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Article *in* Cultural Diversity and Mental Health · February 1997

DOI: 10.1037/1099-9809.3.1.23 · Source: PubMed

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Understanding Cross-Cultural Prognostic Variability for Schizophrenia

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Research suggests that critical and negatively charged family environments correlate with poor prognosis for schizophrenia across cultures. International research also suggests that the increasing industrial status of a country is associated with a less favorable outcome for the disorder. This article reviews the literature on culture and schizophrenia. An argument is made for using an attribution-affect model to help identify factors that may lead to unfavorable emotional reactions toward individuals with schizophrenia. In addition, specific sociocultural values and beliefs are proposed that are hypothesized to contribute to a favorable clinical course for schizophrenia in less industrialized countries.

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• schizophrenia • culture • expressed emotion • attributions • values • industrialization

Cross-cultural variability for the course of schizophrenia has been noted for some time. Strong evidence suggests that outcome for individuals with schizophrenia living in developing societies is markedly superior to that of individuals with schizophrenia from industrialized countries (Jablensky et al., 1992; K. Lin & Kleinman, 1988). Perhaps the most striking evidence for better prognosis for schizophrenia in developing countries comes from the World Health Organization's (1979) International Pilot Study of Schizophrenia (IPSS). This large-scale,

multinational study found that ill individuals from the developing nations of Nigeria, India, and Colombia have fewer symptoms and better functioning between episodes than ill individuals from more industrialized countries such as Denmark, the United Kingdom, and the United States. Two- and 5-year follow-up studies reaffirmed the IPSS's original findings (Leff, Sartorius, Jablensky, Korten, & Ernberg, 1992).

Evidence of a better course and history of schizophrenia in developing societies has led researchers to hypothesize that "cultural fac-

• **Editor's Note:** Renato Alarcón, MD, served as action editor for this article.

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tors" may impact the manifestation and outcome of psychotic disorders. Few investigators, however, have set out to examine the specific sociocultural characteristics that may cause differences in form, intensity, and duration of major psychiatric illnesses among countries of different developing statuses (K. Lin & Kleinman, 1988).

In this article it is proposed that a society's beliefs about schizophrenia influence its reactions toward mentally ill individuals; society's response, in turn, is believed to be a critical factor in accounting for differences in illness prognosis. Specifically, attributions regarding the cause, and controllability of psychotic illness are hypothesized to be of central importance in determining how members will respond to those who are mentally ill. In addition, a society's value systems and customs, including religion and kinship structure are believed to guide and shape conceptualizations of mental illness, and in some developing countries may lead to practices that minimize stress, social stigma, and self-devaluation.

This article begins with a general review of a theoretical model linking attributions of control to emotional responses. Evidence is then presented for applying an attributional-affect model to the study of expressed emotion (EE), a construct found to be a reliable and valid predictor of schizophrenic prognosis. A discussion of sociocultural factors proposed to account for cross-cultural prognostic variability for schizophrenia follows. The article concludes with a summarization of the strengths and weaknesses of the existing research, followed by a discussion of clinical and research implications.

An Attributional (Controllability) Model of Emotions

Research suggests that perceptions of one's ability to control the cause or outcome of an event are related to the emotional reactions that follow (Fiske & Taylor, 1984). Weiner (1986) offered a model that calls specific attention to linkages between controllability

attributions and affective consequences. Specifically, Weiner proposed that when presented with an unpleasant event or behavior of another person, individuals will evaluate that person's ability to have controlled or prevented the occurrence. According to the theory, when controllable factors are implicated, people are likely to respond to the person with negative emotions such as anger and dislike, and in turn, antisocial responses. Correspondingly, when the same event or behavior is perceived as outside the perpetrator's personal control, people are expected to respond with positive emotions such as sympathy, pity, and prosocial behavior.

Some evidence for applying an attribution-affect model to the study of psychopathology comes from research on a construct known as expressed emotion. EE is a measure of attitudes of a close relative toward a mentally ill family member. Specifically, the construct assesses critical and hostile comments and evidence of emotional overinvolvement (e.g., exaggerated affect, overly self-sacrificing behavior; Jenkins & Karno, 1992). Studies conducted over the past few decades consistently indicate that individuals with schizophrenia who return from the hospital to live with relatives who talk about them in a critical, hostile, or emotionally overinvolved way (high-EE) during a semi-structured interview suffer elevated relapse rates in comparison with individuals whose relatives do not express these negative attitudes (low-EE; for a review, see Kavanagh, 1992). Some data suggest that the association between high relapse rates for mentally ill individuals from families with emotionally overinvolved relatives, characterized as expressing overprotective attitudes and excessive concern, may be a function of these individuals having poorer premorbid histories and more severe symptomatology (Miklowitz, Goldstein, & Falloon, 1983). The same does not hold true for ill individuals from the other two subtypes of high-EE. Researchers consistently fail to find differences in severity of residual symptoms and/or level of premorbid functioning between ill individuals

from low-EE families and those from high-EE families, defined by highly critical or hostile attitudes (Kavanagh, 1992).

