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The Expression and Presentation of Depressive Symptomatology in Adult Chinese as a Function of Level of Ethnocultural Identification

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THE EXPRESSION AND PRESENTATION OF DEPRESSIVE SYMPTOMATOLOGY IN ADULT CHINESE AS A FUNCTION OF LEVEL OF ETHNOCULTURAL IDENTIFICATION

by

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VITA

The author, Fung Chu Ho, is the daughter of Tsin Man Ho and Chai Yau. She was born in December 16, 1964, in Hong Kong.

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CHAPTER I
INTRODUCTION

Despite the fact that depression is one of the oldest psychopathologies in human history, studies of depression across cultures have only a short history, starting at the beginning of the 20th century through the work of Kraepelin (Marsella, 1978, 1980). Early research focused on the question of the presence or absence of depression in non-Western cultures. Some researchers contended that the prevalence rate of depression is lower in non-Western cultures, while others claimed that depression is universal, that is, independent of cultural factors. The paucity of cross-cultural research coupled with the inappropriate and inconsistent research methodology in studying depression make the validity of most of the early research questionable. With improved research methodology, more recent cross-cultural research on depression has shed some light on understanding the fundamental nature of depression. Some consistent findings show that the depressive syndrome represents only a small fraction of the entire field of depressive phenomena (Kleinman, 1977). Depression is universal, but the conceptualization, expression and symptomatology may vary in different cultures (Marsella, 1980). Studies of depression among Chinese show that Chinese have more somatic than affective complaints in depression when compared with their Western counterparts. Both Marsella (1980) and Kleinman (1986) proposed that the experience and manifestation of depression differ as a function of Westernization. With the

increasing international contact among different ethnic groups in today's world, one can no longer assume any single ethnic group as homogeneous, particularly in the United States. The present study explores the expression of depressive symptomatology with respect to the level of ethnocultural identification among Chinese in the United States.

CHAPTER II
REVIEW OF THE LITERATURE

Prevalence Rate

In recent years, a great deal of research has been done in trying to determine the prevalence rates of depression across cultures in order to find out whether depression is a cultural or universal phenomenon.

Reported Lower Depression Rates Among Chinese

Zuo, Yang, and Chu (1985) compared the patterns of psychiatric consultation in a Chinese general hospital with that of a similar hospital in the United States. The authors assumed that the general patterns of psychiatric consultation in China were similar to those in the United States in a number of ways such as there being more female patients, the mean age of the patients being near 40 years, and most of the patients being referred to the psychiatric department by the department of internal medicine. The International Classification of Disease (ICD-9-CM) was used in the study. Their findings revealed some differences of psychiatric consultation between the two cultures. First, the prevalence of psychiatric consultation in the Chinese hospital is 0.74% which was much lower than the 2%-10% of the United States hospital. Second, only a small number (4%) of the Chinese patients had the diagnosis of depression while a larger number (12%) of the Chinese patients had the diagnosis of neurasthenia.

The authors considered several possibilities such as cultural screening of samples or, on the other hand, that there might be intrinsically an overall lower incidence and prevalence of mental illness in China than in the United States.

In some early research (Jew & Brody, 1967) within a U.S. based population study, it was found that the admission rate is low for Chinese patients compared to other segments of American society. More recent U.S. based data, drawn from community mental health facilities as well as hospitals (Sue & McKinney, 1975), also seems to corroborate these earlier observations. The authors investigated 17 mental health facilities and revealed that only 0.1% of the patients were Chinese, although the population areas served by these facilities included 0.6% Chines

From these findings, one can conclude that the investigations of Zuo et al. (1985) and Sue and McKinney above are in rough agreement with each other with the former reporting a factor of around 3 to 13 times and the latter reporting a factor of around 6 times less utilization of mental health facilities on the part of Chinese populations than Western populations.

In a study that was not limited to just a comparison of Chinese and Western cultures but rather concerned with a more world-wide survey, Murphy, Wittkower and Chance (1964) restricted the definition of depression to four symptoms: (1) a mood of depression or dejection, (2) diurnal mood change, (3) insomnia with early morning wakening, and (4) diminution of interest in social environment. Questionnaires were sent to mental health professionals in 30 countries and the respondents had to rate the frequency of patients who had all the above four defined depressive symptoms. Their study showed that Europeans tended to be in the high-

depression group regardless of where they lived, including such places as Asia and Africa.

Lower Rates Questioned

Berk and Hirata (1973) compared the data of Chinese and general population hospital commitments of mentally ill patients in California. Official hospital records between 1855 to 1955 were used in the study. Results showed that initially the Chinese had a lower rate of hospital commitment than the general population. However, since the 1930's, this has no longer been the case. By then, there had been a two-fold increase for the general population compared to a seven-fold increase among the Chinese. As a result, the rates of hospital commitment for both groups by the time of the study were approximately the same. The authors contended that the low rates of mental illness commitment among the Chinese is more of a myth than reflecting a real life situation.

In a survey study of Chinatown in San Francisco, Loo, Tong, and True (1989) contended that the extremely low utilization rate of mental health services, 5%, is not due to a lack of psychological problems among Chinese Americans. Rather, it is due to their lack of knowledge of existing services and awareness of how psychological problems can be treated.

In the case of the Chinese, epidemiological research (Lin, 1953) has indicated a relatively small percentage of individuals to be suffering from depressive disorders in Taiwan. However, Chu and Liu (1960) found a relatively high number of depressive disorders in their study of inpatients in Peking.

From all of this apparently contradictory research, one must conclude

that although cross-cultural research on the prevalence of depression or psychopathology in general has been done for a number of decades, conclusive agreement has not been reached on the true prevalence. Consensus seems to have been reached about the fact that depression as a morbid affect exists in all cultures (Sartorius, 1986). Some of the contradictions can be explained by differences in the method of sampling, in the techniques used for assessment and diagnosis, in the training of investigators, and in their theoretical orientation and classificatory allegiance. Other differences could perhaps be explained by the political ethos. All in all, at this point, the situation is anything but clear.

Symptomatology

Basically some argue that depressive symptoms are universal and thus independent of any given culture. However, others argue that depression is a cultural phenomenon in the sense that depressive symptomatology changes from culture to culture.

Symptomatology of Depression is Universal

Dunner, Jie, Ping, and Dunner (1984), in a collaborative research between U.S. and Chinese psychiatrists, attempted to determine the similarities and differences in symptoms and course of illness between Chinese and U.S. patients with affective disorder. A Chinese psychiatrist from China went to the U.S. and learned how to diagnose using the DSM-III. After his training in the U.S., the Chinese psychiatrist selected affective disorder patients in China according to the DSM-III criteria. On the other hand, an American psychiatrist went to China and made an independent

diagnosis of pre-selected affective disorder patients. A high degree of diagnostic interrater reliability was demonstrated in this cross-cultural study. In addition, patients who were depressed or euthymic were interviewed using the 17-item Hamilton Depression Scale and the Carroll Self-rating Scale. The Carroll Self-rating Scale has been shown to correlate very well with the Hamilton Depression Scale in the American depressed and euthymic patient populations. A very high correlation between the two scales was also found among studies of Chinese depressives. Based on the above two findings, the authors concluded that diagnoses could be made reliably across cultures using the DSM-III and that the phenomenology of affective disorder such as depression in China seems quite similar to that found in equivalent populations in America.

Similar research was carried out in China by Altshuler et al. (1988) with the exception that the Chinese psychiatrist used a Chinese Classification of Mental Disorders instead of the DSM-III. High reliability (75% agreement) of the diagnosis between the Chinese and American psychiatrists was found. It was argued that the high degree of overlap might be due to the fact that the Chinese Classification of Mental Disorders was in part based on the DSM-III. However, one interesting difference was found in the diagnosis of depression. Almost half of the patients given a DSM-III diagnosis of major depression were not given such a diagnosis by the Chinese classification standards. If a depressed patient's symptoms were predominantly somatic, the patient was more often than not given a diagnosis of anxiety disorder or neurasthenia. The results of this study seem to support the notion that depressed Chinese patients tend to manifest more somatic symptoms and may therefore be given diagnoses of somatic or

neurotic disorders rather than major depression.

Murphy et al. (1964), in their world survey mentioned above, contended that culture is not the main influence on the symptomatology of depression. Nine reports sent independently by Japanese psychiatrists from different centers in Japan indicate that depression is quite common in Japanese culture. Moreover, no differences were noted between the major depressive symptoms presented by Japanese patients and those symptoms commonly seen in Western patients.

Ndetei and Vadher (1984), in a study conducted in Bexley Hospital in southeast London, found evidence to criticize most of the comparisons made in cross-cultural studies that have been carried out by different researchers in geographically isolated areas. Their claim is that no single study had compared the pattern of depression in people of various cultural and geographical origins studied under the same circumstances by the same clinicians. They attempted to fill that gap. In this study, all the patients were admitted to one hospital under uniform circumstances and mainly attended by the same team of doctors, particularly the senior consultants. For the comparison, it was desirable to exclude those patients of English or Irish extraction and instead to concentrate on the other cultures represented. This was done by the following two procedures. First, hospital records were used. The family name of the patients was used as a means of identifying those to be excluded, i.e., those born abroad to British or Irish parents. Second, the countries of birth were regrouped into nine different groups reflecting cultural backgrounds. One of the authors constructed a syndrome check list (SCL) from the clinical information available from the case notes following the set of procedures laid out by Wing, et al. (1974) for

the description and classification of psychiatric symptoms. The information obtained on this SCL was subjected to the British diagnostic CATEGO system for subsequent diagnoses. The hospital diagnoses of depression and the CATEGO Depressive Syndromes diagnoses were compared for each cultural group and across all groups with a $\underline{X}^2$ analysis.

In terms of findings, the authors claimed that the results do not necessarily reflect the true symptom profile of depression in the various cultural backgrounds, but only those considered consistent with depression by the British School of Psychiatry on the basis of British patients. Therefore, for all groups other than the native British group, these results can only be considered as representative of depression when they conform to the symptoms of the British group. They reflect little of the culturally determined symptoms of depression peculiar to any other cultural groups. However, the authors also contended that the symptoms of depression as defined in the standard manual of the CATEGO programme, are found in all the cultural groups in more or less similar frequencies. The results do not support earlier reports by other researchers that certain symptoms of depression in Western settings are not found in other cultures, particularly those of developing countries.

As a criticism of this research, I want to note that the design of research seems to be inadequate since the population selected for study is uniform to begin with. That is, they are selected through the cultural filter of English culture by the time they even get to Bexley Hospital. Thus, it should not be surprising that when compared across cultures essentially a culturally independent result is obtained.

Silver (1987) argues that physical distress is part of the core

depressive syndrome and that, for severe psychiatric illness at least, cultural factors are a secondary phenomenon affecting the expression of physical symptoms and influencing the emphasis placed on physical symptoms by patient and physician. Silver found that depressed patients scored higher in the Physical Complaints List than the non-depressed controls. This effect was independent of the patients' ethnic origins. The ethnic origins of the subjects under study were roughly divided into three groups: Israel, Europe and America, and Asia and Africa, based on the country of birth of the patient and parents. The country of origin of the parents was used when the two differed. The major shortcoming of this study is the way used to determine the ethnic origins and the assumption that early home environment is the dominant element in the formation of attitudes. There is also considerable mixing of cultures as if they belonged to one cultural population.

