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Japanese American conceptions of mental illness and attitudes toward help-seeking

Narikiyo, Trudy Ann, Ph.D.

University of Hawaii, 1991

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JAPANESE AMERICAN CONCEPTIONS OF MENTAL ILLNESS
AND ATTITUDES TOWARD HELP-SEEKING

A DISSERTATION SUBMITTED TO THE GRADUATE DIVISION OF THE UNIVERSITY OF HAWAII IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF

DOCTOR OF PHILOSOPHY

IN

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By

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ABSTRACT

This study examined Japanese American conceptions of mental illness and attitudes toward help-seeking, in order to gain a better understanding of the factors that may contribute to reported underutilization of mental health services by this ethnic group. A questionnaire using a vignette format was administered to 288 college students enrolled at the University of Hawaii and Chaminade University. Responses of Japanese American students were compared with those of a mainstream Caucasian group. Causal attributions of mental illness were assessed, in addition to the perceived helpfulness of various remedial measures. It was hypothesized that Japanese Americans would be less likely than Caucasians to endorse psychological causes and the helpfulness of professional psychological treatment. It was also hypothesized that there would be a significant relationship between the causes of mental illness and the types of help sought for its remediation.

Results did not support the first hypothesis. Japanese Americans were as likely as Caucasians to conceptualize the causes of mental illness in psychological terms, and to endorse the helpfulness of formal psychological treatment. However, the results yielded other significant ethnic group differences that were consistent with past research. Japanese Americans were more likely than Caucasians to

attribute mental illness to social causes, and to seek help from family members and/or friends. There was also a greater tendency among Japanese Americans to resolve problems on their own.

The hypothesized relationships between causes and treatments were generally supported in the Caucasian group, but were less clear for the Japanese American group. Subjects' personal help-seeking preferences were significantly different from those prescribed for the person in the vignettes. Subjects were much more likely to rely on themselves and family and/or friends, and much less likely to consult mental health professionals when asked about themselves versus others. Results suggest that the most probable barriers to service utilization for this sample of Japanese Americans are the use of alternate informal resources, and possible stigmatization of mental illness and professional help-seeking.

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CHAPTER I

INTRODUCTION

A consistent and well-documented finding in research on Japanese Americans is the significant underutilization of mental health services by this ethnic group (Sue & Morishima, 1982). This finding has been reported by researchers from a variety of settings and different locations. Kitano (1969) conducted one of the earliest studies on a sample of Japanese Americans residing in Southern California. He reported data from the state hospital system, community mental health centers, and Japanese American mental health professionals which agreed on findings of low utilization rates for the years between 1960-1965. Sue and McKinney (1975) reported that Japanese and other Asian Americans utilized Seattle community mental health clinics far less than would be expected by their population in the community.

Low utilization rates have also been reported for college students. Sue and Sue (1974) examined the use of mental health services by Japanese and other Asian American students at the University of California, Los Angeles. A comparison of student health records revealed that Asian American students underutilized psychiatric services, representing only 4% of the clinic population as opposed to 8% of the student body. Sue and Kirk (1975) conducted a

similar study with Asian American students at the University of California, Berkeley from 1966 to 1970. Once again, Asian American students were found to underutilize campus psychiatric services compared with non-Asian students.

Recent studies have continued to report underutilization of mental health services by Asian Americans. Liu and Yu (1985) reported low treated prevalence rates based on 1980 census data for inmates of institutions, mental hospitals, and correctional institutions. Pacific/Asian males were reported to have an age-adjusted commitment rate of .45/1000 compared to 1.20/1000 for Caucasian males; Pacific/Asian females had a rate of .24/1000 versus .70/1000 for Caucasian females. In a national study on psychiatric hospitalization, Asian American/Pacific Islanders were reported to have consistently lower admission rates across various inpatient mental health services, and longer lengths of stay in state and county hospitals (Snowden & Cheung, 1990). Cheung and Snowden (1990) reviewed national trends in minority utilization of various mental health services. They reported that Asian American/Pacific Islanders had low utilization rates for all types of services, including inpatient care, residential treatment and support, outpatient care, and partial care.

There is considerable evidence that Japanese Americans in Hawaii, like their counterparts on the mainland, also underutilize mental health services. They had the lowest rates of psychiatric hospitalization during the approximate period of 1945-1956, accounting for only 15% of admissions to Hawaii state mental hospitals although they comprised 39.2% of the population (Ikeda, Ball, & Yamamura, 1962; Kimmich, 1960). Kinzie and Tseng (1978) obtained data from 411 outpatients at a major mental health clinic in Honolulu and reported that Japanese Americans underutilized these services. Facilities were used only for crisis and severe mental illness, and rarely for less serious neuroses or situational problems in living.

A related issue is the tendency for Japanese Americans who do utilize services to drop out of treatment prematurely. In a study of Seattle community mental health centers, Sue and McKinney (1975) found that 52% of Asian American patients dropped out of therapy after one session compared to a 29% drop-out rate for Caucasian patients. Subsequent studies also reported that Asian Americans terminated therapy prematurely compared to Caucasians (Sue, McKinney, & Allen, 1976; Sue, 1977).

Low rates of service utilization have often been interpreted as support for the view that Asian Americans are relatively well-adjusted and have few psychological

difficulties (Sue & Sue, 1985). Low utilization rates have served to perpetuate the prevalent stereotype of Japanese Americans as a "model" minority group. This success image suggests that Japanese American values of conformity and hard work help them to succeed in the areas of education, occupation, and income (Kim & Hurh, 1983). They are perceived as an upwardly mobile population that poses few demands on mental health systems (Sue & Morishima, 1982).

This success image, however, has been oversimplified and misinterpreted (Crystal, 1989; Kim & Hurh, 1983). The assumption that underuse of services reflects lower rates of disturbance has been called into question in recent years (Kitano & Matsushima, 1981; Yamamoto, 1981). Investigators have pointed out that existing data on the incidence and prevalence of mental disorders is mainly based on treated populations, that is, only those who come into contact with psychiatric services and facilities. These data do not reflect true prevalence rates since numerous selection factors determine who actually receives treatment.

The use of treatment rates as an indication of true prevalence of mental disorders is misleading, and several factors suggest that these statistics may underestimate the prevalence of disturbance among Japanese Americans. First of all, studies suggest that Asian Americans seek treatment only when disorders are relatively severe, and those with

milder disturbances do not turn to the mental health system (Kinzie & Tseng, 1978; Sue & McKinney, 1975). It has been suggested that many Asian American clients are sheltered by their families which assume a protective caretaking role, and are exposed to the mental health system only when symptoms are too severe for the family to endure (Munakata, 1989; Tsui & Schultz, 1985).

Secondly, treated prevalence rates may be misleading because many Asian Americans have been reported to experience stress psychosomatically (e.g., headaches, loss of appetite, difficulty sleeping, digestive problems), and may thus seek help from the traditional medical sector instead of mental health professionals (Sue & Morishima, 1982). Thirdly, studies have reported that Asian Americans experience higher than normal levels of certain disturbances, such as depression (Kuo, 1984) and personality problems (Leong, 1986). Sue and Sue (1974) found that MMPI profiles of Asian American students seen at a University psychiatric clinic revealed more psychopathology and greater problems involving somatic complaints, family conflict, and social introversion than Caucasians. Brown, Stein, Huang, and Harris (1973) found that 22% of Asian Americans in Seattle community mental health centers were diagnosed as psychotic versus 13% of Caucasian patients.

Many factors have been suggested to account for the underutilization and premature termination of mental health services by Japanese Americans and other ethnic minority groups. Underutilization has been attributed to such factors as stigma and shame associated with mental disorder, reliance on alternate resources, language and communication difficulties, high costs of services, culturally unresponsive services, lack of knowledge concerning services, different beliefs concerning mental illness, and different treatment expectations (Leong, 1986; Shon & Ja, 1982; Uomoto & Gorsuch, 1984). Underutilization as a function of culturally inappropriate services has been considered by various authors (Flaskerud, 1984; Sue & Morishima, 1982; Tsui & Schultz, 1985). Despite the establishment of culturally sensitive clinics specifically designed to meet the needs of Asian Americans, underutilization continues to persist (Yamamoto, 1987).

Many questions remain as to the relative importance of the factors that contribute to reported rates of underutilization. In an attempt to answer some of these questions, the purpose of this study was to examine Japanese American conceptions of mental illness that may be associated with service utilization. Specifically, perceived causes of mental illness, as well as judgments about the helpfulness of various types of remedial measures were

assessed. To clarify the rationale of this study, the existing research on cultural conceptions of mental illness and help-seeking will be reviewed in the following sections.

Conceptions of Mental Illness

White and Marsella (1982) have argued that cultural conceptions of mental illness are derived from common sense, everyday knowledge that people use to understand their experience. Illness behavior is interpretive and influenced by cultural "theories" of disorder and social behavior in general (White & Marsella, 1982). For example, ethnic minority groups including Chinese Americans, Mexican Americans, Black Americans, and Native Americans have been found to hold beliefs about the etiology and treatment of mental illness that differ from those of Western mental health professionals (Acosta, 1979; Flaskerud, 1982, 1984; Primeaux, 1977). In the Western view, mental illness is distinguished from physical illness, and spriritual problems are not considered to be within the health professional's domain. In contrast, many minority group members do not distinguish between physical, mental, and spiritual symptoms, and often present a mixture of complaints. Another difference is that western explanatory models tend to attribute the causes of mental disorder to the individual, whereas Asian models tend to emphasize somatic processes,

supernatural forces, and social relations as causal agents (White & Marsella, 1982).

Due to the "model minority" stereotype and low utilization rates, Japanese American conceptions of mental illness have received little attention in the literature. One of the first empirical studies on Asian ideas about mental illness and counseling was conducted by Arkoff, Thaver, and Elkind (1966). The Asian sample consisted of 74 Chinese, Filipino, Japanese and Thai graduate students at the University of Hawaii. The American sample consisted of 24 Caucasian students and 20 male Ph.D.s in counseling and clinical psychology. Responses on Nunnally's Conception of Mental Illness Questionnaire (Nunnally, 1961) revealed Asian beliefs that mental health could be enhanced through exercising will power and avoiding unpleasant thoughts, and that mental illness was due to organic factors. They also viewed counseling as a directive, paternalistic and authoritarian process where the counselor is expected to provide advice and recommend a course of action.

Sue, Wagner, Ja, Margullis and Lew (1976) also used Nunnally's questionnaire to assess the attitudes and beliefs of 62 Asian American (Chinese, Filipino, and Japanese) and 81 Caucasian college students at the University of Washington. They reported two significant ethnic group differences which were consistent with the results of the

Arkoff et al. (1966) study. Asian Americans were more likely than Caucasians to believe that mental illness is caused by organic or bodily factors, and that mental health is due to the avoidance of morbid thinking.

Okano (1976) conducted an exploratory study of attitudes toward mental health among a sample of 235 Japanese Americans of three generations in Los Angeles who were contacted through ethnic churches. Subjects completed a four-part questionnaire assessing cultural orientation, conceptions of mental disorder, general attitudes on mental health-related concerns, and personal data. Results showed that Japanese Americans did not define mental disorder in radically different ways from the general population. However, they tended to reject the personal relevance of mental health concepts, and to define mental disorder in terms of extreme deviance. Japanese Americans did not appear to think in psychological terms, and the majority denied ever having felt a need for mental health counseling. Subjects identified problems in the areas of alcoholism, drug abuse, care for the elderly, and child-rearing which are concerns of the mental health field.