A few investigators have alluded to the role of families' attributions or explanations of their relative's disorder in order to help understand the psychological processes that underlie certain relatives' high-EE critical and hostile attitudes. Hooley (1987) speculated that high levels of EE in relatives may be interpreted within an illness framework. High-EE attitudes (based on critical comments) are hypothesized to develop when relatives perceive that the symptoms are not the result of a legitimate illness and are, at least to some degree, controllable by the ill individual. High-EE relatives will thus be inclined to nag and criticize the ill family member in an attempt to modify undesirable behavior. Hooley speculated that ill family members who are criticized often may be subjected to higher levels of stress, hence increasing the probability of relapse.

Hooley (1987) hypothesized that low-EE relatives also make attributions about the disorder in a way consistent with a medical model. Low-EE relatives are hypothesized not to hold mentally ill individuals responsible for their bizarre behavior because it is perceived as the inevitable side effect of a genuine illness. These relatives are thus thought to respond to the schizophrenic symptomatology with patience and understanding. More positive reactions by relatives would reasonably be associated with a more stable and "mentally healthy" environment, corresponding with less stress.

Some qualitative data offer indirect support for Hooley's (1987) theory. Leff and Vaughn (1985), for example, noted differing attitudes toward the legitimacy of the illness, and differing expectations for the ill individual's functioning between low-EE and high-EE relatives. The authors observed that low-EE relatives tended to attribute the cause of abnormal behavior to a genuine illness, coupled by respect for the afflicted family member's feelings and perceptions when ill. In contrast, the authors observed that high-EE

relatives frequently questioned or denied that the family member was genuinely ill. These relatives were generally intolerant of complaints of illness and repeatedly engaged in confrontations with the ill family member. Jenkins, Karno, de la Selva, and Santana (1986) reported observing similar differences in attributions toward illness between high-EE and low-EE relatives in a sample of Mexican Americans.

A few recent studies offer more direct support for the view that attributions of control are related to EE. Three sets of researchers (Barrowclough, Johnston, & TARRIER, 1994; Brewin, MacCarthy, Duda, & Vaughn, 1991; Weisman, López, Karno, & Jenkins, 1993) found that low-EE relatives made less controllable and less personal (rather than universal) attributions for their ill family member's behavior than did high-EE relatives (designated by high levels of criticism). In addition, Weisman et al. found that attributions held by relatives were related to their affective reactions. Specifically, relatives who perceived the ill family member as having control over the symptoms of schizophrenia tended to express greater negative emotions such as anger and annoyance toward the individual than did relatives who viewed the symptoms as beyond the individual's personal control.

The preceding observations support the view that attributions play an important role in the development of high-EE attitudes. In addition, the Weisman et al. (1993) findings conducted with a Mexican American sample, together with the findings of Brewin et al. (1991) and Barrowclough et al. (1994) conducted with British samples, suggest that the attributional model may have cross-cultural relevance in understanding the EE construct.

EE, however, is inherently sociocultural and qualitative in nature. The construct indexes a wide array of behaviors, emotions, and attitudes that are part of an individual's cultural repertoire, developed through processes of socialization (Jenkins & Karno, 1992; Jenkins et al., 1986). Not surprisingly, some variability has been found in the profiles of EE families across cultural groups.

Culture and EE

Jenkins et al. (1986) have observed marked differences in percentages of high-EE families between Mexican American and Anglo-American key relatives for a matched sample. For Mexican American key relatives, the majority (69%) were rated as low-EE. For Anglo-Americans, on the other hand, the majority were rated as high-EE, with only 33.8% falling in the low-EE category. The differences in percentages of high-EE families between Mexican Americans and Anglo-Americans seems to parallel qualitative data regarding the attributions that the two groups make for their ill family member's disorder (Jenkins et al., 1986). On the whole, Mexican Americans were noted as much more likely to view the problem as one of illness than were Anglo-Americans, irrespective of EE status. Jenkins et al. also reported qualitative differences in the emotional reactions to the disorder between these two groups. For Mexican Americans, the most commonly conveyed emotional reactions toward the illness were feelings of sadness, sorrow, and pity. Although Anglo-Americans also reported feelings of sadness (especially those low in EE), they occurred less frequently than other more negative emotions such as anger and annoyance.

The observations by Jenkins et al. (1986) and other cross-cultural researchers (e.g., Waxler, 1979) suggest that there are differences in perceptions of an individual's control over schizophrenia across cultures. However, previous investigations have generally neglected to examine why different cultural groups come to different conclusions regarding the causes of mental illness and individuals' abilities to exert control over the associated symptoms. Identifying specific sociocultural values and beliefs that shape cultural views of psychopathology may help elucidate important factors underlying the more favorable emotions expressed toward mentally ill individuals in developing societies.

Culture and Mental Illness

It is generally assumed that most beliefs and attitudes are acquired through our culture and reflect experiences with our proximal environment. Not surprisingly, an individual's beliefs about the world also affect what inferences are made about the behaviors of others (Read & Miller, 1989). In this section it is proposed that sociocultural variations in religion, spiritual beliefs, and kinship structures shape a society's view of psychopathology and its members' emotional reactions toward their mentally ill members.

