"BLANDNESS OF THE HEART":

VERBAL EXPRESSION OF EMOTIONS IN THE CHINESE

by

Edward Kai-ming Shen

M.Soc.Sc., University of Hong Kong, 1981

B.Soc.Sc., University of Hong Kong, 1978

DISSERTATION SUBMITTED IN PARTIAL FULFILMENT OF

THE REQUIREMENTS FOR THE DEGREE OF

DOCTOR OF PHILOSOPHY

in the Department

of

PSYCHOLOGY

© Edward K. Shen 1996

SIMON FRASER UNIVERSITY

July 1996

Approval

Name: Edward Kai-ming Shen

Degree: Doctor of Philosophy (Clinical Psychology)

Title of Thesis: "Blandness of the Heart": Verbal Expression of Emotions
in the Chinese.

Examining Committee: Chairman: Dr. Vito Modigliani

_____

Dr. Robert G. Ley
Senior Supervisor

_____

Dr. James E. Marcia

_____

Dr. William Turnbull

_____

Dr. Gary D. Poole
Internal-External Examiner

Dr. Marv Westwood
External Examiner
Professor
Department of Counselling Psychology
University of British Columbia

Date Approved: _July 22, 1996_

PARTIAL COPYRIGHT LICENSE

I hereby grant to Simon Fraser University the right to lend my thesis, project or extended essay (the title of which is shown below) to users of the Simon Fraser University Library, and to make partial or single copies only for such users or in response to a request from the library of any other university, or other educational institution, on its own behalf or for one of its users. I further agree that permission for multiple copying of this work for scholarly purposes may be granted by me or the Dean of Graduate Studies. It is understood that copying or publication of this work for financial gain shall not be allowed without my written permission.

Title of Thesis/Project/Extended Essay

"Blandness of the Heart": Verbal Expression of Emotions in

the Chinese

Author:_____   _ _   _____
    (signature)

    Edward Kai-ming Shen
    (name)

    _____ July 28, 1996 _____
    (date)

Abstract

The present study focused on the verbal expression of emotions of Chinese people, in comparison to that of White people. Ninety-four White college students and 95 Chinese college students were asked to imagine an affect-arousing event (e.g. the breaking-up of a relationship), and to then verbally complete sentences about the event pretending they were speaking to a friend and a counsellor, respectively. White participants responded in English. Chinese participants responded either in English or in Cantonese. Three dependent measures were taken: emotional words used, emotional ideas without emotional words, and emotional ideas with somatic referents. Overall verbal emotional expressiveness was defined as the sum of the first two measures. These measures were rated by a bilingual and bicultural rater. The results suggested that Chinese participants expressed a lower proportion of emotional words than White participants, and the Chinese were less emotionally expressive overall. Interestingly, Chinese participants used more emotional words in English than in Cantonese. Chinese participants also showed a significantly higher proportion of somatic referents than did White participants, but there was no evidence that the Chinese produced more of other forms of indirect verbal expressions. Both Chinese and White participants gave more somatic referents in the counsellor situation than in the friend situation. Implications of the findings for psychotherapy with the Chinese are discussed, with special reference to the Canadian context.

iv

Acknowledgments

I would like to express my gratitude to Bob Ley for his guidance and support as a senior supervisor as well as a friend throughout my years in graduate school. Thanks is also directed to Jim Marcia for facilitating my growth as a person and a clinician. Special thanks is also given to Bill Turnbull, whose shrewd comments and criticisms have helped me tremendously in my research.

This study would not have been possible without the help of Tony Watt and Peggy Chang, who assisted with the data collection, and Cynthia Davis and Melissa Tsang, who generously donated their time to act as co-raters for the study. To all of you I wish to say -- I thank you sincerely.

Table of Contents

List of Tables

List of Figure

I. Introduction

In recent decades, Canada has witnessed an increased influx of immigrants and refugees from countries throughout the world. The 1991 national census found that 28% of the entire immigrant population came between 1981 and 1991. Of these immigrants, 48% were from Asian countries, and the majority of them were of Chinese descent. In 1991, the Chinese population in Canada was 586,645, and in British Columbia alone it amounted to 181,185. After Toronto, Vancouver now has one of the largest Chinese communities in Canada (population 167,425), and about a quarter of the Chinese population in Vancouver are from Hong Kong. As a result of these demographic changes, Chinese has become the language most often spoken in Vancouver other than English. In the 1991 census, 130,680 people in Vancouver identified Chinese as their first language, and 85% claimed to be using it at home. Of all the dialects of Chinese, Cantonese is the most predominant as this is the language spoken in Hong Kong, where the majority of the recent Chinese immigrants to Canada originate.

The changing composition of the Canadian population has exerted pressure on provincial health systems to accommodate the needs of these immigrants. The Canadian Health Act (Section 12) requires that "all Canadians have reasonable access to insured health services unimpeded by charges or other factors". However, in a conference on Mental Health Issues of Chinese Canadians in British Columbia, Beiser (1990) reported that the Federal Government Task Force on the Mental Health of

Immigrants and Refugees in Canada revealed that ethnocultural communities do not feel that they have equitable access to the health care system. At the same conference, Peters (1990) also pointed out that Chinese make up 13% of the population that the Greater Vancouver Mental Health Service caters for, but only 7.5% of their actual caseload, representing a utilization rate of only 58%. On the other hand, Anglo-Canadians were over-represented, with a utilization rate of 119%. The underutilization of mental health services by the Chinese community is found across major cities in North America (Leong, 1986, 1994; Sue & Kirk, 1975; Sue & Sue, 1972, 1974).

A number of differences between Chinese and White people may underlie these trends. For example, Chinese people perhaps enjoy better mental health than White people in general, and consequently have a lesser need for services. Chinese people may also have a different way of conceptualizing mental health issues, and hence prefer alternative forms of treatment. Linguistic and cultural barriers in the help-seeking process may perhaps prevent better entry or integration of the Chinese into the existing mental health system.

Attempts have been made to address each of these issues. Lin (1983) reported a lower prevalence rate in the Chinese, compared to White populations, for certain neurotic conditions such as obsessive-compulsive neurosis, depression, and alcoholism. However, more recent studies by Cheng, Leong, and Geist (1993), and Dion and Giordano (1990) conducted in American and Canadian universities suggested that Asian students, who included Chinese, experienced more personal and emotional

problems than White North American students. Abe and Zane (1990) also found that their sample of foreign-born Asian American students (of which 23% were Chinese in ethnicity) showed greater levels of psychological maladjustment than their White American counterparts, even after controlling for variables that have been confounded with ethnicity, such as demographics, response set, and personality styles. Zheng and Berry (1991) studied Chinese sojourners in Canada and discovered that they experienced poorer psychological health, especially after arrival in Canada. As a result, the idea that Chinese people might enjoy better mental health has been appropriately discarded in recent years.

The second possible explanation is that the psychological problems experienced by the Chinese are manifested differently, and then are less readily captured by Western diagnostic systems. Tseng et al. (1990), for example, demonstrated how in minor psychiatric disorders (neuroses, situational adjustment reaction, or acute emotional reaction) sociocultural factors play a significant role in determining the symptomatology. The same may be true of depression, the mental disorder found among the Chinese that has received the most attention from researchers. One consistent finding is that depression has a much lower incidence in the Chinese compared to that in the White population (Cheung, 1991; Kleinman, 1977; Tseng, 1975). Interestingly, neurasthenia, which comprises many somatic discomforts, is a commonly diagnosed condition in most Chinese societies. This diagnosis, which was popularized by George Beard in the late nineteenth century, is considered obsolete in

western classification systems. Kleinman (1982) suggested that neurasthenia acts as a substituting condition for depression, because of the sociocultural implications that surround neurasthenia in the Chinese context. Although there is still no conclusive understanding of the relationship between depression and neurasthenia for the Chinese, there is a general belief that Chinese people are less likely to express their emotional problems and are more likely to present somatic complaints when they seek help. This hypothesis has received empirical support from a number of studies (Cheung, Lau, & Waldmann, 1980-81; Tseng, 1975; Tseng & Hsu, 1969; White, 1982).

Leff (1973) attempted an explanation for this phenomenon. He claimed that the Chinese language, compared to English, was less rich in feeling words. From this he concluded that the Chinese were less able to differentiate various emotions. In a later paper, he modified his conclusion to suggest that Chinese people would find it difficult to verbally communicate differentiated emotional experience, and not necessarily that the experience itself should be undifferentiated (Leff, 1977). Such remarks have perhaps promoted Chinese researchers to try to explore the problem using a perspective that is specific to the culture, i.e. an emic approach. For example, Cheung and Lau (1982) found that situational variables partially determined the verbal expression of emotions in Chinese patients. The authors concluded from the study that situational variations influence the way Chinese patients conceptualize their problems, which in turn enable the patients to place their focus on somatic or emotional symptoms. Furthermore, they demonstrated that, given the appropriate solicitation, Chinese

patients were just as emotionally expressive in words as Western patients were.

This, and other similar findings, raises a number of important issues. First, although studies done by westerners have repeatedly shown that Chinese people tend to present more somatic complaints than White people, few studies have looked into whether Chinese people actually give *fewer* verbal emotional expressions than their White counterparts. So far, the impression that Chinese people do not express much emotion verbally is based on clinical anecdotes provided by mental health practitioners who have had experience working with the Chinese. Second, most of the previous studies in the area were conducted by White researchers using emotional concepts drawn from the English lexicon. These studies suffer the drawback of neglecting the influence of culture on how emotions are delineated and expressed, and run the risk of having imposed the emotional structure of the English-speaking world onto another culture with a very different linguistic background. Despite Ekman's convincing empirical evidence on the universality of facial expressions of emotions, Mesquita and Frijda (1992) and Wierzbicka (1992) have stressed the importance of culture in the definition and organization of emotional concepts, and in the ways emotions are expressed verbally. Following this more recent line of thinking, any meaningful study on verbal expressions of emotions should require input from one who shares the same cultural and linguistic background as the research participants.

The third proposed explanation for the low utilization rate of mental health services of the Chinese is that the Chinese are prevented by cultural and linguistic

barriers from seeking help. In particular, the reported low level of verbal emotional expressiveness among the Chinese may represent the impact of situational constraints rather than a difficulty in differentiating and processing emotions. From a clinical perspective, it is important to know whether the Chinese are less capable of expressing their emotions in words or whether they choose to express less emotion in a given situation. For example, certain psychological treatment approaches, namely the more psychodynamically oriented ones, largely require in the client the ability to process affective and emotional responses. Those who have difficulty in expressing and processing emotions would presumably be less able to benefit from those forms of psychotherapy. Finally, it would be illuminating to see if Chinese people show different degrees of emotional expressiveness when they speak in Chinese and when they speak in English. This issue is highly relevant to the provision of mental health services to Chinese communities in North America. In Vancouver, there is an obvious scarcity of qualified Chinese-speaking mental health practitioners. There are two solutions to this problem. Some propose that more bicultural and bilingual students should be admitted to training programmes so that ethnic specific services can be offered in the future. Others believe that a cultural sensitivity component should be added to existing training programmes so that mainstream students can be equipped to work with clients with multicultural backgrounds. It is of course impractical to try to teach mainstream therapist to speak the native language of the client, but how large an obstacle this presents is basically unknown. For the case of Chinese clients, it would be useful to

find out how important it is that psychotherapy be conducted in Chinese. The answer would help identify future training needs, and perhaps point to a direction for therapist training programmes in Canada.

The present study is an attempt to validate some of the prevailing beliefs about verbal emotional expressiveness of the Chinese, and also to challenge others, by directly examining verbal emotional expressions from Chinese participants. An emic approach was adopted by making use of raters who are fluent in both the English and the Cantonese language, and the cultural scripts associated with them. Comparisons with a control group of White participants were made. The implications of the results are discussed with special reference to the mental health needs and approaches to Chinese in Canada.

Depression and Somatization in the Chinese

Early studies of psychopathology among the Chinese were based mainly on epidemiological surveys and clinical case studies using Western diagnostic categories (e.g. the DSM system or the WHO-ICD system). Reviews of these sources have indicated that the overall prevalence rates for psychoses among the Chinese are roughly the same as those found in Western societies (Lin & Kleinman, 1981; Lin, Kleinman, & Lin, 1981). Recently, Cheung (1991) arrived at the same conclusion in his review of adult psychiatric epidemiology in China. For example, he reported a prevalence rate of schizophrenia in China in the range of 1.93 - 4.75 per thousand, compared to 2 - 9 per thousand in the West. However, the prevalence rate for depression is markedly low

compared to Western rates. Cheung (1991) reported a prevalence rate of 0.37 - 0.89 per thousand in China, and 4 - 12 per thousand in the West. This cross-cultural difference has been found consistently in surveys done in Hong Kong (Yap, 1965; Chen at al., 1993; Lo, 1981) and Taiwan (Lin, 1953) as well. The low rate of depression among the Chinese has received enormous amounts of attention from researchers interested in cross-cultural psychopathology. The focus, however, is not confined to whether Chinese people are less likely to suffer from depression but extends to the question whether Chinese people experience and express depression in a different way than Westerners. Other clinicians and researchers have questioned whether the concept of "depression" is a valid disease entity for the Chinese (Chan, 1990; Cheung, 1982; Kirmayer, 1984; Kleinman, 1982; Tseng, Di, Ebata, Hsu, & Yuhua, 1986).

Although both Yap (1971) and Singer (1975) concluded from their experience as clinicians in Hong Kong that features of depression do not exhibit significant cross-cultural differences, other researchers disagree with their view. Tseng (1975) reported that 70% of patients later given a diagnosis of depression initially presented with somatic complaints to the psychiatric clinic of the National Taiwan University Hospital. He pointed to somatization in Chinese depressed patients as an illustration of how culture shapes the conceptualization of normality and deviance. Kleinman (1977), working at the same clinic in Taiwan, compared a group of patients with depression with a similar group diagnosed at the Massachusetts General Hospital. He found that 88% of the Taiwanese patients presented solely somatic complaints whereas 4% of the

American patients did so. The general impression derived from these studies is that Chinese patients with depression diagnosable by Western psychiatric criteria do not complain of feeling depressed, nor do they seek out mental health practitioners but instead go to internists or family physicians for treatment of the somatic concomitants of depression (the vegetative symptoms). These patients are often given a diagnosis of *neurasthenia*, which in Chinese literally refers to "weakness of the nerves". It is associated with symptoms such as bodily weakness, fatigue, headaches, dizziness, lethargy, and a range of gastrointestinal and sexual complaints.