The few existing studies of clinical populations have also revealed differences in Japanese American conceptions of mental illness. Kitano (1970) conducted cross-cultural comparisons of individuals diagnosed as schizophrenic among

Japanese living in California, Hawaii, Okinawa, and Japan. In all settings there existed high levels of tolerance and denial of mental illness, suggesting that the concept of mental disorder carried a lot of stigma. Symptoms of withdrawal, thought disorder, depression, and bizarre behavior were typically called "crazy" and interpreted as laziness. Attempts to change behavior usually involved instructions to work harder and endure hardships. Japanese Americans considered mental illness as inappropriate or as malingering. Families did not recognize such behavior as indicative of possible mental disorder until it became overtly disruptive, and only at this point was outside help sought. Kitano suggested that there is a lack of a role for the mentally ill individual and his or her family, stemming from the strong stigma and lack of knowledge about behavioral problems.

In summary, existing data suggest that Asian Americans associate mental illness with morbid thinking, a lack of will power, and organic factors. Studies have also suggested that denial and stigmatization of mental illness exist among Japanese Americans. However, these findings are based on a limited empirical database and are in need of further validation and expansion.

Attitudes Toward Help-Seeking

Conceptions of problems and their causes also include ideas about what should be done to reestablish desirable behavior. Cultural theories of mental disorder have a pervasive influence on the perception of appropriate and effective remedies (Tseng & McDermott, 1981; White & Marsella, 1982). Studies of ethnic minority groups such as Blacks (Hall & Tucker, 1985), Chinese Americans (Cheung, 1987; Li, 1983), and Mexican Americans (Edgerton & Karno, 1971) have supported the existence of a relation between conceptions of mental illness and attitudes associated with seeking psychological help. Many members of these ethnic groups do not conceptualize problems in psychological terms, and are thus unlikely to approach mental health professionals for help. Ethnicity has been argued to be an important factor in predicting professional help-seeking (Broman, 1987; Snowden, 1982; Sussman, Robins, & Earls, 1987; Warren, 1981), suggesting that it is important to consider ethnocultural differences in attitudes toward seeking professional help.

Empirical studies on Japanese American attitudes toward help-seeking are relatively scarce. Sue and Morishima (1982) suggested that while mental health services may be underutilized by Asian Americans, alternate resources may be preferred and used in coping with emotional problems. As

mentioned earlier, many Asian Americans tend to attribute mental illness to organic factors. They often present physical and somatic symptoms as chief complaints, and therefore may seek medical treatment instead of psychotherapy (Brown et al., 1973; Sue & Sue, 1974; White, 1982b).

Liu and Yu (1987) state that Asian Americans tend to seek alternate sources of indigenous care before or concurrently with mental health services. Treatment methods by traditional healers and herbal doctors are often used to treat physical disorders believed to be the patient's primary problem. Japanese American and other ethnic minority groups sometimes seek help from folk healers in addition to Western health care givers because they share the same language, use cures closely related to the client's causal perceptions, and make use of family members and religion (Cheung & Snowden, 1990; Flaskerud, 1984). Japanese American families have also been suggested as a primary source of support for dealing with mental illness (Kitano, 1969; Lin, Tardiff, Donetz, & Goresky, 1978).

Mental health professionals seem to be consulted only as a last resort, and are often regarded as irrelevant or ineffective (Liu & Yu, 1987). Studies have reported that Asian Americans hold expectations about mental health treatment that contrast with traditional therapeutic

approaches. For example, Tsui and Schultz (1985) reported that Asian Americans expect the therapist to be an authority figure who can solve their problems as would a physician or elderly family member. Brown et al. (1973) found that insight-oriented therapy was not very effective with Chinese patients perhaps because its emphasis on an in-depth analysis of thoughts contrasted with Asian beliefs that one should not dwell on morbid thoughts. The authors suggested that therapies emphasizing direct problem-solving techniques, self-help, and involvement of family and friends may be more effective with Asian Americans.

Moreover, when Asian Americans do seek professional help, they often present different problems from Caucasian clients, which may reflect a reluctance to admit to emotional problems. Tracey, Leong, and Glidden (1986) compared the presenting complaints of counseling center clients at the University of Hawaii between 1980 and 1983. Asian American clients (Japanese, Chinese, Filipinos, Korean, part Hawaiian, Asian-American-White mix and Asian American mix) were much more likely to report educational/vocational concerns compared to White clients who disproportionately reported personal/emotional concerns. It was suggested that Asian Americans find it more acceptable to report academic/vocational concerns and may

use these problems as an indirect means of addressing more personal/emotional issues.

Lin, Inui, Kleinman, and Womack (1982) conducted a preliminary study on the sociocultural determinants of help-seeking behavior of patients with mental illness. In examining the help-seeking patterns of 48 outpatients of Seattle health care facilities, these authors reported that help-seeking was strongly related to ethnicity. Specifically, Asian Americans pursued a help-seeking pathway that included persistent family involvement, extensive utilization of the traditional health care system and extreme delay in mental health contact and entry. The utilization of mental health services was found to depend heavily on the referral of other nonpsychiatric helping professionals and by friends or relatives who have had substantial past contact with mental health professionals.

Uomoto and Gorsuch (1984) examined referral patterns, attitudes, and subjective norms of Japanese Americans in response to psychological disorder. Subjects in this study were 106 Japanese Americans recruited from Protestant churches. The investigators employed a questionnaire containing 4 vignettes describing persons with Paranoid Schizophrenia, Major Depression, Agoraphobia, and Family problems. Subjects were asked to write down two things they would do in response to each vignette and to rate the

probability of carrying out those intentions. Results showed that nonmental health referrals were reported significantly more frequently than mental health resources. Self-resources (e.g., resolve the problem on their own) were reported most frequently, followed by mental health professional referrals, and paraprofessional/nonmental health professionals. Attitudes toward seeing a psychologist were generally favorable when this option was presented, but it was seldom spontaneously thought of as a first or second intended action. In contrast to previous studies (Chen, 1977; Lin et al., 1978), family and friends were referred as frequently as mental health professionals. The authors speculated that this difference may have been due to the subjects' task of referring others as opposed to using mental health services themselves.

Research on help-seeking by Japanese Americans in Hawaii is even more limited. In a needs survey of the general population including Japanese, Chinese, Hawaiian, Filipino, and Samoan ethnic groups, it was reported that people first sought help from their families (Prizzia & Villanueva-King, 1977). Help-seeking outside the family was kept close to the cultural community, with priests approached first, followed by public sources, and lastly psychiatrists.

Suan and Tyler (1990) conducted a recent study comparing Japanese American undergraduate students at the University of Hawaii to a sample of Caucasian students at the University of North Dakota. This study examined the underutilization phenomenon among Japanese Americans as related to attitudes about mental health and appropriate resources for help with personal problems. Consistent with past findings, Japanese Americans preferred close friends as their first choice for help, and were less likely than Caucasians to seek help from mental health professionals.

Cultural Influences on Attitudes Toward Mental Illness and Help-Seeking Among Japanese Americans

Both conceptions of mental illness and attitudes toward help-seeking are thought to be strongly influenced by cultural factors, such that Japanese American attitudes will differ from those of other ethnic groups. As previously mentioned, cultural patterns associated with one's ethnic heritage guide an individual to determine how to express distress, and from whom to seek help (Lee, 1986; Root, 1985).

Specific Japanese American cultural influences include an emphasis on conformity to the family or community, in contrast to Western values which encourage individuation and independence (Sue & Morishima, 1982). Asian American cultures also tend to emphasize deference to authority,

control over emotional expression, strong family bonds, well-defined role expectations, and a pragmatic view of life (Tsui & Schultz, 1985). As discussed earlier, significant differences exist between Asian American and Caucasian American conceptions of mental illness (Sue et al., 1976). For example, the existence of psychiatric problems among Asian Americans is often denied by attributing their causes to underlying medical problems (Lin et al., 1982). The somatization of mental illness is consistent with the cultural value of avoiding shame, since the expression of physical symptoms is more acceptable than the expression of emotional difficulties (Sue & Sue, 1974).

Investigators have proposed that Japanese American cultural values of bringing honor to the family name, avoiding shame and disgrace of admitting mental health problems, and restraining strong feelings may contribute to low utilization rates (Root, 1985; Sue & Kirk, 1975). Many Asian Americans will cope with problems themselves and exhaust all internal resources before turning to outside help (Cheung, 1980). As mentioned earlier, when help is sought for personal problems, there is a general tendency to seek help within the family or from close friends. Many regard seeking help from mental health facilities as shameful, which may be related to the previously mentioned finding that professional help is generally not sought

unless a family member is exhibiting severe mental health problems (Cheung, 1980).

Rationale of the Study

The above review suggests that empirical research on Japanese American conceptions of mental illness and help-seeking is severely lacking. Because of the "model minority" stereotype and reported low utilization rates, relatively little research has been conducted on Japanese American mental health and illness. Moreover, much of the existing research does not focus specifically on Japanese Americans; many studies use samples combining several Asian American groups that are perceived as sharing similar characteristics. However, Asian Americans are comprised of more than 29 distinct subgroups with significant cultural differences (Yoshioka, Tashima, Chew, & Murase, 1981), which suggests that findings from studies on Asian Americans may not be applicable to Japanese Americans specifically.

In response to the limited knowledge base in this area, this study examined attitudes toward mental illness and help-seeking in a sample of Japanese Americans residing in Hawaii. This investigation stems from a concern with the low utilization rates of mental health services by Japanese Americans that have been consistently reported in the literature. The study sought to provide empirical baseline

data and insights into the perceptions and attitudes of Japanese Americans that may influence help-seeking behavior.

The objectives of this study were to examine the perceived meanings and causal attributions of mental illness among Japanese Americans residing in Hawaii. The perceived helpfulness of various types and sources of help for the remediation of mental disorders were also assessed. The influence of cultural factors on attitudes toward mental illness and help-seeking were explored by comparing Japanese American conceptions with those of a Caucasian sample. This study provided tests of the following hypotheses:

1. Japanese American conceptions of mental illness and help-seeking will differ significantly from those of mainstream Caucasian Americans. Despite acculturation effects, Japanese Americans may retain traditional values that support views of mental illness that differ from those of Western society (Leong, 1986; Sue, 1988). Specifically, Japanese Americans are expected to be less likely than Caucasians to attribute mental illness to psychological causes, and to endorse the helpfulness of professional psychological treatments. This hypothesis arises from past research on Japanese Americans (Kitano, 1970; Okano, 1976) and other ethnic minority groups (Acosta, 1979; Flaskerud, 1984; Primeaux, 1977).

2. Japanese Americans will be more likely to seek professional psychological help for Schizophrenia which is perceived to be a more severe disorder than Depression. In contrast, less of a difference in help-seeking between the two disorders is expected for the Caucasian group. This result would support past research findings that Japanese Americans seek outside help only when a disorder is overtly severe and disruptive (Cheung, 1980; Kitano, 1970).

3. Subjects will report different attitudes toward mental illness and help-seeking depending on whether a male or female is perceived. Both mental health practitioners (Broverman, Broverman, Clarkson, Rosenkrantz, & Vogel, 1970) and college students (Nowacki & Poe, 1973) have been reported to hold different standards of mental health for males and females. These studies reported that in comparison to men, women were perceived as more submissive, dependent, emotional, and excitable in minor crises. Although results of subsequent studies have been mixed (Dailey, 1983; Davidson & Abramowitz, 1980), some researchers report that women continue to be perceived in stereotypic ways (O'Malley & Richardson, 1985; Swenson & Ragucci, 1984). Based on these findings, subjects in this study are also expected to hold different perceptions of mental illness in men and women.

4. Male and female subjects will differ in attitudes toward mental illness and help-seeking. Previous studies have reported women to be more willing than men to seek professional help for emotional problems (Fisher & Turner, 1970; Gim, Atkinson, & Whiteley, 1990; Suan & Tyler, 1990; Tracey et al., 1986; Williams, 1983). Such findings suggest that sex differences in responses may be expected in this study as well.