Religion and the Supernatural

For many ethnic groups religion and spiritualism offer a culturally sanctioned explanatory model for understanding illness, and for influencing attitudes and feelings toward individuals suffering from mental disorders (Bach-y-Rita, 1982; Rogler, 1989). Among the predominately Catholic Latino societies, for example, the will of God is frequently invoked as the cause of events, including mental illness and suffering (Bach-y-Rita, 1982; Lefley & Pederson, 1986). Many Latinos also integrate elements of native religions with Christianity. This process is termed *syncretism* (Gualtieri, 1984, p. 93). Thus, rather than referring to psychiatrists or psychologists when first presented with mental illness, some Latinos may consult indigenous healers instead of, or in addition to, Catholic clergy (Creson, cited in Ruiz, 1982; Wintrob, 1977) although Edgerton, Karno, and Fernandez (1970) and Padilla, Carlos, and Keefe (1976) cautioned that the numbers of Latinos who utilize traditional healers may be overestimated.

A mention of *curanderos* (Mexican folk doctors) and *espiritistas* (spiritual healers) and their specific treatments is relevant to this discussion, because it is thought to be a reflection of core Latino values including beliefs about mental illness and their causes. Religion is the central focus of folk healers (Kiev, 1968): Afflicted individuals are taught

to view illness and suffering in a holistic fashion, including spiritual, physical, emotional, and social factors (G. Canino & I. Canino, 1982; Comas-Díaz, 1992; Ho, 1987).

One philosophical orientation that is reportedly common among Latino groups and encouraged by folk healers is fatalism (Sandoval & de la Roza, 1986). The fatalistic stance presupposes the existence of supernatural and external forces that unpredictably interfere in human affairs. Whereas Catholicism, fatalism, and folk teachings seem to encourage resignation and passivity, and may discourage efforts to change the world, they also provide a sense of security, acceptance, and comfort for the patient and his or her loved ones. It has been suggested that one function of folk healing is to prevent the labeling of the participant as crazy, because the spiritualist session has created a permissive group setting wherein all abnormal behavior is given meaning and is made acceptable (Gomez, 1982). When a hallucination or other unusual behavior can be linked to religious beliefs and the supernatural, it may minimize its impact on the family because it is viewed as a more normal and noble expression of distress (Torrey, 1970).

Folk healers and Catholic clergy, in general, encourage Latinos to believe that another's suffering is symbolically their own. In addition, the acceptance of things one cannot control, espoused by fatalism, psychologically and culturally prepares people for life's uncertainties (Kiev, 1968). This belief system supports the perception that there is no protection against adversity and that anything that happens to others can also happen to oneself. It would seem that this external locus of control perspective might impress Latinos with the need to be more compassionate, understanding, and tolerant of other people's failures, such as mental illness. This orientation may be one of the factors accounting for the low levels of anger and hostility elicited by Mexican American families when presented with schizophrenic relatives (Jenkins et al., 1986).

Observations of Samoan folk knowledge of mental disorder as described by Clement (1982) parallel many of the Latino folk beliefs discussed here. Using traditional ethnographic approaches, Clement found that Samoan representations of mental disorders are heavily influenced by the belief that mental conditions are due to spirit possession. The traditional view is that a spirit may take possession of a person's body and cause them to behave strangely. Clement suggests several latent functions of the Samoan system for responding to mental illness. The victim generally is not held responsible for disturbed behavior and thus can vent emotions and anger by acting out occasionally, with only benign punishment such as apologizing to a deceased ancestor. This may serve as a safety valve for the individual and his or her family. Once the individual "regains control" and is restored to health, he or she can resume a normal position and social role. In line with the ideas put forth here, Walters (1977) suggested that Samoan conceptualizations of, and reactions toward, mental illness likely account for the discrepancy between the expected rate of mental illness in the country based on population, and the comparatively low rate of actual cases of mental illness diagnosed in Samoa.

Research conducted in Bali (Connor, 1982) suggests that Balinese views of madness also center around supernatural forces. As in Samoa, belief that madness is due to an ancestral or divine curse is commonplace in Bali. When this occurs, the precipitating factors are usually attributed to the neglect of an important ritual by the family or mistakes in a ritual already completed. Hence the blame is typically diffused or diverted. Connor also reported that with Balinese folk healers, individuals seemed to recover quickly, after only a short course of traditional treatment. Unlike established Western psychiatric and psychological techniques, there the diagnosis orients directly to a culturally construed cause of the disorder. The therapy is also relevant and sensitive to Balinese values and be-

liefs. For example, the healing rituals in Bali are preformed under the guidance of a trusted folk healer and include the family (the most central and important unit in Balinese culture) in all stages of the preparation and performance.

Like Latino, Indonesian, and South Pacific societies, in Vietnamese and Chinese thought there is also a strong belief that all extents have a place within a supernatural logic, and any unexplained affliction like psychosis is attributed to uncontrollable, supernatural causes. In some traditional Asian families, behaviors that would likely be considered psychotic in some Western cultures such as talking to deceased relatives and believing that their spirits guide one's behavior is not only condoned, but may even be considered respectful of past generations (Yee & Hennessy, 1982).

Beliefs about supernatural forces have important implications for the attribution of responsibility and punishment. In Samoa, for example, delirious behavior that is seen as the result of possession by an angry ancestral spirit is treated by spirit healers, and the ill individual is exempt from blame. On the other hand, if possession is doubted, the afflicted person is regarded as responsible and may even be beaten as a result (Clement, 1982). Similarly, erratic behavior by a child from Bali may be tolerated if it is perceived as the manifestation of personality traits of an ancestor reincarnated in the child (Connor, 1982), otherwise the child would be severely castigated.