Symptomatology of Depression is culturally specific

Cross-cultural research on the symptomatology of psychopathology has revealed that patients express their psychological concern in different ways. One distinct feature about Asian populations in general is that they tend to have more somatic complaints than Western populations. Based on clinical experiences in working with psychiatric patients in both Taipei and Massachusetts, Tseng and Hsu (1969) concluded that Chinese psychiatric patients in Taipei tend to present a higher proportion of neurasthenic, hypochondriacal and psychosomatic symptoms than American psychiatric patients in Boston. Moreover, depressive symptoms, while common in Boston, were less frequent in Taipei. Later, in clinical surveys of psychiatric

outpatients in Taiwan, Tseng (1975) found that nearly 70% of the psychiatric outpatients presented somatic complaints, while 30% complained only of emotional problems to the psychiatrist at their first visit.

Gada (1982) argues that the symptomatology of any illness is not only the expression of a pathological process in an individual, but depends upon many other factors, such as the environmental, social, and cultural background. One hundred patients from Western India were diagnosed as depressive based upon the Hamilton Psychiatric Rating Scale and the diagnostic criteria of the International Classification of Disease of the World Health Organization. The data of this study were compared to four other studies with one consisting of subjects from North India, one with subjects from South India, and the remaining two with subjects from two different parts of Britain. In general, somatic symptoms, hypochondriasis, anxiety, and agitation were found to be present in a significantly large percentage of Indian depressed patients, with guilt feelings significantly less frequent, when compared to the British depressed patients.

The Chinese Case

Even more particularly, studies concerned with the expression of depressive disorders among Chinese are few in number (Marsella, Kinzie, & Gordon, 1973). Yap (1965, p. 58), in a survey of depression among Chinese residing in Hong Kong, observed, "On the whole, the clinical picture presented was similar to that described in the West, although in our cases women seemingly exhibited more resistiveness and agitation than men.". On the other hand, Tseng and Hsu (1969) note that there is no word to express "depressive mood" in colloquial Chinese and that the Chinese

are not used to expressing depressive affect verbally. As a result, they concluded that Chinese depressives tend to present a high proportion of neurasthenic, hypochondriacal, and psychosomatic symptoms. It appears that contradictory results were presented in different studies.

I would like to interject one point here as a native speaker of Chinese and that is, contrary to the way Tseng and Hsu (1969) may seem to present the case, there is indeed a common way of expressing depression verbally in Chinese. For example, the Chinese words "chou men" means feeling gloomy; being in low spirit; and being depressed (The Pinyin Chinese-English Dictionary, 1990, p. 97). In addition, unlike the West, where such an expression is direct, in Chinese it is often done indirectly through metaphor such as making reference to the weather. Emotional expression has a long history in the Chinese language, well documented in Tang and Sung Dynasty poetry. An obvious example for this kind of projection can easily be found in Chinese poetry. When poets want to express their sadness of separation, they very often just describe the change of natural phenomenon to represent their internal affect. The dripping of wax from a burning candle can be interpreted by the poet that the candle understands the separation between the poet and his friend. Thus, the candle is crying for them. Distress is common; its presentation is different. It should be emphasized that "somatization" in symptom presenting does not mean that the Chinese language does not have terms or concepts to express depressive affect verbally (Chang, 1985).

Common Problems of Early Cross-Cultural Research on Depression

Marsella et al. (1973) concluded that, in spite of the existing research,

we know very little about the frequency and expression of depressive disorders among non-Western cultures. In this section, it is my intention to critique the problems of earlier research on the prevalence and symptomatology of depression cited above.

The First Problem: Conceptualization of Depression

Many researchers are confused over the concepts of depressive syndrome and depressive phenomena; that is, they have done research on comparing the symptoms of depression while thinking that they were comparing the syndrome. Both Marsella (1980) and Kleinman (1977) strongly emphasize this point. Marsella (1980) points out that depression is universal but the conceptualization, expression and symptomatology may vary from culture to culture. He indicates that current findings and research do not provide enough knowledge and evidence to conclude that depression is less prevalent in non-Western cultures than Western cultures. Rather, it seems that there is a core of depressive symptomatology that is universal across cultures. However, Marsella does note that the psychologicalization of depression or mood variation tends to be absent in non-Western cultures.

It is an oversimplification to only conclude that certain symptoms of depression are either present or absent in a given culture. Refined investigations are also necessary to monitor the variations of frequency, intensity, and duration of depression in order to obtain a full picture of the symptom patterns across cultures.

Kleinman (1977) has criticized the methodology in older transcultural psychiatric research which tends to draw the conclusion that depression is universal. This conclusion is based on the findings that same kinds of

depressive syndromes appear to be present in a number of different cultures. Kleinman points out that the "depressive syndrome" only represents a small fraction of the entire field of depressive phenomena. It is a cultural category constructed by psychiatrists in the West to yield a homogeneous group of patients.

Chang (1985) points out that most researchers agree that depression is a phenomenon of a multidimensional constellation of symptoms. The description of depression given by the Diagnostic and Statistical Manual -- Third Edition-Revised (DSM-III-R) (American Psychiatric Association, 1987) states the following:

> The essential feature of a Major Depressive Episode is either depressed mood (or possibly, in children or adolescents, an irritable mood) or loss of interest or pleasure in all, or almost all, activities, and associated symptoms, for a period of at least two weeks. The symptoms represent a change from previous functioning and are relatively persistent, that is, they occur for most of the day, nearly every day, during at least a two-week period. The associated symptoms include appetite disturbance, change in weight, sleep disturbance, psychomotor agitation or retardation, decreased energy, feelings of worthlessness or excessive or inappropriate guilt, difficulty thinking or concentrating, and recurrent thoughts of death, or suicidal ideation or attempts. (pp. 218-219)

This description not only lists the symptoms of depression but also the relationships between the symptoms. That is, the affective complaints are major symptoms; somatic symptoms and feeling of loss and self-worth concerns are secondary concomitants which accompany the primary affective complaints. This description of depression with its emphasis on affective complaints represents a consensus of the operational definitions of depression as it is viewed in the United States (Eysenck, Wakefield, & Friedman 1983). When this cluster of symptoms is used as criteria for

depression in cross-cultural studies, incidences of depression seem to be rare in non-Western cultures. Noticeably absent in the case reports are affective complaints (Marsella, 1980). Cross-cultural surveys, however, indicate the strong presence of somatic complaints, that is, physiological symptoms that usually accompany affective symptoms. Some of the researchers noted the presence of affective symptoms, but the symptoms were often de-emphasized by the patients during reporting or interviewing (Kleinman, 1977, 1982).

DSM-III/DSM-III-R Diagnoses: A Self-Fulfilling Prophecy

Escobar (1987) has pointed out problems with attempting to use the DSM-III outside of its culture of origin, the United States. Operational diagnoses as presented in the DSM-III are a step forward. From the perspective of cross-cultural research, however, systems like the DSM-III tend to minimize cross-cultural differences in symptoms and yield rather concordant syndromes sharing essential core symptoms stripped of their cultural character. Indeed, DSM-III was nurtured by international studies on schizophrenia and depression whose major purpose was to identify universal symptoms for the sake of international communication. The exclusion rules in DSM-III require that once a dominant diagnosis such as a major depressive disorder or schizophrenic disorder is determined to be present, associated disorders such as somatization or anxiety are assumed to be caused or explained by the primary one. Therefore, they tend to be excluded. As a consequence, cultural differences cannot generally be demonstrated by using the DSM-III somatoform disorders criteria. Many patients with "unfounded" somatic symptoms have another DSM-III

primary diagnosis that is often assumed to cause or explain the somatic symptoms. In addition, the true prevalence of unfounded somatic symptoms is hidden because of the strict criteria required for a DSM-III primary diagnosis of somatization disorder.

Kleinman (1977) points out that the definition of depression itself in the DSM-III excludes most depressive phenomena, even in the West, because they fall outside its narrow boundaries. Applying such a category to analyze cross-cultural studies is not a cross-cultural study of depression. By definition, it will find what is "universal" and systematically miss what does not fit its tight parameter. The former is what is defined and therefore "seen" by a Western cultural model; the latter, which is not so defined and therefore not "seen", raises far more interesting questions for cross-cultural research. This research approach is a self-fulfilling prophecy. This category fallacy contributes the most fundamental error in cross-cultural research. Having dispensed with indigenous illness categories because they are culture-specific, studies of this kind go on to superimpose their own cultural categories on some sample of deviant behavior in other cultures, as if their own illness categories are culture-free.

Similarly, Marsella et al. (1973) point out that though generally more reliable than diagnostic tallies, symptom-frequency tabulations fail to provide the composite picture of the disorder which the research often seeks. People from different cultures may report the same complaint -- e.g., insomnia -- but it is the total pattern of complaints, of which insomnia is only a part, which is the important feature, especially in cross-cultural research.

Likewise, Nikelly (1988) in the paper entitled "Does DSM-III-R Diagnose Depression in Non-Western Patients?" explicitly points out the

problem of generalizing the applicability of DSM-III-R in diagnosing and treating patients in non-Western cultures. A study of three non-Western patients, a Latin American woman, an Asian woman, and a Moslem man, was made. All of them manifested impaired functioning and a noticeable change in behavior and as such could be diagnosed as depressed even by Western criteria, ruling out somatoform, dysthymic, and post-traumatic stress syndrome. However, their subjective view of their condition was not verbalized as depression but was reported in the form of physical and coping debilities. They had difficulty using the "psychologizing" idiom of communication, showed a paucity of cognitive content, and presumed that their condition had physical causes. They expressed those aspects of depression that were consistent with their culture. Nikelly goes on to point out that the DSM-III-R is biologically conceptualized and description-oriented as well as culturally biased because its characterization of depression is based on observations of patients in the U.S. Thus, even in cases where such non-Western patients can be diagnosed as depressed within Western standards, the application of Western approaches to treatment may not be appropriate. Since such treatments are not from within but rather are external to the culture of the patient, they may actually compound their real problems by medicalizing a cultural issue and thereby eliminating more effective treatment alternatives.

Marsella et al. (1973) also take note that clinical observations of depressive disorders are affected by the clinician's skills in interviewing as well as his/her predispositions to seek out certain phenomena as a result of his/her experiences and training in traditional classification systems.

The Second Problem: Depression as an Entity

Another problem closely connected to the category fallacy is the traditional transcultural psychiatric preoccupation with disease as an entity, a thing to be "discovered" in pure form under the layers of cultural camouflage. This assumption results in the erroneous belief that deviance can be studied in different societies independent of specific cultural norms and local patterns of normative behavior (Kleinman, 1977). Certainly, as pointed out above, this is a major problem with the DSM-III-R when applied in a cross cultural context. This pattern is a direct reflection of the Western medical model that illness is a disease caused by a "thing" to be removed (rather than, for example, something to be examined and understood). Such a view is often not shared by non-Western cultures.

