been noted by other researchers as well. For example, Miller (1993) has discussed problems with definitions of borderline personality disorder, as understood and interpreted by both therapists and patients. Miller (1993) found that "most of the therapists contacted for...[her] study used an idiosyncratic definition of borderline personality and not that found in DSM-

III-R. They were even not sure of the eight DSM-III-R diagnostic criteria" (Miller 1993:11). In addition, she felt that the category "has meaning for clinicians, but not for patients...It is not a popular illness category...The participants in this study [ten white Anglo-Saxon Protestants, raised in middle or lower middle class households] did not identify closely with their psychiatric diagnosis...They perceived themselves as inherently flawed, but until they were in psychiatric care, they did not perceive their condition or malaise as a sign of illness" (Miller 1993:215-216).

Other authors have stressed the need for a change in DSM III categories to include culture bound syndromes, such as nervios. Otherwise, "research will remain a kind of colonial imposition of Western categories on experiences, some of which are shared but many of which differ in important ways" (Guarnaccia et al. 1990:1455). While I do not want to argue against culturally relevant instruments to measure mental, or any kind of health, the larger issue is that the standard instruments used to measure mental health do not appear to teflect categories meaningful even for the mainstream population. Rather than an imposition of Western categories on ethnic minorities, the instruments seem to represent the imposition of professional categories on the lay population as a whole. And while many differences persist between the ways this area of life is categorized among Mexican migrant workers and middle class urbanites, they do seem to share more with each other than either group does with the biomedical professionals.

Conclusions

Perceptions of health and mental health among the Mexican and Mexican American migrant workers studied differ from those of the biomedical model. Good health and bad health are often described using characteristics which might be biomedically defined as those of good (or bad) mental health. Physical ailments which do not interfere greatly with daily life are not considered indications of bad health. While mind and body are more closely linked than in the biomedical model, respondents did not believe that a mild physical health problem would necessarily indicate mental or emotional problems. The converse was also considered to be possible. However, in the case of a serious physical ailment, emotional and/or mental consequences were considered possible and not unlikely.

Mental illness is considered to be indicated by abnormal behavior, acting crazy, and is felt to be, unlike physical illness, irreversible (as in the case of mental retardation). While respondents had a variety of names for illnesses, for the most part, they knew few names for "mental illnesses." The familiarity of the middle class American population with therapy, psychology, and psychological/psychiatric terminology is not shared by this group.

Nervios is a label which covers many conditions considered biomedically to be mental illnesses. However, most respondents did not consider nervios to be a mental illness. La locura was not felt to be a part of normal life, yet only 28% considered it to be a mental illness A mental illness is considered to be more serious than la locura, nervios, and physical illnesses, which with the perception of mental illness as an incurable condition, perhaps leads to the reluctance to use this label.

Anxiety was not viewed as "a problem" by many, preferring to label it nervios; similarly for phobias, nervios was the preferred term. Depression, on the other hand was considered by many to be an illness. Few felt that appropriate treatment for phobias or anxiety included use of mental health professionals, although a few mentioned this as a possible approach to depression, along with use of physicians.

Measurement of incidence of mental illness in this. population may not be truly accurate because of the types of instruments currently being used to measure it, as well as cultural characteristics of the population. The approach based on NSHS questions appears to lead to false positives among the healthy population and false negatives among the mentally ill population. The proposed "inventory approach with vague quantifier response categories" suffers from too high a reading level, unclear questions, unintelligible questions, and interpretation of response categories that varied greatly from individual to individual within this cultural group. This pattern has also been reported for other cultural groups (Schaeffer 1991). In addition, she suggests that variation may occur between cultural groups, which would make this approach difficult to use in the US population as a whole.

Finally, the results of this research and that of Cassidy (1992, 1993) suggest a number of interesting hypotheses, which might be investigated further. At least for the domain of mental health (and perhaps others as well), standard demographic variables such as ethnicity, level of education, language, and income seem to be less critical than is the lay/professional distinction. Current survey instruments designed to measure mental health do not accurately reflect the mental health of either mainstream or minority populations, due to the use of professional and biomedical rather than lay categories. More surprisingly, instruments appropriate for middle class Anglos are also likely to be acceptable for Mexican migrant farmworkers if not encumbered by inappropriate biomedical categories. In the conceptualization of this area of life experience, the Mexican migrant workers and the middle class urbanites seem to share more with each other than either group does with biomedicine.