Waxler (1984) purported that because beliefs about mental illness center on supernatural causation in many developing societies, the person is not held responsible for his or her illness. Hence, the "self" remains unchanged and the person is able to shed the sick role quickly and easily. In contrast, where psychiatric illnesses are believed to involve personality change and personal responsibility, individuals receive many messages that something is seriously wrong; consequently, their perception and behavior may conform

to those messages and the corresponding illness may have a long duration.

The Role of Family and Community in Illness Prognosis

In an analog study using vignettes of an individual described to meet the *DSM-IV* criteria for schizophrenia, Weisman and López (1996) recently found that family cohesion was correlated with emotions toward schizophrenia. In that study, research participants who perceived their own families as cohesive and supportive expressed more intense positive feelings and less intense negative feelings toward a hypothetical family member with schizophrenia. One explanation for this finding may be that individuals with strong familistic identities perceive a family member with schizophrenia as less responsible for his or her condition in order to preserve the solidarity of the family. In line with an attribution-affect model, this view might lead to low-key supportive environments in familistic societies, as well as other behaviors that might aid in the recovery process. Families who view the cause of their relative's illness in a more benign and less blameworthy fashion may be more willing to help him or her in an instrumental sense. In addition to offering more affective support, these family members may also be more amenable to providing the relative with financial assistance, advice, or help with activities of daily living.

There is general agreement in the literature on Mexicans and Mexican Americans of a strong basic value orientation toward integration, intimacy, and enduring relationships within the family unit (Edgerton & Karno, 1971). Escobar and Randolph (1982) reported that in the Mexican American culture there is often an unwillingness to abandon a relative, even in the most disruptive or severe cases. Jenkins (1981) has observed that Mexican American families will go to great lengths to interpret even schizophrenic behavior in a positive or impartial light. In one instance, Jenkins reported an incident in

which a Mexican American mother was relieved that her son was happy again—after seeing him laughing and talking alone. Another example is the use of the term *nervios* (nerves) to explain illness behavior. According to Jenkins (1988a, 1988b), this euphemistic label protects the ill family member from the stigma of mental illness, and facilitates maintaining him or her at home.

Several investigators have also reported that, in the Latino community, there is a strong pressure to solve most problems within a family context (Jaco, 1959; Madsen, 1964). Edgerton and Karno (1971) found that Mexican Americans believe that remaining with the family would be most likely to lead to recovery, whereas Anglo-Americans generally reported seeing no benefit to having a mentally ill person remain with the family. The fact that Mexican Americans are underrepresented as psychiatric patients proportional to their numbers in the United States (Padilla, Ruiz, & Alvarez, 1975; Pokorney & Overall, 1979) appears to add support to this hypothesis. Given this distinctive population's burdens of migration, prejudice, and poverty, speculations about the structural and functional aspects of Latino social networks appear to be in order. The family's supportive atmosphere likely exerts a protective influence against psychopathology.

G. Canino and I. Canino (1982) noted that among some Latinos illness is perceived as a family affair and thus requires a family intervention for its cure. Kiev (1968) observed that Mexican American family and friends actively participate in the treatment of ill family members. Sickness is said to be taken very seriously and the sick are offered support and excused from their usual social responsibilities and from their obligations to adhere strictly to norms. The supportive treatment individuals receive, the reduction of responsibility, and the family's help in decision making when ill, may all play a role in the favorable course observed for Mexican Americans with schizophrenia.

Like many Latinos, the tradition of most Asian and Pacific cultures also places great

emphasis on the family (rather than the individual) as the central unit. Japanese families are also believed to have a strong moral code to care for their ill. Munakata (1989) reported that even when alternatives are readily available, Japanese rarely leave their mentally ill to the care of psychiatric hospitals. Chinese American families also tend to put off psychiatric treatment and hospitalization. T. Lin and M. Lin (1978) found that, relative to Caucasians, Chinese American families were much more likely to resort to intrafamilial coping. S. Sue and Morishima (1982) suggested that one reason for the favorable mental health generally reported for Asians is that family ties enable the individual to share problems, to have affective needs satisfied, and to have a sense of belongingness and community.

In Far Eastern societies the pressure requiring Asian families to look after their sick (including the mentally ill), sometimes extends beyond the social arena (Munakata, 1989). Under Japan's Mental Health Acts, for example, guardians (usually families) are required to have their sick members receive treatment, to supervise them so that they will not injure themselves, and to help manage their assets. Professionals also frequently attempt to ease the family's emotional burden of caring for an ill loved one by purposely disguising certain severe or stigmatizing disorders. In Japan, for instance, psychotic disorders are often disguised as neurasthenia by physicians. This term is similar to the Mexican American concept of *nervios*. Like *nervios*, neurasthenia is considered to be a "legitimate" and curable illness of the nervous system; hence, neurasthenia labels reduce family culpability and allow ill individuals to adapt to the normal sick role without the stigma of mental illness.

Waxler (1984) reported that in Sri Lanka and Mauritius (countries demonstrating a comparatively mild course for schizophrenia), mental illness is also associated with a relative lack of stigma, close family involvement, and reasonable expectations of re-

sponsibility in the community for the afflicted person. Lefley (1987) and Waxler both contended that developing countries offer greater availability of meaningful roles in the family and community, as well as unburdened love. Less technologically advanced societies can provide occupational choices and roles for the ill individual that can be adapted to realistic expectations of performance, and that do not necessarily insult former levels of aspiration. For the most part, there are no artificially created jobs in agrarian societies, as in many Western vocational rehabilitation projects, which the individual may recognize as below his or her competence level. In developing societies the ill individual is generally able to return quickly to village life and to relatively normative occupational roles, with flexible demands geared toward his or her level of capacity.