The Third Problem: Lack of Standardization

Marsella (1978) has questioned the current approach of measuring the epidemiology of depression across cultures. One of the major problems he points out is the lack of standardization for the conceptualization and definition of depression. Certainly in comparing the various studies done on prevalence rates one is struck by this lack of standardization. The conceptualization and definition of depression can be very much determined by culture (inter-cultural) as well as by variation from within a culture (intra-cultural).

Intra-Cultural View of Depression

Even in the West, there is a problem with the word "depression" for it conveys a number of different meanings depending upon context (Sartorius,

1986). For example, in English, there is a unique opportunity to use a different word for each of the three faces of depression: (1) depression as a disease with a pathogenesis and certain symptoms defined medically, (2) depression as an illness, describing the experience of the individual and reflecting the cultural definition of illness in general, and (3) depression as a sickness describing societal recognition of patient state as a reason for obtaining sickness benefits and accepting lesser performance in social roles.

A similar pattern was found by Tanaka-Matsumi and Marsella (1976) in a word association study. Their results indicated that in Western cultures, the concept of depression has a variety of meanings. It is used to describe a mood, a clinical symptom, and a diagnostic syndrome. Thus, the concept of depression transcends a limited and clearly delineated range of normal and abnormal behavior.

Inter-Cultural View of Depression

The inter-cultural situation is even more difficult to sort out than is the intra-cultural situation. Non-Western cultures may not have equivalent terms for depression and the expression of depression may be very different than in Western cultures (Marsella, 1978). Since the Western cultures rely heavily on the affective symptom for the diagnosis of depression, it may be deceiving to conclude, as we have seen some researchers do, that the prevalence of depression is lower in non-Western cultures due to the fact that non-Western cultures do not express affect directly but rather through somatic complains.

Often non-Western cultures do not have the English equivalent term for depression (Tanaka-Matsumi & Marsella, 1976). This is not to say that

these groups do not experience some things which Westerners might call "depression," but rather that the experience may be embedded in a different cultural context which thus alters its meaning and subjective appraisal. Tanaka-Matsumi and Marsella go on to point out that if one is to reduce ethnocentric biases in cross-cultural research on depression, it would be important to investigate potential variations in the meaning and subjective experience of depression with research approaches that permit an examination of indigenous perceptions.

The Fourth Problem: Biased Methodology

The treated case approach, based on hospital admission, assumes equal access to and motivation to seek psychiatric treatment across cultures (Marsella, 1978). However, this may not be the case in most non-Western cultures. It would thus explain lower prevalence figures in studies in non-Western cultures. Further, admission case counts are likely to be greatly affected by the diagnostic preferences of the staff, raising serious questions about the accuracy of this method of studying depression transculturally (Marsella et al., 1973). Thus, such lower reported rates could be a consequence of culturally biased methodology. The untreated case approach, based on community or field surveys, faces the problem of case determination. Again no standardized procedures were used for diagnostic judgement across different studies within or across cultures. Consequently, diagnostic preference biases which are either for or against traditional Western diagnostic nomenclature and criteria are the rule in such studies.

In conclusion, the problems in the treated and untreated case approaches in measuring the rates of depression across cultures make it

impossible to assess and conclude the true rates of depression. Further, in general, as pointed out by Marsella et al. (1973), among the vast majority of studies of cross-cultural depression reported, emphasis has typically been placed upon three research approaches to the problem: clinical observations, hospital admission surveys, and symptom-frequency tabulations. All three of these approaches have severe methodological problems.

As can be seen from above, any realistic investigation into the question of cross-cultural depression and its presentation must necessarily involve multiple variables which are not necessarily manifest at the beginning. One methodological approach which offers the opportunity of deriving a total pattern or syndrome of depression in an objective manner is factor analysis (Marsella et al., 1973). Factor analysis has frequently been employed in studies attempting to derive symptom clusters across many ethnic and cultural groups. It has also been found useful in generating symptom clusters associated with one particular diagnostic subtype.

Emic vs. Etic Research Approach

The terms "emic" and "etic" are suffixes from the words "phonemic" and "phonetic", which are used in linguistics in reference to two systems of describing speech sounds (Olmedo, 1979). Thus phonetics is a universal system to describe all sounds in all languages, whereas phonemics applies only to specific sounds that are meaningful in a particular language. In cross-cultural research, the emic approach seeks to explain phenomena in terms of categories deemed meaningful within a specific culture, whereas the etic approach emphasizes the development of explanatory constructs

that are applicable to all cultures.

Although each approach has merit, a problem arises when explanatory constructs in a particular culture are assumed to be universal and are therefore applied to other cultures without establishing their cross-cultural equivalence. Berry (1980b) called this approach "imposed etics" and distinguished it from "derived etics." The latter involves the search for universals by first determining explanatory categories which are shared by various cultures (in an emic sense) and which can then be used to derive new constructs that are cross-culturally equivalent.

Since there are many theories and studies that explain the biological mechanisms of depression and which seem to be universally applied, it seems that a more predictive approach is not to argue for the presence or absence of certain symptoms but to search for the configurations and the underlying dimensions of phenomenological manifestations of depression and to identify dimensions of symptoms that are better indicators of depression for people of different cultures (Chang, 1985). More refined investigation is necessary to sample the variations across the dimensions of frequency, intensity, and duration in order to obtain a full range of the depressive symptomatology across cultures (Marsella, 1980).

Marsella et al. (1973), in one such study, made efforts to identify and compare patterns of depressive disorders among American college students of Caucasian, Chinese, and Japanese ancestry and to relate these patterns to four variables which the authors consider indispensable in understanding disordered behavior: (1) culture, (2) biological and psychological individual differences, (3) the stress confronting the individual, and (4) definitions of deviant behavior. Samples of Americans of Japanese,

Chinese, and European ancestry evidencing clinical levels of depression were administered a depression symptom checklist, and the results were submitted to a factor analysis. The ethnic groups differed from each other with respect to the functional dimensions expressed by the patterns. In general, existential symptoms dominated the patterns of the Japanese and Caucasians, while somatic symptoms were more characteristic of the Chinese. In addition, the Japanese evidenced an interpersonal symptom pattern, and both Asian groups manifested a cognitive symptom pattern.

Tanaka-Matsumi and Marsella (1976) show that early research had a tendency to rely on a "professional" framework in evaluating and labelling the observed behavior. What appears to be needed is a more systematic analysis of the meaning and subjective experience of depression via the use of research methods which examine the problem in the "emic" or cultural-relative terms.

A method used to study the subjective experience is that of free association to various concepts. This word association technique is conducted in the indigenous language having the advantage of eliciting directly responses from individuals in different cultures without imposing a structured framework upon their response. Tanaka-Matsumi and Marsella (1976) investigated the subjective experience of depression among the normal college populations of Japanese-Nationals, Japanese-Americans, and Caucasian-Americans. The authors studies the subjective experience of depression by using the free word associations to various concepts. The results indicated that Japanese-Nationals associated more external referent terms, such as "rain" and "cloud," and somatic referent terms, such as "headache" and "fatigue," to the word yuutsu (the equivalent word of

depression in Japanese). In contrast, both Japanese-Americans and Caucasian-Americans associated predominantly internal mood state terms, such as "sad" and "lonely," to the word depression. These differences are attributed to variations in the self-structure which mediates the subjective experience of depression in the different cultures. Japanese self-structure was considered to be essentially "unindividuated," while American self-structure was considered to be essentially "individuated."

Reliability and Validity

The problem of taking an instrument of proven reliability and validity, developed within a single culture, and applying it to a different culture can be quite profound. The results may appear to the researcher to be significant and yet be absolutely meaningless. We have already seen a number of examples of studies with validity and reliability problems. Thus, it is most important that some sort of an investigation be conducted specifically to check the reliability (let alone the validity) of an instrument before it is applied outside of the population that it was actually developed for. While this should be of immediate common sense in terms of proper psychometric technique, as we have seen, it is often completely ignored and researchers continue to publish "results" and draw conclusions based on them.

One instrument which has been used by researchers to gain some handle on the questions of cross-cultural reliability and validity is the Symptom Check List or SCL-90 which is a 90 item self-report symptom inventory on which each symptom is rated on a 5-point scale of distress ranging from "not at all" to "extreme bother." The SCL-90 was initially

designed to measure symptomatology in psychiatric outpatients. It is considered, in the Caucasian population for which it was standardized, to monitor five hypothesized factors: (1) somatization, (2) obsessive-compulsive tendencies, (3) interpersonal sensitivity, (4) depression, and (5) anxiety. A recent study made use of the SCL-90, applying it to population samples consisting of four different ethnic groups in Hawai'i: Caucasians, Filipinos, Japanese and Native Hawaiians (Takeuchi, Kuo, Kim, & Leaf, 1989).

Takeuchi et al. (1989) assessed how the four different ethnic groups, responded to 54 items of the SCL-90. The analysis of the symptom items was conducted in two parts. First, the researchers assessed the internal reliability of the five scales for each ethnic group. The second part consisted of analyses to determine whether the scale items factored into the hypothesized five dimensions for the four ethnic groups. The results showed that the scale item loadings generally did not correspond to the hypothesized factors. Among the ethnic groups, Caucasians appeared to have the best fit between the empirical and hypothesized factors whereas Native Hawaiians had the worst fit. For the Caucasian sample, the somatic, obsessive-compulsive, and interpersonal sensitivity factors seem to have the best fit of all the hypothesized factors. Less than half of the depression and anxiety scale items loaded on the hypothesized factor. Filipinos had a high number of somatic items that loaded on the hypothesized factor, but the other hypothesized factors had a large number of items with split loadings. Among the Japanese sample, the somatic and interpersonal sensitivity items seemed to have the best fit with the hypothesized factors. None of the hypothesized factors seemed to fit the scale items among the Native

Hawaiians.

This study demonstrates that the 54 items used on the SCL do not correspond to the five dimensions of anxiety, depression, interpersonal sensitivity, obsessive-compulsive, and somatization for all four ethnic groups in Hawai'i. Thus, at best, to apply the SCL to a Hawaiian population would be a gross cultural projection and conclusions drawn from it may be a self-fulfilling prophesy. Nothing of value would have been measured. Takeuchi et al. go on to point out that several researchers have commented that patients from certain non-Western cultures may somatize their psychological distress rather than express it as a psychiatric problem. Indeed, the somatic factor for Caucasians appeared to be the clearest, with two physiologic items loading on it. Native Hawaiians, Filipinos, and Japanese had other distress items loading on the somatic factor. Again, these results reinforce the importance of assessing established psychiatric scales among ethnic groups rather than assuming appropriateness of constructs across cultures. The conclusion drawn by the authors was as follows:

> Although we identified symptom scales which varied for four ethnic groups in Hawai'i, we cannot always distinguish psychiatric symptom items from expression of cultural values and norms....Our study demonstrated the statistical relationship among items, but future studies will need to demonstrate the cultural validity of these items in measuring psychiatric illness. (p. 327)

Finally, they note that although this study has demonstrated the psychiatric symptom dimensions among Asian Americans and Native Hawaiians, one cannot conclude that the similarities and differences are due entirely to cultural factors because the data set did not have an adequate measure of

ethnicity. A self-report indicator was used to measure ethnic group affiliation, but it is not entirely satisfactory as a measure of cultural identity. Without such a measure one is left to speculate on whether the differences between ethnic groups can be attributed to cultural or other variables.