However, because of the small sample size in this study, tied to a methodology of in-depth interviewing, additional research is needed to investigate further the hypotheses about conceptualizations of mental health among these populations.

An example would be to determine how middle class Mexican Americans, conceptualize mental health, and then compare those results with those of people of similar ethnicity (Mexican American migrant workers), and with those of people of different ethnicity but similar income and educational levels (e.g. White or African-American middle class urbanites).

The larger issue suggested by these two studies, as well as that of Miller (1993) — the importance of the lay/professional distinction — is also worthy of further investigation. Lay people of many different cultural backgrounds may share the "normalizing" tendencies seen in this study. Therefore, survey instruments which incorporate this perspective (perhaps using non-dichotomous categories such as: "OK," "needs some help to be OK again," "not OK, and will never be, but is able to live more or less like other people," and "not OK and will never be and is not able to live like other people") may be more useful in accurately measuring mental health and illness in our increasingly multi-cultural society than are the instruments currently in use. The lay/professional distinction may be more

critical than those of income, educational level, language, and/ or even ethnicity. In addition, lay/professional differences in conceptualization may go beyond the domain of mental health, and be important for understanding behavior in areas such as physical health and food consumption and nutrition (Baer and Cassidy 1991).

Finally, this study offers a concrete example of the need to do in-depth ethnographic pilot research before committing to a larger survey. So much of what we know — or at least think we know — is based on survey research; it would be comforting to be sure that our policies and programs are based on data with solid grounding in reality.

REFERENCES CITED

Angel, Ronald and Peter Guarnaccia

1989 Mind. Body. and Culture: Somatization Among Hispanics. Social Science and Medicine 12:1229-1238.

Bach-Y-Rita, George

1982 The Mexican American: Religious and Cultural Influences.
In Mental Health and Hispanic Americans: Clinical Perspectives. Rosina Becerra, M. Karno, and J. Escobar, eds. Pp. 29-40. New York: Grune and Stratton, Inc.

Baer, Roberta D. and Marta Bustillo

1993 Biomedical Correlates of Mexican Folk Illness: Susto and Mal de Ojo. Medical Anthropology Quarterly 7(1):90-100.

Baer, Roberta D. and Claire Cassidy

1991 Belly Laughs: Cartoons as Reflections of Popular Cognition about Scientific Nutrition. Paper presented at the Meetings of the American Anthropological Association, New Orleans, LA.

Baer, Roberta D. and Dennis Penzell

1993 Susto and Pesticide Poisoning Among Florida Farmworkers. Culture. Medicine & Psychiatry 17:321-327.

Briones, David, Peter Heller, H. Paul Chalfant, Alden Roberts, Salvador Aguirre-Hauchbalum, and Walter Fattijt.

1990 Socioeconomic Status, Ethnicity, Psychological Distress, and Readiness to Utilize a Mental Health Facility. American Journal of Psychiatry 147(10):1333-1340.

Browner, C.H., Bernard Ortiz de Montellano and Arthur Rubel

1988 A Methodology for Cross-Cultural Ethnomedical Research. Current Anthropology 29(5):681-689.

Burnam, M. Audrey, Diane Timbers, and Richard Hough

1984 Two Measures of Psychological Distress among Mexican Americans, Mexicans, and Anglos, Journal of Health and Social Behavior 25:24-33.

Casas, J. Manuel and Susan E. Keefe

1978 Family and Mental Health in the Mexican American Community. Los Angeles: Spanish Speaking Mental Health Research Center.

Cassidy, Claire

1992 Belief and Attitudes about Mental Health and Illness of White Middle-Class Americans. Report for the Center for Survey Methods Research, US Bureau of the Census, Washington, DC.

1993 A Million Ways to be Health: Middle Class Normalization of Specialist Mental Health Constructs. Paper presented at the Meetings of the American Anthropological Association, Washington, DC.

Finkler Kaja

1989 The Universality of Nerves. In Gender Health and Illness, Dona Davis and Setha M. Low, eds. New York: Hemisphere Publishing Corporation, pp. 171[79]-179[87].