Lefley (1987) further maintained that this circular reinforcement pattern strengthens the coping resources of both the individual and the family. Offering realistic, low-expectancy but normative occupational roles likely gives the individual a niche in the community, enhancing his or her self-esteem, and reducing dependency on the nuclear family. Freed from the nagging burdens of support and attention, the family may be better able to respond with unhampered caring.

Returning to the discussion of expressed emotion, the finding of a lower prevalence of high levels of criticism and hostility among families of both developing countries and traditional ethnic groups in the United States, lends additional support to the hypothesis that intrafamilial behaviors may account for different schizophrenic outcomes in different cultures. Leff (1981) proposed that the extended family structures common in developing countries may serve to dilute the deleterious effects of high-EE. Specifically, he argued that in developing countries with large extended networks, individuals are less likely to be alone with any one particular person in the family; thus, the deleterious effect of a critical or hostile relative may be at-

tenuated by more supportive interactions with other family members.

In line with Leff (1981), Lefley (1987) suggested that extended kinship networks characteristic of developing countries provide a qualitatively larger support system to the ill individual and family. This, Lefley believed, assists in both physical and psychological survival. By sharing the burden of caretaking, attention giving, and housing, the family is better able to sustain low-EE, genuine concern, and greater tolerance of aberrant behavior. In contrast, the typical industrialized family in the United States is typically nuclear. Given this arrangement, Lefley maintained, it is almost impossible to care for physically or psychologically disabled family members at home. With two adults at most to take roles of major responsibility in the home, there seems to be little margin for "shock absorption."

There is also much support for the notion that friends and family network systems have a preventative or curative role in the community. For example, El Islam (1979) reported that ill individuals living with their extended families (as is customary in many traditional societies) fare better on follow-up than those residing with nuclear families. In addition, results from a 2-year follow-up of individuals included in the IPSS indicate that social isolation, and widowed, divorced, or separated marital status are associated with a poor schizophrenic outcome (Sartorius, Jablensky, & Shapiro, 1978). In developing societies the divorce rate is generally lower than in industrial countries, and extended kin networks are much more frequent.

Together these findings suggest that family/community prognostic differences for schizophrenia among individuals from countries of different developing statuses. It is likely that greater protection available from naturally occurring social support systems such as extended kinship networks and intact marriages characteristic of developing countries, may serve as a bastion to protect ill individuals from the consistent stresses of adjusting to a debilitating illness. Jaco (1959)

hypothesized that a strongly rooted orientation of familism provides a closely meshed psychosocial support network that protects its members against the development of, or destruction from, psychotic disorders. Hence, a familial attitude of acceptance toward the disorder coupled with involvement and assistance toward the individual might help explain the benign outcome for some cultural groups.

Conclusion and Future Directions

This article provided a review of numerous studies and reports with an eye toward understanding cross-cultural prognostic variability observed for schizophrenia. The literature provides evidence that, compared to ill individuals in industrialized societies, individuals with schizophrenia in developing countries have a more favorable clinical course. My thesis is that in developing countries a social ambience that externalizes causation, stresses mutual family interdependence rather than independence, and allows for realistic expectancies regarding ill individuals' performance may result in more supportive and healthful family relationships, and consequently, better illness prognosis for relatives suffering from schizophrenia in developing societies.

Several implications for treatment emerge from this review. Given that family involvement seems to play a curative role for schizophrenia in developing cultures, collaborating with family members and enlisting them into the treatment process may enhance Western psychosocial treatments for schizophrenia. Intervention programs specifically geared toward fortifying family members' perceptions of group spirit, unity, and cohesion may be one effective means of buffering the effects of schizophrenia in the industrialized West. In addition, the findings relating relatives' controllability attributions to their emotional reactions toward mental illness suggest that psychoeducational programs aimed at reframing beliefs regarding the

causes and controllability of schizophrenia toward external factors (e.g., biology, environmental stress) may be beneficial in reducing critical and hostile emotions known to have a deleterious effect on individuals suffering from schizophrenia.

It is important to address one final point: A few researchers (i.e., Edgerton & Cohen, 1994; S. Sue, D. W. Sue, L. Sue, & Takeuchi, 1995) have suggested that what appears to be better mental health in developing countries may actually be an artifact of other factors. Edgerton and Cohen, for example, pointed out that limited resources and inaccessible psychiatric facilities may lead to reduced public awareness of the extent of psychiatric problems in developing societies. Similarly, S. Sue et al. suggested that the widespread notion of Asian Americans as an emotionally well-adjusted group may not reflect reality. S. Sue et al. suggested that attempts to determine the exact prevalence rates of mental disorders may have been hindered by "non-cultural" characteristics of Asian Americans, such as relatively small sample size, heterogeneity, and rapid changes in demographics. To date, much of the research regarding the effect of culture on psychopathology has been anecdotal and qualitative in nature. This research is useful for generating hypotheses. However, before we can replace the guesswork with substantive information regarding the role that culture plays in mental illness prognosis, empirical and epidemiological studies are needed that operationalize and directly assess specific sociocultural variables hypothesized to influence the course of mental illness. Economic and other practical issues that may minimize awareness of psychiatric problems in some cultures must also be carefully examined.