Other Variables: Westernization, Socioeconomic Status, and Age

Contradictory results were found in many of the early cross-cultural studies because poorly worded and controlled demographic variables interacted with the variables under study.

When Radloff (1977) first introduced the Center for Epidemiologic Studies-Depression (CES-D) scale, she found that items of depressive affect and somatic complaints were separated among Caucasian subjects. Kuo (1984) adopted the CES-D scale in the study of the prevalence rate of depression among four Asian-American groups in a community survey in Seattle, Washington. Kuo obtained three factors: (1) depressed and somatic, (2) positive affect, and (3) interpersonal by using factor analysis with a Varimax rotation. This result showed that the depressive affect and somatic complaints tend to cluster together among Asian-American groups. There was no clear differentiation between the affective and somatic structures in Kuo's Asian-American sample.

Ying (1988) examined the level of depressive symptomatology, as measured by the CES-D, in a community-based Chinese-American sample in San Francisco, California. In addition, she assessed the psychometric properties of the CES-D within this group. A factor analysis revealed an inseparability of affective and somatic structures among Chinese-Americans. The findings replicated the results of the earlier aforementioned

study done by Kuo (1984). Ying concluded that the results of her study reflects an apparent lack of differentiation between psychological and bodily complaints in the Chinese sample. In fact, it is likely that for some Chinese-Americans, the former has limited meaningfulness. Ying adopted Kleinman's (1986) suggestion, that only in technologically advanced societies is the psychological well-being of the individual valued, to explain her results. In Chinese societies, where technological development is fairly recent and the values held continue to be Confucian, i.e., based on an agrarian society, individual psychological well-being takes a back seat to the well-being of the group. Thus, physical complaints are valid and relevant because they are believed to obstruct the person's ability to function properly in his/her role within the group. On the other hand, individual psychological distress is suppressed and viewed as irrelevant. Clearly, this traditional deemphasis on the self is beginning to change with increased exposure to Western culture, particularly for the more acculturated Chinese-Americans. Thus, the inseparability of somatic and affective complaints reflects the persistent Chinese value of de-emphasizing attention of one's affective state and emphasizing one's physical state. This also underlines the fact that while it is useful and important to test cross-cultural relevance of existing measures of symptomatology, the concept of depression may not be fully understood in a cross-cultural context and measurement of depression may not be successfully accomplished outside the context of the culture in which it occurs.

Ying also found that the level of depressive symptomatology was higher than previously reported in both Caucasian and Asian samples. And that socioeconomic level (as measured by education and occupation) has

been found to correlate significantly with depressive level; those who are better off economically also are better off emotionally. The author contended that those with higher socioeconomic levels possess more resources, both financially and otherwise, and, thus, experience less stress (i.e., are more resistant) and/or are more able to handle depressive symptoms.

The fact that the CES-D score varies significantly with age only when socioeconomic level is held constant, but not when it is allowed to vary, would support the above contention. Although younger respondents report greater depressive symptoms, they are also better off socioeconomically than their older counterparts.

In summary of the above literature review, several points should be highlighted regarding the current status of cross-cultural research in depression. First, the claim that the Chinese population has a lower rate of depression is inconclusive. The true prevalence rate of depression among Chinese has yet to be determined. It will necessary to improve methodology and controls over previous studies. Second, it is indisputable to conclude that depression is universal and the presentation and expression of depressive symptomatology is culturally specific. Third, imposing the Western conceptualization of depression in cross-cultural research and categorically determining whether certain depressive symptoms are either present or absent are not helpful in shedding light on understanding the nature of depression in non-Western cultures. Instead, an emic approach to study the subjective view and experience of depression should be adopted. Furthermore, examination of the configuration of different depressive symptomatology would be more helpful in understanding the broad range of

depressive phenomena. Four, the interaction effect of demographic and ethnicity variables should be examined in relation to the experience and expression of depression.

Marsella (1978) proposes four new conceptual approaches to facilitate future studies:

1. An emic determination of disorder categories in different cultures.
2. The establishment of symptom frequency, intensity, and duration baselines.
3. Objective symptom pattern determination through multivariate data processing techniques.
4. Comparative studies using similar methodologies with culturally relevant definitions of disorder.

CHAPTER III
STATEMENT OF THE PROBLEM AND HYPOTHESES

Purposes

Firstly, the ethnic Chinese population in the U.S. is a heterogeneous rather than a homogeneous group. Depending upon their place of origin, length of time in staying in the U.S. and different degree of resistance to accepting new cultural values, we have a wide ranging population in terms of acculturation level. So far, little research has been done to explore this cultural spectrum. Often the Chinese in the U.S. have been treated as a single homogeneous group (Liu & Yu, 1985). In the present study, ethnic Chinese subjects were divided into subgroups depending upon their level of ethnocultural identification.

Secondly, researchers have been confused about such terms as cultural, ethnic, and racial groups. These terms tend to be used interchangeability as if they have the same meanings. No consistent/ standardized way to distinguish one's ethnic background has been used. Instead, subjects tend to be assigned casually based on one's place of birth, parents' place of birth, names, or language spoken. The subject may hold different values and belief systems independent of where one was born, one's parents' value and belief system, or even one's racial background. In the present study, the subjects' subjective identification of themselves is to be explored based on his/her value, belief system, and behavior, in order to

distinguish his/her level of acculturation.

Thirdly, Marsella (1980), in his literature reviews of cross-cultural studies of depression, has concluded that the experience and manifestation of depression differ as a function of Westernization. Those cultures evidencing subjective epistemological orientations tend to avoid the psychologizing of experience and thus do not manifest psychological and existential symptomatology in depression. This does not mean that depression, as it is defined in the West, is absent in non-Western cultures, but that it is conceptualized differently and may be experienced differently. Therefore, Chinese may experience and express more somatic than psychological and existential symptoms. One way to examine this proposed hypothesis is to explore the expression of depressive symptomatology with respect to the level of acculturation among Chinese in the U.S.

Fourthly, Chang (1985) studied a normal population made up of a pool of college students at Texas Southern University taking an introductory psychology class. The pool was divided into groups of roughly the same size: African-American, Caucasian, and Overseas Chinese. The results indicated that the three college student groups evidence different configurations as well as different underlying dimensions of the symptoms of depression. For the Caucasian group, a cluster of significant correlations was found between the items that contain existential concerns and concerns for cognitive functioning; for the African-American group, a cluster of significant correlation coefficients was found between the items containing somatic complaints and affective complaints, and another cluster was found between the cognitive and existential concerns. For the Overseas Chinese group, it was observed that the self-esteem items and

cognitive concern items were related. However, higher correlations were found between the items containing somatic complaints with low correlations with existential concerns and the affective symptoms. This latter pattern seems to be characteristic of the Overseas Chinese group.

Instead of trying to determine the presence of certain depressive symptomatology among Chinese, the present study examined the configurations of depressive symptomatology. Five depressive factors (affective, existential, somatic, cognitive, and interpersonal) along three dimensions of frequency, duration and severity were investigated.

Acculturation and Ethnocultural Identification

Most of the early research on acculturation has been anthropological in nature (Olmedo, 1979). Within the United States, the majority of this research has focused on the acculturation of Native American Indians to European culture with an emphasis on the process of sociocultural change under the conditions of cultures in contact (Siegel, 1955). Research on the acculturation of other American ethnic groups, however, has been conducted in the field of sociology (Spiro, 1955). As Chance (1965) has pointed out, anthropologists and sociologists have in general chosen an interpsychic or interpersonal approach which has led to an emphasis on acculturation as a group process in terms of relationship to socialization, social interaction, and mobility.

The study of acculturation in the field of psychology is a rather recent phenomenon (Olmedo, 1979). Most of the literature in this area has emerged within the last two decades. Most of the research has focused on the adjustment of immigrant groups to the U.S. (Berry, 1980a; Johnston,

1976; Szapocznik & Kurtines, 1980), stress related to the process of acculturation (Berry, 1970; Padilla, 1987), differences in the acculturation process in accordance with different generations of immigrants (Meredith, 1966; 1967a, 1967b; Yao, 1979), and methodological issues. Moreover, the populations under study were mostly Hispanics, Japanese, and Southeast Asians. Little emphasis has been placed in other minority ethnic groups, i.e., Chinese, Korean, Filipino, etc., although they are also major ethnic minorities in the United States.

A gradual shift of research emphasis in the field of psychology in an attempt to move away from the anthropological and sociological nature of this research has been indicated by the emergence of literature with a greater emphasis on assessing acculturation within the context of ethnic identity, or ethnicity (Olmedo, 1979). Cultural value orientations, attitudes, knowledge, and behavior are some of the psychological variables being studied. This fosters a perspective that attempts to understand ethnic groups in their own terms rather than by contrasting them with other cultures or reference groups. An important effect of these developments has been the greater emphasis placed on understanding individual acculturation and its relationship to group acculturation phenomena. In general, psychologists and psychiatrists tend to view acculturation in terms of intrapsychic mechanisms, that is, as a change in the perceptions, attitudes, and cognitions of the individual (Chance, 1965).

Acculturation occurs when two independent cultural groups come into continuous first-hand contact over an extended period of time, resulting in changes in either or both cultural groups (Berry, Kim, Power, Young, & Bujaki, 1989). In the present study, rather than examining the group process

of acculturation in an anthropological and sociological manner, an individual's "psychological acculturation" (Graves, 1967), that is, ethnocultural identification, will be the examined. Ethnocultural identification can be defined as "the individual's values, attitudes, and preference representative of a particular cultural group, as an integral part of the totality of identification formed" by an individual (Bayard, 1978, p. 110). The magnitude of one's ethnocultural identification is a function of the extent of the individual's incorporation of his identification with one or more ethnic groups into his total ego identity (Matsumoto, Meredith, & Masuda, 1970).

The current status of research assessing acculturation within the context of ethnic identity is still in its infancy. It is still a struggle for researchers to search for a precise definition and method of measurement of acculturation and ethnocultural identity (Olmedo, 1979). Although many attempts have been made to come up with some models in describing acculturation and ethnocultural identity (Olmedo & Padilla, 1978; Szapocznik, Scopetta, Kurtines, & Aranalde, 1978), so far no single satisfactory model can describe the phenomena in a comprehensive manner. In reviewing the literature, however, some consistent or commonly agreed upon characteristics are found: (1) individual acculturation is a multidimensional process rather than a linear process, and is a function of various factors, i.e., generation, age, language, etc., and (2) there are different gradients of ethnocultural identification and levels of individual acculturation within a given ethnic group (Bayard, 1978; Matsumoto et al., 1970; Pierce, Clark, & Kaufman, 1978-79; Sue, & Sue, 1971; Suinn, Rickard-Figueroa, Lew, & Vigil, 1987).

One's attitude towards the ways in which he/she wishes to become involved with, and to relate to, other people and groups he/she encounters in his/her acculturation area determines one's level of ethnocultural identification (Berry et al., 1989). In general, three levels of ethnocultural identification can be distinguished among Asian-Americans. The first is Asian-identified: a person retains identity with his/her ethnic heritage and refuses attempts to become integrated within the larger Western society. The second is Western-identified: a person entirely assimilates into the new culture in all ways; e.g. the Asian becomes completely identified as a part of the dominant Western society. The third is transitional: a person identifies himself/herself with more than one particular culture; i.e., the Asian does not clearly fall into either of the above two categories.