Golding, Jacqueline and M. Audrey Burnam

1990a Immigration, Stress, and Depressive Mexican American Community. Journal Mental Disease 178(3):161-171.

1990b Symptoms in a of Nervous and Stress and Social Support as Predictors of Depressive Symptoms in Mexican Americans and Non-Hispanic Whites. Journal of Social and Clinical Psychology 9(2):268-287.

Golding, Jacqueline, Marvin Karno and Carolyn Rutter

1990 Symptoms of Major Depression Among Mexican Americans and Non-Hispanic Whites. American Journal of Psychiatry 147(7):861-866.

Guarnaccia, Peter, Byron Good, and Arthur Kleinman

1990 A Critical Review of Epidemiological Studies of Puerto Rican Mental Health. American Journal of Psychiatry 147(11):1449-1456.

Jenkins, Janis

1988 Ethnopsychiatric Interpretations of Schizophrenic Illness: The Problem of *Nervios* within Mexican American Families. Culture, Medicine and Psychiatry 12:301-329.

Kay, Margarita and Carmen Portillo

1989 Nervios and Dysphoria in Mexican American Widows. In Gender, Health, and Illness. Dona Davis and Setha M. Low eds. Pp. 273[181]-293[201]. New York: Hemisphere Publishing Corporation.

Keefe, Susan

1978 Why Mexican Americans Underutilize Mental Health Clinics: Fact and Fallacy. In Family and Mental Health in the Mexican American Community, J. Manuel Casas and Susan E. Keefe, eds. Pp. 91-108. Los Angeles: Spanish Speaking Mental Health Research Center.

Martaus, Therese

1986 The Health-Seeking Process of Mexican American Migrant Farmworkers. Home Healthcare Nurse, 4(5):32-38.

Miller, Sharon

1993 Borderline Personality Disorder: An Anthropological Perspective. Ph.D. dissertation, University of South Florida, Tampa.

Montgomery, Gary, Bill Arnold, and Sergio Orozco

1990 MMPI Supplemental Scale Performance of Mexican Americans and Level of Acculturation. Journal of Personality Assessment 54(1&2):328-342. Newton, Frank

1978 The Mexican American Emic System of Mental Illness: An Exploratory Study. In Family and Mental Health in the Mexican American Community, J. Manuel Casas and Susan E. Keefe, eds. Pp. 69-90. Los Angeles: Spanish Speaking Mental Health Research Center.

Parra, Fernando

1987 Perceptions of Mental Illness in Mexico: A Descriptive Study in the City of Chihuahua. The International Journal of Social Psychiatry 33(4):270-276.

Rubel, Arthur, Carl W. O'Neil, and Rolando Callado-Ardon

1984 Susto: A Folk Illness. Berkeley: University of California Press. Salgado de Snyder, V. Nelly, Richard Cervantes and Amando Padilla 1990a Migration Y Estres Postraumatico: El Caso De Los Mexicanos Y Centroamericanos en Los Estados Unidos. Acta

Psquit. Psicol. Amer. Lat. 36(3-4):137-145.

1990b Gender and Ethnic Differences in Psychosocial Stress and Generalized Distress Among Hispanics. Sex Roles 22(7/8):441-453.

Schaeffer, Nora Cate

1991 Hardly Ever Or Constantly? Group Comparisons Using Vague Quantifiers. Public Opinion Quarterly 55:395-423.

Schreiber, Janet and John Homiak

1981 Mexican Americans. In Ethnicity and Health Care. Alan Harwood, ed. Pp. 264-336. Cambridge: Harvard University Press.

Vega, William, George Warheit, Joanne Buhl-Auth, and Kenneth Meinhardt

1984 The Prevalence of Depressive Symptoms among Mexican Americans and Anglos. American Journal of Epidemiology 120:592-607.

Warheit, George J., William A. Vega, Joanne Auth, and Kenneth Meinhardt

1985 Mexican American Immigration and Mental Health: A Comparative Analysis of Psychosocial Stress and Dysfunction. In Stress and Hispanic Mental Health: Relating Research to Service Delivery. William A. Vega and Manuel R. Miranda, eds. Pp. 76-109. Rockville, MD: US Dept, of Health Services.