A collaborative research project by the University of Washington and Hunan Medical College in China found that 87 out of 100 Chinese neurasthenic patients in an outpatient clinic in China met the DSM-III criteria for Major Depressive Disorder. Of the 87 patients, 30% complained entirely of somatic symptoms, and 70% of somatic and psychological complaints together, but with a decided emphasis on the former. None of the patients complained entirely or mostly of psychological symptoms. The majority of them responded to antidepressant medication, but this therapeutic response did not change the way they experienced their illness, nor the way they conveyed their illness to the researchers (Kleinman, 1982). Draguns (1996), in reviewing studies of a similar nature, concluded that the affective and cognitive aspects of depression are both less readily put into words by the sufferer, and less quickly noticed by the observer in China than they are in the West. He is of the opinion that depression is experienced with a somatized guise in the Chinese culture.

The tendency to focus on somatic complaints instead of psychological ones is hardly unique to the Chinese, and appears to be fairly common at least among Asian cultures. In Japan, *shinkeishitsu* is an illness with prominent somatic symptoms including pressure on the head, headache, fatigue, and dizziness. It is considered best treated with Morita therapy, a psychosocial intervention which originated in Japan (LeVine, 1991). *Futeishuso* is an illness experienced by Japanese women with nonspecific somatic complaints including headache, feelings of coldness, stiff shoulders, back pain, premenstrual pain, and depression (Lock, 1982). In Korea, an illness called *hwabyung* affects mainly women and is characterized by epigastric fullness which is believed to be caused by excessive "fire" associated with suppressed anger (Lin, 1983). In a multicultural study of symptom manifestation, Tseng et al. (1990) demonstrated that for minor psychiatric disorders, symptom manifestation varied greatly with different sociocultural settings. They found that Asian patients in general emphasized somatic symptoms over others.

Studies such as those reported above have convinced many researchers and clinicians that Asian patients in general, and Chinese patients in particular, place special emphasis on somatic symptoms in their total illness experience. However, the reason(s) for this orientation and its meaning are still open to debate. As Kirmayer (1991) pointed out, the term somatization carries three meanings: (a) high levels of medically unexplained symptoms reported in multiple physiological systems (similar to DSM-IV Somatization Disorder); (b) high levels of somatic preoccupation beyond what is

expected for demonstrable physical disease (as in DSM-IV Hypochondriasis); and (c) the predominantly somatic presentation of emotional disorder, most commonly depression and anxiety. The first two definitions denote a state of being at any given time in a disease process, while the third postulates a hypothetical mechanism whereby emotions can be "translated" into somatic symptoms. It is this last definition of somatization that most cross-cultural researchers adopt. However, it is never made clear how the somatic presentation comes to "replace" the emotional presentation for people from certain cultures.

One of the models that has been offered to explain the mechanism of somatization is Sifneos' concept of alexithymia, which literally means "no words for feelings" (Sifneos, 1973). In Sifneos' view, people who are prone to somatization have difficulty expressing their feelings in words, and show little processing of emotions in their conscious and their fantasy lives. These people are known to have impoverished imagination, and tend to operate on a very concrete level (what is known as pensée operatoire). Furthermore, it is also believed that because of these deficits, alexithymic patients are unlikely to benefit from insight-oriented psychotherapy (Krystal, 1979, Lesser, 1981). Although alexithymia has been shown to be associated with a large number of psychosomatic illness in the West (Acklin & Alexander, 1988; Flannery, 1977; Shipko, 1982), few studies have been done in Asian countries to elucidate the role of alexithymia in somatization. So far only one empirical study has been done on Chinese children, lending partial support to the construct (Ngan, 1989).

It should be pointed out that although it has been established that Chinese patients focus heavily on somatic complaints, the under-reporting of psychological symptoms in the Chinese has never been adequately supported by empirical data. Indeed, Kleinman (1982) reported in his Hunan study that Chinese neurasthenic patients did provide psychological symptoms if and when they were solicited. Beiser and Fleming (1986), in their study on Asian refugees, also showed by factor analysis that Asians do experience psychological symptoms and have little difficulty expressing them verbally. They obtained a somatization factor that was orthogonal to the depression factor, which negates the idea that somatization and depression are substitutes for each other. Although it may be true that somatization is more highly elaborated among Asians, it does not necessarily mean that they somatize depression, or for that matter, any other affect. It is a logical fallacy to conclude that since the Chinese speak the somatic language so well, they must be illiterate in the language of feelings.

Language and the Expression of Emotions

Emotions can be expressed in four basic ways: verbally, behaviourally, nonverbally through facial expressions, and through physiological arousal (Brody, 1993). Of these, the facial expression of emotions is one of the most widely studied areas in psychology. Through the efforts of Ekman's group, researchers from different cultures have identified universal patterns of facial expressions which are purported to represent basic emotions that are common to most cultures in the world (Ekman et al., 1987). Whereas the evidence for the universality of facial expressions of emotion is

compelling, some question whether this is a fruitful way to studying human emotions. Verbal expressions of emotions have not enjoyed the same attention from researchers until fairly recently. Leff (1973) in his work in transcultural psychiatry, drew attention to the historical changes in the meanings of emotional words. In his view, an emotional word begins as a word denoting the somatic reactions of emotional arousal. It is only later that the word comes to denote the emotional experience as well as the somatic accompaniments. The focus of meaning of the word then shifts to the experience of emotion, and the somatic meaning fades into the background. By the same token, Harre and Gillet (1994) described how from early eighteenth century emotional words were used exclusively to refer to public displays of behaviour, until in the mid-nineteenth century when they expanded their meaning to include bodily feelings and, later on, individual sentiments. Hence, the somatic aspect can be considered a built-in component of many emotional words, and the incorporation of a feeling element is only a recent development in the expansion of referents in the emotional lexicon.

In his controversial paper Leff (1973) used data from the International Pilot Study of Schizophrenia (IPSS) conducted by the World Health Organization and found that the feelings of anxiety, depression, and irritability were more positively correlated for people from developing countries than for those from the developed ones. He suggested that such emotions were less well differentiated for people in developing countries. In addition, Leff discovered that words such as "anxiety", "depression", and "tension" were particularly difficult to translate into Chinese and Yoruba, and

concluded that people in China and Nigeria were least capable of emotional differentiation. He also selected a group of African patients who were native English speakers and found that even when a more emotionally differentiating lexicon was made available, they still did not use the discriminatory capacity of the language to the same extent as White people do. It appears that both cultural and linguistic variables are influential on the process of emotional differentiation. Marsella (1981) examined the concept of *depression* in studies on Yoruba, various North American Indian Languages, Chinese, Malay, Japanese, Eskimo, and Fulani in Africa. He came to the conclusion that there is no word for *depression* among many non-Western cultural groups. In comparing emotional lexicons for *depression* in eight cultures, Brandt and Boucher (1986) found that the United States' depression words form the most unified conceptual whole compared to the other cultures. This suggests that for American people, *depression* is a valid organizational concept. On the contrary, in the Australian, Korean, Puerto Rican, and Malaysian samples, the language groups failed to form a distinct depression cluster, suggesting that the concept of *depression* may not be a valid organizational schema for them.

Indeed, researchers have reported only limited success in their search for translations for *depression* in many languages. Tanaka-Matsumi and Marsella (1977) in their attempt to find a Japanese translation, came up with the word *yuutsu*. The two terms *yuutsu* and *depression*, however, gave rise to different associations on the word association technique, and different factor structures on the semantic differential. Chan

(1990) did the same exercise with Chinese and arrived at the word *you-yu*, which again proved itself to be a slightly different emotional construct than *depression*. Apart from *depression, anxiety* is another concept that has no exact Chinese translation (Cheng, 1977). On the other hand, certain emotional constructs are found to be more clearly identifiable in Asian cultures than in Western cultures. Marsella, Murray, and Golden (1974) discovered that *shame* was more specifically identified by Asian-Americans than White-Americans. They argued that the concept of shame is used more frequently as a technique for social control in Asian cultures, with the consequence that Asian people are better able to read somatic cues related to *shame* and thus experience it more vividly.

An important implication of the above research is that it may not be appropriate to take an emotional construct which is meaningful in the North American culture and impose it on another culture without first questioning whether or not the construct serves as a valid schema in that culture. Different cultures have different lexicons to communicate their emotional experiences. How the lexicon is carved out of the totality of human experiences depends heavily on the biological, sociological, and cultural heritage of the group using the lexicon. Wierzbicka (1986) pointed out the futility of doing cross-cultural research on human emotions based on English emotion words because they were all language-specific and culture-specific. One identifies one's feeling state in terms of concepts that are provided by one's language-and-culture system. If this is not borne in mind, the researcher runs the danger of reifying

phenomena that are inherently fluid and that can be conceptualized and categorized in different ways. Without what Wierzbicka (1986) calls a culture-independent semantic metalanguage, researchers must be cautious when making comparisons of emotional constructs across cultures and languages. The same emotional experience may be represented by different emotional words in different cultures. Even when an equivalent translation of an English emotional word is found in another culture, the two emotional words may denote different emotional experiences. The same problem occurs in the study of language in a single culture over time. The English word "sad" originally meant "satisfied", came to mean "sober" or "serious" in the seventeenth century, and then later took on a meaning closer to "grieved" (Ellsworth, 1994). In essence, the emotional lexicon is as dynamic as the emotions that they denote, and the meaning of emotional words is subjected to the sociocultural influence of the Zeitgeist at the time.

Of relevance to the present study is the distinction between emotion and bodily sensation that is so commonly made in the English language. This distinction presumably arises out of the dualistic view that the body and the mind are separate entities. However, Wierzbicka (1994) raised the issue that the conceptual distinction between body and mind may be an artificial one and may have originated from "the unconscious absolutization of the Anglo folk dichotomy opposing body to mind" (p. 145). A similar point was made by White (1982) when he talked about somatization as a legitimate way of expressing emotions, and that it is considered peculiar only in western cultures that

emphasize the "psychologization" of emotions. If one reviews most cultures in the world, one will find that the "psychologization" of emotions is the exception rather than the rule. What is easily forgotten is that "somatization" and "psychologization" are both culturally-based constructs, and are meaningful only in cultures where the mind and the body are accorded separate existence. In cultures like that of China, where body-mind unity is the predominant philosophical belief, notions like "somatization" and "psychologization" lose their meaning and significance. Even in the majority of cultures that uphold the dichotomy between body and mind, the body is often taken to be more than just a conglomeration of physiological processes, and is treated as an encultured concept in itself. Culture penetrates into various aspects of emotion processing, not only the linguistic elements but also the physiological elements that need to be adapted to suit the specific cultural environment (Kitayama & Markus, 1994). Thus people in a particular culture will have their unique way of identifying, classifying, processing, and naming emotions.

Stearns and Stearns (1988) coined the term emotionology to refer to the study of the impact of culture on the vocabulary of emotional words used. In their view an emotional word is seldom used to *express* emotions. Rather, the word *describes* an emotion with all its intended social impacts, as well as a specific set of display rules that pertain to the emotion involved. The display rules and the social impact of emotions are partly culturally determined, but are also arrived at partly through negotiation between interactive members who are doing the emoting. This emphasis on the discursive nature

of the emoting process helps to understand emotion expression as a product of social negotiation (Harre and Gillet, 1994).

Following the idea that an emotion construct is partly a social construction, one perhaps should never expect to find an exactly equivalent translation of the English word *depression* in another language. In fact, this etic approach to studying emotions, which aims at discovering "universals" across cultures, is likely to bring forth more confusion than clarity to the understanding of emotions in a non-English speaking culture. Unfortunately, most previous studies on emotions in non-English speaking cultures employed such an approach, and cross-cultural comparisons were made under the impression that, for example, depression when present must take the form it does in the English-speaking world. This is an assumption that is difficult to defend. The fact that there is no word for *depression* in some non-English speaking cultures does not mean that people in those cultures do not experience some emotion similar in nature to depression. In Brandt and Boucher's (1986) study, for the cultural groups that did not show a depression word cluster, they did find depression-type words which formed part of the cluster labelled "sadness". They concluded that the experience of depression was still present in those cultures. Even though the emotion is experienced in different cultures, the display rules for conveying the emotional experience may or may not be similar. The emotion may be expressed metaphorically, non-verbally, or in whatever way the cultural script decides as appropriate. Naturally, such expressions of emotions are more readily and accurately detected by observers with the same cultural and linguistic

background as the person experiencing the emotion. In other words, more meaningful information can be gathered using an emic approach. Returning to the issue of whether Chinese people are less expressive of their emotions, it would then be essential to review the limited number of studies that were done by Chinese researchers on Chinese participants.

Expression of Emotions in the Chinese

In an earlier study of the perception and judgment of facial expressions of emotions in the Chinese, Chan (1985) used the method of multidimensional scaling and discovered that facial expressions of emotions were evaluated by Chinese judges along two dimensions: (a) a dimension resembling pleasantness-unpleasantness, and (b) a dimension contrasting open expressions of emotions with expressions of a subtle, controlled and concealed form. Although the first dimension has been reported in many Western studies, the second one has never been documented in studies done in Western cultures. According to this finding, the explicitness of the expression is an important source of information for the Chinese in their evaluation of facial expressions of emotions. The same issue of explicitness was found to be of relevance also for verbal expressions of emotions in the Chinese. In another study on Chinese word associations to the meaning of *depression*, the same author (Chan, 1990) found that Chinese college students in Hong Kong gave twice as many external referents (e.g. "blue colour", "weeping", "silent") as internal mood-state related ones (e.g. "sad"). The external referents included physical, behavioural, and somatic referents, in descending order of their frequencies. He

postulated that such expressions using physical and other external metaphors serve great communicative value in the understanding of emotions in Chinese. Furthermore, they did not seem to be accounted for by the lack of emotional terms in the Chinese vocabulary, as the internal referents did make up more than one-third of all the associations, and were rich and diverse in nature. Hence it seems that when it comes to the feeling of depression, Chinese people prefer to use what would be considered indirect means of expression in the eyes of Westerners. The Chinese often employ external referents as a metaphoric expression, even though they may be equipped with more direct emotional terms to refer to the same experience. However, the extensiveness of the emotion lexicon in the Chinese language is still debatable. Russell and Yik (1996) reviewed recent studies on this issue and found that the reported number of emotion-denoting words in the Chinese vocabulary ranged widely from 204 to 2,915. They also added that the working vocabulary of readily available terms may be only one-tenth of the entire set of words that are potentially available.