5. There will be a significant relationship across ethnic groups between the causes of mental illness and the types of help that are sought for its remediation. For example, if a particular group attributes mental illness to primarily physical causes, there should also be a corresponding tendency to perceive physical treatments as most helpful. As mentioned earlier, previous investigations have reported the existence of such relationships among various ethnic minority groups (Cheung, 1987; Edgerton & Karno, 1971; Hall & Tucker, 1985; Li, 1983).

CHAPTER II

METHOD

Subjects

The subjects in this study were undergraduate students enrolled in the two major four-year universities in Honolulu: the University of Hawaii and Chaminade University. Students were recruited from psychology and anthropology classes, or were approached on campus. Subjects either volunteered to participate, or received bonus points toward their course grade in exchange for participating in the experiment.

Subjects were recruited from two different ethnic groups: Japanese American and Caucasian American. One-hundred forty-four students in each ethnic group participated, for a total of 288 subjects. Equal numbers of males and females were recruited from each ethnic group in order to examine possible sex differences. The mean age for the Japanese subjects was 19.09 years, and the mean age for the Caucasian group was 20.54 years. The Japanese lived in Hawaii an average of 18.39 years, compared to 8.45 years for the Caucasians. There was a significant difference between the two ethnic groups in father's occupation, according to an index of occupations and social status by Reiss, Duncan, Hatt, and North (1961). Social status, as assessed by

father's occupation, was higher for the Caucasian group (M = 56.89) than for the Japanese group (M = 50.10).

Materials

Few studies have focused specifically on indigenous cultural conceptions of mental disorder, thus a convergence of methodological approaches has not emerged (White & Marsella, 1982). Due to the unavailability of a standardized research measure to meet the requirements of this study, a questionnaire was specifically developed for this investigation (see Appendix).

The questionnaire was constructed to assess the following: (a) perceived meanings of mental illness, (b) causal attributions for illness, and (c) illness treatment and help-seeking. Both open-ended responses and objective ratings were obtained to assess illness meanings, attributions, and treatments.

A preliminary version of the questionnaire was pilot tested on 41 undergraduate students at the University of Hawaii who were enrolled in psychology summer school classes in 1989. The content and format of the questionnaire were revised based on an examination of pilot data as well as feedback received from subjects participating in the pilot study.

The questionnaire employed the use of vignettes, a method which has been used extensively in past research

(Chen, 1977; Edman, 1989; Edman & Kameoka, 1990; Flaskerud, 1984; Okano, 1976; Star, 1955; Uomoto & Gorsuch, 1984). Each subject read a vignette describing in everyday language, a person depicted as suffering from either Schizophrenia or Major Depression based on the revised third edition of the Diagnostic and Statistical Manual of Mental Disorders (American Psychiatric Association, 1987) diagnostic criteria. Half of the vignettes described a person named "John", and the other half described a person named "Jane", in order to examine possible differences in the conceptions of mental illness and help-seeking as a function of the gender of the person perceived.

The content validity of the vignettes was established in a two-step process. The initial validation on the vignettes used in the pilot study was done by five licensed clinical psychologists in Honolulu. The psychologists were asked to read each vignette carefully and to provide a diagnostic label for the disorders depicted in the vignettes. Four out of five clinicians listed the intended diagnoses, and suggestions for improvement were incorporated into revisions of the vignettes. The revised vignettes were then revalidated with five licensed clinical psychologists at the Los Angeles County - University of Southern California Medical Center. All five psychologists listed the

intended diagnoses, and a few additional suggestions were incorporated into the final vignettes.

In order to assess perceived meanings of mental illness, the first set of questions employed an open-ended format to elicit naturally occurring explanations. Subjects were asked to read the vignette and then to list the first three words or phrases that came to mind to describe what John/Jane was experiencing. Next, illness attributions were elicited by asking subjects to describe what they thought was causing John/Jane to be like this. Subjects were instructed to list the most likely cause, excluding drugs or alcohol. The last open-ended question assessed attitudes toward help-seeking, and consisted of two parts. First, subjects were asked to rate whether or not they thought John/Jane needed help on a scale ranging from 1 (No, did not need any help at all) to 5 (Yes, certainly needed help). If subjects indicated that John/Jane needed help, they were then asked to describe what and/or whom would be most helpful.

Subjects were then asked to respond to three sets of objective items. The first set contained a list of possible causes for what John/Jane was experiencing. The list of causes was generated from attributions described in past literature (Chen, 1977; Elinson, Padilla, & Perkins, 1967; Nunnally, 1961) and items obtained from pilot study

responses. The list included spiritual (e.g., God, demons), physical (e.g., hereditary, diet), psychological (e.g., stress, negative thinking), and social (e.g., bad family life, problems with other people) attributions in order to examine the predicted relationship between causes and treatments. These categories of explanation have been used in past research (Edman, 1989; Edman & Kameoka, 1990; Gaviria & Wintrob, 1976; Westermeyer & Wintrob, 1979). Subjects were asked to rate the likelihood of each possible cause on a five-point scale which was found to be appropriate based on the results of the pilot testing. They circled "1" if they believed the item was not at all a cause, "2" if it was possibly a cause, "3" if it was probably a cause, "4" if it was very likely a cause, and "5" if it was certainly a cause.

Attitudes toward treatment were assessed by asking subjects to rate the helpfulness of various types and sources of help obtained from pilot study responses and past literature (Elinson et al., 1967; Okano, 1976). The second set of objective questions contained a list of possible types of help for John. Again, this list included items from spiritual, physical, psychological, and social categories. Subjects were asked to rate the helpfulness of each item on a scale ranging from 1 (not helpful at all) to 5 (certainly helpful). The last list contained possible sources of help.

Types of help were distinguished from sources of help because similar kinds of help (e.g., psychotherapy), may be received from different sources (e.g., psychiatrists, psychologists, counselors). Once again sources of help from the four different categories were included, and subjects were asked to rate the helpfulness of each source on a scale ranging from 1 (not helpful at all) to 5 (certainly helpful).

In order to address the possibility that subjects may have responded differently when answering about others versus themselves, the next page of the questionnaire elicited personal information. Subjects were asked what they would do if they were experiencing what John or Jane was going through, and how they usually took care of their own emotional problems. Subjects were then asked if they have ever received mental health services. If they answered "yes", they were then asked to indicate from whom, for how long, and whether or not it was helpful for them. Subjects who answered "no" were asked to check one or more of six possible reasons why they had not used mental health services in the past. Subjects were also asked whether they knew of any family members or friends who had received mental health services, and if so to indicate from whom, for how long, and the perceived effectiveness of the intervention. The final personal information question asked

subjects whether or not they would prefer to see a mental health professional from the same ethnic background.

The last page of the questionnaire requested demographic information on a number of variables including sex, age, place of birth, generational status, marital status, religion, education, occupation, and ethnicity. Lastly, subjects were asked to write any comments or questions they may have had about the study.

Procedure and Design

The questionnaires were administered either individually or in a group format under the supervision of the experimenter. The questionnaire was prefaced by a cover sheet that contained a consent form and the following instructions:

> This is a questionnaire about how people perceive certain types of behavior. You will be reading and answering questions about a particular person. We are interested in _your_ opinion. You are not expected to have any expert knowledge, and there are no right or wrong answers. Your answers will be strictly confidential so please give your honest opinions.
>
> Thank you for your cooperation.

These directions were followed by a note of importance that instructed subjects to complete the questionnaire in order, and not to look ahead to any page until they completed the

page before it. This warning, and supervision by the experimenter were included in order to ensure that the open-ended responses were not influenced by the lists of possible causes and treatments.

To test the hypothesized effects, the study employed a 2 (subject ethnic group: Japanese American, Caucasian American) x 2 (type of disorder: schizophrenia, depression), x 2 (sex of vignette: male, female) x 2 (sex of subject: male, female) design. Subjects were randomly assigned to read one of four vignettes: male schizophrenic, female schizophrenic, male depressive, or female depressive.

CHAPTER III

RESULTS

Ethnic Group Differences

The major hypothesis in this study was that Japanese American conceptions of mental illness and attitudes toward help-seeking would be significantly different from those of the Caucasian group. Specifically, it was hypothesized that the Japanese would be less likely to endorse psychological causes and professional psychological help for mental illness.

Two (ethnicity) x two (disorder) x two (sex of vignette) x two (sex of subject) multivariate analyses of variance (MANOVAs) were conducted to test the major hypothesis of this study. Because a significant ethnic group difference was found on father's occupation, multivariate analyses of covariance (MANCOVAs) were also performed using father's occupation as a covariate. However, results of the MANCOVAs yielded the same overall findings as the MANOVAs, therefore only results of the MANOVAs will be presented.

Significant main effects for ethnicity and disorder were found for causes, types, and sources of treatment. A significant main effect for sex of the person in the vignette was found for types of treatment. A significant main effect for sex of subject was found for sources of treatment. There were no significant two or three-way interactions. Ethnicity effects will be presented in this

section; the effects of other variables will be presented in the subsequent sections.

Differences in Causes of Mental Illness

Objective Ratings. As described in the Method section, subjects were asked to rate 16 possible causes of mental illness on a scale from 1 (not at all a cause) to 5 (certainly a cause). A 2 (ethnicity) x 2 (disorder) x 2 (sex of vignette) x 2 (sex of subject) MANOVA was performed on the 16 illness causes as dependent variables.

Using the Wilks' Lambda criterion, a significant main effect was found for ethnicity ($F = 4.36$, $p < .0001$). At the univariate level, significant differences were found for 6 out of 16 illness causes (see Table 1). An examination of these differences revealed several unexpected findings. Contrary to the hypothesis, Japanese were more likely than Caucasians to attribute mental illness to certain psychological causes. Specifically, Japanese rated "weak mind" and "keeps problems to self" as more likely to be causes of mental illness than the Caucasians did. Another unexpected finding in light of the reported tendency for Japanese to somaticize psychological problems, was that the Caucasians were more likely than the Japanese to endorse physical causes of mental illness. "Diet", "physical illness", and "hereditary" received significantly higher ratings by the Caucasians. The only group difference in causal attributions that seemed consistent with past

Table 1

Ethnic Group Differences in Causes of Mental Illness

Cause	Group	Mean	SD	F	df
Diet	Jap.	1.78	0.77	14.57**	1/282
	Cauc.	2.12	0.75		
Worrying too much	Jap.	3.37	1.16	0.49	1/282
	Cauc.	3.28	1.14		
Demons/Spirits	Jap.	1.38	0.61	0.01	1/282
	Cauc.	1.36	0.74		
Bad family life	Jap.	3.04	1.11	0.80	1/282
	Cauc.	3.16	1.09		
Punishment for sins	Jap.	1.49	0.84	1.32	1/282
	Cauc.	1.37	0.78		
Problems with others	Jap.	3.54	0.10	5.21*	1/282
	Cauc.	3.26	1.01		
Brain disorder	Jap.	2.38	1.27	0.37	1/282
	Cauc.	2.45	1.15		
Negative thinking	Jap.	3.26	1.20	1.45	1/282
	Cauc.	3.09	1.17		
Weak mind	Jap.	2.34	1.10	18.50***	1/282
	Cauc.	1.79	0.99		
Changes in life	Jap.	3.65	1.02	2.61	1/282
	Cauc.	3.44	1.14		
Hereditary	Jap.	1.88	0.97	4.10*	1/282
	Cauc.	2.09	0.93		
Curse	Jap.	1.15	0.43	2.70	1/282
	Cauc.	1.08	0.36		
Work/School pressures	Jap.	3.71	1.00	1.15	1/282
	Cauc.	3.58	1.01		
God	Jap.	1.28	0.53	1.03	1/282
	Cauc.	1.35	0.76		
Physical illness	Jap.	2.69	1.16	4.39*	1/282
	Cauc.	2.96	1.08		
Keeps problems to self	Jap.	3.97	1.03	17.69***	1/282
	Cauc.	3.44	1.12		

Wilks' Lambda = 0.7844
F(16,254) = 4.36***

*p < .05
**p < .001
***p < .0001

research, was that the Japanese rated "problems with other people" as more likely to be a cause. This finding is consistent with the Japanese cultural value of social and interpersonal harmony.