To measure on some deeper level the cultural specificity of depression, the present study was undertaken to compare and contrast the prevalence of depressive symptomatology among overseas Chinese living in America. As a whole, this population has a spectrum of individuals who would be considered to ethnoculturally identify themselves as Chinese on the one end and as American on the other end with many somewhere in between. The goal was to identify three subject groups, namely (1) traditional Chinese, (2) Westernized Chinese, and (3) a group that does not clearly fall into either of the above two categories and is viewed as transitional.

Hypotheses

One would expect that there are different patterns of depressive symptomatology across these three groups of individuals having different

ethnocultural identity. That is, the traditional Chinese are expected to present the pattern of depressive symptomatology which is expected to be closer to that of his/her homeland, while the Westernized Chinese are expected to be closer to the American patterns. In the present study, three hypotheses were proposed to explore the affective, existential, somatic, cognitive and interpersonal dimensions of depressive symptomatology among Chinese living in the Unites States. Hypothesis 1: the traditional group would show more signs of somatization and interpersonal problems than either the transitional or Westernized groups. Hypothesis 2: the Westernized group would show more depressive signs on the affective, cognitive, and existential factors than the other two groups. Hypothesis 3: the transitional group will lie somewhere in between the responses of the two extremes, namely the traditional and Westernized groups.

CHAPTER IV
METHOD

Subjects

A group of 78 Chinese, living in the United States of America, who volunteered to participate, formed the subject pool of this study. Only adults over the age of 18 were selected on the assumption that their ethnocultural identity should have emerged by that age. Fifty of the subjects were from Hawai'i and 25 from Chicago. They were individually administered a three-part questionnaire. The basic demographic information on the subjects is summarized in Table 1.

Materials

A three-part questionnaire was employed in the present study. Part I consists of questions about demographic information of the subject while Part II and Part III are two self-report questionnaires. Part II was the Ethnic Identity Questionnaire, EIQ, (Meredith, 1966, 1967a, 1967b) which was originally developed for the study of Japanese ethnocultural identification for different generations of Japanese-Americans in the United States. The original EIQ consisted of 50 items. In the present study, an attempt was made to adapt it to the study of Chinese populations. Two of the items, questions 16 and 30 which directly follow, were omitted due to their irrelevance:

Table 1

Demographic Summary of Subjects

Number of Subjects	Total	78
	Male	39
	Female	39
Age	Mean	29.192
	Standard Deviation	1.083
Native Language	Chinese	75.64%
	English	15.39%
	Chinese & English	5.13%
	Chinese & Vietnamese	1.28%
	Thai	1.28%
	Vietnamese	1.28%

(16) I would not feel any more tendency to agree with the policies of the Japanese government than any other American would.

(30) Although children may not appreciate Japanese schools at the time, they will later when they grow up.

Some other items were modified into a Chinese context for the purpose of the present study. As examples, consider the following questions where the word "Japanese" was replaced by the word "Chinese":

Original: I especially like Japanese foods

Modified: I especially like Chinese foods.

Original: Its unlucky to be born Japanese.

Modified: Its unlucky to be born Chinese.

Original: I think it is all right for Japanese Americans to become Americanized, but they should retain part of their own culture.

Modified: I think it is all right for Chinese living in the United States to become Americanized, but they should retain part of their own culture.

The respondent can agree or disagree on a five-point scale with each item of the EIQ. The items are composed of preferences for Chinese things (e.g., foods, movies, etc.), personality characteristics (e.g., display of affection, spontaneity, etc.), child rearing customs, family kinship items, community social relationships, discrimination, Chinese cultural heritage, sex roles, interracial attitudes, etc. For most of the questions, highest ethnicity for an item is given a score of 1, the lowest 5. The remaining questions are worded so that the raw score is in the reverse, namely the highest ethnicity would be a score of 5 and the lowest a score of 1. These

questions occur scattered throughout the questionnaire so as to minimize any biased response pattern. Before combining the scores of each item, the reverse worded questions are transformed so that the highest raw score of ethnicity is a score of 1 and the lowest a score of 5 just like the other questions. The total ethnic identification score (Identity Index) for an individual is the sum of the scores on the 48 items (Matsumoto et al., 1970).

Part III consisted of the Symptoms of Depression Scale, SODS (A. Marsella, personal communication, December, 1988), which was designed to be a refined measure of the three dimensions of depressive symptomatology of relative frequency, duration, and severity of the symptoms. It consists of a series of 25 questions testing for the prevalence of five depressive symptoms, i.e., affective, existential, somatic, cognitive, and interpersonal factors. There were five test questions pulling for each symptom presented in alternating order on the questionnaire.

The goal of the SODS was to establish the depressive symptomatology profiles along the five factors for each of the three subject groups. This is accomplished by first calculating the mean response for each of the five factors for each subject group. Secondly, the mean frequency (count per times) and mean duration (in minutes) along each symptom dimension for each subject group are computed. Thirdly, a severity parameter is scored for any item checked by the subject over a range from very strong to very mild. A five-point scale is used for various degrees of severity of the symptoms.

Procedure

Teachers of classes at the University of Hawai'i at Manoa and

Honolulu Community College with a large number of attending Chinese students were contacted who in turn distributed the questionnaires to volunteers in their classes. Additionally, Chinese community contacts in Honolulu and Chicago formed the remainder of the subject pool. The volunteer subjects were given a take home packet consisting of the three-part questionnaires. In all cases, potential volunteers were told that they could fill out a packet if in "some sense" they identified themselves as Chinese. The questionnaires were filled out in complete anonymity.

Part I, namely the demographic section, was used to screen out anyone who did not qualify as being Chinese in any way or who might be underaged. In addition, subjects whose questionnaires which were too incomplete in either Part II (the EIQ) or Part III (the SODS) to permit analysis were also screened out. There was a high percentage of incomplete questionnaires (approximately 20%), particularly with respect to the SODS. Finally, the remaining subjects were accepted for analysis and assigned a unique subject number for the purposes of computer data entry and data tracking.

CHAPTER V
RESULTS

The Identity Index of the subjects was determined by the sum of the scores on their responses to the EIQ. The Identity Index of the 78 subjects was found to range from 117 to 176. Since the EIQ has never been used to determine the level of acculturation in previous research, there are no standardized cut off points to divide the subjects into different groups. Consequently, the subjects were rank ordered by their Identity Indices from low to high. With this ranking, the author arbitrarily divided the subject pool into three equally populated levels of ethnocultural identification. Each level contained 26 subjects with the population having the lowest Identity Indices being the Traditional, the population having the highest Identity Indices being the Westernized, and the population in the middle being considered as Transitional.

The SODS is designed to measure the frequency, duration, and severity along the five depressive symptomatology. There is a total of 25 questions in the SODS and each of the five depressive symptomatology is measured evenly by five questions. Thus, there are five scores each for the frequency, duration, and severity. The scores on frequency of each of the five depressive symptomatology is obtained by averaging the total number of times of occurrence (in one month). Duration was reported as a number of days, hours, or minutes and then converted to a total number of minutes

for each of the 25 questions. Again, scores on duration of each of the five depressive symptomatology is obtained by averaging the total number of minutes (in one month). Finally, a five-point scale is used to indicate the severity of the depressive symptomatology i.e., 1 for "very strong", 2 for "strong", 3 for "mild", 4 for "very mild", and 5 for "no problem." The scores on severity for each of the five depressive symptomatology is again the mean of the individual scores for that symptom. In all cases the "true" average was computed. Blank responses were interpreted as missing data and not as zero.

The hypothesis for this study, based upon previous investigations, was that in the Traditional population, the affect, existential, and cognitive scores would be lower while the somatic and interpersonal scores would be higher than in the Westernized population. The hope was that by making a refined measure in the form of frequency, duration, and severity, that a more sensitive reading of this would result. The Transitional population was expected to lie somewhere in between.

Categorical and correlational statistical analyses in the form of Analysis of Variance and multiple regression were carried out on the data. Three (levels of ethnocultural identification) by five (depressive symptomatology) ANOVA tests with repeated measures were performed to determine if there were any significant differences between the level of ethnocultural identification and the frequency, duration, and severity of the depressive symptomatology. The mean and standard deviation, and the outcome data of the ANOVA for the frequency, duration and severity of the depressive symptoms as a function of level of acculturation were summarized in Tables 2 and 3, 4 and 5, and 6 and 7 respectively. As the

Table 2

Means and Standard Deviations of the Frequency of the Depressive Symptoms as a Function of the Level of Ethnocultural Identification

Level of Ethnocultural Identification	Depressive Symptom	Mean	Standard Deviation
Traditional	Affective	3.592	3.374
	Existential	0.987	1.399
	Somatic	6.146	7.171
	Cognitive	3.592	3.482
	Interpersonal	4.39	4.51
Transitional	Affective	2.454	2.285
	Existential	1.392	2.173
	Somatic	3.6	3.161
	Cognitive	3.331	2.953
	Interpersonal	2.811	3.203
Westernized	Affective	3.083	3.62
	Existential	1.295	3.907
	Somatic	3.561	3.657
	Cognitive	3.342	3.641
	Interpersonal	3.228	4.483

Table 3

Repeated Measures Analysis of Variance of the Frequency of the Depressive Symptoms as a Function of the Level of Ethnocultural Identification

Source	**df**	**MS**	**F**	**p**
Between Subjects				
Ethnocultural Identification	2	38.736	1.027	0.3632
Subjects within Groups	75	37.734		
Within Subjects				
Frequency	4	108.179	13.241	0.0001
Frequency x Ethnocultural Identification	8	11.484	1.406	0.1934
Frequency x Subjects within Groups	300	8.17		

Table 4

Means and Standard Deviations of the Duration of the Depressive Symptoms as a Function of the Level of Ethnocultural Identification

Level of Ethnocultural Identification	Depressive Symptom	Mean	Standard Deviation
Traditional	Affective	1860.622	4582.614
	Existential	1205.519	1614.931
	Somatic	3960.231	6461.602
	Cognitive	2130.712	4386.446
	Interpersonal	2060.156	2495.264
Transitional	Affective	521.423	1096.853
	Existential	440.302	635.95
	Somatic	760.59	1305.69
	Cognitive	827.311	1956.391
	Interpersonal	1210.2	2522.119
Westernized	Affective	109.797	160.991
	Existential	2827.9	6776.227
	Somatic	1808.733	3276.945
	Cognitive	168.892	447.361
	Interpersonal	5303.922	10139.089

Table 5

Repeated Measures Analysis of Variance of the Duration of the Depressive Symptoms as a Function of the Level of Ethnocultural Identification

Source	df	MS	F	p
Between Subjects				
Ethnocultural Identification	2	45549259.54	1.311	0.2824
Subjects within Groups	35	34740763.48		
Within Subjects				
Duration	4	19821538.99	1.85	0.1227
Duration x Ethnocultural Identification	8	20911816.22	1.952	0.057
Duration x Subjects within Groups	140	10715470.55		

Table 6

Means and Standard Deviations of the Severity of the Depressive Symptoms as a Function of the Level of Ethnocultural Identification

Level of Ethnocultural Identification	**Depressive Symptom**	**Mean**	**Standard Deviation**
Traditional	Affective	2.836	1.207
	Existential	3.272	1.302
	Somatic	3.049	3.049
	Cognitive	3.173	1.109
	Interpersonal	3.242	1.072
Transitional	Affective	3.069	0.613
	Existential	3.089	1.024
	Somatic	3.014	0.921
	Cognitive	3.029	0.763
	Interpersonal	3.356	1.047
Westernized	Affective	3.442	1.031
	Existential	3.74	1.421
	Somatic	3.44	1.173
	Cognitive	3.637	0.998
	Interpersonal	3.823	1.196

Table 7

Repeated Measures Analysis of Variance of the Severity of the Depressive Symptoms as a Function of the Level of Ethnocultural Identification

Source	df	MS	F	p
Between Subjects				
Ethnocultural Identification	2	7.65	1.81	0.1744
Subjects within Groups	49	4.227		
Within Subjects				
Severity	4	1.098	2.938	0.0217
Severity x Ethnocultural Identification	8	0.149	0.398	0.9206
Severity x Subjects within Groups	196	0.374		

tables indicate, none of the interactions between the level of ethnocultural identification and the frequency (p=0.1934, df=8), duration (p=0.057, df=8), or severity (p=0.9206, df=8) of the depressive symptomatology was significant. However, the interaction between the level of ethnocultural identification and the duration approached significance (p=0.057). This was probed using the Newman-Kuels test.