Zheng, Xu, and Shen (1986) studied the styles of verbal expression of emotions in Chinese patients and normals in China. They selected 16 key emotional and physical terms from Chinese versions of English inventories and asked Chinese participants how they would describe those experiences. They distinguished four styles of verbal expression: psychological, somatic, neutral (having both psychological and somatic features), and deficient (not being able to come up with an expression). Their results suggested that Chinese patients and normal participants shared basically the same styles

of expression. Instead of a distinctly preferred style for all emotions, different styles were found for different emotions. For example, guilt was expressed mainly in psychological style, depression in somatic style, and anxiety in neutral style. Apparently there is no one Chinese style, and different emotions have their own display rules within the culture. This highlights the need to specify the particular emotion being studied when conducting research on verbal expressions of emotions in the Chinese.

Another interesting finding in the Zheng et al (1986) study was that the state denoted by the key term, which was taken from translated instruments, was seldom expressed with the key term itself. This finding was interpreted to mean that the terms used in translated instruments were very different from the actual verbal expressions that the Chinese would normally use in daily life. This likelihood has been acknowledged by Chan (1985), and Russell and Yik (1996), who maintain that an equivalent translation is never possible given the different cultural interpretations of the terms and the social desirability attached to them.

As a result of the connotations attached to some of the symptoms that are usually investigated in studies of this kind, the same symptoms may be endorsed to different degrees depending on whether they are described in English or in Chinese. Studies on bilingual speakers have demonstrated how the language used affects the thinking of the speakers. In an attempt to explore the interaction between topics of discussion and the language used for discussion, Ervin-Tripp (1964) studied bilingual Japanese women married to American servicemen. In a sentence completion test, they responded

differently depending on the language they were using, and the differences coincided with differences between Japanese and American cultures. In a study on bilinguals which specifically looked at an English-Chinese comparison, Hoffman, Lau, and Johnson (1986) discovered that each language activated a different set of schemata which, in turn, affected the impressions and memory that the participants formed for characters presented to them. The study involved the written form of the Chinese language, referred to as Mandarin or Putonghua. In another study comparing spoken English and spoken Chinese (in this case Cantonese), Bond and Lai (1986) suggested that topics regarded as too emotional or too embarrassing in the first language (Cantonese) are discussed more easily in a second language (English). They further argued that code-switching to a second language serves a distancing function, thus facilitating more emotionally-laden productions, such as swearing, revelation of personal problems, and responses that would normally lead to anxiety. This effect allegedly occurs because second languages are usually acquired in less affectively-arousing circumstances than are first languages. Psychoanalytic writers have also noted the close association of the mother tongue with primal mother-child conflicts, and how visual imageries associated with the mother tongue can be anxiety provoking (Greenson, 1950).

In view of the different effects of first and second language use on mental processing, it becomes important to consider this factor when making claims on the verbal expression of emotion in the Chinese. Then, for example, in a clinical situation, when Chinese are using a second language (i.e. English), they may feel more removed

from their traditional cultural inhibitions in expressing their feelings. As a consequence, they may be more ready to verbally acknowledge feelings and symptoms that they would normally inhibit if they were using Chinese. This possible language effect is of significant importance during psychological assessment and treatment of Chinese patients. Unfortunately, no empirical study of this issue has been conducted.

That Chinese bilinguals should find it easier to talk about emotional subjects in English than in Chinese points to the different social meanings that emotions take on in the two cultures. From an anthropological perspective, Potter (1988) compared the social construction of emotion in the North American culture and in the Chinese culture. In the North American culture, he asserts that every relationship rests on a continuous process of emotional validation from the enacting selves, otherwise the relationship will be void of emotions and hence of its meaning. The emotional experience is taken as a legitimizing basis for social relationships and social action. The Chinese, on the other hand, assume the existence of a continuous social order that is independent of experienced emotions. The establishment of a social order or institution is separate from inner emotional experience and does not require any affirmation in feeling states. Social meaning is derived more from the social context than from within. In fact, rather than affirming the social structure, intense emotional expressions could endanger the structural continuity. Thus on the whole, explicit emotional expressions are discouraged in the Chinese culture. However, this does not mean that the Chinese will avoid showing any emotions whatsoever. Rather, the Chinese will demonstrate just the amount of emotion

that is deemed appropriate for the situation. As Chan (1985) pointed out, one of the dimensions that the Chinese use to evaluate emotions is the appraisal of the explicitness with which they are expressed. An important factor in this determination is the social context in which the emotions arise and are communicated. This has been alluded to by Frijda (1988) as The Law of Situational Meaning of Emotion, which states that emotions are precipitated by events the social meaning of which is determined by the situational context. In a study by Vinacke and Fong (1955), Japanese, Chinese, and White subjects were presented with pictures of spontaneous emotional expressions with a background (Situation condition) and without a background (Face condition). The subjects were asked to match a list of emotional words with the pictures. For all three groups of subjects there was more agreement in the Situation condition than in the Face condition. In addition, the Japanese and Chinese subjects showed more agreement on the nature of expression than the Whites, suggesting that situational cues held more importance for Japanese and Chinese people than for White people. However, just as there is no one "Chinese" style of expression for all emotions, there may not be an appropriate degree of explicitness that cuts across all situational contexts. Hence, unless the situational context is specified and well defined, it is not particularly meaningful to comment on how emotionally expressive Chinese people are. Because of the author's interest in clinical applications, the present study examined the verbal expression of emotions in a clinical situation.

Emotional Expressiveness of Chinese in Clinical Contexts

In an attempt to further examine Kleinman's (1980) claim that Chinese depressives

tend to mask their depression with somatic complaints, Cheung, Lau, and Waldmann

(1980-81) administered a symptom checklist and a psychiatric interview to patients

diagnosed with depression in a private medical clinic. They found that although depressed

Chinese patients primarily presented vague somatic symptoms, 82% of them also

acknowledged psychological symptoms when directly asked during the interview. These

symptoms included sadness, anxiety, self-reproach, loss of interest in social activities,

and loss of sexual interest. The researchers concluded that although those patients tended

to express their problems in somatic terms when they sought help, they nevertheless were

aware of their psychological disturbances. The somatic manifestation was a culturally

accepted form of help-seeking behaviour which was independent of their admittance

to psychological symptoms. In another study using data from the Hong Kong Biosocial

Survey on 3962 urban Hong Kong Chinese, Cheung (1982) further showed that the

participants' admission of psychological symptoms on the Langner Scale was as frequent

as, if not more than, their endorsement of somatic symptoms. The data suggested that

there is a discrepancy between the awareness of psychological problems in the general

public and the presentation of these problems in medical and psychiatric settings. Taken

together, these studies indicate that instead of being unable to differentiate among various

psychological states, as suggested by Leff (1973, 1977), in a medical or psychiatric

situation the Chinese choose to focus on their somatic symptoms or use subtle emotional

expressions. Zheng et al. (1986) also found that Chinese people mainly use an indirect or restrictive mode of expression in their symptom reporting. In their sample of Chinese patients and normals, a somatic style of expressing emotional experiences was not correlated with the somatization score on the Symptom Checklist-90. This finding points to the need for distinguishing between people who verbally express their emotions in somatic terms from those who actually experience somatic symptoms. In Zheng et al.'s (1986) study, the participants' expression of somatic concerns is more likely an idiom of expression of emotion, than somatization in the traditional sense of the word as used in the DSM-IV (APA, 1994).

In a review of the perceptual and cognitive functioning of the Chinese, Hoosain (1986) suggested that because of their agricultural heritage and collective societal organization, the Chinese are basically a field-dependent group of people. Not only is this evident in visual perceptual tasks, the Chinese also attend more to contextual and interpersonal cues in their cognitive style towards problem solving. It can thus be expected that contextual and interpersonal cues exert their influence in help-seeking situations as well. This prediction was supported Cheung and Lau (1982) in a study investigating Chinese patients attending three different medical settings. These patients included a general medical outpatient clinic, a psychiatric outpatient clinic, and a prison psychiatric service. The authors found that patients in the first two settings presented mainly somatic complaints (78.4% and 45.3% respectively), but very few (7.7%) of those in the third setting did so. In fact, the clinical presentation of psychiatric patients in the

prison bore more resemblance to that of nonpsychiatric inmates in the same setting than to similar psychiatric patients at the outpatient psychiatric clinic. In other words, the setting offered a better delineation of symptom presentation in the participants than did their diagnoses. Cheung (1984) further found that Chinese college students in general were reluctant to seek help for their problems and when they did, they often turned to friends when they had psychological problems and to medical doctors when they had somatic and ambiguous problems. Similar results were obtained by Ying (1990) on immigrated Chinese-American women. These results highlight the impact of contextual variables on the symptom presentation of Chinese patients in a help-seeking situation.

Further, this might help explain the preponderance of somatic complaints seen in the medical context. The Chinese conceptualization that medical doctors are for physical problems and not psychological ones probably creates a cultural script which in turn determines the social discourse that transpires between the doctor and the patient. The assertion that the Chinese patients are less verbally expressive about their emotions than White patients could be an artifact of the medical context in which most previous studies have been conducted. It would be of interest to see how the Chinese compare with their White counterparts in verbal emotional expressiveness in a non-clinical context, such as meeting with a friend. This would shed light on how communication of emotion changes with respect to the social situation. Such information may assist service providers to make changes to the context in which psychotherapy is usually conducted, in order to facilitate more verbal expressions of emotion in the Chinese client.

Rationale of the Study

The present study is an attempt to investigate the emotional expressiveness of Chinese people under different experimental conditions, and in comparison with that of their White counterparts. Rather than looking for evidence of somatization, and making inferences about emotional expressiveness from that, this study directly measured verbal expressions of emotions by Chinese and White participants. Samples of verbal responses were gathered from participants rather than asking them to endorse items on a checklist or questionnaire, the most common measurement strategy in this domain. This methodology creates greater resemblance to real life situations and hence increases the external validity of the study. Responses gathered were subjected to coding done by a bicultural and bilingual rater, with the help of a coding manual which took into account emotional expression styles that were common to both English and Cantonese, as well as those unique to each language. In essence, verbal expressions of emotion were identified according to the specific yardstick pertaining to each culture.

For the purpose of cross-cultural comparison, participants of both Caucasian and Chinese ethnicity were included in the study. To test whether Chinese participants were more verbally expressive of their emotions in English than in Cantonese, roughly half of the Chinese participants performed the study in English and the rest in Cantonese. A mixed three factor design with two between factors and one within factor was used. The first between factor was ethnic-language grouping. The participants were divided into three groups according to their ethnicity - language mix. Unfortunately, few White

participants spoke Cantonese, so a true factorial design could not be used. Analyses of variance and group contrasts were performed to detect any group differences, and if they were present, the possible contributions from ethnicity and language respectively.

The second between group factor was gender. This factor was included because participants of both genders took part in the study. However, this was not a factor of interest in this particular research.

In view of the findings of Cheung and Lau (1982) that the situational context exerts an impact on how Chinese people present their problems, and that of Cheung (1984) that in general Chinese take their emotional problems to friends rather than to mental health professionals, situational context was made a within-subject factor in the study. Each participant was asked to perform the experimental task in a clinical context (e.g. speaking with a counsellor), and a non-clinical context (e.g. speaking with a friend). This allows a test of the effects of context on the verbal emotional expressiveness of the participants. The design thus allows an examination of the extent to which the clinical context might have acted as a confounding variable in previous studies on emotional expressiveness of the Chinese.

Three dependent measures were used in the study; specifically (a) emotional words, (b) emotional ideas (without the use of emotional words), and (c) emotional expressions with somatic referents. Verbal expressions of emotions were not restricted to the use of emotional words, but instead included indirect expressions such as metaphors, idiomatic phrases, and phrases with somatic referents. The effects of the

grouping variable and the context variable were examined for total emotional expressiveness, as well as for each of the dependent measures.

Conceptual Hypotheses

Six conceptual hypotheses were formulated from the literature reviewed. They are as follows:

1. When both direct use of emotional words and indirect verbal expressions of feelings are considered together, Chinese and White participants are equally verbally expressive of their emotions.

2. The situational context exerts greater influence on the overall verbal expressiveness of Chinese participants about their emotions than it does on White participants. This differences is expected because in general the Chinese are more field-dependent than are White people, and the Chinese tend to tailor their emotional expressiveness according to what is considered appropriate to the social situation.

3. White participants are expected to use more direct verbal expressions of emotion than Chinese participants, and among the Chinese participants, those who responded in English are expected to use more direct verbal expressions than those who responded in Cantonese.

4. Chinese participants who responded in Cantonese are expected to show more indirect verbal expressions of emotion, including somatic idioms, than those who responded in English. Chinese speaking English are expected to show more

indirect expressions than White participants.

5.   Chinese participants responding in Cantonese are expected to give more somatic referents than those responding in English. Chinese speaking English are expected to show more somatic referents than White participants in the study.

6.   The Chinese-Cantonese Group is expected to show more somatic referents in the clinical situation than in the non-clinical situation. This context effect on help-seeking behaviour, which is associated with Chinese cultural values, is expected to be reduced in the Chinese with the use of a second language, and to be non-existent for the White-English Group.

II. Method

Participants

The nature of the study required that the Chinese participants had the language proficiency to express their feelings in English. Therefore, only university and college students were solicited for the study, as they had already demonstrated a level of English proficiency that enabled them to gain admission to tertiary institutions. Participants were recruited from Simon Fraser University, Langara College, and Kwantlin College (Richmond campus). They were all psychology students wanting to gain experience in psychological research. The majority of the participants were taking courses in research design or data analysis, and obtained 2% credit for their coursework. Sign-up sheets were posted asking for White participants with English as their first language, and Chinese participants with Cantonese as their first language. They were informed that this was an experiment about the way Chinese and White people express themselves when they speak. The task was to imagine themselves in certain scenarios and to complete a sentence completion blank. White participants performed the task in English. Half of the Chinese participants performed in English while the other half performed in Cantonese. As a result, three groups were formed according to their ethnicity-language mix: a White-English Group (WE), a Chinese-English Group (CE), and a Chinese-Cantonese Group (CC). No requirements on gender were exercised at the beginning, but towards the end of the data collection, only male participants were solicited to redress a developing gender imbalance.

A total of 204 participants were recruited, all of whom were eighteen years of age or above. They included 100 Whites and 104 Chinese. Of these participants, fifteen (7%) were discarded from the pool. Nine were discarded because their responses were incomplete due to mechanical failures in the recording process, one because the participant went into a philosophical discussion of the topic and went astray from the experimental task, and five because their voices were too soft to be heard. To check for any bias introduced through discarding data, the last group was listened to by an impartial bilingual rater, who agreed that the voices could not be heard in any reliable way. As a result the usable sample was reduced to 189 participants, comprising 94 White participants and 95 Chinese participants. Their mean age was 21.29 years ($SD = 4.91$). The composition of the sample is represented in Table 1.