Despite these differences, the Japanese and Caucasians did not differ significantly on the majority (10 out of 16) of causes. Both groups tended to agree that the most likely causes of mental illness were psychological and social in nature. The five causes that received the highest ratings in both groups were "keeps problems to self", "work or school pressures", "major changes in life situation", "problems with other people", and "worrying too much". These causes were rated as probably or very likely to be causes. Physical causes (e.g., diet, brain disorder, hereditary) were generally rated as less likely, but possible causes by both groups. Lowest ratings occurred on spiritual causes (e.g., demons, curse) which were generally judged by both groups to be highly unlikely causes of mental disorder.

Open-ended responses. Responses to open-ended questions were also analyzed in order to provide an additional test of the major hypothesis. On the first page of the questionnaire, subjects were asked to write down the most likely cause for what the person in the vignette was experiencing. These responses were content analyzed into one of four categories: psychological (e.g., mental instability, low self-esteem), physical (e.g., chemical imbalance,

physical illness), social (e.g., break up of relationship, lonely), and spiritual (realization of life's hard to accept truths). The Japanese responses were coded by two Japanese American graduate students, and the Caucasian responses were coded by two Caucasian graduate students. All four raters were enrolled in the clinical psychology program at the University of Hawaii. The percent of interrater agreement was 98% for the Japanese, and 96% for the Caucasians. The Japanese raters disagreed on only one response ("problem in life"), and the Caucasian raters disagreed on two responses ("personal problems" and "bad nerves"). These responses were excluded from the analyses.

Frequencies and percentages of responses in each category are presented in Table 2. Consistent with objective ratings, significantly more Caucasians than Japanese endorsed physical causes (chi-square = 7.5, $p < .01$). Chi-square tests revealed no significant ethnic group differences in psychological, social, or spiritual causes. Although not significant, Japanese subjects did endorse more social causes than Caucasians. Group differences in psychological causes were very slight, with the majority of subjects in both groups (70% of Japanese, 66.7% of Caucasians) listing psychological causes as most likely. For the Japanese, social causes were the second most frequently endorsed (25%), followed by a few physical causes (5%). In contrast, the Caucasians did not differ in the

Table 2

Open-ended Responses to Causes of Mental Illness

Ethnic Group	Psych.		Physical		Social		Spiritual	
	Freq.	%	Freq.	%	Freq.	%	Freq.	%
Japanese	98	70.0	7	5.0	35	25.0	-	-
Caucasian	94	66.7	23	16.3	23	16.3	1	0.7

percentage of subjects who endorsed social and physical causes (16.3%). Once again, both groups felt that spiritual causes were the least likely; only one spiritual cause was spontaneously produced by a Caucasian subject (realization of life's hard to accept truths).

Differences in Treatments for Mental Illness

Ratings on Types of Treatment. Subjects were asked to rate the helpfulness of 16 different types of treatment for mental illness on a scale from 1 (not at all helpful) to 5 (certainly helpful). A 2 (ethnicity) x 2 (disorder) x 2 (sex of vignette) x 2 (sex of subject) MANOVA was performed on the 16 types of treatment. Once again, the general hypothesis of group differences was supported by a significant main effect for ethnicity using Wilks' Lambda ($F = 5.81$, $p < .0001$). At the univariate level, results revealed significant ethnic group differences on 8 out of 16 types of treatments (see Table 3). As with causal attributions, the hypothesized difference between Japanese and Caucasian subjects was not found. The two ethnic groups

Table 3

Ethnic Group Differences in Types of Treatment

Type of Treatment	Group	Mean	SD	F	df
Psychotherapy	Jap.	3.15	1.24	0.15	1/279
	Cauc.	3.08	1.17		
Resolve disagreements	Jap.	3.53	1.09	4.35*	1/279
	Cauc.	3.26	1.05		
Meditation/Relaxation	Jap.	3.06	1.02	0.30	1/279
	Cauc.	2.99	1.10		
Prayer	Jap.	2.23	1.17	1.11	1/279
	Cauc.	2.38	1.23		
Family and/or friends	Jap.	4.18	0.97	16.08***	1/279
	Cauc.	3.72	1.04		
Change diet	Jap.	1.94	0.93	16.66***	1/279
	Cauc.	2.39	0.92		
Positive thinking	Jap.	3.91	1.04	4.52*	1/279
	Cauc.	3.64	1.15		
Confess sins	Jap.	1.91	0.97	1.70	1/279
	Cauc.	1.76	0.95		
Socialize	Jap.	3.47	1.01	17.12***	1/279
	Cauc.	2.98	1.04		
Endure and adjust	Jap.	2.99	1.32	5.20*	1/279
	Cauc.	2.64	1.25		
Surgery	Jap.	1.39	0.73	0.15	1/279
	Cauc.	1.41	0.58		
Learn social skills	Jap.	2.43	1.10	0.31	1/279
	Cauc.	2.36	1.10		
Please spirits	Jap.	1.23	0.51	4.35*	1/279
	Cauc.	1.12	0.36		
Medication	Jap.	2.21	1.15	2.77	1/279
	Cauc.	2.41	1.04		
Remove curse	Jap.	1.17	0.50	0.59	1/279
	Cauc.	1.13	0.46		
Exercise	Jap.	2.73	1.11	11.70**	1/279
	Cauc.	3.17	1.04		

Wilks' Lambda = 0.7298
$F(16,251) = 5.81$***

*$p < .05$
**$p < .001$
***$p < .0001$

did not differ in their ratings of "psychotherapy"; both groups felt that psychotherapy would probably be helpful. Also unexpected, but consistent with differences in illness attribution, was the finding that Caucasians were more likely than the Japanese to endorse the helpfulness of physical treatments ("exercise" and "change diet").

Other group differences were consistent with past research. Japanese rated "talk to family and/or friends", "resolve disagreements with others", and "socialize" as significantly more helpful than the Caucasians did, again reflecting an emphasis on social harmony and support. Japanese ratings of "endure and adjust" and "positive thinking" were also significantly higher, and are consistent with cultural values of emotional restraint and self-reliance. The last group difference was that the Japanese ratings of "please spirits" were higher than those of the Caucasians. However, since mean ratings indicate that both groups felt this treatment was not at all helpful, this statistical difference translated into a small substantive one.

As with causal attributions, both groups agreed that the most helpful types of treatment were social and/or psychological in nature. Although the Japanese ratings were significantly higher, both groups agreed that the three most helpful courses of action were "talk to family and/or friends", "positive thinking", and "resolve disagreements

with others." Physical treatments were rated as less likely to be helpful, and spiritual treatments were deemed to be the least helpful by both ethnic groups.

Ratings on Sources of Treatment. In addition to types of treatment, subjects were also asked to rate the helpfulness of 16 sources of treatment for mental illness. A 2 (ethnicity) x 2 (disorder) x 2 (sex of vignette) x 2 (sex of subject) MANOVA was performed on the 16 sources of help. A significant main effect was again found for ethnicity using Wilks' Lambda ($F = 3.25$, $p < .0001$). At the univariate level, significant ethnic group differences were found for 4 out of 16 sources of treatment (see Table 4). Once again, the specific hypothesis was not supported; significant ethnic group differences were not found on the ratings of various mental health professionals ("psychologist", "psychiatrist", "counselor" and "social worker"). Both groups rated these sources as probably or very likely helpful.

Group differences in sources of treatment were consistent with findings on causes and types of treatment. Japanese were again more likely to endorse the helpfulness of social sources of treatment. Specifically, Japanese rated "family", "friends", and "self-help/support group" as significantly more helpful than the Caucasians did. The remaining ethnic difference was that Caucasians rated "herbalist" as more helpful than the Japanese, which may be

Table 4

Ethnic Group Differences in Sources of Treatment

Source of Treatment	Group	Mean	SD	F	df
Surgeon	Jap.	1.50	0.76	0.39	1/285
	Cauc.	1.55	0.61		
Psychologist	Jap.	3.76	1.13	0.07	1/285
	Cauc.	3.73	1.07		
Spiritual/Faith healer	Jap.	1.71	0.92	0.34	1/285
	Cauc.	1.78	1.06		
Counselor	Jap.	3.66	0.90	0.00	1/285
	Cauc.	3.66	1.05		
Self	Jap.	3.66	1.33	0.32	1/285
	Cauc.	3.76	1.32		
Herbalist	Jap.	1.34	0.55	7.81**	1/285
	Cauc.	1.57	0.82		
Minister/Priest	Jap.	2.34	1.04	0.98	1/285
	Cauc.	2.48	1.16		
Family doctor	Jap.	2.56	1.15	0.72	1/285
	Cauc.	2.67	1.07		
Exorcist	Jap.	1.18	0.52	0.85	1/285
	Cauc.	1.13	0.38		
Social worker	Jap.	2.65	1.12	0.01	1/285
	Cauc.	2.66	1.12		
Friends	Jap.	4.20	0.91	19.73***	1/285
	Cauc.	3.71	1.01		
Self-help/Support grp.	Jap.	3.84	1.02	5.07*	1/285
	Cauc.	3.56	1.08		
Psychiatrist	Jap.	3.69	1.25	0.83	1/285
	Cauc.	3.56	1.21		
Family	Jap.	4.35	0.92	13.93***	1/285
	Cauc.	3.92	0.99		
Fortune teller	Jap.	1.20	0.57	2.00	1/285
	Cauc.	1.13	0.35		
Hypnotist	Jap.	1.78	0.93	0.02	1/285
	Cauc.	1.79	0.88		

Wilks' Lambda = 0.8315
F(16,257) = 3.25***

$*p < .05$
$**p < .01$
$***p < .001$

consistent with their greater endorsement of physical causes and types of treatment. Once again, both groups generally rated social and psychological sources of treatments as more helpful than physical and spiritual sources.

Open-ended Responses. Subjects were asked to write down what or whom would be most helpful for the person described in the vignette. In order to compare these responses with the objective treatment ratings, open-ended responses were assigned to one of five categories representing the following sources of treatment: self (e.g., think about the problem, keep busy), family and/or friends, medical doctor, mental health professional, and God (e.g., prayer, read the bible). Frequencies and percentages of responses in each of the five categories are presented in Table 5. Chi-square tests revealed no significant ethnic group differences. As with the objective ratings, the two groups did not differ significantly in their endorsement of professional psychological help, with over half of the subjects in each group listing a mental health professional to be most helpful (52.1% of Japanese, 57.7% of Caucasians). Also consistent with objective ratings, was the tendency for more of the Japanese to endorse family and/or friends as most helpful (35.2% of Japanese, 28.9% of Caucasians), although this finding was not significant. The two groups did not differ significantly in the remaining categories; less than

Table 5

Open-ended Responses to Treatments for Mental Illness

Ethnic Group	Self		Family-Friends		Medical Doctor		Mental Health Professional		God	
	Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%
Jap.	7	4.9	50	35.2	11	7.7	74	52.1	-	-
Cauc.	4	2.8	41	28.9	13	9.2	82	57.7	2	1.4

10% of subjects in each ethnic group rated a medical doctor, self, or God to be most helpful.

<u>Differences as a Function of Type of Disorder</u>

Disorder was included as an independent variable in all of the MANOVAs presented thus far, and a discussion of its effects will be presented here. The effects of disorder were examined to test the second hypothesis: that the Japanese would be more likely to endorse the helpfulness of formal psychological treatments for schizophrenia, which is generally perceived to be a more severe disorder. This hypothesis was generally unsupported, since the interaction between ethnicity and disorder was not significant for either types or sources of treatment. However, some support for the hypothesis appeared at the univariate level. A significant interaction between ethnicity and disorder was found on helpfulness ratings of "psychologist". In line with the hypothesis, Japanese rated a psychologist as more helpful for schizophrenia than for depression, and

less of a difference between disorders was found among Caucasians.