The probing indicated that the near-significance could be accounted for by one extreme score, the Westernized-Interpersonal score. This score differed significantly from 10 of the 14 other scores. The only measures it did not differ from were the Westernized-Existential, Traditional-Somatic, Traditional-Interpersonal, and Traditional-Affective. Since these differences are not consistent with those expected from the literature or those predicted in the hypothesis of the study, it is possible that they are due to chance factors. No other differences between any of the means were significant.

In addition to the categorical analyses reported above, the data were subjected to correlational analyses. Three separate multiple regression analyses were performed for the frequency, duration, and severity dimensions in order to determine if any of the five depressive symptoms would yield significant relationships to the level of ethnocultural identification as measured by the Identity Index. The frequency, duration, and the severity of the five depressive factors (affective, existential, somatic, cognitive and interpersonal) were the predictor variables and the ethnocultural identity was the criterion variable. Table 8, 9, and 10 summarized the results of the ANOVA from the multiple regression analysis. As the tables indicated, the F values were all non-significant: F(5,

Table 8

Summary Table for Analysis of Variance from the Multiple Regression Analysis with the Frequency of the Depressive Symptoms as Repeated Measures

Source	**df**	**MS**	**F**	**p**
Regression	5	224.884	1.164	0.3352
Residual	72	193.17		
Total	77			

Table 9

Summary Table for Analysis of Variance from the Multiple Regression Analysis with the Duration of the Depressive Symptoms as Repeated Measures

Source	**df**	**MS**	**F**	**p**
Regression	5	309.651	2.353	0.063
Residual	32	131.614		
Total	37			

Table 10

Summary Table for Analysis of Variance from the Multiple Regression Analysis with the Severity of the Depressive Symptoms as Repeated Measures

Source	**df**	**MS**	**F**	**p**
Regression	5	174.556	0.835	0.5316
Residual	46	209.014		
Total	51			

72)=1.164, p=0.3352; F(5, 32)= 2.353, p=0.063; F(5, 46)=0.835, p=0.5316. Table 11, 12, and 13 summarized Beta coefficients of the three multiple regression analyses. The frequency, duration, and severity of the five depressive symptoms were not significant predictors of the individual's ethnocultural identification.

Based on the results of the categorical and correlational analyses, hypotheses 1, 2, and 3 of the present study were not supported. The above results indicate that the present study did not replicate previous work on depression, or serve to refine the SODS as a measure of the frequency, duration, and severity of the depressive symptomatology.

The author re-examined carefully the nature of the EIQ and SODS questionnaires and the particularities of Chinese culture as well as some of the feedback expressed by subjects which might account for the non-significant outcome of this study. There are a number of reasons to question the validity of the EIQ and SODS when applied as a measure of ethnocultural identification for a Chinese population and the depressive symptomatology respectively. This will be discussed in the following section.

Table 11

Summary Table for Multiple Regression Analysis with the Frequency of the Depressive Symptoms as Repeated Measures

Independent Variable	*ß*	SE *ß*	Standard *ß*	t	p
Affective	-0.369	0.623	-0.083	0.592	0.5558
Existential	1.256	0.864	0.24	1.454	0.1502
Somatic	-0.489	0.41	-0.178	1.194	0.2366
Cognitive	0.249	1.994	1.666	0.388	0.6991
Interpersonal	-0.416	0.6	-0.123	0.694	0.49

Table 12

Summary Table for Multiple Regression Analysis with the Duration of the Depressive Symptoms as Repeated Measures

Independent Variable	*β*	SE *β*	Standard *β*	t	p
Affective	-0.001	0.001	-0.205	0.729	0.4714
Existential	1.069E-4	0.002	0.031	0.064	0.9493
Somatic	1.997E-4	0.001	0.069	0.231	0.8187
Cognitive	-0.001	2.037	1.694	1.303	0.202
Interpersonal	0.001	0.001	0.447	0.92	0.3644

Table 13

Summary Table for Multiple Regression Analysis with the Severity of the Depressive Symptoms as Repeated Measures

Independent Variable	*ß*	SE *ß*	Standard *ß*	t	p
Affective	4.147	3.376	0.284	1.228	0.2256
Existential	-0.691	2.7	-0.61	0.256	0.7993
Somatic	-3.439	3.513	-0.245	0.979	0.3327
Cognitive	1.268	2.013	1.679	0.382	0.7043
Interpersonal	2.081	3.273	0.162	0.636	0.5279

CHAPTER VI
DISCUSSION

The main purpose of this study was to explore the effect of ethnocultural identification on the expression and presentation of depressive symptomatology in Chinese culture. The second purpose was to attempt a refine measure of different dimensions (frequency, duration, severity) of the five components of depressive symptomatology (affective, existential, somatic, cognitive, interpersonal).

In many cross-cultural studies, it has been found that Chinese do not present the same depressive symptomatology when compared to the Western population i.e. the American. There is a tendency for Chinese to present more somatic and less affective complaints in the expression of depression. On the contrary, the American counterparts tend to show more affective and less somatic depressive symptoms. In the present study, it was hypothesized that the ethnocultural identification pose an effect on the expression and presentation of depressive symptomatology. In other words, it was expected that the Westernized Chinese would present more depressive symptomatology of the affective, cognitive, and existential factors than the Traditional and Transitional Chinese.

Problems with the EIQ

Little was known about the ethnicity and acculturation of ethnic

minorities in the United States until the 1970's. Most of the early research was done within the disciplines of anthropology and sociology in an attempt to understand the process of acculturation within a group. Psychology is a late comer to this research. However, research has moved from viewing the acculturation process only in terms of a group level to a more personal and individual level. The emphasis is more on ethnocultural identification rather than the process of acculturation. It is currently still a struggle within psychology to find a comprehensive model to define and describe the construct of ethnocultural identification. The constructs of ethnicity, acculturation, and ethnocultural identification have as yet not been well researched and understood.

Based on the previous literature, ethnocultural identification has been crudely divided into three the broad categories of Traditional, Transitional, and Westernized. Those who maintain a strong sense of ethnocultural identification to their original culture are considered to be Traditional. Those who identity themselves more with the mainstream American culture are considered to be Westernized. Finally, those who incorporate American culture while still maintaining part of their identity to the original culture are considered to be Transitional. However, no good operational definitions exist for these distinct groups. Moreover, the majority of this research has focused on the Hispanic population.

Up to today, there are only two measures available for potentially investigating the level of acculturation for Asians and these are not without problems. The first one to mention is the Suinn-Lew Asian Self-Identity Acculturation Scale which is a questionnaire consisting of 21 questions (Suinn et al., 1987). It is borrowed from the models used to describe the

Mexican American population. It consists of an uneven number of questions for measuring different dimensions in ethnocultural identification such as four questions for language, four questions for identity, four questions for friendship choice, five questions for behaviors, three questions for generations/geographic history, and one question for attitudes. In addition, it is designed for the general Asian population without considering the major differences to be found among different Asian cultures.

The second measure is the EIQ which was chosen and adapted to measure the levels of ethnocultural identification of the Chinese in the present study. The EIQ was designed for Japanese-Americans in the 1960's and has not been revised since then. Culture is a dynamic rather than static construct and it changes over time. The construct and the wording of some of the questions may not be appropriate or applicable to the current cultural interplay of two cultures. It was originally developed with the intent to study the differences across three generations of the Japanese-Americans in the United States. It was not specifically designed to either measure the level of ethnocultural identification or be applied to other ethnic groups such as the Chinese. As mentioned before, there are no intrinsic cut off points for different levels of ethnocultural identification. Moreover, in contrast to Chinese culture, Japanese culture is very homogeneous with little tolerance for differences in individual behavior; rather Japanese culture is far more group oriented. Chinese culture itself is not a uni-ethnic culture but a multi-ethnic culture. Even the way the Japanese emigrated to the United States reflects this orientation. Most of the emigration took place during only a short period early in the 20th century. Japanese Americans even conveniently rank themselves in terms of the generations from that

time on as Isei (first generation, the emigrant generation), Nisei (second generation, first born in America), and Sansei (third generation, second born in America). Chinese have been coming to America from various parts of China, spread out almost continuously for the last 150 years. There is no similar convenient ranking system for Chinese-Americans as a whole.

It follows that there is a narrower range of norms for the Japanese while there is a wider spread of norms among the Chinese. Consequently, attempts to tease out the Traditional from the Westernized become all that much harder. In original study (1967a, 1967b), the EIQ range collected in the 114 subject sample is 98 to 177. The present study with 78 subjects obtained a range of 122 to 183 (117 to 176 scaled from 48 questions in the EIQ to 50 questions in Meredith's scale). A plausible explanation for the difference in results in the study of the Japanese and Chinese cases is summarized in Figures 1 and 2. Figures 1 and Figure 2 showed the plausible distribution of Traditional, Transitional, and Westernized groups within the Japanese-American and Chinese-American populations respectively.

Furthermore, as the figures show, with its narrow range of variation and its mean being more obviously shifted to the left, the Traditional Japanese population could allow for a discernable peak as well as permit the development of a discernable Transitional peak being defined between the Traditional and the Westernized extremes. As indicated in Figure 1, clear separation of the groups because of the relatively narrow distribution characterize the uni-ethnic Traditional group. In the Chinese case, where the Traditional peak is much more spread out and not as strongly shifted to the left, there is considerable overlap among the Traditional, Transitional,

Figure 1

The plausible distribution of Traditional, Transitional, and Westernized groups within the Japanese American population showing the clear separation of the groups.