References

- Bach-y-Rita, G. (1982). The Mexican-American: Religious and cultural influences. In R. Bercerra, M. Karno, & J. Escobar (Eds.), *Mental health and Hispanic Americans: Clinical perspec-*

- tives (pp. 29–40). New York: Grune & Stratton.
- Barrowclough, C., Johnston, M., & Tarrier, N. (1994). Attributions, expressed emotion, and patient relapse: An attributional model to relatives' response to schizophrenic illness. *Behavior Therapy, 25*, 67–88.
- Brewin, C., MacCarthy, B., Duda, K., & Vaughn, C. E. (1991). Attribution and expressed emotion in the relatives of patients with schizophrenia. *Journal of Abnormal Psychology, 100*, 546–554.
- Comas-Díaz, L. (1992). The future of psychotherapy with ethnic minorities. *Psychotherapy, 29*, 88–94.
- Canino, G., & Canino, I. (1982). Culturally syntonetic family therapy for migrant Puerto Ricans. *Hospital Community Psychiatry, 33*, 299–303.
- Clement, D. C. (1982). Samoan folk knowledge of mental disorders. In J. Marsella & G. White (Eds.), *Cultural conceptions of mental health and therapy* (pp. 193–213). Boston: D. Reidel.
- Cohen, A. (1992). Prognosis for schizophrenia in the Third World: A reevaluation of cross-cultural research. *Culture, Medicine and Psychiatry, 16*, 53–75.
- Connor, L. (1982). The unbounded self: Balinese therapy in theory and practice. In J. Marsella & G. White (Eds.), *Cultural conceptions of mental health and therapy* (pp. 251–267). Boston: Reidel.
- Edgerton, R. B., & Cohen, A. (1994). Culture and schizophrenia: The DOSMD challenge. *British Journal of Psychiatry, 164*, 222–231.
- Edgerton, R. B., & Karno, M. (1971). Mexican-American bilingualism and the perception of mental illness. *Archives of General Psychiatry, 24*, 286–290.
- Edgerton, R. B., Karno, M., & Fernandez, I. (1970). Curanderismo in the metropolis: The diminishing role of folk psychiatry among L. A. Mexican-Americans. *American Journal of Psychotherapy, 24*, 124–134.
- El Islam, M. F. (1979). A better outlook for schizophrenics living with extended families. *British Journal of Psychiatry, 135*, 343–347.
- Escobar, J. I., & Randolph, E. T. (1982). The Hispanic and social networks. In R. Becerra, M. Karno, & J. Escobar (Eds.), *Mental health and Hispanic Americans: Clinical perspectives* (pp. 41–57). New York: Grune & Stratton.
- Field, M. J. (1968). Chronic psychosis in rural Ghana. *British Journal of Psychiatry, 114*, 31–33.
- Fiske, S., & Taylor, S. (1984). *Social cognition*. Reading, MA: Addison-Wesley.
- German, G. A. (1972). Aspects of clinical psychiatry in sub-Saharan Africa. *British Journal of Psychiatry, 121*, 461–479.
- Gomez, A. G. (1982). Puerto Rican Americans. In E. Gaw (Ed.), *Cross-cultural psychiatry* (pp. 109–136). Littleton MA: John Wright. PSG Publishing Co., Inc.
- Gore, P. M., & Rotter, J. B. (1971). A personality correlate of social action. In R. Wilcox (Ed.), *The psychological consequence of being a Black American* (pp. 370–376). New York: John Wiley & Sons.
- Gualtieri, A. R. (1984). *Christianity and native traditions: Indigenization and syncretism among the Inuit and Dene of the western Arctic*. IN: Cross Cultural Publications.
- Hamilton, V. L. (1980). Intuitive psychologist or intuitive lawyer: Alternative models of the attribution process. *Journal of Personality and Social Psychology, 39*, 767–772.
- Ho, M. H. (1987). *Family therapy with ethnic minorities*. Newbury Park, CA: Sage.
- Hooley, J. M. (1986). An introduction of EE measurement and research. In M. Goldstein, I. Hand, & K. Hahlweg (Eds.), *Treatment of schizophrenia: Family assessment and intervention* (pp. 25–34). New York: Springer-Verlag.
- Hooley, J. M. (1987). The nature and origins of expressed emotion. In K. Hahlweg & M. Goldstein (Eds.), *Understanding major mental disorder: The contribution of family interaction research* (pp. 176–194). New York: Family Process.
- Jablensky, A., Sartorius, N., Ernberg, G., Ankar, M., Korten, A., Cooper, E., Day, R., & Bertelsen, A. (1992). Schizophrenia: Manifestations, incidence and course in different cultures. *Psychological Medicine, 1–97* (Suppl. 20).
- Jaco, E. G. (1959). Mental health of the Spanish-American in Texas. In M. K. Opler (Ed.), *Culture and mental health: Cross-cultural studies* (pp. 467–485). New York: Macmillan.
- Jenkins, J. (1981, December). *The course of schizophrenia among Mexican-Americans*. Paper presented at the annual meeting of the American Anthropological Association, Los Angeles, CA.