Significant main effects for disorder were found for causes (Wilks' Lambda = 0.7451; F = 5.44; $p < .0001$), types of treatments (Wilks' Lambda = 0.6380; F = 8.90, $p < .0001$) and sources of treatments (Wilks' Lambda = 0.7638; F = 4.97, $p < .0001$). Although differences as a function of disorder were not specifically hypothesized, the significant findings made intuitive sense and will be presented below.

Ratings on Causes of Mental Illness

At the univariate level, significant differences between disorders were found for 7 out of 16 causes (see Table 6). Subjects across ethnic groups rated "brain disorder", "punishment for sins", "hereditary", "demons/spirits" and "weak mind" as significantly more likely to be a cause of schizophrenia than of depression. "Diet" and "work/school pressures" were rated as more likely to be causes of depression. Subjects were more likely to attribute spiritual and unalterable physical causes to schizophrenia.

Ratings on Treatments

At the univariate level, significant differences between disorders were found on 8 out of 16 types of treatment (see Table 7). "Psychotherapy", "please spirits", and "medication" were rated as more helpful for schizophrenia. Subjects rated "family and/or friends",

Table 6

Differences in Causes of Mental Illness as a Function of Type of Disorder

Cause	Disord.	Mean	SD	F	df
Diet	Sz	1.83	0.63	6.08*	1/282
	Dep.	2.06	0.89		
Worrying too much	Sz	3.35	1.21	0.08	1/282
	Dep.	3.31	1.09		
Demons/Spirits	Sz	1.51	0.80	11.72**	1/282
	Dep.	1.24	0.52		
Bad family life	Sz	3.22	1.10	3.39	1/282
	Dep.	2.98	1.09		
Punishment for sins	Sz	1.54	0.88	4.86*	1/282
	Dep.	1.33	0.73		
Problems with others	Sz	3.52	1.06	3.55	1/282
	Dep.	3.29	0.97		
Brain disorder	Sz	2.88	1.21	47.18***	1/282
	Dep.	1.97	1.01		
Negative thinking	Sz	3.20	1.23	0.17	1/282
	Dep.	3.15	1.15		
Weak mind	Sz	2.20	1.13	4.35*	1/282
	Dep.	1.94	1.02		
Changes in life	Sz	3.53	1.12	0.04	1/282
	Dep.	3.56	1.06		
Hereditary	Sz	2.21	0.97	16.55***	1/282
	Dep.	1.77	0.88		
Curse	Sz	1.15	0.49	3.03	1/282
	Dep.	1.08	0.27		
Work/School pressures	Sz	3.48	1.08	7.10*	1/282
	Dep.	3.80	0.91		
God	Sz	1.33	0.62	0.22	1/282
	Dep.	1.30	0.69		
Physical illness	Sz	2.93	1.16	2.79	1/282
	Dep.	2.72	1.09		
Keeps problems to self	Sz	3.64	1.12	1.19	1/282
	Dep.	3.77	1.10		

Wilks' Lambda = 0.7451
F(16,254) = 5.44***

*p < .05
**p < .001
***p < .0001

Table 7

Differences in Types of Treatment
as a Function of Type of Disorder

Type of Treatment	Disord.	Mean	SD	F	df
Psychotherapy	Sz	3.64	1.13	64.11***	1/279
	Dep.	2.62	1.05		
Resolve disagreements	Sz	3.31	1.13	2.02	1/279
	Dep.	3.48	1.03		
Meditation/Relaxation	Sz	3.00	1.05	0.16	1/279
	Dep.	3.05	1.07		
Prayer	Sz	2.42	1.21	2.74	1/279
	Dep.	2.18	1.19		
Family and/or friends	Sz	3.74	1.12	13.28**	1/279
	Dep.	4.15	0.88		
Change diet	Sz	1.96	0.83	13.44**	1/279
	Dep.	2.36	1.03		
Positive thinking	Sz	3.64	1.13	4.52*	1/279
	Dep.	3.91	1.05		
Confess sins	Sz	1.92	0.99	1.95	1/279
	Dep.	1.76	0.93		
Socialize	Sz	3.09	1.03	5.10*	1/279
	Dep.	3.36	1.06		
Endure and adjust	Sz	2.78	1.37	0.28	1/279
	Dep.	2.85	1.23		
Surgery	Sz	1.46	0.64	2.20	1/279
	Dep.	1.34	0.68		
Learn social skills	Sz	2.52	1.05	3.32	1/279
	Dep.	2.27	1.15		
Please spirits	Sz	1.23	0.53	5.30*	1/279
	Dep.	1.11	0.32		
Medication	Sz	2.59	1.14	18.48***	1/279
	Dep.	2.04	0.99		
Remove curse	Sz	1.20	0.52	2.95	1/279
	Dep.	1.10	0.43		
Exercise	Sz	2.68	1.10	16.54***	1/279
	Dep.	3.20	1.02		

Wilks' Lambda = 0.6380
F(16,251) = 8.90***

*p < .05
**p < .001
***p < .0001

"change diet", "positive thinking", "socialize", and "exercise" as more helpful for depression. Spiritual and professional interventions were deemed more helpful for schizophrenia, whereas depression was seen as more likely to be helped by less extreme measures.

Six out of 16 sources of treatment were significantly different between disorders (see Table 8). Once again, spiritual and professional sources of help, that is, "surgeon", "psychologist", "spiritual/faith healer", "exorcist", and "psychiatrist" were rated as more helpful for schizophrenia. As with types of treatment, "friends" were rated as significantly more helpful for Depression.

Differences as a Function of Sex of the Vignette

It was expected that subjects would hold different attitudes about mental illness and help-seeking depending on the gender of the person perceived. In order to examine this effect, sex of vignette was included in all of the prior analyses. Three separate MANOVAs were performed on causes, types of treatment, and sources of treatment as dependent variables. No significant main effects were found on causes of mental illness or sources of treatment. However, as expected, a significant main effect was found on types of treatment (Wilks' Lambda = 0.8707; $F = 2.33$, $p < .01$). No significant interaction effects were found in any of the analyses.

Table 8

Differences in Sources of Treatment as a Function of Type of Disorder

Type of Treatment	Disord.	Mean	SD	F	df
Surgeon	Sz	1.63	0.71	6.77**	1/285
	Dep.	1.42	0.65		
Psychologist	Sz	4.06	0.99	25.57***	1/285
	Dep.	3.43	1.10		
Spiritual/Faith healer	Sz	1.92	1.11	9.15**	1/285
	Dep.	1.56	0.83		
Counselor	Sz	3.72	0.99	0.97	1/285
	D	3.61	0.96		
Self	Sz	3.61	1.42	1.55	1/285
	Dep.	3.81	1.21		
Herbalist	Sz	1.51	0.72	1.40	1/285
	Dep.	1.41	0.70		
Minister/Priest	Sz	2.48	1.13	1.11	1/285
	Dep.	2.34	1.08		
Family doctor	Sz	2.66	1.10	0.43	1/285
	Dep.	2.57	1.12		
Exorcist	Sz	1.22	0.49	4.79*	1/285
	Dep.	1.10	0.42		
Social worker	Sz	2.71	1.11	0.64	1/285
	Dep.	2.61	1.13		
Friends	Sz	3.77	1.05	10.90**	1/285
	Dep.	4.14	0.90		
Self-help/Support grp.	Sz	3.71	1.11	0.03	1/285
	Dep.	3.69	1.01		
Psychiatrist	Sz	4.06	1.01	43.63***	1/285
	Dep.	3.18	1.27		
Family	Sz	4.06	0.10	1.68	1/285
	Dep.	4.21	0.96		
Fortune teller	Sz	1.17	0.45	0.12	1/285
	Dep.	1.15	0.50		
Hypnotist	Sz	1.79	0.85	0.02	1/285
	Dep.	1.77	0.96		

Wilks' Lambda = 0.7638
F(16,257) = 4.97***

*p < .05
**p < .01
***p < .001

At the univariate level, the helpfulness of 2 out of 16 types of treatment were significantly different depending on whether a male or female was perceived. Subjects rated "psychotherapy" ($F = 5.13$, $p < .05$) and "change diet" ($F = 4.83$, $p < .05$) as significantly more helpful for females than for males. Consistent with past findings, subjects may have perceived females to be more maladjusted and therefore more likely to benefit from these interventions.

Subject Sex Differences

It was also hypothesized that male and female subjects would hold different attitudes toward mental illness and help-seeking. Therefore, sex of subject was included in all of the prior analyses. No significant effects were found on illness causes or types of treatment. However, a significant main effect was found for sources of treatment (Wilks' Lambda = 0.9033; $F = 1.72$; $p < .05$).

Ratings on 2 out of 16 treatment sources were found to be significantly different at the univariate level for male versus female subjects. Females rated "counselor" ($F = 5.57$, $p < .05$) and "self-help/support group" ($F = 5.07$, $p < .05$) to be more helpful than male subjects did. Although such differences were not specifically hypothesized, they appear to support past research which will be presented in the Discussion section.

Relationship Between Causes and Treatments

The fifth hypothesis was that there would be a significant relationship between the causes and treatments for mental illness. As described earlier, subjects rated the likelihood of 16 causes of mental illness, and the helpfulness of 16 types and 16 sources of treatment. These responses were grouped into categories in order to examine the relationship between causes and treatments. These analyses are described below.

Rationally Derived Categories

Two Japanese and two Caucasian clinical psychology graduate students at the University of Hawaii assigned each of the causes and treatments to one of four categories: spiritual, physical, social, and psychological. All of the coders reached agreement on the category assignments. The resulting composite categories are presented in Table 9.

Canonical Correlation Analyses

Canonical correlation analyses were performed to examine the relationship between illness causes and illness treatments. The composite scores for spiritual, physical, social, and psychological causal categories as a set were related to the composite scores for the spiritual, physical, social, and psychological treatment categories as a set. Separate analyses were conducted for each ethnic group and each disorder. It was hypothesized that each category of illness causes would be most strongly related to its

Table 9

Rationally Derived Categories of Causes and Treatments

Spiritual Causes	Spiritual Treatments
Demons/Spirits	Please spirits
Curse	Remove Curse
God	Prayer
Punishment for sins	Confess sins
	Minister/Priest
	Exorcist
	Spiritual/Faith healer
	Fortune teller
Physical Causes	**Physical Treatments**
Brain disorder	Surgery
Hereditary	Medication
Diet	Change diet
Physical illness	Exercise
	Family doctor
	Surgeon
	Herbalist
Psychological Causes	**Psychological Treatments**
Worrying too much	Positive thinking
Weak mind	Meditation/Relaxation
Keeping problems to self	Psychotherapy
Negative thinking	Endure and adjust to situation
	Self
	Psychiatrist
	Psychologist
	Counselor
	Hypnotist
	Social Worker
Social Causes	**Social Treatments**
Work or School Pressures	Talk to family and/or friends
Problems with other people	Spend time/Socialize with others
Major changes in life	Resolve disagreements
Bad family life	Learn social skills
	Friends
	Family
	Self-help/Support group

corresponding category of treatments across ethnic groups and disorders.

Japanese Group. The results of the canonical correlation analyses for the Japanese group are presented in Table 10. For Schizophrenia, the analysis yielded three significant canonical correlations, which suggests that the first three pairs of canonical variates accounted for significant relationships between causes and treatments. For Depression, only the first two canonical correlations were significant and interpretable.