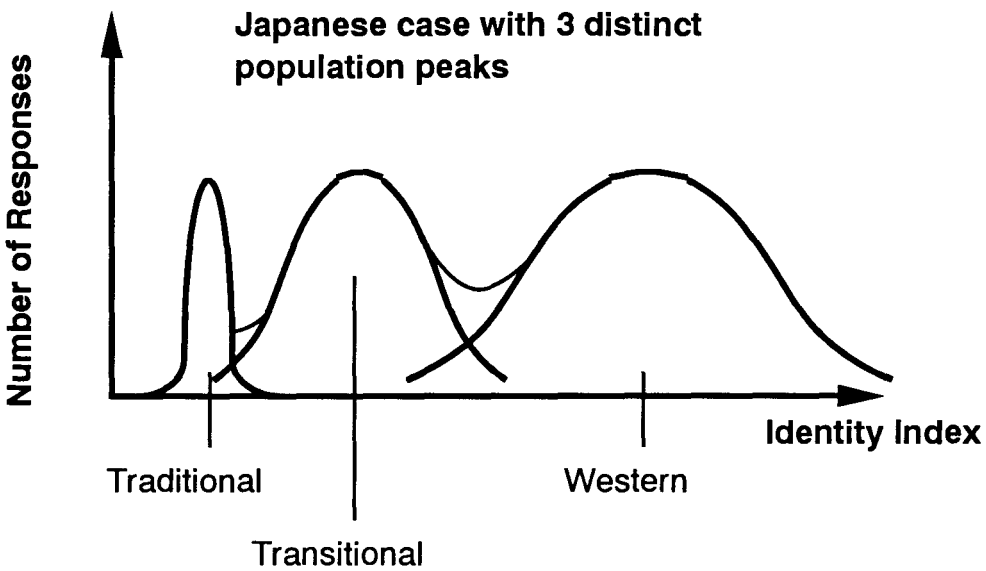
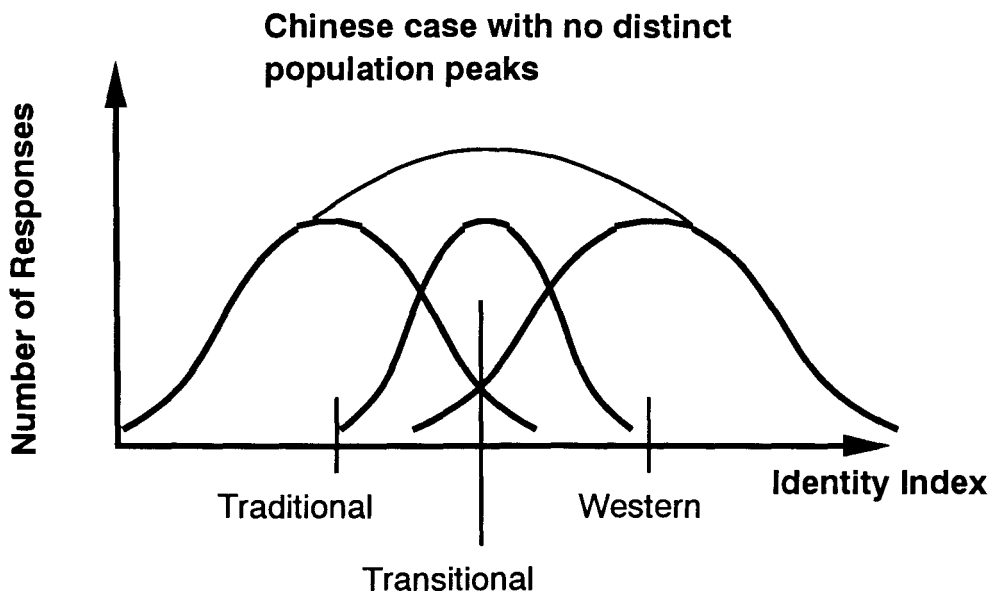


Figure 2

The plausible distribution of Traditional, Transitional, and Westernized groups within the Chinese American population showing no distinct separation of the groups.



and Westernized groups so that there are no obvious cutoff points to differentiate among the three. Therefore, Figure 2 showed no distinct separation of the groups because of the relatively broad distribution characterizing the multi-ethnic Traditional group.

Moreover, the EIQ is not a comprehensive measure of ethnocultural identification. It only measures the attitude, not the behavior of an individual. However, the person's attitude may not totally coincide with her/his behavior. Recent research is trying to take a look at the behavioral dimension of ethnocultural identification.

Meredith's EIQ scale, in retrospect, seems to have tapped in on two things that are not applicable when working with Chinese culture. First, he was dealing with a homogeneous culture. The view of what is traditional Japanese was closely shared by his subjects. Second, he was dealing with an emigrant group that could conveniently classify itself into the three stages that one wished to study (Traditional = Isei, Transitional = Nisei, and Sansei = Westernized). This convenient classification does not emerge when working with Chinese Americans. Thus it is not that surprising that the present study failed to differentiate out Traditional, Transitional, and Westernized groups by adopting Meredith's EIQ which was designed for studying the Japanese. Meredith's success was that he tapped into patterns that were offered up by Japanese culture. To properly study the Chinese case, it will be necessary to creatively tap into patterns that are offered up by Chinese culture.

Problems with the SODS

The SODS was developed as an attempt to refine the measure of the

depressive symptomatology profile along the frequency, duration, and severity dimensions rather than just noting the presence or absence of certain depressive symptomatology. However, it seems to be difficult for some subjects to respond to some of the questions in terms of frequency and duration. For example:

(18) I am eating much more or less than I used to.

(20) I don't care about my appearance.

In addition, the subject is asked to retrospectively describe their emotions and behavior. The inaccuracy of their memory may pose a threat to any accurate reporting of the actual occurrence of their behavior. Further, the self perception of an individual can result in that subject reporting behavior that is different from the actual behavior.

Problems in Studying Chinese Culture

It is perhaps appropriate here to note some observations concerning the problems encountered in studying the Chinese population. Firstly, and perhaps most importantly, there is a Chinese cultural tendency to be unwilling to share one's true feelings and thoughts with others. It is a direct consequence of Chinese culture that it can be difficult to get the subjects to complete all of the questions on the questionnaires or to get genuine responses from Chinese subjects. There is a tendency, should a potential subject even bother to fill out the questionnaires, to pick and choose those questions that they may feel a bit more comfortable about filling out.

Secondly, there is the practical aspect of Chinese culture such that without some immediate direct benefit to the individual, it is difficult to motivate a Chinese subject to complete a task such as filling out a

questionnaire. There is no "sense of duty" to completeness. This could account for much of the incompleteness found in filling out such a detailed questionnaire as the SODS.

Thirdly, several problems may exist with there being only an English version of the measures. While the very nature of the study is one in which the majority of the subjects (75.64%) are native speakers of some form of Chinese, without a choice of languages (written Chinese or English) for the subject to choose from, this study is potentially biased towards a Western view. Those who could read and understand English well in order to fill in the two questionnaires may be more Westernized. Those who could not read English at all may be more traditional, but also would not be able to fill in the questionnaires. Thus, the sample collected may be skewed to a more Westernized population. It would be better to offer both written Chinese and English versions so that the individuals filling it out would not be so dependent upon only one language source. The use of the English language could indeed bias everything in the direction of Westernization. Of course, a purely Chinese version would tend to bias things in the direction of the Traditional Chinese. In addition, since the first language of most of the subjects in the present study is Chinese, there is no way to assess their understanding and interpretation of the questions, even though they made an attempt to fill in the two measures. The subject may have particular difficulty in understanding the questions dealing with the abstract psychological and emotional constructs.

Fourthly, aside from obvious language problems, traditional Chinese world views are not psychological in their nature, and so this way of relating to the world and oneself is not as prevalent as found in the West. This could

also possibly explain much of the incompleteness of the responses to the two measures. Approximately 20% of all questionnaires returned had to be rejected because they were too incomplete to extract any useful data.

Finally, subjects not accustomed to the format of a questionnaire or survey (which is a Western thing) may be confused over what they have to do.

CHAPTER VII
FUTURE RESEARCH

The present study was an attempt to examine the relationship between the ethnocultural identification of an individual to his/her expression and presentation of depressive symptomatology. The results of this study did not confirm the hypotheses nor did they support previous findings. After a careful examination of the possible explanations for the non-significant results in the previous section, the author suggests that a series of future studies should be undertaken to provide a better understanding of the construct of ethnocultural identification and the configuration of depressive symptomatology among Chinese before incorporating such identification and symptomatology into a single study as was done in the present study.

The study of the constructs of ethnocultural identification and ethnicity is itself worthy of research. Ethnocultural identification should be examined in combination with attitudinal, behavioral, personality, and situational factors. In addition, an individual's ethnocultural identification should not be viewed as solely dependent upon his/her acculturation into the host (American) culture. Rather, cross-validation of the individual's ethnocultural identification to the original culture should also be considered.

It is necessary to establish the baseline of the configuration of the depressive symptomatology for each cultural group before any cross-

cultural comparison be performed. This could provide standardized comparison of the differences in depressive symptomatology cross-culturally.

The present study was confined to a Chinese-American sample because of limited financial and temporal resources. As discussed in the previous section, Chinese traditional culture encompasses many different subcultures in contrast to the more homogeneous Japanese culture. China has a broader variety of climates, geography, political systems and spoken languages than all of Europe! The Chinese-American population is very complex since it consists of a mixture of different Chinese subcultures as well as the interaction with the American culture. Thus, the use of a Chinese-American sample did not allow a convenient classification into Traditional, Transitional, and Westernized as that was found in the Japanese-American case because there are really "many Chinas" rather than just one.

In examining the effects of Chinese ethnicity on depression, the approach of classifying different Chinese subgroups by the EIQ ought to be abandoned. Contemporarily, Hong Kong, PRC and Taiwan are three regional populations, each with a different degree of Westernization and industrialization. They provide three natural samples in studying the effects of Chinese ethnicity and Westernization on depression. An alternative approach to the present study is to collect SODS data from Chinese in Hong Kong, PRC, and Taiwan. In turn, this should be compared to an American (Western) control population. Further, the SODS should be administered in a more tightly controlled setting so as to overcome the high rate of incomplete questionnaires as well as some of the other problems mentioned

above. One possibility would be to give it to a group of volunteers to fill it out in a room together with an available monitor to answer questions and to directly encourage completeness.

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APPENDIX A

Demographics Questionnaire for Chicago Subjects

PART I

Please answer all questions in this section fully.

1. Today's date: _____ _____ _____
   (Month) (Day) (Year)

2. Age: _____ Sex (M or F): _____ Birth Date: _____ _____ _____
   (Month) (Day) (Year)

3. Please indicate the current level of your education:

   _____ High School

   _____ Undergraduate (if so, how many years _____)

   _____ Graduate School (degree you are pursuing _____)

4. Religious affiliation: _____

5. Most of the time, what do you tell people when you mention what your ethnic background is?

   _____

6. Are you a foreign student? _____ Yes _____ No

7. Before age 18, where did you live? Please indicate the number of years.

   _____ U.S.A.

   _____ Hong Kong

   _____ Macao

   _____ Mainland China (PRC)

   _____ Taiwan (ROC)

   _____ Other (please specify _____)

8. Within your family, the dominant cultural tradition is:

   _____ Chinese _____ Other (please specify _____)

9. How long have you been living in the U.S.A.? _____ _____
   (Years) (Months)

10. Does your family live in Chicago? _____ Yes _____ No

11. Do your live with your family? _____ Yes _____ No

12. Your native language is :

_____ Chinese

_____ English

_____ Malay / Indonesian

_____ Spanish

_____ Vietnamese

_____ Other (please specify _____)

13. Do you speak other languages? ____ Yes ____ No

(if yes, please specify _____)

14. Your Father's ethnic background is:

_____ Chinese

_____ European

_____ Filipino

_____ Hawaiian

_____ Japanese

_____ Korean

_____ Vietnamese

_____ Other (specify: _____)

15. Your Mother's ethnic background is:

_____ Chinese

_____ European

_____ Filipino

_____ Hawaiian

_____ Japanese

_____ Korean

_____ Vietnamese

_____ Other (specify: _____)

APPENDIX B

Demographics Questionnaire for Hawai'i Subjects

PART I

Please answer all questions in this section fully.