Table 1: Composition of Sample ($N = 189$)

	WE	CE	CC	Total
Male	31	22	20	73
Female	63	26	27	116
Total	94	48	47	189

The distribution of the discarded participants is represented in Table 2. They had a mean age of 22.57 years ($SD = 5.84$). There was no difference between the discarded group and the remaining sample with respect to age and length of residency in Canada, at $p > .05$.

Table 2: Composition of Discarded Participants (*n* = 15)

	WE	CE	CC	Total
Male	3	3	3	9
Female	3	2	1	6
Total	6	5	4	15

All the participants were treated in accordance with the ethical standards of Simon Fraser University, as well as those of the Canadian Psychological Association.

Apparatus

The participants' verbal responses were collected by means of a sentence completion blank similar to Rotter's Incomplete Sentences Test (Rotter & Willerman, 1947) and Exner's Self Focus Sentence Completion (Exner, 1973). A semi-structured format consisting of 15 sentence stems was designed to simulate the natural flow of a normal conversation. The stems started with "*I want to let you know that ...*", and continued with "*This has been making me ...*", "*When I think about it I feel ...*", "*Everything seems ...*", and ending with "*Before we go, I ...*". Participants were asked to complete these stems verbally as if they were conducting a conversation under the experimental conditions. The instrument was used here not as a projective personality measure, but as a stimulus for eliciting speech samples. No psychological interpretations of the participants' responses were made. The sentence completion blank was designed in English and translated into Chinese by the author. It was translated back into English

by a bilingual registered clinical psychologist and a bilingual university graduate to achieve

equivalence of the English and the Chinese versions (Appendix A). The instrument was

tested out on seven pilot participants before it was implemented in the study proper.

After the pilot data were collected and examined, it was clear that the meaning

of two of the items were ambiguous to most participants. The last item "*Before we go,*

I ..." was understood by some participants as referring to the end of the conversation

and by others as referring to the separation from a loved one (see procedures below).

Consequently, this item was discarded in the analysis. The eighth item "*If only ...*" was

found to be incomprehensible by some Chinese participants, who were unable to respond

to the item. It has been reported that while English has a distinct grammatical structure

for encoding counterfactuals, e.g. "*If I had been there, this wouldn't have happened*",

there is no equivalent structure in the Chinese language (Bloom, 1981). Rather, Chinese

rely on contextual information to arrive at counterfactual reasoning (Liu, 1985). Perhaps

because of this some Chinese participants were unable to respond to a counterfactual

structure such as "*If only ...*". Hence this item was also discarded from analysis. The

final analyses were based on responses to the remaining 13 items.

In addition to the sentence completion blank, which was done verbally, the

participants also filled out a demographic data sheet assessing their age, first language,

most comfortable language, and length of stay in Canada (Appendix B). Included in

the demographic data sheet were four items which asked how easy it was for the

participant to imagine the situation, the vividness of the experience, how common the

experience of breaking up was to them, and the likelihood of their going to a counsellor

for help in these situations. These items were rated on 5-point scales.

Procedures

Ethical approval for the study was obtained from Simon Fraser University

(Appendix C). The participants were invited to take part in the study individually. The

nature and purpose of the study was explained to each participant, and informed consent

was obtained (Appendix D). The data collection was conducted entirely by an assistant

who was blind to the hypotheses of the study. He was a second generation Chinese

Canadian who spoke fluent English and Cantonese. The same experimenter was used

for both White and Chinese participants of either gender, so as to control for main effects

of the experimenter. A standard set of instructions was delivered (Appendix E). The

participants were asked to imagine the scenario that they had just broken up with an

intimate partner, and they were going through a lot of emotions. This particular scenario

was chosen partly for its familiarity among college students, but also because it seemed

likely to elicit feelings of sadness and depression, emotions which the Chinese purportedly

express rarely. While considering this scenario, the participants were asked to orally

complete the sentence completion blank pretending that they were talking about the

experience with a close friend and with a counsellor, respectively. The sentence stems

were read to the participants by the experimenter. Every participant was instructed to

respond in these two contexts, namely non-clinical and clinical, but the order of

presentation was counter-balanced. The participants were assigned to these experimental

conditions on a random basis according to the order in which they signed up for the study. All responses were audiotaped with a microcassette recorder placed unobtrusively before the participants. After the experiment, participants filled out the demographic data sheet, and they were debriefed about the nature and purpose of the study (Appendix F). The responses were later transcribed by the author who is fluent in both English and Cantonese. These transcripts were used to code subjects' responses.

Dependent Measures

The study employed content analyses of speech samples as a method of assessment (Gottschalk, 1971, 1977; Gottschalk & Hambidge, 1955, Viney, 1983). It has been demonstrated that the method is useful in assessing the processing of affect and thought in normal and clinical populations (Oxman, Rosenberg, Schnurr, & Tucker, 1985; Seegmiller & Epperson, 1987).

Three dependent measures were derived from the participants' responses. The first measure is labelled "Emotional Words" (EW), consisting of the number of feeling words used, or in the case of Cantonese, lexicon units that clearly depict an emotion. Such words or units can take the form of a noun (e.g. "sadness") or an adjective (e.g. "depressed") or a term which is not used exclusively to refer to an emotional state but does denote one given the appropriate context (e.g. "empty"). The second measure is labelled "Emotional Ideas without Emotional Words" (EI). It includes verbal expressions which do not contain emotional words but in which an unambiguous manifest tone of feeling is evident. The tone of feeling should be comprehensible without lengthy

interpretations; that is, it must be direct and colloquial. Examples are metaphors (e.g. "in the dumps"), behavioural descriptions (e.g. "committing suicide"), and profanity used in an emotional context (e.g. "that asshole"). This definition is modified from the one used by von Rad, Lalucat, and Lolas (1977) in a study of differences of verbal behaviour between psychoneurotic and psychosomatic patients. The third measure, which is a subset of the second, represents verbal expressions that make reference to body organs or somatic functions to denote a feeling state. It is labelled "Emotional Ideas with Somatic Referents" (SR). Examples are "my heart is broken", "a gut-wrenching experience", "can't eat or sleep", and "feeling dizzy". Since the third measure strictly speaking is a subset of the second, only the first two measures were combined together to form an index of the overall verbal emotional expressiveness of the participant (EW+EI). This measure represents verbal expressions of emotions through either direct use of emotional words, plus use of indirect expressions of emotional ideas that do not contain emotional words at all.

A bilingual and bicultural rater went over each transcribed protocol and identified the number of verbal expressions for each dependent measure. This was done using a Coding Manual for Verbal Expression of Emotions designed for the purpose of this study (Appendix G).

Coding Manuals

In order to test for the reliability of the Coding Manual for Verbal Expressions of Emotion, inter-rater agreement was computed using the responses from the seven

pilot participants. The author acted as the primary rater for both English and Cantonese protocols. A White English-speaking monolingual female acted as the co-rater for the English protocols. A bilingual Chinese-Canadian female who has been in Canada for 13 years acted likewise for both English and Cantonese protocols. In order to take into account agreements between raters that occur by chance, Kappa was used instead of Pearson product-moment correlation. The author achieved initial Kappas of 0.73 with the English co-rater, and 0.77 with the bilingual co-rater. After discussion with the co-raters, it was determined that the disagreement was not so much on whether an idea was of an emotional nature or not, but on what constituted an idea unit. In view of this, it was decided that the participants' responses should be first divided into idea units so that each rater would have the same number of ideas to work on.

A Coding Manual for Idea Units was designed (Appendix H). The same pilot protocols were used for this exercise and the author coded all the responses into idea units. Another bilingual Chinese-Canadian female, who has been in Canada for 14 years, was solicited to act as co-rater for this part of the study. In 22 protocols, the author identified 547 idea units and the co-rater 535 idea units. They agreed on 519 of them prior to any discussion, and after discussion a total of 548 idea units were arrived at. This gave an agreement ratio of 519/548 or 95%, suggesting that the coding manual was a highly reliable one.

The pilot protocols were then presented again to the raters, this time with pre-defined idea units, for identification of emotional expressions. Kappas of 0.86 and 0.80

were recorded with the English and bilingual co-rater respectively. The figures suggested that the Coding Manual for Verbal Expressions of Emotion is reliable enough to be applied to the actual data set, provided that idea units have been pre-defined.

Inter-rater Agreement

All the participants' responses were divided into idea units by the author using the Coding Manual for Idea Units. In view of limitations in resources which did not allow the use of an impartial rater, the author proceeded to rate the transcribed protocols on the dependent measures according to the Coding Manual for Verbal Expressions of Emotion. As a reliability check for the objectivity of the author, a sample of 10 WE participants (11%) and 5 CE participants (10%) was rated by the English co-rater. The same sample, with another 5 CC participants (10%), was rated by the bilingual co-rater. As the average number if ideas generated by each participant in each situation was 50.15, such sample sizes were considered adequate for reliability check. Kappas of 0.84 and 0.80 were computed between the author and the two co-raters respectively. The two co-raters showed a Kappa of 0.80 between themselves (Table 3).

Table 3: Kappa Values for Inter-rater Agreement

	Author	English Co-Rater	Bilingual Co-Rater
Author	1.00		
English Co-Rater	0.84	1.00	
Bilingual Co-Rater	0.80	0.80	1.00

The Kappa values suggested that the ratings done by the author were sufficiently objective and unaffected by his knowledge of the hypotheses being tested. They also indicated that the author's ratings on the English responses closely resembled those from a native English-speaking person, and his ratings on the Cantonese responses also closely resembled those from a bilingual Chinese-Canadian. This ensured that when rating the responses in the two languages, the author was using a yardstick which was culturally and linguistically appropriate to each language. It reduced a problem raised by Wierzbicka (1986) that cross-cultural comparisons of emotion lexicon is meaningless when rules of one culture (or language) is applied to another culture (or language). In this study, an emic approach was adhered to as much as possible. By virtue of the fact that the author is bicultural and fluently bilingual, emotional expressions in either language could be evaluated within their own unique culturo-linguistic context. The inter-rater agreements provided empirical support that this had been achieved to a reasonable extent.

Experimental Hypotheses

The conceptual hypotheses gathered from literature review and theoretical derivation were transformed into six experimental hypotheses. They were as follows:

1. For overall verbal expressiveness of emotions, no group difference is expected. That is, for (EW+EI): WE = CE = CC.

2. For overall verbal expressiveness of emotions, the situational context exerts a greater influence on the Chinese than on the White participants. That is, for (EW+EI): a Grouping X Context interaction effect is postulated.

3.   In terms of styles of expression, emotional words are used more often by the White- English Group than the Chinese-English Group, and more often by the Chinese-English Group than the Chinese-Cantonese Group. That is, for EW: WE > CE > CC.

4.   Chinese participants give more indirect expressions when speaking in Cantonese than in English, and in both cases more than the White participants. That is, for EI: CC > CE > WE.

5.   Chinese participants give more somatic referents when they speak in Cantonese than when they speak in English, and in both cases more than the White participants. That is, for SR: CC > CE > WE.

6.   When speaking in Cantonese, Chinese participants give more somatic referents in the clinical context than in the non-clinical context. This does not hold true for the White participants, or for the Chinese who perform in English. That is, for SR: a Grouping X Context interaction effect is postulated, with only the CC Group showing a context effect.

III. Results

People vary in their verbal output according to personality styles and situational requirements. In view of this, a raw frequency count of the dependent measures was considered an inappropriate index of emotional expressiveness. Accordingly, the dependent measures for each participant were computed as percentages of the total number of idea units expressed by that participant. This method is frequently used in content analysis research, e.g. that of Oxman, Rosenberg, Schnurr, and Tucker (1985), Schnurr, Rosenberg, and Oxman (1992), Seegmiller and Epperson (1987), and Viney (1983). Unfortunately, the few studies done previously in the area used either direct frequency counts of emotional words (e.g. Zheng et al., 1986), or clinical impressions of the amount of emotions expressed in an interview (Cheung et al., 1980-81). They did not control for the verbosity of different participants, nor that of the same participant in different situations. The higher the verbal output, the more emotional expressions are likely to be produced by chance. This poses a serious problem for the interpretation of results and for the comparison of their findings with those from other studies. In the current study expressiveness was defined as the proportion of verbal expressions of emotion to the total number of idea units produced. This method allows more meaningful comparisons of the different sets of results.

Comparisons performed on each of the four dependent measure were considered to constitute a family. There were two hypotheses in the family of Total Expressiveness (EW+EI), two in Somatic Referents (SR), one in Emotional Words (EW), and one in

Emotional Ideas without Emotional Words (EI). All of these planned comparisons were theory-driven and they represented the major interests of this study. Following the recommendation of Keppel (1991), the author gave planned comparisons a privileged status in the analysis. No correction for family-wise Type I error was made. An alpha level of .05 was used for all planned comparisons. There were three reasons for this decision. First, the number of comparisons in each family (either one or two) never exceeded the degrees of freedom associated with the variable(s) under investigation. Second, further contrasts were done only when the test of omnibus F was significant. This controlled the family-wise error indirectly, by conditioning the number of comparisons on the significance of the omnibus F; that is, F acted as a "gate-keeper" that reduced the number of required comparisons to the minimum. Third, although the effect sizes of the variables in this study have not been explored or reported in previous studies, they were estimated to be "small" to "medium" (with omega squared between .01 and .06) in Cohen's classification (Cohen, 1977). If the error rate was made more restrictive, power would be lost and thereby rendering the treatment effects undetectable. After considering all of the above, it was decided that no restriction on cumulative Type I error would be exercised for planned comparisons in this study.

A summary of the descriptive statistics of the data is presented in Table 4. Individual cell means and results of the analysis are discussed separately for each dependent measure.