The analyses were interpreted conservatively as suggested by Stevens (1986), such that the canonical variate-variable correlations were interpreted instead of the canonical coefficients, and only the very high variate-variable correlations were used. For the Japanese, the hypothesized relationship between categories of causes and treatments was not consistently supported. For Schizophrenia, the first pair of canonical variates indicate that psychological causes (.80) were related to social treatments (.69), which is contrary to the hypothesis that these causes would be related to psychological treatments. The second variate pair suggested a relationship between spiritual causes (.97) and spiritual treatments (.97), as hypothesized. The last canonical variate revealed a relationship between physical causes (.76) and both physical (.64) and psychological (.66) treatments. For Depression,

Table 10

Canonical Analysis of the Relationship Between Causes and Treatments for the Japanese Ethnic Group

	1st Canonical Variate		2nd Canonical Variate		3rd Canonical Variate	
	Corr.	Coef.	Corr.	Coef.	Corr.	Coef.
			Schizophrenia			
Causes						
Spiritual	-.04	-.09	.97	.91	-.23	-.40
Physical	-.56	-.50	.31	.20	.76	.84
Social	.64	.36	.10	.04	.51	.37
Psychological	.80	.61	.33	.15	.29	.28
Treatments						
Spiritual	-.25	-.06	.97	1.05	.05	-.66
Physical	-.68	-.74	.36	-.26	.64	.89
Social	.69	.45	.34	.02	.50	.39
Psychological	.45	.37	.45	.16	.66	.40
Canonical Correlation	.80		.69		.68	
Canonical Variate	F		df		p	
Variate #1	13.42		16/190		.0001	
Variate #2	11.80		9/153		.0001	
Variate #3	11.83		4/128		.0001	
			Depression			
Causes						
Spiritual	.61	.30	-.55	-.60		
Physical	.92	.71	-.09	-.10		
Social	.31	.04	.54	.33		
Psychological	.54	.29	.72	.67		
Treatments						
Spiritual	.61	.09	-.40	-.74		
Physical	.97	.77	-.08	-.40		
Social	.54	.02	.60	.80		
Psychological	.77	.24	.36	.52		
Canonical Correlation	.85		.56			
Canonical Variate	F		df		p	
Variate #1	9.00		16/190		.0001	
Variate #2	3.50		9/153		.0006	

the first variate showed a hypothesized relationship between physical causes (.92) and physical treatments (.97). The second canonical variate again revealed a relationship between psychological causes (.72) and social treatments (.60) as was found for Schizophrenia.

Caucasian Group. Hypothesized relationships between causes and treatments were more clearly supported in the Caucasian group. Results of the canonical correlation analyses for the Caucasian group are presented in Table 11. Results were similar for both Schizophrenia and Depression, yielding three significant canonical correlations for each disorder. The first canonical variate for both disorders suggested a relationship between social and psychological causes, and social and psychological treatments. The second pair of canonical variates indicates that physical causes were related to physical treatments for both disorders. The third variate suggested a relationship between spiritual causes and spiritual treatments for both disorders.

Multiple Regression Analyses

Standard multiple regression analyses were conducted to examine the extent to which causes could predict or account for treatment ratings. The influence of illness causes on illness treatment was analyzed for each treatment category separately (spiritual, physical, social, and psychological). Separate analyses were conducted for each ethnic group.

Table 11

Canonical Analysis of the Relationship Between Causes and Treatments for the Caucasian Ethnic Group

	1st Canonical Variate		2nd Canonical Variate		3rd Canonical Variate	
	Corr.	Coef.	Corr.	Coef.	Corr.	Coef.
			Schizophrenia			
Causes						
Spiritual	.08	-.03	-.23	-.06	.93	.96
Physical	.22	.07	.97	.99	.02	.19
Social	.96	.61	-.10	-.31	-.07	-.50
Psychological	.92	.44	-.03	.08	.16	.39
Treatments						
Spiritual	.24	-.07	-.04	-.56	.96	1.05
Physical	.43	.09	.74	1.12	.47	-.05
Social	.96	.73	-.19	-.53	.00	-.32
Psychological	.85	.33	.23	.19	.08	.09
Canonical Correlation	.75		.60		.45	
Canonical Variate	F		df		p	
Variate #1	6.58		16/168		.0001	
Variate #2	4.80		9/136		.0001	
Variate #3	3.38		4/114		.0119	
			Depression			
Causes						
Spiritual	.27	.26	-.20	-.18	.94	.96
Physical	-.09	-.18	.97	.95	.21	.24
Social	.82	.57	.31	.11	-.24	-.08
Psychological	.87	.51	.09	.05	-.15	-.20
Treatments						
Spiritual	.08	.21	.07	-.45	.97	.98
Physical	-.04	-.40	.84	.94	.47	.09
Social	.93	.91	.24	-.29	-.02	.12
Psychological	.64	.18	.58	.52	-.01	-.29
Canonical Correlation	.74		.71		.57	
Canonical Variate	F		df		p	
Variate #1	10.46		16/193		.0001	
Variate #2	9.96		9/156		.0001	
Variate #3	7.17		4/130		.0001	

The results of these analyses indicated that spiritual causes were the strongest predictors of spiritual treatment ratings for both ethnic groups and both disorders (see Table 12). Likewise, physical causes were the strongest predictors of physical treatment ratings for both ethnic groups and disorders (see Table 13). The predictions of social treatments across ethnic groups and disorders were less clear (see Table 14). For the Caucasians, social treatments were most strongly predicted by social causes, and to a lesser extent by psychological causes for both disorders. For the Japanese, social treatments were most strongly predicted by psychological causes for both disorders. To a lesser extent the Japanese ratings of social treatments were also predicted by social causes for Schizophrenia, and by physical causes for Depression. Findings on the prediction of psychological treatments were also unclear (see Table 15). For the Japanese, psychological causes were significant predictors of psychological treatments for both disorders. However, for Schizophrenia, physical and social causes were also significant predictors of psychological treatments, and for Depression, physical causes were an even stronger predictor than psychological causes. For the Caucasian group, psychological treatments were most strongly predicted by social and psychological causes for Schizophrenia, and by physical and social causes for Depression.

Table 12

The Prediction of Spiritual
Treatments from Illness Causes

Source	Schizophrenia F	df	Depression F	df
	Japanese Group			
Model	15.34***	4/70	8.46***	4/71
Spiritual Causes	45.36***	1/70	14.99***	1/71
Physical Causes	6.83*	1/70	5.02*	1/71
Social Causes	0.00	1/70	0.06	1/71
Psychological Causes	0.00	1/70	0.18	1/71
R-Squared = .4818			R-Squared = .3355	
	Caucasian Group			
Model	3.98**	4/67	5.92***	4/71
Spiritual Causes	11.98***	1/67	20.50***	1/71
Physical Causes	0.25	1/67	1.22	1/71
Social Causes	0.00	1/67	0.00	1/71
Psychological Causes	1.13	1/67	0.94	1/71
R Squared = .2017			R-Squared = .2611	

*p <.05, ** p <.01, ***p <.001

Table 13

The Prediction of Physical
Treatments from Illness Causes

Source	Schizophrenia F	df	Depression F	df
	Japanese Group			
Model	17.52***	4/70	36.71***	4/70
Spiritual Causes	1.68	1/70	9.61**	1/70
Physical Causes	57.31***	1/70	67.55***	1/70
Social Causes	0.01	1/70	0.03	1/70
Psychological Causes	2.36	1/70	5.59*	1/70
R-Squared = .5150			R-Squared = .6899	
	Caucasian Group			
Model	8.13***	4/65	12.59***	4/70
Spiritual Causes	2.51	1/65	2.18	1/70
Physical Causes	22.67***	1/65	45.83***	1/70
Social Causes	0.00	1/65	0.02	1/70
Psychological Causes	2.18	1/65	0.05	1/70
R Squared = .3476			R-Squared = .4328	

*p <.05, **p <.01, ***p <.001

Table 14

The Prediction of Social
Treatments from Illness Causes

Source	Schizophrenia F	df	Depression F	df
	Japanese Group			
Model	17.58***	4/70	7.63***	4/70
Spiritual Causes	0.26	1/70	0.03	1/70
Physical Causes	0.18	1/70	4.26*	1/70
Social Causes	13.58***	1/70	1.61	1/70
Psychological Causes	19.74***	1/70	10.02**	1/70
R-Squared = .5159			R-Squared = .3161	
	Caucasian Group			
Model	18.16***	4/66	14.38***	4/71
Spiritual Causes	0.21	1/66	0.28	1/71
Physical Causes	0.87	1/66	0.00	1/71
Social Causes	12.48***	1/66	12.02***	1/71
Psychological Causes	6.32*	1/66	9.16**	1/71
R Squared = .5395			R-Squared = .4619	

*p <.05, **p <.01, ***p <.001

Table 15

The Prediction of Psychological
Treatments from Illness Causes

Source	Schizophrenia F	df	Depression F	df
	Japanese Group			
Model	12.52***	4/69	14.85***	4/70
Spiritual Causes	0.50	1/69	2.14	1/70
Physical Causes	7.90**	1/69	14.02***	1/70
Social Causes	7.55**	1/69	1.34	1/70
Psychological Causes	14.03***	1/69	12.07***	1/70
R-Squared = .4352			R-Squared = .4736	
	Caucasian Group			
Model	11.55***	4/65	10.01***	4/71
Spiritual Causes	0.00	1/65	0.05	1/71
Physical Causes	3.06	1/65	7.71**	1/71
Social Causes	4.85*	1/65	7.83**	1/71
Psychological Causes	4.06*	1/65	2.93	1/71
R Squared = .4309			R-Squared = .3741	

*p <.05, **p <.01, ***p <.001

Responses to Personal Information Questions

Help-Seeking Preferences

Subjects were asked about their personal help-seeking preferences in order to compare these responses with those prescribed for others (i.e., the person described in the vignette). Subjects were asked what they would do if they were experiencing what the person in the vignette was going through. Responses to both questions were grouped into the same five categories of sources of help that were used to compare ethnic differences in open-ended treatment responses: self, family and/or friends, medical doctor, mental health professional, and God. Frequencies and percentages of responses in each category are presented in Table 16. Japanese again showed a greater tendency than Caucasians to seek help from family and/or friends, whereas Caucasians were more likely than the Japanese to seek help from medical doctors and mental health professionals. Despite these differences, family and/or friends were most frequently endorsed as the first choice for help by both ethnic groups (58% of Japanese, 41% of Caucasians). For the Japanese, reliance on self was the second most frequent choice (24%) followed by a mental health professional (15%). For the Caucasians, mental health professional (26%) and self (22%) were the next most frequently endorsed sources of help. Relatively few subjects in both groups endorsed a medical doctor or God as first choices for help.

Subjects were also asked about what they usually did to take care of their emotional problems. Responses revealed that subjects in both groups rely heavily on themselves and family and/or friends for help with emotional problems. Sex differences were found to be stronger than ethnic differences. Males in both ethnic groups were more likely than females to rely on themselves, whereas more females in each group tended to rely on family and/or friends.

Responses Regarding Self Versus Others

It was expected that subjects' personal help-seeking preferences would differ from those prescribed for others (i.e., the person in the vignette). Comparisons between help-seeking responses regarding self versus others are presented in Table 17. The tendency for Japanese to seek help from family and/or friends is even stronger when asked what they themselves would do. The Japanese were also less likely than the Caucasians to seek professional psychological help for themselves. Despite these differences, responses of both ethnic groups differed greatly when asked about themselves versus others. Subjects were much more likely to rely on themselves and family/friends, and much less likely to consult a mental health professional when asked about themselves as opposed to another person.

Table 16

Responses to Questions about
Subjects' Help-Seeking Preferences

"What would YOU do if you were experiencing what John/Jane is going through?"