1. Today's date: _____ _____ _____
   (Month) (Day) (Year)

2. Age: _____ Sex (M or F): _____ Birth Date: _____ _____ _____
   (Month) (Day) (Year)

3. Please indicate the current level of your education:

   _____ High School

   _____ Undergraduate (if so, how many years _____)

   _____ Graduate School (degree you are pursuing _____)

4. Religious affiliation: _____

5. Most of the time, what do you tell people when you mention what your ethnic background is?

   _____

6. Are you a foreign student? _____ Yes _____ No

7. Before age 18, where did you live? Please indicate the number of years.

   _____ U.S.A.

   _____ Hong Kong

   _____ Macao

   _____ Mainland China (PRC)

   _____ Taiwan (ROC)

   _____ Other (please specify _____)

8. Within your family, the dominant cultural tradition is:

   _____ Chinese _____ Other (please specify _____)

9. How long have you been living in the U.S.A.? _____ _____
   (Years) (Months)

10. Does your family live in Hawai'i? _____ Yes _____ No

11. Do your live with your family? _____ Yes _____ No

12. Your native language is :

_____ Chinese

_____ English

_____ Malay / Indonesian

_____ Spanish

_____ Vietnamese

_____ Other (please specify _____)

13. Do you speak other languages? ____ Yes ____ No

(if yes, please specify _____)

14. Your Father's ethnic background is:

_____ Chinese

_____ European

_____ Filipino

_____ Hawaiian

_____ Japanese

_____ Korean

_____ Vietnamese

_____ Other (specify: _____)

15. Your Mother's ethnic background is:

_____ Chinese

_____ European

_____ Filipino

_____ Hawaiian

_____ Japanese

_____ Korean

_____ Vietnamese

_____ Other (specify: _____)

APPENDIX C

Ethnic Identity Questionnaire (EIQ)

PART II

To the right of each statement, circle the phrase which best describe how you feel about the statement, e.g., agree, disagree, neutral. Do no skip any statement.

SA = Strongly Agree; A = Agree; N = Neutral; D = Disagree; SD = Strongly Disagree

1.	A good child is an obedient child.	SA A N D SD
2.	It is all right for personal desires to come before duty to one's family.	SA A N D SD
3.	Chinese should not disagree among themselves if there are Caucasians around.	SA A N D SD
4.	I especially like Chinese foods.	SA A N D SD
5.	A good Chinese background helps prevent youth from getting into all kinds of trouble that American youth have today.	SA A N D SD
6.	It's unlucky to be born Chinese.	SA A N D SD
7.	It would be more comfortable to live in a neighborhood which has at least a few Chinese than in one which has none.	SA A N D SD
8.	When I feel affectionate I show it.	SA A N D SD
9.	It is a duty of the eldest son to take care of his parents in their old age.	SA A N D SD
10.	Chinese who enter into new places without any expectation of discrimination from Caucasians are naive.	SA A N D SD
11.	I think it is all right for Chinese living in the United States to become Americanized, but they should retain part of their own culture.	SA A N D SD
12.	A wife's career is just as important as the husband's career.	SA A N D SD
13.	In regard to opportunities that Americans enjoy, Chinese living in the United States are deprived of many of them because of their ancestry.	SA A N D SD
14.	It is all right for children to question the decisions of their parents once in awhile.	SA A N D SD
15.	In the Chinese community, human relationships are generally more warm and comfortable than outside in American society.	SA A N D SD

SA = Strongly Agree; A = Agree; N = Neutral; D = Disagree; SD = Strongly Disagree

16.	The best thing for the Chinese living in the United States to do is to associate more with Caucasians and identify themselves completely as Americans.	SA A N D SD
17.	I tend to hide my feelings in some things, to the point that people may hurt me without their knowing it.	SA A N D SD
18.	It is a shame for a Chinese American not to be able to understand Chinese.	SA A N D SD
19.	Chinese people have an unusual refinement and depth of feeling for nature.	SA A N D SD
20.	I would be disturbed if Caucasians did not accept me as an equal.	SA A N D SD
21.	It is unrealistic for a Chinese living in the United States to hope that he can become a leader of an organization composed mainly of Caucasians because they will not let him.	SA A N D SD
22.	I don't have a strong feeling of attachment to China.	SA A N D SD
23.	I am not too spontaneous and casual with people.	SA A N D SD
24.	It is not necessary for Chinese parents living in the United States to make it a duty to promote the preservation of Chinese cultural heritage in their children.	SA A N D SD
25.	An older brother's decision is to be respected more than that of a younger one.	SA A N D SD
26.	Socially, I feel less at ease with Caucasians than with Chinese.	SA A N D SD
27.	The Chinese are no better or no worse than any other ethnic group.	SA A N D SD
28.	Even though I live in the United States, I always think of myself as Chinese.	SA A N D SD
29.	Life in the United States is quite ideal for Chinese living in the United States.	SA A N D SD
30.	When in need of aid, it is best to rely mainly on relatives.	SA A N D SD
31.	It is better that Chinese date only Chinese.	SA A N D SD
32.	Parents who are very companionable with their children can still maintain respect and obedience.	SA A N D SD
33.	Once a Chinese always a Chinese.	SA A N D SD
34.	Good relations between Chinese and Caucasians can be maintained without the aid of traditional Chinese organizations.	SA A N D SD

SA = Strongly Agree; A = Agree; N = Neutral; D = Disagree; SD = Strongly Disagree

35.	It is nice if a Chinese learns more about Chinese culture, but it is really not necessary.	SA A N D SD
36.	It would be better if there were no all-Chinese communities in the United States.	SA A N D SD
37.	China has great art heritage and has made contributions important to world civilization.	SA A N D SD
38.	Those Chinese living in the United States who are unfavorable toward Chinese culture have the wrong attitude.	SA A N D SD
39.	I believe that, "He who does not repay a debt of gratitude cannot claim to be noble."	SA A N D SD
40.	To avoid being embarrassed by discrimination, the best procedure is to avoid places where a person is not totally welcomed.	SA A N D SD
41.	I usually participate in mixed group discussions.	SA A N D SD
42.	Many of the Chinese customs, traditions, and attitudes are no longer adequate for the problems of the modern world.	SA A N D SD
43.	I enjoy Chinese movies/videos.	SA A N D SD
44.	It is a natural part of growing up to occasionally show disrespect for at teachers, policemen, and other grownups in authority.	SA A N D SD
45.	A person who raises too many questions interferes with the progress of a group.	SA A N D SD
46.	If I were to go to church, I would prefer an all-Chinese church.	SA A N D SD
47.	One can never let himself down without letting the family down at the same time.	SA A N D SD
48.	Interethnic marriages between Chinese and Caucasians should be discouraged.	SA A N D SD

APPENDIX D

Symptoms of Depression Scale (SODS)

PART III

This is a self-report section about your behavior patterns. It is *not* a test. There are no right or wrong answers. An answer is right if it is true of you.

To the right of each statement there are three columns titled **FREQUENCY, DURATION and SEVERITY.** In the first column, FREQUENCY, write in how often this condition has occurred in the last 30 days. In the second column, DURATION, write in how long the condition lasts when and if it does occur. The third column, SEVERITY, asks how intense the condition is when it occurs. Check *only one box*, either very strong, strong, mild, very mild, or not a problem.

For example:

		FREQUENCY: *How often has this condition occurred in the last 30 days? (i.e. number of times)*	DURATION: *In general, when the condition occurs, how long does it last? (minutes, hours, days, ...specify)*	SEVERITY: ***VERY STRONG*** *Unable to meet daily responsibilities due to discomfort.*	***STRONG*** *Can meet daily responsibilities with much discomfort.*	***MILD*** *Can meet daily responsibilities with mild discomfort.*	***VERY MILD*** *Can meet daily responsibilities with mild discomfort.*	***NO PROBLEM*** *Can meet daily responsibilities without discomfort.*
1	I daydream.	6	1 day		X			

		How often has this condition occurred in the last 30 days? (i.e. number of times)	*In general, when the condition occurs, how long does it last? (minutes, hours, days, ...specify)*	***VERY STRONG*** *Unable to meet daily responsibilities due to discomfort.*	***STRONG*** *Can meet daily responsibilities with much discomfort.*	***MILD*** *Can meet daily responsibilities with mild discomfort.*	***VERY MILD*** *Can meet daily responsibilities with mild discomfort.*	***NO PROBLEM*** *Can meet daily responsibilities without discomfort.*
		FREQUENCY	**DURATION**	**SEVERITY**				
1	I feel angry and irritable.							
2	I feel hopeless.							
3	I feel weak and exhausted.							
4	I feel my memory is poor.							
5	I have lost interest in sexual relations.							
6	I feel anxious, tense and frightened.							
7	I feel my life has no meaning or purpose.							
8	I am sleeping much more or less than I used to.							
9	I have difficulty concentrating.							
10	I feel alone and isolated from people.							
11	I feel guilty and deserving of blame.							
12	I feel worthless.							
13	I feel I have poor health.							

		How often has this condition occurred in the last 30 days? (i.e. number of times)	In general, when the condition occurs, how long does it last? (minutes, hours, days, ...specify)	***VERY STRONG*** Unable to meet daily responsibilities due to discomfort.	***STRONG*** Can meet daily responsibilities with much discomfort.	***MILD*** Can meet daily responsibilities with mild discomfort.	***VERY MILD*** Can meet daily responsibilities with mild discomfort.	***NO PROBLEM*** Can meet daily responsibilities without discomfort.
		FREQUENCY	**DURATION**	**SEVERITY**				
14	I feel my thoughts are confused and unclear.							
15	I am unable to get alone with people.							
16	I feel sad and depressed.							
17	I feel helpless to change my life.							
18	I am eating much more or less than I used to.							
19	I have difficulty making decisions.							
20	I don't care about my appearance.							
21	I am unable to feel any pleasure or enjoyment.							
22	I have been thinking of taking my life.							
23	I have headaches.							
24	I feel my mind is slow.							
25	I prefer to be alone.							

APPROVAL SHEET

The thesis submitted by Fung Chu Ho has been read and approved by the following committee:

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The final copies have been examined by the director of the thesis and the signature which appears below verifies the fact that any necessary changes have been incorporated and that the thesis is now given final approval by the Committee with reference to content and form.

The thesis is therefore accepted in partial fulfillment of the requirements for the degree of Master of Arts.

3-30-92
Date


Director's Signature