Table 4: Summary Statistics for Data

	Mean	SD	Min. Value	Max. Value
EW(FRD)	23.37	11.08	0.00	56.10
EI(FRD)	3.03	3.49	0.00	25.00
SR(FRD)	0.51	1.41	0.00	8.70
EWEI(FRD)	26.40	11.49	0.00	57.90
EW(CSL)	23.49	9.98	0.00	53.85
EI(CSL)	3.36	3.74	0.00	17.65
SR(CSL)	1.08	2.30	0.00	13.64
EWEI(CSL)	26.86	10.77	0.00	61.54

Emotional Words

Table 5: Cell Means (Standard Deviations) for EW

Grouping	Gender	Non-clinical Situation	Clinical Situation
WE	Male	21.75 (9.35)	22.37 (8.47)
	Female	26.95 (11.57)	27.88 (10.81)
	Total	25.28 (11.13)	26.10 (10.40)
CE	Male	24.71 (7.76)	22.96 (8.22)
	Female	23.49 (11.94)	21.22 (8.38)
	Total	24.05 (10.15)	22.02 (8.26)
CC	Male	18.31 (10.78)	18.73 (10.93)
	Female	18.58 (10.22)	20.67 (8.58)
	Total	18.47 (10.35)	19.84 (9.59)

The means of the individual cells for Emotional Words (EW) are represented in Table 5. The grand mean for EW in the friend situation was 23.37 (SD = 11.08) and that in the counsellor situation was 23.49 (SD = 9.98). Analysis of variance revealed that Grouping had a significant main effect on the proportion of emotional words used, F (2, 182) = 6.46, p = .002. Using R squared as an index of treatment effect, and employing the formula

R squared = Sum of Squares (source)/ Sum of Squares (total),

the effect size of grouping was found to be .047.

No other main or interaction effects were significant (Table 6).

Table 6: ANOVA for EW

Source	Mean Square	D.F.	F	p
Grouping (G)	947.996	2	6.46	.002**
Gender (S)	225.873	1	1.54	.216
GXS	375.847	2	2.56	.080
Error (bet.)	146.784	182		
Context	0.002	1	0.00	.995
CXG	77.171	2	1.33	.267
CXS	4.828	1	0.08	.773
CXGXS	7.077	2	0.12	.885
Error (with.)	58.013	182		

** p < .01

Further analysis with group contrasts indicated that the WE Group (M = 25.69) showed significantly more emotional words than the CC Group (M = 19.15) across the

two contexts, $t = 4.26, p = .000$. The CE Group ($M = 23.03$) also showed more emotional words than the CC Group, $t = 2.21, p = .029$. The WE Group and the CE Group were not significantly different.

Emotional Ideas without Emotional Words

The results for Emotional Ideas without Emotional Words (EI) are detailed in Table 7.

Table 7: Cell Means (Standard Deviations) for EI

Grouping	Gender	Non-clinical Situation	Clinical Situation
WE	Male	2.70 (2.80)	2.33 (3.21)
	Female	3.33 (4.30)	3.36 (3.90)
	Total	3.13 (3.88)	3.03 (3.70)
CE	Male	3.34 (3.14)	4.11 (2.70)
	Female	2.00 (2.64)	3.08 (3.59)
	Total	2.61 (2.93)	3.55 (3.22)
CC	Male	2.71 (2.85)	2.83 (3.85)
	Female	3.79 (3.46)	4.71 (4.47)
	Total	3.33 (3.22)	3.91 (4.28)

The mean value of EI across all groups in the friend situation was 3.03 ($SD = 3.49$), whereas that in the counsellor situation was 3.36 ($SD = 3.74$). Analysis of variance indicated that none of the main or interaction effects was significant (Table 8).

Table 8: ANOVA for EI

Source	Mean Square	D.F.	F	p
Grouping (G)	9.849	2	0.54	.583
Gender (S)	11.579	1	0.64	.426
GXS	47.289	2	2.60	.077
Error (bet.)	18.217	182		
Context (C)	14.761	1	1.89	.171
CXG	9.732	2	1.24	.291
CXS	5.205	1	0.67	.416
CXGXS	0.412	2	0.05	.949
Error (with.)	7.826	182		

As none of the omnibus Fs were significant, no further comparisons of means was performed.

Emotional Ideas with Somatic Referents

Table 9 summarizes the individual cell means for Emotional Ideas with Somatic Referents (SR). For all three groups of participants, somatic referents occurred in much smaller proportions (from 0.17% to 2.33%) than the other two dependent measures. The overall mean proportion for the friend situation was 0.51 ($SD = 1.41$), and that for the counsellor situation was 1.08 ($SD = 2.30$).

Table 9: Cell Means (Standard Deviations) for SR

Grouping	Gender	Non-clinical Situation	Clinical Situation
WE	Male	0.31 (1.15)	0.17 (0.76)
	Female	0.37 (1.08)	0.86 (1.91)
	Total	0.35 (1.10)	0.64 (1.66)
CE	Male	0.41 (0.99)	1.50 (2.14)
	Female	0.45 (1.78)	1.05 (2.63)
	Total	0.43 (1.45)	1.26 (2.40)
CC	Male	0.25 (0.61)	1.04 (1.89)
	Female	1.42 (2.25)	2.33 (3.63)
	Total	0.92 (1.83)	1.78 (3.05)

As can be seen in Table 10, there was a significant grouping main effect, $F(2, 182) = 4.63, p = .011$, and a significant context main effect, $F(1, 182) = 13.07, p = .000$. Using R squared, the effect sizes of grouping and of context were .030 and .023 respectively. A main effect for gender just reached statistical significance, $F(1, 182) = 3.92, p = .049$. The effect size was .013. No significant interaction effect was detected between grouping and context.

With respect to the Grouping main effect, it was discovered that the difference came from the comparison between WE and CC. The CC Group ($M = 1.35$) showed significantly more somatic referents than the WE Group ($M = 0.49$), $t = 3.19, p = .002$. The CE Group ($M = 0.84$) occupied a position between the WE and CC Groups, but

was not significantly different from either of them.

Table 10: ANOVA for SR

Source	Mean Square	D.F.	F	p
Grouping (G)	20.899	2	4.63	.011*
Gender (S)	17.692	1	3.92	.049*
GXS	12.256	2	2.72	.069
Error (bet.)	4.511	182		
Context (C)	32.274	1	13.07	.000**
CXG	4.880	2	1.98	.142
CXS	0.149	1	0.06	.806
CXGXS	2.398	2	0.97	.381
Error (with.)	2.469	182		

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

The context main effect revealed that all three groups showed significantly more somatic referents in the counsellor situation ($M = 1.08$) than in the friend situation ($M = 0.51$), regardless of the ethnicity of the participants or the language that was used.

The gender main effect which barely reached statistical significance suggested that females gave more somatic referents ($M = 0.94$) than males ($M = 0.56$).

Overall Expressiveness

An overall index of verbal expressiveness of emotions was computed by adding EW and EI. Results on this measure are presented in Table 11.

Table 11: Cell Means (Standard Deviations) for (EW+EI)

Grouping	Gender	Non-clinical Situation	Clinical Situation
WE	Male	24.45 (9.63)	24.69 (9.71)
	Female	30.28 (11.87)	31.24 (10.41)
	Total	28.40 (11.48)	29.13 (10.59)
CE	Male	28.05 (9.01)	27.07 (8.92)
	Female	25.48 (11.86)	24.30 (9.01)
	Total	26.66 (10.62)	25.57 (8.99)
CC	Male	21.01 (11.95)	21.55 (13.05)
	Female	22.38 (10.73)	25.38 (11.21)
	Total	21.80 (11.16)	23.75 (12.04)

Table 12: ANOVA for Overall Expressiveness (EW+EI)

Source	Mean Square	D.F.	F	p
Grouping (G)	764.964	2	4.60	.011*
Gender (S)	339.734	1	2.04	.155
GXS	589.553	2	3.54	.031*
Error (bet.)	166.315	182		
Context (C)	15.103	1	0.23	.629
CXG	48.541	2	0.75	.473
CXS	20.059	1	0.31	.578
CXGXS	10.801	2	0.17	.846
Error (with.)	64.504	182		

* $p < .05$.

Once again a significant grouping main effect was found for overall expressiveness, $F(2, 182) = 4.60, p = .011$. The effect size was .034. A significant interaction effect was also found between grouping and gender, $F(2, 182) = 3.54, p = .031$ (Table 12). Pairwise contrasts of the group means revealed that the only group difference arose from the comparison between WE and CC. The WE Group ($M = 28.77$) was more emotionally expressive than the CC Group ($M = 22.77$), $t = 3.67, p = .000$. The other two pairwise comparisons (i.e. between WE and CE, and between CE and CC) were not significant.

The significant interaction effect between grouping and gender was explored.

Figure 1: Grouping X Gender Interaction Effect for (EW + EI)
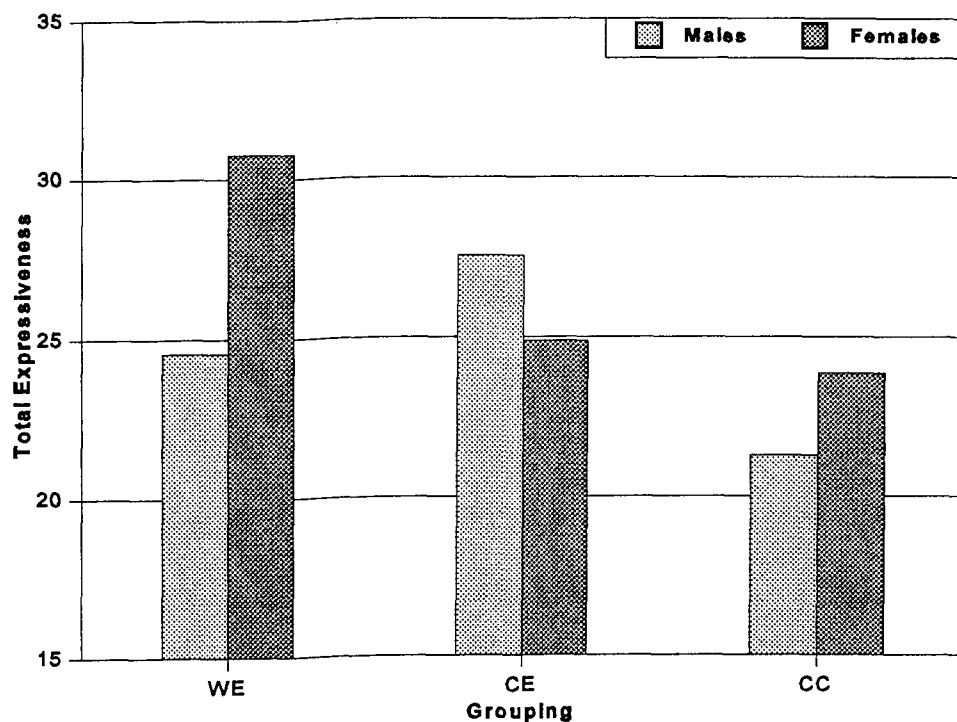
It was discovered that in both WE and CC, female participants were more verbally expressive of emotions than male participants. This trend was reversed for CE, where male participants were the more expressive (see Figure 1). This was the only significant interaction found in the study, with an effect size of .026. The hypothesized interaction effect between grouping and context was not significant.

Post-hoc Analyses

Significant grouping main effects were found for EW, SR, and (EW+EI), suggesting that the ethnicity-language mix exerted a small yet definite influence on the expressiveness of emotions in this study. Because of limitations in the design, it was impossible to tease out the variance attributable to ethnicity and language as independent variables. Nevertheless, post-hoc analyses were done to explore the relative contributions of ethnicity and language to the group differences. For each dependent measure where a grouping difference was found, CE and CC were combined and this combined Chinese Group was compared with WE for an estimate of the contribution of ethnicity. Likewise, WE and CE were combined to form an English Group and this was compared with CC to estimate the contribution of language. As there were altogether three possible comparisons of this kind for each significant grouping main effect, and maintaining a family-wise alpha level of .05, applying the Bonferroni correction gave an alpha of .05/3 or .017 for each comparison. This was used to test for the significance of the independent contribution of ethnicity and language for each comparison.

For EW, the combined Chinese Group (CE+CC) scored lower than the White

Group (WE) regardless of the language used, $t = 3.68$, $p = .000$. Also, when WE and CE were combined to form an English Group, irrespective of ethnicity, it scored higher than the Cantonese Group (CC), $t = 3.56$, $p = .001$. Apparently, both ethnicity and language contributed to the group differences. Being White and speaking in English are both associated with an increased production of emotional words.

In the same way, the White Group (WE) produced fewer somatic referents than a combined Chinese Group (CE+CC) irrespective of language, $t = 2.76$, $p = .007$. When the Cantonese Group (CC) was compared with a combined English Group (WE+CE), it was also found that the Cantonese Group produced more somatic referents than the combined English Group, $t = 2.66$, $p = .009$. It appeared that both ethnicity and language played a significant role in determining the amount of somatic referents used. Being Chinese and speaking in Cantonese were associated with the use of more somatic referents.

Ethnicity also had a significant effect on overall emotional expressiveness ($t = 3.25$, $p = .001$), as did language ($t = 3.00$, $p = .003$). Both ethnicity and language had their own contribution to the observed superiority of the WE Group. Thus, in every case where there was a significant Grouping main effect, it appears that both ethnicity and language made a contribution.

Apart from the experimental variables identified in this study, it was also of theoretical interest to explore other factors that might be associated with verbal expressiveness of emotions. A number of variables were selected from the demographic

data sheet and correlated with the dependent measures. These variables included

participants' age, number of years in Canada (CanYr), their rating of ease of imagining

themselves in the situation depicted (EaseScr), their rating on the vividness of their

imagined experience (VividScr), their rating on how common the experience was for

them (ComScr), and finally their rating on how likely they were to go for therapy for

the problem (LikelyScr). The resulting correlation matrix is presented in Table 13.

Table 13: Correlation Matrix for Selected Variables

	Age	CanYr	EaseScr	VividScr	ComScr	LikelyScr
EW(FRD)	.15*	.22*	- .01	- .03	- .07	.00
EW(CSL)	- .04	.15*	- .06	- .07	.08	.06
EI(FRD)	- .12	- .05	- .06	- .08	.02	- .11
EI(CSL)	- .01	- .10	.01	.03	.11	.07
SR(FRD)	- .10	- .20*	- .11	- .02	.15*	- .06
SR(CSL)	- .05	- .22*	.00	- .05	.10	- .02
EWEI(FRD)	.11	.19*	- .03	- .05	- .06	- .03
EWEI(CSL)	- .04	.11	- .05	- .05	.11	.08
LikelyScr	.14*	.20*	.13	.18*	.15*	1.00

* $p < .05$.