Group	Self		Family/ Friends		Medical Doctor		Mental Health Pro.		God	
	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%
Japanese										
Male	20	28	40	56	2	3	10	14	-	-
Female	14	20	43	61	3	4	11	16	-	-
Caucasian										
Male	18	25	31	43	5	7	16	22	2	3%
Female	13	18	28	39	9	13	21	30	-	-

"How do you usually take care of your emotional problems?"

Group	Self		Family/ Friends		Medical Doctor		Mental Health Pro.		God	
	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%
Japanese										
Male	33	46	39	54	-	-	-	-	-	-
Female	17	24	55	76	-	-	-	-	-	-
Caucasian										
Male	41	57	29	40	-	-	-	-	2	3
Female	25	35	44	61	-	-	-	-	3	4

Table 17

Comparison of Help-Seeking Preferences
Between Responses Regarding Self Versus Others

Group	Self	Family/ Friends	Medical Doctor	Mental Health Pro.	God
	%	%	%	%	%
Japanese					
Self	24	58	4	15	-
Other	5	35	8	52	-
Caucasian					
Self	22	41	10	26	1
Other	3	29	9	58	1

Use of Mental Health Services

Subjects were also asked about their use of mental health services (see Table 18). Responses revealed that significantly more Caucasians, especially females, have received mental health services than the Japanese (Chi-square = 21.0, $p < .001$). In addition, significantly more Caucasians knew of family members or friends who have received mental health services (Chi-square = 17.33, $p < .001$). These findings are consistent with reported underutilization of services by Japanese Americans since these two ethnic groups are about equally represented in Hawaii's population (State of Hawaii Data Book, 1990). Lastly, subjects were asked if they would prefer a mental health professional to be of the same ethnic background as themselves. Results of a chi-square test revealed no significant group differences. The majority of subjects in both ethnic groups did not indicate a preference for a therapist to be of the same ethnicity.

Table 18

Affirmative Responses to Questions about Use of Mental Health Services

"Have you ever received mental health services?"

	Frequency	Percent
Japanese		
Male	3	4.2
Female	5	6.9
Caucasian		
Male	13	18.1
Female	23	31.9

"Have any of your family members or friends used services at a mental health agency?"

	Frequency	Percent
Japanese		
Male	8	11.4
Female	11	15.3
Caucasian		
Male	18	26.5
Female	31	44.3

"If you went to a mental health professional, would you prefer him or her to be of the same ethnic background as yourself?"

	Frequency	Percent
Japanese		
Male	20	27.8
Female	13	18.3
Caucasian		
Male	12	16.9
Female	13	18.3

CHAPTER IV

DISCUSSION

Ethnic Group Differences

The primary purpose of this study was to gain a better understanding of the variables that may contribute to underutilization of mental health services by Japanese Americans. Ethnic group differences in conceptions of mental illness and attitudes toward help-seeking were the specific contributing factors under investigation. It was hypothesized that Japanese would be less likely than Caucasians to conceptualize the causes of mental illness in psychological terms. Assuming this to be true, it was also hypothesized that Japanese would be less likely to endorse the helpfulness of professional psychological treatment.

The general hypothesis of significant ethnic group differences was strongly supported. Significant main effects for ethnicity were found in causes of mental illness, types of treatment, and sources of treatment. However, the specific hypothesis that Japanese would be less likely than Caucasians to endorse psychological causes and treatments was not supported. In fact, Japanese rated certain psychological causes, i.e., "weak mind" and "keeps problems to self" as more likely to be causes of mental illness than Caucasians did. Open-ended responses also confirmed that Japanese and Caucasians did not differ significantly in the

attribution of psychological causes. The majority of subjects in both ethnic groups listed psychological causes of mental illness to be most likely (70% of Japanese and 67% of Caucasians).

Japanese and Caucasians were also quite similar in their attitudes toward formal psychological treatment. No significant ethnic group differences were found on ratings of "psychotherapy" or various mental health professionals ("psychiatrist", "psychologist", "social worker", and "counselor"). The results suggest that professional psychological help was viewed quite favorably; mean ratings in both groups ranged from probably to very likely helpful. Open-ended responses also support these findings. When asked to list what or whom would be most helpful, the majority of subjects in both ethnic groups spontaneously endorsed a mental health professional. This finding differs from Uomoto and Gorsuch's (1984) study in which Japanese Americans rarely thought of a psychologist as a first or second choice of referral. However, subjects in that study were considerably older, which may partially account for this difference.

Unexpected findings also occurred in ratings of physical causes and treatments. It was expected that the Japanese would be more likely to conceptualize mental illness in physical terms because of their reported tendency

to somaticize psychological conflicts. Instead, the opposite was found; Caucasians rated "physical illness", "diet" and "hereditary" as more likely to be causes than the Japanese. Likewise for treatments, Caucasians rated "exercise" and "change diet" as significantly more helpful than the Japanese. Contrary to past findings (Arkoff et al., 1966; Lin et al., 1982; Sue et al., 1976; Sue & Morishima, 1982), Japanese did not appear to associate mental illness with organic or somatic factors.

No significant ethnic group differences were found in responses regarding spiritual causes and treatments. Subjects in both groups felt that spiritual causes of mental illness were the least likely, and spiritual treatments were least helpful. Findings for the Japanese seem to differ from those of other ethnic minority groups, such as Blacks and Hispanics, who have been reported to use religion, prayer, and spirituality to a greater extent than Caucasians (Acosta, 1984; Veroff, Douvan, & Kulka, 1981). Results also differ from those reported for other Asian American groups who reportedly utilize various indigenous sources of help (Cheung & Snowden, 1990; Flaskerud, 1984).

The above findings appear to suggest that underutilization of mental health services cannot be explained by ethnic group differences in the conceptions of psychological, physical, or spiritual causes and treatments.

However, the results yielded important ethnic group differences that may help to explain differential utilization rates. First, the Japanese showed a greater tendency to resolve problems on their own. Japanese subjects rated "endure and adjust to situation" and "positive thinking" as more helpful than Caucasians did. This finding is consistent with earlier reports of Asian American beliefs that mental illness is due to morbid thoughts and a lack of will power (Arkoff et al., 1966; Root, 1985; Sue et al., 1976). This tendency to rely on oneself is consistent with past research (Cheung, 1987; Uomoto & Gorsuch, 1982), and Japanese values of self-discipline and emotional restraint (Henkin, 1985).

Secondly, significant ethnic group differences were found in the conceptions of social causes and social treatments. The Japanese rated "problems with other people" as more likely to be a cause of mental illness, which is consistent with Asian American values of interdependence and harmonious social relations (Chu & Sue, 1984; Hwang, 1987). The Japanese also rated "talk to family and/or friends", "spend time/socialize with others", and "resolve disagreements with others" as significantly more helpful than the Caucasians. Open-ended responses also confirmed a greater tendency among Japanese to endorse social sources of help. These findings are consistent with numerous other

studies that have reported a preference among Asian Americans for seeking help from family members and friends (Atkinson, Whiteley, & Gim, 1990; Lin et al., 1978; Lin et al., 1982; Prizzia & Villanueva-King, 1977; Suan & Tyler, 1990).

These differences notwithstanding, both ethnic groups generally agreed on the mostly likely causes of mental illness, and the most helpful types and sources of treatment. Both groups agreed that mental illness was most likely caused by psychological and social factors. Likewise, both groups agreed that mental health professionals, social support systems and self-help efforts were of most benefit for the alleviation of psychological distress.

The lack of support for the second hypothesis (i.e., that Japanese would be more likely than Caucasians to endorse formal psychological treatment for Schizophrenia versus Depression) suggests another similarity between ethnic groups. Significant main effects for disorder were found, but they did not interact with ethnicity effects. Specifically, the results suggest that Japanese and Caucasian subjects did not differ in their responses as a function of the severity of the disorder.

Similarities between Japanese and Caucasian responses probably reflect the degree of acculturation among the Japanese Americans in this sample. The majority (84%) of

Japanese were members of either the third or fourth generations. Such a highly acculturated group is expected to have assimilated somewhat to mainstream American culture, which may explain similarities between Japanese and Caucasian responses.

Differences as a Function of Sex of the Vignette

As expected, significant differences were found depending on whether a male or female was perceived. Subjects across ethnic groups rated "psychotherapy" and "change diet" as being more helpful for females than for males. These results appear to be consistent with those of previous studies in which females were perceived in more negative terms (Broverman et al., 1970; Nowacki & Poe, 1973). Subjects may have perceived women as intrinsically more maladjusted than men, and thus more likely to benefit from these interventions.

Subject Sex Differences

The results suggest that females are more likely to endorse the helpfulness of certain sources of help than males. Females rated "counselor" and "self-help/support group" as more likely to be helpful. These findings are consistent with other studies that have reported Asian American women (Gim et al., 1990; Suan & Tyler, 1990; Tracey et al., 1986) and women in general (Fisher & Turner, 1970; Williams, 1983) to be more willing to seek professional

help. Results are also consistent with reports of greater utilization of mental health services by women (Greenley & Mechanic, 1976; Marcus, Seeman, & Telesky, 1984), and findings that women are more likely to recognize a need for help, and are more open to discussing their problems with others (Horwitz, 1977; Kessler, Brown, & Broman, 1981; Johnson, 1988).

Relationship Between Causes and Treatments

The fifth hypothesis was that there would be a significant relationship between the causes and treatments for mental illness. These hypothesized relationships were generally supported in the Caucasian group. Relationships were found between spiritual causes and treatments, and between physical causes and treatments. There also appeared to be a combined psycho-social category of causes that was strongly related to a corresponding psycho-social category of treatments across disorders.

Aside from the relationship between spiritual causes and treatments, hypothesized relationships in the Japanese group were less clear, which may support findings that ethnic minority groups are less likely to distinguish between psychological, physical and social conceptions of illness (Flaskerud, 1984; White & Marsella, 1982). Physical causes were found to be related to both physical and psychological treatments. Psychological causes appear to be

related to social treatments. Although the Japanese were as likely as the Caucasians to conceptualize mental illness in psychological terms, social treatments were considered by the Japanese to be most beneficial. This finding is consistent with ethnic group differences reported earlier that Japanese were more likely than Caucasians to endorse the helpfulness of social sources of help.

Differences in Responses Regarding Self versus Others

Uomoto and Gorsuch (1984) unexpectedly found that Japanese American subjects did not endorse family and friends more often than other referral resources. The authors suspected that it was easier for subjects to refer others to mental health services than to use these services themselves. The results of this study seem to support this hypothesis. Responses differed greatly when subjects were asked about themselves versus others (i.e., the person in the vignette). For example, 52% of the Japanese subjects rated a mental health professional as most helpful for others, but only 15% stated that they would seek professional help for themselves. Instead, subjects were much more likely to rely on themselves and social networks.

This discrepancy may reflect the complexity of the relationship between attitudes and intended behavior. Behavioral intentions are not only influenced by attitudes toward the behavior, but also by subjective norms (Ajzen &

Fishbein, 1977). A subjective norm measures a person's normative beliefs and motivation to comply with the expectations of others. Stigmatization of mental illness among Japanese Americans may result in subjective norms that inhibit the endorsement of professional help due to the shame associated with such treatments. Therefore, although Japanese attitudes toward seeking professional psychological help were generally favorable, a sense of shame or stigma may have prevented them from rating it as an intended behavior.

Ethnic Matching Between Client and Therapist

Another factor that has been hypothesized as a possible barrier to help-seeking is the lack of culturally sensitive personnel of the same ethnic group (Wu and Windle, 1980). The majority of subjects in this study, however, did not endorse a preference for an ethnic match between client and therapist. This finding is consistent with other reports that neither preferences nor satisfaction with counseling-like interactions were related to ethnic matching (Acosta & Sheehan, 1976; Proctor & Rosen, 1981). Ethnic match may be less important for residents in Hawaii where there is no ethnic majority group. Ethnic similarity between client and therapist may be of greater importance to minority group members in settings where a clear ethnic majority group exists.