- Jenkins, J. (1984). *Schizophrenia and the family: Expressed emotion among Mexican-American and Anglo-Americans*. Unpublished doctoral dissertation, University of California, Los Angeles.
- Jenkins, J. (1988a). Conceptions of schizophrenia as a problem of nerves: A cross-cultural comparison of Mexican-Americans and Anglo-Americans. *Social Science and Medicine*, 26, 1233–1244.
- Jenkins, J. (1988b). Ethnopsychiatric interpretations of schizophrenic illness: The problem of nervios within the Mexican-American families. *Culture, Medicine and Psychiatry*, 12, 301–329.
- Jenkins, J., & Karno, M. (1992). The meaning of expressed emotion: Theoretical issues raised by cross-cultural research. *American Journal of Psychiatry*, 149, 9–21.
- Jenkins, J., Karno, M., de la Selva, A., & Santana, F. (1986). Expressed emotion in cross-cultural context: Familial responses to schizophrenic illness among Mexican-Americans. In M. Goldstein, I. Hand, & K. Hahlweg (Eds.), *Treatment of schizophrenia: Family assessment and intervention* (pp. 35–49). New York: Springer-Verlag.
- Karno, M., Jenkins, J., de la Selva, A., Santana, F., Tilles, C., López, S., & Mintz, J. (1987). Expressed emotion and schizophrenic outcome among Mexican-American families. *The Journal of Nervous and Mental Disease*, 175, 143–151.
- Kavanagh, D. (1992). Recent developments in expressed emotion and schizophrenia. *British Journal of Psychiatry*, 160, 601–620.
- Kiev, A. (1968). *Curanderismo: Mexican-American folk psychiatry*. New York: Free Press.
- Kleinman, A. M. (1977). Depression, somatization, and the “new cross-cultural psychiatry.” *Social Science and Medicine*, 11, 3–10.
- Kleinman, A. M. (1988). *Rethinking psychiatry: From cultural category to personal experience*. New York: Free Press.
- Leff, J. (1981). *Psychiatry around the globe: A transcultural view*. New York: Marcel Dekker.
- Leff, J., Sartorius, N., Jablensky, A., Korten, A., & Ernberg, G. (1992). The international pilot study of schizophrenia: Five-year follow-up findings. *Psychological Medicine*, 22, 131–145.
- Leff, J., & Vaughn, C. (1985). *Expressed emotion in families*. New York: Guilford Press.
- Leff, J., Wig, N., Ghosh, A., Bedi, H., Menon, D., Kuipers, L., Korten, A., Ernberg, G., Day, R., Sartorius, N., & Jablensky, A. (1987). Influence of relatives’ expressed emotion on the course of schizophrenia in Chandigarh. *British Journal of Psychiatry*, 151, 166–173.
- Lefley, H. P. (1985). Families of the mentally ill in cross-cultural perspective. *Psychosocial Rehabilitation Journal*, 8, 57–75.
- Lefley, H. P. (1987). Culture and mental illness: The family role. In A. B. Hatfield & H. P. Lefley (Eds.), *Families of the mentally ill: Coping and adaptation* (pp. 30–59). New York: Guilford Press.
- Lefley, H. P., & Pederson, P. B. (1986). *Cross-cultural training for mental health professionals*. Springfield, IL: Charles C. Thomas.
- Lin, T., & Lin, M. (1978). Service delivery issues in Asian North American communities. *American Journal of Psychiatry*, 135, 454–456.
- Lin, T., & Lin, M. (1981). Love, denial, and rejection: Response of Chinese families to mental illness. In A. Kleinman & T. Lin (Eds.), *Normal and abnormal behavior in Chinese culture* (pp. 387–401). Dordrecht, The Netherlands: Reidel.
- Lin, K., & Kleinman, A. (1988). Psychopathology and clinical course of schizophrenia: A cross-cultural perspective. *Schizophrenia Bulletin*, 14, 555–568.
- Lo, W. H., & Lo, T. (1977). A ten-year follow-up study of Chinese schizophrenics in Hong Kong. *British Journal of Psychiatry*, 131, 63–66.
- Lock, M. (1982). Popular conceptions of mental health in Japan. In J. Marsella & G. White (Eds.), *Cultural conceptions of mental health and therapy* (pp. 215–233). Boston: D. Reidel.
- Madsen, W. (1964). *The Mexican-American of south Texas*. New York: Holt, Rinehart & Winston.
- Marsella, A. J., & White, G. (Eds.). (1982). *Cultural conceptions of mental health and therapy*. Boston: D. Reidel.
- Miklowitz, D. J., Goldstein, M. J., & Falloon, I.R.H. (1983). Premorbid and symptomatic characteristics of schizophrenics from families with high and low levels of expressed emotion. *Journal of Abnormal Psychology*, 92, 359–367.
- Morales, R. F. (1974). *Makibaka: The Filipino American struggle*. Darby, MT: Mountain View.
- Munakata, T. (1989). The sociocultural significance of the diagnostic label “neurasthenia”