In view of the fairly large sample size in this study ($N = 189$), it is rather easy

to reach statistical significance with even a low correlation. According to Edwards

(1976), with a df = 200, a positive or negative correlation of about .138 would reach

significance at .05 level. In this situation, the clinical significance of the correlation is

considered of more importance than its statistical significance. Guilford (1956) provided

a guideline for interpreting the psychological implication of the magnitude of a correlation, which is as follows:

< .20   slight; almost negligible relationship

.20 - .40   low correlation; definite but small relationship

.40 - .70   moderate correlation; substantial relationship

.70 - .90   high correlation; marked relationship

> .90   very high correlation; very dependable relationship

According to Guilford's classification, in the foregoing analysis, four correlations suggested definite but small relationships. They all pertained to the number of years that the participants had spent in Canada. Those who had been in Canada longer produced more emotional words in the social situation, used fewer somatic referents in both the social and the clinical situation, and were more likely to go to a mental health professional for help. The other variables showed no relationship to emotional expressiveness, or with the likelihood to seek professional help. The likelihood of seeing a mental health professional was not correlated with any of the four measures of verbal emotional expressiveness.

IV. Discussion

Evaluation of Hypotheses

Using the measure of overall emotional expressiveness, defined as (EW+EI), Hypothesis 1 which postulated that the three groups were equally verbally expressive was not supported. The White-English Group was significantly more verbally expressive than the Chinese-Cantonese Group. The finding validated what has been reported from clinical anecdotes and case studies, namely that in their first languages Chinese people are less verbally expressive of their emotions than are White people. This finding remains even when their expressions are identified using criteria that are culturally specific to the English and the Cantonese languages. In other words, the difference is a genuine one and cannot be accounted for by the imposing of a yardstick that pertains to the English lexicon upon the Chinese, as proposed by Wierzbicka (1994).

In view of the finding that Chinese people are less explicit in demonstrating their feelings, indirect verbal expressions of emotion were included in this study. This is an area that has been largely neglected by researchers in the past, except for the subset of somatic idioms which has received ample attention. It was originally anticipated that Chinese people would use more indirect forms of expression than White people, and when both direct and indirect verbal expressions were considered, the two groups would emerge as being equally expressive. This was not borne out by empirical evidence. Post-hoc analysis suggests that the greater emotional expressiveness shown by the White participants over the Chinese was the result of contributions from both ethnicity and

language. Each factor appears to have contributed to the difference between WE and CC, but either alone does not seem to exercise a large effect, as evidenced by the non-significant difference between the White-English Group and the Chinese-English Group, and between the Chinese-English Group and the Chinese-Cantonese Group. Even when combined, the effect size of this ethnicity-language factor is only about .034, a small to moderate size according to Cohen's (1977) classification.

Hypothesis 2, which postulated that the overall emotional expressiveness of the Chinese groups is subjected to a stronger context effect than that of the White group, was not supported by the data. There was no significant interaction effect between grouping and context. As well, context had no main effect on the overall verbal expressiveness of emotions. Generally speaking, both White and Chinese participants were equally expressive in the clinical and in the non-clinical situation. Apparently, even though Chinese people have been described as being more reliant on contextual cues, they are not influenced by the context when it comes to the **amount** of emotion they verbally express. Whether the context affects the **way** in which they verbally express their emotions is another question, and one which is answered by examining the other hypotheses.

It was suggested in Hypothesis 3 that for the dependent variable of number of emotional words there would be a decreasing trend from the White-English to the Chinese-English to the Chinese-Cantonese Group. This hypothesis was partly supported by the data. The results were ordered in the expected direction, with the White-English

Group showing the most emotional words and the Chinese-Cantonese Group the least. The White participants produced more emotional words than the Chinese participants when they were both using their first language. However, the Chinese participants showed significantly more emotional words when they were using English than when they were using Cantonese. In fact, when responding in English, the Chinese group did not show a significant difference from the White group. This is a novel finding that perhaps runs counter to the common belief of many researchers. Yet this finding is what would be expected when one takes into consideration the cultural sanction that is often embedded in the social dimension of language. Language, to a large extent, is the vehicle which carries culture from one generation to the next, and from one part of the world to another. As the Chinese cultural generally discourages overly explicit expressions of emotions, this restriction should be most strongly operative whenever the first language (in this case Cantonese) is being used. Chinese employing a second language (in this case English) probably reduces this cultural inhibition, and allows more freedom for the discussion of affect-laden issues which would be considered too embarrassing or revealing in traditional Chinese thinking. As previously noted, support for this speculation was offered by Bond and Lai (1986). The implications of such a finding for clinical work with the Chinese is discussed in detail in a later section.

Once again, both ethnicity and language contributed significantly to the differential use of emotional words among the three groups. The computed effect size of the combined effect was again in the small to moderate range, with an R squared of .047.

In view of the inhibitions associated with the Chinese culture, it was postulated in Hypothesis 4 that the Chinese participants would give more indirect verbal expressions of emotions than the White participants, and that the Chinese would do more of that in Cantonese than in English. This was not supported by the results. There was no difference in the amount of indirect emotional expressions with respect to ethnicity-language grouping or context, or interplay of the two. None of the F values in the analysis were even close to reaching significance. The lack of significant effects here is not likely to be due to a lack of power in the study, which was of sufficient sensitivity to detect even small to moderate effect sizes. Taken together with the findings from the previous three hypotheses, the results indicate that although they are accorded less freedom to express their feelings directly, the Chinese do not make up for the deficit with more indirect verbal expressions of emotion. The notion that Chinese people show a stronger preference for subtle and indirect emotional expressions than White people (Chan, 1990) was not substantiated in this study.

For one subset of indirect expressions, namely that of somatic expressions, the Chinese did show a higher frequency than did the White participants. The Chinese, when using their first language, produced significantly more somatic idioms than the White group. The Chinese-English Group occupied a position between the White-English and the Chinese-Cantonese Groups, but it was not sufficiently different from either to reach statistical significance. Thus the data were in partial support of Hypothesis 5, which postulated significant differences between any two of the three groups. Once again, both

ethnicity and language were found to have made significant contributions to the difference

observed, with a combined effect size of .031. Such a finding is in agreement with what

has been reported of the Chinese in the literature, namely, that they tend to present their

emotional problems in the form of somatic complaints, and more so than do White people

(Kleinman, 1977; 1982; Tseng, 1975). However, the interaction effect between grouping

and context postulated under Hypothesis 6 was not supported by the data. There was

no difference in the way contextual cues affected the production of somatic referents

for the Chinese and for the White participants. In fact, the significant context main effect

indicated that both Chinese and Whites produced more somatic referents in the clinical

situation than in the non-clinical situation.

Discussion and Conclusions

The present research has two distinct characteristics that set it apart from most

of the previous studies on the verbal expression of emotions in the Chinese. First, the

data examined in previous studies were derived mainly from clinical case vignettes (e.g.

Ots, 1990; Tseng, 1975), anthropological reviews (e.g. Tseng, 1969), or attitude surveys

(e.g. Cheung, 1982; Sue, Wagner, Ja, Margullis, and Lew, 1976). These data are, in

essence, impressionistic statements based on clinical experience, or overall views on help-

seeking attitudes of Chinese people for their emotional problems, from which their

behaviours were inferred. A rare empirical study of verbal emotional expression in the

Chinese was that of Zheng at al. (1986). Although the authors measured verbal

behaviours directly, the external validity of the design is questionable as the experimental

task was quite different from what would be experienced in a help-seeking situation in real life. The present study utilized free speech samples obtained in a semi-structured situation to simulate as closely as possible verbal transactions that go on in everyday life. This method presumably permits generalization to real life clinical situations. Second, most previous studies were conducted either by White researchers or Chinese researchers working from a culturocentric point of view. The former group has claimed that Chinese people are less expressive of their emotions than westerners, whereas the latter group has argued that Chinese people do express their feelings when given the appropriate context. The problem with that research is that each group used its own cultural understanding of what constitutes an emotion and how it is to be expressed. This cultural myopia (Cheng and Lo, 1991) makes it difficult to compare the findings from these studies. The present study took advantage of the availability of bilingual and bicultural raters in Vancouver (including the author and those who performed reliability checks for him), and identified English and Cantonese emotional expressions within the confines of the sociolinguistic requirements of each language. This approach is of special significance in the recognition of subtle expressions of emotions like metaphors, idioms, and colloquialism that are specific to each culture. It is only with an emic approach that true cross-cultural comparisons can be made (Hui and Triandis, 1985).

Overall, the results of the present study confirmed the prevailing impression that the Chinese are less emotionally expressive verbally than White people in a general sense. With respect to the amount of emotional expression, White people are more verbally

expressive than are Chinese people when both are using their first language. The picture becomes more complicated when the style of verbal expression is considered. When speaking in their own languages, White people tend to express their feelings more directly by using more emotional words than do Chinese people. Chinese people, on the other hand, present more somatic complaints than White people when both are using their first language. However, the Chinese do not show the same preference for other forms of indirect expression. Wu's (1982) speculation that the Chinese are seen to be less emotionally expressive because they tend to use subtler forms of expression would lead one to expect the Chinese to show more of any kind (or most kinds) of indirect verbal expressions. This was not the case in this study. Of all the indirect forms of verbal expression, the Chinese seem to favour only somatic idioms. Hence there is something unique about the somatic idiom, over and above its subtlety, that accounts for its special position as a carrier of emotions in Chinese communication about emotions.

One possible interpretation of this finding involves the particular scenario that was used in this study. The event of breaking up with a loved one is presumed to elicit feelings of depression, a construct which is reported to be lacking in the Chinese emotion lexicon. A survey of the English responses indicated that the majority of the participants reported feeling sad or depressed as the predominant emotion. It was expected that such an emotion would be most likely expressed in Cantonese in an indirect fashion by the Chinese, and so would be more recognizable by observers within the culture than by an outsider. However, Zheng et al.'s (1986) finding that Chinese people favour different

styles of verbal expression for different emotions added another dimension to the problem. In their results, a somatic style was particularly associated with the feeling of depression. Hence of all indirect styles, the somatic style might have become the default for the scenario that was chosen for the study. More light will be shed on this issue if further studies are done using a different emotional state as the focus of study.

Another possible interpretation is based on a distinction, noted by Zheng et al. (1986), between presenting a somatic symptom, like "*I have a headache*", and describing a dis-ease with a somatic idiom, such as "*I have excess fire in my liver*". Some of the patients in Zheng et al.'s study who expressed somatic concerns did not endorse a comparable amount of somatic symptoms on a symptom checklist. This suggested that the somatic complaints served the purpose of expressing the emotions at hand, rather than that of reporting a bodily ailment. However, it is arguable whether these somatic complaints represent a form of communication that is any less direct than emotional words themselves. Taking the somatic expression as an indirect expression of emotion leads to the distinction between what is to be referred to (in this case the emotion) and that which is doing the referring (in this case the somatic idiom). This dichotomization of the psyche and the body is characteristic of western thought but it is certainly not representative of the way most cultures perceive the relationship between mind and body (Kleinman, 1986; White, 1982). Most cultures in Asia, Europe, and Africa do not subscribe to this dualistic view. Recognizing this, researchers are emphasizing the importance of how culture shapes the way the body and the mind are perceived (e.g.

Kitayama & Markus, 1994; Russell, 1991; Wierzbicka, 1984). Although such writings have opened up an interesting area for exploration, the body is still conceptualized as a product of culture, to be inscribed by the heritage of its symbols and metaphors.

A more revolutionary way of approaching the issue is to conceptualize the body as a generative source of culture (Jenkins, 1994; Ots, 1990). Instead of viewing the body as a container for embodied meaning, one can look at the body as a generator of sensations, orientations, gestures, and behavioural habits all of which have a meaning attributed to them through this body-experiencing process. Ots (1990) suggested the German word *Leib* to denote this "lived-body". If such a view is taken, then the somatic complaints of the Chinese are not indirect expressions of emotions but the emotions themselves.

In traditional Chinese medicine, emotions and bodily functions can both be categorized under the doctrine of Five Elements: fire, earth, metal, wood, and water. Hence a direct equivalence between emotions and bodily functions is established. For example, anger is associated with the liver, anxiety with the heart, melancholia with the spleen, worry with the lungs, and fear with the kidneys. What these organ-terms refer to has been debated for years. While Unschuld (1987) believed that they refer to the actual anatomical structures of the body, Ots (1990) was convinced that they denote emotions as represented by patterns of somatic symptoms. Ots took these body-terms as shorthand for patterns of somatic symptoms which constitute the various emotions. They are not "expressions" of feelings but the feelings themselves as they are experienced.

He provided some empirical data to show that 80% of his patients with liver-related problems had some form of anger, and that 85% of his heart patients showed anxiety. He argued for definite specificity of symptoms for these "somatopsychic" conditions on the basis that the feeling component and the associated somatic response are two sides of the same coin. One is just as real and legitimate as the other. Whereas in western culture each side of the coin is considered separately from the other, in the Chinese culture the whole coin is described with an organ-word. In this view, somatic referents should be given special status in emotion research on the Chinese. They should not be taken as indirect expressions of emotions, but should be treated in the same way as emotional words are for the North American culture.

In the present study, even though the Chinese participants showed significantly more somatic referents than the White participants (1.35% versus 0.49%), the major form of expression for the Chinese was still emotional words (19.15%). Thus it is inaccurate to say that Chinese people talk about their bodies instead of their feelings. The results seem to support Beiser and Fleming's (1986) finding that the emotional language and the somatic language represent alternative ways of expressing distress, and that the somatic language is much more elaborated in the Chinese culture than in the west. A logical next step would be to look at some of the sociolinguistic rules for this somatic language, independent of what is already known about the use of emotional words.

One of the factors determining the extent to which the Chinese present somatic

symptoms was highlighted in Cheung and Lau's (1982) study. They pointed out the influence of situational variables on the presentation of distress in Chinese patients, and attempted to use that to explain the prevalence of "somatization" in the Chinese population. They suggested that being in a medical setting predisposed the Chinese to focus on their bodily symptoms. Looking at problem conceptualization and help-seeking behaviours of Chinese college students, Cheung (1984) also discovered that her participants preferred to go to medical doctors for help with their physical problems, and to friends when the problem was psychological. The findings of the present study supported Cheung's speculations. More somatic referents were produced when the participants were speaking to a counsellor than when they were speaking to a friend. (In the Chinese culture, counselling is often associated with medical services.) However, the pattern held true for the White participants as well. White participants also showed significantly more somatic complaints in a clinical situation than in a non-clinical situation. Hence although contextual variables might account for different amounts of somatic expressions given by the Chinese across different situations, such variables do not seem to account for all the group differences found in earlier research. In the use of somatic referents, the Chinese do not seem to be any more field-dependent than White people are.