Implications of the Present Findings

Responses to questions regarding subjects' use of mental health services suggest an underutilization of these services among Japanese Americans in this sample. Significantly less Japanese than Caucasian subjects have used mental health services in the past, whereas these two ethnic groups are almost equally represented in Hawaii; 24% of the state population is Caucasian, and 23% are Japanese (Hawaii State Data Book, 1990). Only 4.2% of Japanese females and 6.9% of Japanese males have utilized mental health services. Similarly, significantly less subjects in the Japanese group knew of family members or friends who have used services at a mental health agency. The finding of underutilization among this acculturated sample is especially noteworthy, since acculturated Asian Americans have been reported to be more open to seeking professional psychological help than those who are less acculturated (Atkinson & Gim, 1989).

The results of this study may help to clarify the role of different barriers to service utilization among this sample of Japanese Americans. Underutilization cannot easily be explained by ethnic group differences in conceptions of psychological, physical or spiritual causes and treatments. Japanese were at least as likely as Caucasians to attribute symptoms of mental illness to psychological causes, and to

endorse the helpfulness of formal psychological treatment. Japanese were even less likely than Caucasians to endorse physical causes and physical treatments. Group differences were not found in spiritual conceptions, with both groups rating spiritual causes as least unlikely, and spiritual treatments as least helpful.

The results suggest several barriers to the utilization of mental health services. First, the Japanese were more likely than Caucasians to attribute the causes of mental illness to social factors. Japanese correspondingly showed a stronger preference for social sources of help, and felt that these sources were most helpful even when problems were conceptualized in psychological terms. Some support was also found for a greater tendency among Japanese to resolve problems on their own.

The stigma and shame associated with seeking professional psychological help is another plausible barrier. This may also help to explain the preference for informal helpers which carries less stigma than seeking help from a mental health professional. Although Japanese attitudes toward utilizing mental health services were generally favorable, and the majority of Japanese stated that these services would be most helpful for someone else, they were much less likely to utilize these services themselves.

Previous studies have reported a sense of shame and stigma of mental illness that exists among Japanese and other Asian Americans. Yamamoto and Acosta (1982), for example, reported that the stigma of mental illness among Asian Americans remains great even in third and fourth generations. Takeuchi, Leaf, and Kuo (1988) conducted a recent statewide survey on the perceptions of barriers to help-seeking among ethnic groups in Hawaii. This investigation found that 40% of the Japanese perceived at least one barrier, and the greatest obstacles were reported to be shame and a lack of awareness of services (i.e., not knowing where to go for help). Ethnic match, inaccessibility, cost, and inappropriateness were not reported to be significant barriers.

Inappropriateness, inaccessibility, and ethnic match appear to be unlikely barriers in this study as well. Perceived inappropriateness of services does not seem to be supported by the findings, since Japanese generally endorsed the helpfulness of formal psychological treatment. Japanese subjects also did not state a preference for an ethnic match between therapist and client. In addition, the availability and accessibility of services are also unlikely barriers since services are equally available to both ethnic groups.

The results of this study seem to suggest that the strongest barriers to service are the use of alternate

informal resources such as family and friends. These findings may be related to the stigma associated with seeking professional psychological help. Results suggest a need for increased public education about available mental health services, as well as the implementation of mental health programs in less stigmatized environments (e.g., work, religious and community settings).

Future Directions

This study is subject to the limitations of any self-report survey. The use of interview methods instead of, or in addition to the questionnaire, may help to address some of these limitations in the future. In addition, results obtained from this sample of subjects are not generalizable to other populations. The lack of support for hypothesized ethnic group differences may have been due to similarities between the Japanese and Caucasians in this study. As mentioned earlier, Japanese subjects in this study were highly acculturated, and subjects in both groups were college students. Stronger support for hypothesized differences may be found in a less acculturated sample of Japanese that is more representative of the community.

Future research should continue to examine the determinants of help-seeking for mental health services. Areas in need of further examination include the steps and pathways in the help-seeking process; expectations and

preferences for services; the impact of referral sources (e.g., family, friends, non-mental health professionals) on professional help-seeking, and the influence of other factors such as causal attributions, stigma, and acculturation level. It is hoped that future research in these areas will eventually lead to increased usage and responsiveness of mental health services for Japanese Americans and other ethnic minority groups.

APPENDIX
QUESTIONNAIRE

This is a questionnaire about how people perceive certain types of behavior. You will be reading and answering questions about a particular person. We are interested in _your_ opinion. You are not expected to have any expert knowledge, and there are no right or wrong answers. Your answers will be strictly confidential so please give your honest opinions. Thank you for your cooperation.

I certify that I understand what is involved in this project, and that I have been given satisfactory answers to my inquiries concerning project procedures and other matters. I give my consent to participate in this study with the understanding that I am free to withdraw my consent and to discontinue participation in this study at any time.

____
Signature of participant

____
Date

IMPORTANT: Please answer the questions in order. Do _NOT_ look ahead to any page until you have completed the page before it. Once you turn a page, do _NOT_ go back to change any answers.

Please read the following story carefully:

John has always been a hard worker who also enjoyed spending time with his friends. But for the past few weeks, he has been feeling "down" and he doesn't know why. He has lost interest in his job, cannot concentrate, and no longer enjoys being with other people. He always feels tired, and spends most of his time at home staring into space. He has no appetite and sleeps an average of only two hours each night (schizophrenia vignette).

John has been behaving strangely over the past eight months. His relatives and friends say that he seems like a different person. He recently lost his job because he could no longer work or interact with people like he used to. John believes that other people can read his mind. He also hears voices saying nasty things about him. When he speaks, he keeps changing topics and doesn't make sense (depression vignette).

1. We would like to know what word or phrase you would use to describe what John is experiencing.
   a. What is the 1st word/phrase that comes to mind? ______

   b. " " " 2nd " " " " " ? ______

   c. " " " 3rd " " " " " ? ______

2. Next, we would like to know what you think is causing him to be like this. As you think about possible causes, please keep in mind that John has never used drugs. What do you think is the <u>most likely</u> cause ?

3. Do you think John needs help? Circle the appropriate number:

1	2	3	4	5
No, John does not need any help at all	John possibly needs help	John probably needs help	John very likely needs help	Yes, John certainly needs help

If you think John needs help, what kind of help should he receive? Describe what and/or whom you think would be <u>most</u> helpful.

Below is a list of possible causes for what John is experiencing. Next to each cause are the numbers from 1 to 5. Please circle the 1 if you believe it is not a cause at all, 2 if it is possibly a cause, 3 if it is probably a cause, 4 if it is very likely a cause, and 5 if it is certainly a cause.

	not a cause at all	possibly a cause	probably a cause	very likely a cause	certainly a cause
1. Diet	1	2	3	4	5
2. Worrying too much	1	2	3	4	5
3. Demons/Spirits	1	2	3	4	5
4. Bad family life	1	2	3	4	5
5. Punishment for sins	1	2	3	4	5
6. Problems with other people	1	2	3	4	5
7. Brain disorder	1	2	3	4	5
8. Negative thinking	1	2	3	4	5
9. Weak mind	1	2	3	4	5
10. Major changes in life situation	1	2	3	4	5
11. Hereditary	1	2	3	4	5
12. Curse	1	2	3	4	5
13. Work or school pressures	1	2	3	4	5
14. God	1	2	3	4	5
15. Physical illness	1	2	3	4	5
16. Keeps problems to himself	1	2	3	4	5

The next list contains a number of possible kinds of help for John. Next to each type of help are the numbers from 1 to 5. Please circle the 1 if you believe it is not helpful at all, 2 if it is possibly helpful, 3 if it is probably helpful, 4 if it is very likely helpful and 5 if it is certainly helpful.

	not helpful at all	possibly helpful	probably helpful	very likely helpful	certainly helpful
1. Psychotherapy	1	2	3	4	5
2. Resolve disagreements with others	1	2	3	4	5
3. Meditation/Relaxation	1	2	3	4	5
4. Prayer	1	2	3	4	5
5. Talk to family and/or friends	1	2	3	4	5
6. Change diet	1	2	3	4	5
7. Positive thinking/better attitude	1	2	3	4	5
8. Confess sins	1	2	3	4	5
9. Spend time/socialize with others	1	2	3	4	5
10. Endure and adjust to situation	1	2	3	4	5
11. Surgery	1	2	3	4	5
12. Learn social skills	1	2	3	4	5
13. Please spirits	1	2	3	4	5
14. Medication	1	2	3	4	5
15. Remove curse	1	2	3	4	5
16. Exercise	1	2	3	4	5

This list contains a number of possible people who could help John. Next to each item are the numbers from 1 to 5. Please circle the 1 if you believe the source is not helpful at all, 2 if the source is possibly helpful, 3 if the source is probably helpful, 4 if the source is very likely helpful, and 5 if the source is certainly helpful.

	not helpful at all	possibly helpful	probably helpful	very likely helpful	certainly helpful
1. Surgeon	1	2	3	4	5
2. Psychologist	1	2	3	4	5
3. Spiritual/faith healer	1	2	3	4	5
4. Counselor	1	2	3	4	5
5. Himself	1	2	3	4	5
6. Herbalist	1	2	3	4	5
7. Minister/Priest	1	2	3	4	5
8. Family doctor	1	2	3	4	5
9. Exorcist	1	2	3	4	5
10. Social Worker	1	2	3	4	5
11. Friends	1	2	3	4	5
12. Self-help/support group	1	2	3	4	5
13. Psychiatrist	1	2	3	4	5
14. Family	1	2	3	4	5
15. Fortune teller	1	2	3	4	5
16. Hypnotist	1	2	3	4	5

1. What would YOU do if you were experiencing what John is going through?

2. How do you usually take care of your emotional problems?

3. Have you ever received mental health services?
_____yes _____no
   a. If yes, from whom? (check all that apply)
      ______ psychiatrist
      ______ psychologist
      ______ social worker
      ______ mental health counselor
      ______ other (please specify) ____________________
      For how long? __________________
      Did you find it helpful? Please explain.

   b. If no, why not? (check all that apply)
      ______ I never felt a need to
      ______ I don't think it would be helpful
      ______ I would feel too ashamed or embarassed
      ______ It costs too much
      ______ I don't know enough about available services
      ______ other (please specify)____________________

4. Have any of your family members or friends used services at a mental health agency? If yes, please indicate from whom, for how long, and if they found it to be helpful.

5. If you went to a mental health professional, would you prefer him or her to be of the same ethnic background as yourself?
   ______ yes
   ______ no
   ______ would not matter

Lastly, please answer the following questions:

1. Sex: Male _____ Female _____
2. Age ______
3. Place of birth ______________________________

   How many years have you lived in Hawaii? ______

   " " " " " " " the U.S. Mainland? ______

   " " " " " " " other countries? ______

   If American born, who was <u>first</u> born in the U.S.:

   _____ you _____ your great-grandparents

   _____ your parents _____ other (please specify)

   _____ your grandparents
4. Marital Status: _____ single _____ divorced

   _____ married _____ widowed
5. Religion: __________________________

   How religious are you (please circle)?

   1 2 3 4 5

   not at all somewhat very
6. Education: Circle number of last yr. of school completed:

   1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22

   If you have a degree(s), please specify: ________________

   Previous psychology courses ______________________________
7. Your Occupation: ________________________

   Father's occupation: ____________________

   Mother's occupation: ____________________
8. Ethnicity: (list all ethnic backgrounds and proportions of each to the best of your knowledge)

   ____

   Which <u>ONE</u> (select one only) ethnic group do you most strongly identify with? _____________________

   How strongly do you identify with this group in terms of attitudes, beliefs, and behaviors (circle number)

   1 2 3 4 5

   not at all somewhat very strongly
9. Any comments or questions:

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