- in Japan's mental health care system. *Culture, Medicine, and Psychiatry*, 13, 203–213.
- Murphy, H.B.M., & Raman, A. C. (1971). The chronicity of schizophrenia in indigenous tropical peoples: Results of a twelve-year follow-up survey in Mauritius. *British Journal of Psychiatry*, 9, 237–249.
- Padilla, A. M., Carlos, M. L., & Keefe, S. E. (1976). *Psychotherapy with the Spanish speaking: Issues in research and service delivery* (Monograph 3). Los Angeles: Spanish Speaking Mental Health Research Center, University of California, Los Angeles.
- Padilla, A. M., Ruiz, R. A., & Alvarez, A. L. (1975). Community mental health services for the Spanish surnamed population. *American Psychologist*, 30, 892–908.
- Pokorney, A. D., & Overall, J. E. (1979). Relationship of psychopathology to age, sex, ethnicity and marital status in state hospital patients. *Journal of Psychiatry Research*, 7, 143–152.
- Rack, P. (1982). *Race, culture, and mental disorder*. London: Tavistock.
- Raman, A. C., & Murphy, H.B.M. (1972). Failure of traditional prognostic indicators in Afro-Asian psychotics: Results of a long-term follow-up survey. *Journal of Nervous Mental Disease*, 154, 238–247.
- Read, S. J., & Miller, L. C. (1989). Inter-personalism: Toward a goal-based theory of persons in relationships. In L. Pervin (Ed.), *Goal concepts in personality and social psychology* (pp. 413–472). Hillsdale, NJ: Erlbaum.
- Rogler, L. H. (1989). The meaning of culturally sensitive research in mental health. *American Journal of Psychiatry*, 146, 269–303.
- Rotter, J. B. (1966). Generalized expectancies for internal versus external control for reinforcement [Entire issue]. *Psychological Monographs*, 80(1).
- Ruiz, P. (1982). Cuban Americans. In E. Gaw (Ed.), *Cross-cultural psychiatry* (pp. 75–86). Littleton MA: John Wright. PSG Publishing Co., Inc.
- Sandoval, M. C., & de la Roza, M. C. (1986). A cultural perspective for serving the Hispanic client. In H. P. Lefly & P. B. Pederson (Eds.), *Cross-cultural training for mental health professionals* (pp. 151–181). Springfield, IL: Charles C Thomas.
- Sartorius, N., Jablensky, A., Korten, A., Ernberg, G., Naker, M., Cooper, J., & Day, R. (1986). Early manifestations and first-contact incidence of schizophrenia in different cultures: A preliminary report on the initial evaluation phase of the WHO collaborative study on determinants of outcome of severe mental disorders. *Psychological Medicine*, 16, 909–928.
- Sartorius, N., Jablensky, A., & Shapiro, R. (1978). Cross-cultural differences in the short-term prognosis of schizophrenic psychosis. *Schizophrenic Bulletin*, 4, 102–113.
- Shaver, K. G. (1985). *The attribution of blame: Causality, responsibility and blameworthiness*. New York: Springer-Verlag.
- Sue, S., & Morishima, J. K. (1982). *The mental health of Asian Americans*. San Francisco: Jossey-Bass.
- Sue, S., & Sue, D. W. (1974). MMPI comparison between Asian-American and non-Asian students utilizing a student health psychiatric clinic. *Journal of Counseling Psychology*, 21, 423–427.
- Sue, S., Sue, D. W., Sue, L., & Takeuchi, D. T. (1995). Psychopathology among Asian Americans: A model minority? *Cultural Diversity and Mental Health*, 1, 39–51.
- Torrey, E. F. (1970, March). *The irrelevancy of traditional mental health services for urban Mexican Americans*. Paper presented at the meeting of American Orthopsychiatric Association, San Francisco.
- Walters, W. (1977). Community psychiatry in Tutuila, American Samoa. *American Journal of Psychiatry*, 134, 917–919.
- Warner, R. (1992). Commentary on Cohen, prognosis for schizophrenia in the Third World. *Culture, Medicine and Psychiatry*, 16, 85–88.
- Waxler, N. (1979). Is outcome for schizophrenia better in non-industrialized societies? The case of Sri Lanka. *Journal of Nervous and Mental Disorders*, 167, 144–158.
- Waxler, N. (1984). Culture and mental illness: A social labeling perspective. In J. Mezzich & E. Berganza (Eds.), *Culture and psychopathology* (pp. 379–395). New York: Columbia University Press.
- Weiner, B. (1986). *An attribution theory of emotion and motivation*. New York: Springer-Verlag.

- Weisman, A. G., & López, S. R. (1996). Family values, religiosity, and emotional reactions to schizophrenia in Mexican and Anglo-American cultures. *Family Process, 35*, 227-237.
- Weisman, A. G., López, S. R., Karno, M., & Jenkins, J. (1993). An attributional analysis of expressed emotion in Mexican-American families with schizophrenia. *Journal of Abnormal Psychology, 102*, 601-606.
- White, G. M., & Marsella, J. (1982). Introduction: Cultural conceptions in mental health research and practice. In J. Marsella & G. White (Eds.), *Cultural conceptions of mental health and therapy* (pp. 3-38). Boston: D. Reidel.
- Wintrob, R. M. (1977). Belief and behavior: Cultural factors in the recognition and treatment of mental illness. In E. F. Foulks, R. M. Wintrob, J. Westermeyer, & A. R. Favazza (Eds.), *Current perspectives in cultural psychiatry* (pp. 103-111). New York: Spectrum.
- World Health Organization. (1979). *Schizophrenia: An international follow-up study*. New York: John Wiley & Sons.
- Yee, B., & Hennessy, S. (1982). Pacific/Asian American families and mental health. In F. U. Munoz & R. Endo (Eds.), *Perspectives on minority group mental health* (pp. 53-70). Washington, DC: University Press of America.