The group differences observed between White and Chinese participants in emotional words, somatic referents, and total expressiveness seem to be a result of both ethnicity and language. Unfortunately, it was impossible to measure the independent

contributions of each factor because of the lack of a completely crossed factorial design (due to the fact that few, if any, White students spoke Cantonese). However, the results revealed a combined ethnicity-language effect of small to moderate magnitude, somewhere around .030 to .047. Inspection of the error terms used in the analyses of variance reveals that a large part of the variance came from individual differences. It appears that there are other factors influencing how verbally expressive an individual is about his or her feelings, or that emotional expression is an idiosyncratic form of communication which is governed mainly by the individual's personality and personal history.

One important finding that emerged from the data was that Chinese people produced more emotional words when they were responding in English than when they were responding in Cantonese. In fact, when responding in English, the Chinese students were no less emotionally expressive than the White students. It is tempting to assume that one would be most emotionally expressive when using one's first language. The results suggest otherwise. What appears to be operative here is that the first language calls forth the "mother culture" of the individual who then produces what would be considered appropriate expressiveness in that culture. In this case, the Chinese culture discourages explicit verbal expressions of emotions, hence an over-abundance of emotional words would probably be inappropriate for the Chinese individual. Chan (1985) showed how certain symptoms on the General Health Questionnaire were endorsed by Chinese when presented in English but not when presented in Chinese. Bond

and Lai (1986) also pointed out the face-saving value of using a second language. Switching to a second language removes the embarrassment caused by a tabooed act and allows more freedom for the expression of emotions. For the Chinese participants who responded in Cantonese, it was occasionally observed that they switched to English when they wanted to express an emotional word, and then returned to Cantonese for the rest of the sentence. This finding that Chinese people are more emotionally expressive in English than in Cantonese is a new one in the area of emotion research, and hopefully it will engender more studies of this phenomenon.

Participants of both sexes were included in this study, but gender was not a variable under investigation. However, it is important to know whether gender placed any restrictions on the kind of conclusions that can be drawn from the results, since the three subject groupings had different proportions of males and females. There was no Gender main effect for EW, EI, and (EW + EI), indicating that the different gender compositions in the three groups did not pose a problem. For SR, a significant Gender main effect was found, with females presenting more somatic referents than males. The effect did not interact with any of the other variables. Given that there were more females in the White group than in the Chinese group, this finding further speaks to the ethnic and linguistic pressure in the Chinese to present somatic expressions. If anything, the Gender main effect served only to reduce the difference found between the groups, which in turn lends stronger support to the conclusion.

A significant Gender X Grouping interaction effect was found on the variable

of overall expressiveness. When both the White and the Chinese participants were using their first language, females were more expressive than males. For the Chinese group that responded in English, it was the males who were more expressive. Literature that reports females to be more emotionally expressive (e.g. Brody, 1993) is mostly based on studies done on the White population using the English language. There is some evidence that the same pattern emerges when Chinese use Cantonese. The trend however is reversed for the Chinese when a second language, English, is used. It is speculated that Chinese men are subjected to even more stringent cultural sanctions on their emotional expressiveness than are Chinese women. As a result, Chinese men may probably experience an even greater modifying effect when responding in English than do Chinese women. This explanation would account for the reverse trend found in the study. Confirmation of this speculation will require further research.

The post-hoc correlation analyses provided further interesting information and thoughts for future research. Three items on the demographic sheet asked for the participant's reactions to the experimental task. These items include the participant's perceived easiness in entering into the scenario, the vividness of the participant's imagination, and how common the event of breaking-up was in the participant's experience. In a way, they all indirectly assess dimensions of demand characteristics of the experimental task. None of the items correlated substantially with any of the dependent measures. Hence the amount of emotion expressed did not seem related to the participants' reactions to the task at hand. The only variable that correlated with

some of the dependent measures in any meaningful way was years of residency in Canada. Apparently, the longer one has been in Canada, the more one tends to use emotional words (at least in the friend context) and fewer somatic referents (across both contexts). Years of residency in a culture is often taken as a convenient index for acculturation. Thus the finding can be taken to mean that the more acculturated to the North American culture one becomes, the more one utilizes emotional words to express one's feelings directly, and the less one resorts to using a somatic language.

The question whether participants would seek out a mental health professional after a break-up is another item of interest in the post-hoc analyses. Again the only correlate (to any substantial degree) was years of residency in Canada. People who had been in Canada for a longer period reported a greater inclination to seek help from a counsellor. This finding is consistent with Ying and Miller's (1992) finding that acculturation level is an important predictor of both help-seeking attitude and behaviour in Chinese Americans. However, even though both the likelihood of going to a counsellor and the utilization of a direct mode of verbal expression of emotion are positively related to acculturation, they were not associated with one another. Being more verbally expressive or being direct in one's style of expression bore no relation at all to how likely one would consider seeking counselling as a problem-solving method. These findings call for a more thorough examination of the interplay of variables like acculturation, language use, emotional expressiveness, and somatization, in psychotherapeutic work with Chinese populations in North America.

Clinical Implications

The reluctance of Chinese Americans to utilize mental health services that is widely documented (Sue & Sue, 1974; Leong, 1986, 1994), has initiated a call for therapists to be more sensitive to cultural issues of minority populations (Sue & Sue, 1972; 1987; Yi, 1995). There is some evidence that the access inequity can be reduced by providing ethnic-specific mental health services (Zane, Hatanaka, Park, & Akutsu; 1994), but more has to be done in relating the provision of these services to actual treatment effectiveness for the Chinese (Sue, 1988). As more research begins to surface in this area, it becomes apparent that the cultural knowledge of the therapist is but a distal factor related to the successful treatment of Chinese clients (Sue, 1988; Sue and Zane, 1987), and at times could have a detrimental effect on treatment outcomes when the cultural knowledge is applied indiscriminantly (Flaskerud & Liu, 1990). In view of this, Sue and Zane (1987) stressed the importance of proximal factors that directly lead to treatment effectiveness.

One of the reported ways to enhance treatment effectiveness is to ensure an ethnic match between the counsellor and the client. Flaskerud (1986) reported that the provision of bicultural and bilingual counsellors significantly enhanced the utilization rate of mental health services among minority groups. Fujino, Okazaki, and Young (1994) also reported that an ethnic and/or gender match is significantly associated with reduced premature termination and increased treatment duration. However, thus far there is no evidence that an ethnic match leads to better treatment outcomes. In fact, Zane, Enomoto, and

Chun (1994) presented evidence that Asian-American clients showed poorer short-term treatment outcomes than White-American clients even when there was ethnic match between client and therapist. Clearly, the difficulty in working with Chinese clients has three prongs: the low utilization rate, the relatively high drop-out rate and premature termination of therapy, and the lack of indicators that would point to better treatment outcomes. Some effort has been made to educate the minority populations about the availability of mental health services in Vancouver, and attempts are being made to introduce courses in multicultural counselling in graduate programmes. Both the American Psychological Association and the Canadian Psychological Association are more actively encouraging the admission of minority students to these programmes in order to meet the demands of the changing communities. Yet it appears that more has to be understood before better solutions can be offered.

Sue (1988) reminded researchers that an ethnic match does not necessarily imply a culture match. Culture subsumes many more characteristics than ethnicity does. One aspect of culture that has received little attention in the area of cross-cultural psychotherapy is language. A study by Flaskerud and Liu (1990) is among the few that looked into the language match between therapist and client. These researchers discovered that a language match for Vietnamese and Cambodian clients increased the number of sessions for those who stayed in therapy, but for Cambodians a language match actually *increased* the drop-out rate. According to Flaskerud and Liu (1990), with a language match catharsis is more readily achieved in the early sessions, thereby resulting

in immediate symptom relief and reducing the need for further sessions. There are no comparable studies on Chinese clients.

It should be pointed out that there are two ways of language matching between the therapist and the client. The first is to match according to the first language of the client, e.g. Cantonese or Mandarin for Chinese clients. The second is to match the Chinese client's English proficiency with an English-speaking therapist. The findings of the present study are noteworthy because they suggest that if the Chinese client is capable of conducting a conversation in English, then conducting therapy in English would allow the client to be more emotionally expressive than if the therapy were conducted in the first language. If the conjecture of Flaskerud and Liu (1990) is correct, this approach should facilitate even more catharsis and symptom relief for Chinese clients. The issue at hand is not one of first or second language, but of finding a language in which the client is more verbally expressive of the client's feelings. In a sense this is also one form of culture match, albeit in this case, a match according to the culture of traditional psychotherapy.

It should also be noted that an ethnic mismatch does not necessarily imply a culture mismatch. Often when a Chinese client presents somatic symptoms, the client is automatically assumed to be unwilling or unable to talk about feelings. The present study demonstrated that although Chinese people tend to produce more somatic referents than White people, their predominant mode of emotional expression is still the use of emotional words. In this sense the Chinese client is not that different from a White client.

In fact, it appears that the longer the Chinese has been in Canada, the more will the individual's expressions resemble those of White people. The findings of the present study should remind therapists not to assume that emotional work will be difficult when faced with a Chinese client with somatic complaints. Although the client may be of a different ethnicity, there may be still be cultural similarities that are masked by superficial differences. The question of whether or not Chinese clients can benefit from insight-oriented therapy should receive a definite affirmative response. Holmes (1992) has warned psychoanalysts of minority clients who use ethnicity as a form of resistance to therapy. These clients often complain that their therapists are unable to help them because they are of a different ethnicity. Perhaps therapists too should be alerted to their use of ethnicity as a form of counter-resistance when working with minority clients.

In his review of research on ethnic similarity in counselling, Atkinson (1981) listed two viewpoints that were taken up by most counselling training programmes. Proponents of intracultural counselling argue that counsellors who are of the same ethnicity as their clients are better able to understand their clients' experience, and so can better resolve their clients' problems. In this view, more minority students should be admitted to graduate programmes to ensure that an adequate supply of therapists of various ethnicities are available to serve the ever increasing minority populations. Proponents of cross-cultural counselling argue that culturally-sensitive counsellors should be able to transcend cultural differences the same way they transcend other differences between themselves and their clients. These people recommend that cultural sensitivity courses be included

in graduate programmes to enable mainstream therapists to work with clients from a

diversity of ethnic backgrounds. After an extensive review on studies done between

1960 and 1980, Atkinson (1981) concluded that there was no evidence that counselling

was more effective when the therapist and the client shared similar ethnic backgrounds

than when they were of different ethnicities. From a purely empirical standpoint, there

is insufficient justification that more minority students are required in clinical graduate

programmes to meet the changing demands of society. As Sue (1988) explained, the

recommendation for admission of minority students is more a moral and political issue

than a professional one. This is not to say that the recommendation is invalid, but it is

based on different grounds than a scientific one.

Findings from the present study suggest that when the Chinese client demonstrates

a level of English proficiency that allows the client to participate in therapy in English,

what results is more direct verbal expressions of emotions from the client. There is the

possibility that this enhanced expressiveness actually increases the effectiveness of

psychotherapy with Chinese clients. For some Chinese clients, therapy is best conducted

with a mainstream therapist in English. The implication is that mainstream therapists

should be prepared to work with the increasing Chinese population in Vancouver, instead

of relying on the few Chinese therapists around to do the task. This was emphasized

by Kawaga-Singer and Chung (1994) and by Westwood (1983). It is the author's

recommendation that cultural sensitivity courses be included in clinical graduate curricula

to foster better understanding of the Chinese client on a conceptual level (e.g. Kawaga-

Singer, 1994), as well as on a practical level (e.g. Akutsu, Lin, & Zane, 1990).

Limitations of the Study and Directions for Future Research

The present study utilized an imaginative role-play method to simulate real-life situations of a social and a therapeutic nature. Although the participants were enabled to engage in their imagination as instructed, the study did not monitor the extent to which participants did successfully differentiate between the clinical and the non-clinical situations. A post-experiment inquiry would have ensured that the context variable had been successfully manipulated. This would have enhanced the internal validity of the results. In addition, the external validity can also be improved by using excerpts from videotaped/audiotaped therapy sessions, which would allow generalizations to be made more legitimately to actual therapeutic situations with Chinese clients.

With the findings of this exploratory piece of work, and the availability of the coding manuals developed, further research can be envisioned in this area. Instead of delineating different styles of emotional expression, one can investigate degrees of emotionality in verbal expressions. This would enable finer differentiations to be made of verbal expressions on emotions. Likewise, rather than using categorical groupings of ethnicity, one can begin to define degrees of acculturation to any given culture as measured by a continuous scale. The Suinn-Lew Asian Self-Identity Acculturation Scale (Suinn, Ahuna, & Khoo, 1992; Suinn, Rickard-Figueroa, Lew, & Vigil, 1987) is an appropriate instrument for the purpose. When levels of acculturation can be measured as a quantitative variable, more sophisticated statistical analyses may be performed to

shed more light on the intricate relationship between ethnicity and language, and the independent roles they play in determining the verbal expression of emotions in the Chinese.

Appendix A

SENTENCE COMPLETION BLANK

(ENGLISH)

Participant's Code:

Sex: Context:

1.   I want to let you know that ...

2.   This has been making me ...

3.   When I think about it I feel ...

4.   Everything seems ...

5.   Sometimes I really feel ...

6.   I think ...

7.   My family ...

8.   If only ...

9.   The hardest thing for me is ...

10.   However, I feel ...

11.   At least I'm not ...

12.   My friends ...

13.   I feel ...

14.   I guess I'll have to ...

15.   Before we go, I ...

SENTENCE COMPLETION BLANK

(CANTONESE)

1 我想話你知。。。

2 呢件事令我。。。

3 當我想起呢件事的時候，我就覺得。。。

4 所有 " 野 " 都好似。。。

5 有時我眞係覺得。。。

6 我認爲。。。

7 我 D 屋企人。。。

8 如果。。。

9 對我來講，最難係。。。

10 不過，我覺得。。。

11 最少我唔係。。。

12 我 D 朋友。。。

13 我覺得。。。

14 我想我唯有。。。

15 臨走之前，我。。。

Appendix B

DEMOGRAPHIC DATA SHEET

Participant's Code:

Age: Date of Birth:

Sex:

What is your first language?   (Please check):
     1.   English   (   )
     2.   Cantonese   (   )
     3.   Other (please specify) _____

What is the language that you feel most comfortable speaking? (Please check):
     1.   English   (   )
     2.   Cantonese   (   )
     3.   Other (please specify) _____

How long have you been residing in Canada?   _____ years

How many years of schooling have you had in Canada?   _____ years

If you are from another country, how old were you
when you arrived in Canada?   _____

Please rate the following items according to the scale:
      1......................2......................3......................4......................5
   Not at all   Extremely

1.   How easy was it for you to put yourself in the situation
      of talking to somebody as described in the study?   _____

2.   How vivid was your memory for (or imagined
      experience of) the ending of a relationship?   _____

3.   How common is the situation (i.e. breaking up with
      a boyfriend/girlfriend) in your experience?   _____

4.   How likely would you be to go to a specialist if you
      were really upset about the ending of a relationship?   _____

SIMON FRASER UNIVERSITY

VICE PRESIDENT, RESEARCH

BURNABY, BRITISH COLUMBIA
CANADA V5A 1S6
Telephone: (604) 291-4152
FAX: (604) 291-4370

June 2, 1994

Mr. Edward Shen
Graduate Student
Psychology
Simon Fraser University

Dear Mr. Shen:

Re: "Blandness of the Heart": Expression of Psychological
Problems Among the Chinese

I am pleased to inform you that the above referenced application has been
approved on behalf of the University Ethics Review Committee.

Best wishes for success in this research.

Sincerely,

Bruce P. Clayman, Chair
University Ethics Review Committee

BR/hme

c: R. Ley, Supervisor
       C. Webster, Chair

Appendix D

PARTICIPANT CONSENT FORM

<u>Invitation to Participate</u>:
You are invited to participate in a study about the way Chinese and White people express themselves.

<u>Procedures</u>:
If you choose to participate in this study, all you need to do is to imagine a situation and orally complete a number of sentences. You will also be asked to give some basic demographic data. The whole procedure takes about 15 minutes.

<u>Potential Risks and Discomfort</u>:
There is no risk in participating. The study is completely non-intrusive.

<u>Potential Benefits</u>:
Students from the subject pool of S.F.U. will be given credit (2%) for their participation. Otherwise, there are no direct benefits to you other than the understanding that you may be contribute to our knowledge in Psychology.

<u>Anonymity</u>:
Your individual results will be kept anonymous and will be identified by a code and not by name. All analyses will be done by group comparisons. Comparison of individual results will not be conducted.

<u>Confidentiality</u>:
Any information obtained will remain strictly confidential. The protocols will be kept in a locked place to which only the experimenter will have access, and they will be destroyed after the research is completed.

<u>Withdrawal from the Study</u>:
Participation is entirely voluntary and you may withdraw from the study at any time you so desire.

<u>Concerns and Complaints</u>
You may register any concerns or complaints you might have about the experiment with the researcher Edward Shen (291-3354) or with Dr. Chris Webster (291-3358), Chair of the Department of Psychology, Simon Fraser University.

Request for Results
        If you wish you may obtain a summary of the results of the study upon its completion by filling out the following:

Name:

Mailing Address:

Please read the following paragraph, and if all of it is to your satisfaction, please sign at the bottom of the page.

"I have volunteered to participate in a research project under the direction of Edward Shen, a Ph.D candidate in the Psychology Department at Simon Fraser University. I have been informed of the basic procedures of the study by reading the first page of the informed consent form. I take part in this study with the understanding that I may withdraw my participation at any time. I am aware that my participation will involve the task described in the section entitled "Procedures" on the first page of this form. I take part in this study with the assurance that my responses will be completely anonymous and confidential. I understand that I may obtain a copy of the results of the study upon its completion from Edward Shen or Dr. Robert Ley at 291-3354.

Signature of Participant   Date

Signature of Witness   Date

<u>Appendix E</u>

<u>ENGLISH INSTRUCTIONS TO THE PARTICIPANT</u>

<u>First Trial</u>

Please sit down. My name is Tony.

Thank you for participating in this study. This experiment involves your completing a series of sentences. I'd like you to think about a time when you broke up with your boyfriend/girlfriend. I'd like you to remember the time you spent together, and all the things you did with him/her, and how you felt when the relationship ended. I want you to put yourself back into that experience again. Let me give you some time to remember what it was like. (Pause)

You are feeling really sad, and really need to talk with someone.

[Non-clinical version: So you have asked a good friend to meet with you. Please complete the following sentences imagining that you're actually having a conversation with your friend.]

[Clinical version: So you have arranged to meet with a doctor specializing in treating psychological and emotional problems. Please complete the following sentences imagining that you're actually having a conversation with the doctor.]

Are you ready?

Second Trial

Thank you. (Pause)

Now we come to the second part of the study. Again I want you to remember the same time when you broke up with your boyfriend/girlfriend. The feelings are the same. You are very sad and upset about your relationship ending. You really need to talk to someone about how you feel. Take a few moments to put yourself in the situation again.

This time, however, instead of talking to a friend/[doctor], you decide to talk to a doctor specializing in treating psychological and emotional problems/[friend]. I want you to complete the following sentences imagining you are talking to that doctor/friend.

Are you ready?

CANTONESE INSTRUCTIONS TO THE PARTICIPANT

PART I

請坐，多謝你參加呢個研究。

呢個實驗係要你完成一 D 句子。

我想你記番你同你男（女）朋友分手時候。我想你記番你
地一齊日子，你地一齊做 D " 野 " ，同埋你地散果時你 D 感受。

我想你將自己擺番入去果個情況裡面。 等我比 D 時間你記
番係點。

（ PAUSE ）

你覺得好唔開心，而好需要同人傾一傾。

FRIEND： 於是你就叫個好朋友出來。

COUNSELLOR： 於是你就安排見一個專醫心理同埋情緒問題
D 醫生。

請你幻想你同緊你朋友 / 醫生傾緊偈，來完成呢 D 句子。

你準備好未？

PART II

唔該晒。

而家我地來到個實驗第二部分。

我想你再一次記番你同你男（女）朋友分手個次，個D感受都係一樣。你對呢次散 " 左 " 覺得好唔開心。 你好需要同人傾你 D 感受。

你用一陣來將自己擺番入去個情況度。

但係呢，今次你唔係同一個朋友（醫生）傾，你決定同一個專醫心理同埋情緒問題 D 醫生（朋友）傾。

我想你幻想你同緊你個醫生 / 朋友傾緊偈，來完成呢 D 句子。

你準備好未？

Appendix F

DEBRIEFING SHEET

Thank you for helping out with my research. In order to make your experience

an educational one, I have prepared the following summary of the study. PLEASE DO

NOT SHARE THIS WITH FELLOW STUDENTS WHO MAY POTENTIALLY

PARTICIPATE IN THE STUDY.

Many North American studies have indicated that Chinese people are reluctant

to seek help for their psychological problems, and when they do they present them in

the form of bodily complaints. Therefore, it is often believed that the Chinese tend to

somatize their emotional problems instead of expressing them directly. Although the

tendency for the Chinese to present somatic complaints to mental health workers is fairly

well established, there is insufficient evidence to suggest that they are less likely to report

emotional complaints than Westerners. It is possible that the Chinese exhibit varying

degrees of emotional expressiveness depending on the cultural and situational context

in which the emotions are expressed.

This study explores the effects of language and situational cues on the emotional

expressiveness of Chinese and Caucasian students. Since the lack of sadness has been

most frequently reported in the Chinese by Western researchers, this emotion is chosen

as the focus of the study. Two independent variables are manipulated: language (English

vs Cantonese) and context (friend vs doctor). The dependent variable, emotional

expressiveness, is measured in three ways:

a.   number of emotional words used (e.g. sad, hurt);

b.   number of emotion-laden ideas without emotional words (e.g. "it's the end of the world");

c.   number of emotion-laden ideas with somatic referents (e.g. "a gut-wrenching experience").

A Chinese target group and a Caucasian comparison group are included in the study. An experimenter blind to the hypotheses, Mr. Tony Watt, is recruited to collect the data. The order of presentation of the contexts (friend/doctor) is counter-balanced. The responses collected will be transcribed and rated according to the three measures of the dependent variable. ANOVA will be performed on the results.

Edward Shen

CODING MANUAL FOR VERBAL EXPRESSION OF EMOTIONS

Instructions

This study is about verbal expressions of emotions. You are requested to help determine how expressive participants in the study were about their emotions. This is achieved by identifying verbal expressions of emotional words and ideas according to certain operational criteria which are described below, and recording the frequency under each category of expression. Some of the transcripts are in English and others are in Chinese (Cantonese). The same coding principles apply to both. The subject of interest here is the emotional expressiveness of the participants. The genuineness and appropriateness of the emotions are irrelevant to the study. In the situation that the same emotional word or idea is expressed more than once, each occurrence is considered an independent count of expression. Correctness of grammar is not considered important for the purpose of this study.

The expression of emotion is categorized into three types. Their operational criteria for identification are as follows:

1.   **Emotional Words (EW):**

In English this category refers to the use of a single word which clearly depicts an emotional idea. The frequency count is recorded under the column "Emotional Words" on the recording sheet.

a.   The response can take the form of a noun which refers to a feeling as

opposed to reason. Examples include *anger, love, sadness, pain, hurt, rage, hatred, despair, confusion, happiness, anxiety, relief,* etc.

b. The response can take the form of an adjective suggesting a propensity to feel in a certain way. Examples include *unhappy, sad, angry, painful, sorry, mad, confused, anxious, tense,* etc. This also includes very general indications of positiveness or negativeness in one's propensity to feel, e.g. *"I feel good", "...feel bad for...",* etc.

c. The response can also take the form of a word which is not used exclusively to refer to an emotional state but can be used to denote a feeling given the appropriate context. Examples are *miss* as in "I *miss* him", *empty* as in "I feel *empty*", *lost* as in "I'm *lost*", etc.

In Cantonese this category refers to an emotional idea which is often expressed in a phrase of two or more characters which constitute a single lexicon unit.

a. The response can take the form of a noun phrase which refers to a feeling state. Examples include " 憤怒 " , " 痛苦 " , 等 。

b. The response can also be an adjectival phrase suggesting a propensity to feel in a certain way. Examples are " 嬲 " , " 冇趣 " , " 後悔 " , " 唔開心 " , " 好慘 " , 等 。

c. The category also includes phrases that are not used exclusively to refer to emotional states but can refer to a feeling given the appropriate context. Examples are " 掛住 " , " 空 " , " 灰暗 " , 等 。

2. **Emotional Ideas without Emotional Words (EI):**

In both languages this category refers to the situation where an emotional state is expressed in a phrase which does not contain any emotional words. All the subtypes listed below fall under this category.

a. The first subtype includes phrases in which somatic or body-organ terms are used to refer to an emotional state. It also includes the expression of an emotional state through the description of everyday bodily functions like sleep, appetite, etc. The frequency is recorded under the column **"Emotional Ideas with Somatic Referents" (SR)**, which is a subset of **"Emotional Ideas without Emotional Words" (EI)**. Note that *"concentration"* is considered a mental process and not a bodily one. Examples for this category include *"my heart is broken"*, *"it's really giving me a headache"*, *"a gut-wrenching experience"*, *"I'm not sleeping at all"*, *"I can't eat"*, *"I feel like crying"*, *"I feel dizzy"*, " 心碎 " ， " 頭痛 " ， " 訓唔著覺 " ， " 冇胃口 " ， " 喊 " ， " 冇心肝 " ， " 冇眼睇 " ，等 。

b. Other expressions included in this category are metaphors and behavioural descriptions which suggest a certain state of feeling. Examples of metaphors are *"it's the end of the world"*, *"in the dumps"*, *"like the sky has fallen"*, " 好似世界末日 " ， " 晴天霹靂 " ，等 。 Examples of behavioural descriptions are *"could have killed him"*,

"commit suicide", *"beat him up"*, *"slap him on the face"*,

" 殺左呢個人 " , " 自殺 " , " 打一把 " , 等 。

Note that a description that one would <u>not</u> behave in a certain way is considered a positive expression of emotion, such as *"I'm not thinking about suicide..."*, *"I'm not going to beat him up or do anything like that ..."*,

c.   Sometimes profanity terms may be found. They may or may not be used in such a way that an emotional state is being expressed. You are to exercise your judgment using contextual cues as to whether the profanity term is used to express an emotional state in each individual case.

<u>Appendix H</u>

<u>CODING MANUAL FOR IDEA UNITS</u>

<u>Instructions</u>

Please read each transcript carefully and identify the idea units in each sentence stem. You are requested to use your common sense as you would in any ordinary conversational interaction. The following operational guidelines are provided to meet the requirements of the study.

1. The unit of identification is the clause, with one or more verbs, that carry an ideational theme, e.g. "*John and I broke up...*" (1 unit), "*...I am depressed...*" (1 unit), "*I feel like crying*" (1 unit), "*if only I had seen it coming...*" (1 unit), "*She came and left just like that...*" (1 unit), "*I feel like I want to get back together...*" (1 unit), " 我地散左 " , " 我好唔開心 " , " 我好想喊 " , " 我一早估唔到 " , " 冇左個衰人仲好 " , 等 。 Each is considered one idea unit.

2. The over-riding principle is that every time an emotional expression occurs, it is considered an idea unit. There can be no more than one emotional expression in any one idea unit. Here emotional expressions refer to words or clauses that clearly depict a feeling state, a propensity to feel in a certain way, or a readiness to act in a way that suggests a certain state of feeling. Examples are "*I am depressed...*" (1 unit), "*I want to slap him...*" (1 unit), "*...committing suicide...*" (1 unit), "*...it's the end of the world for me...*" (1 unit), " 我好唔開心 " ,

" 我想自殺 " , " 我想殺左呢個人 " , 等 。

3. Each emotional expression is considered an independent idea unit, irrespective of whether it is a repetition of previous expressions. This is because the focus of the study is on the number of emotional <u>expressions</u> and not on the nature or type of the emotions being expressed. Examples are "...*depressed, really depressed...*" (2 units), "...*sad, and depressed...*" (2 units), "...*angry, just angry...*" (2 units), " 唔開心，好唔開心 " , " 嬲，好嬲 " , 等 。

4. Qualifying adjectives and adverbs that form part of the same ideational theme are considered as belonging to the same idea unit, e.g. "...*take a long, hard look...*" (1 unit), "*it was just a huge, dark nightmare...*" (1 unit), "...*neurotically depressed...*" (1 unit), "...*pretty upset...*" (1 unit), " 好好睇清楚 " , " 好似一場大惡夢 " , " 幾唔開心 " , 等 。

5. In cases where clauses are joined by "and" or "or", each clause is treated as an idea unit on its own, e.g. "*I can't think and sleep*" is taken to mean "*I can't think and I can't sleep*" (2 units). Other examples are "...*feel somewhat helpless and I can't control it...*" (2 units), "...*thinking of suicide or hurting anybody...*" (2 units), " 又訓唔到，又食唔到 " , 等 。

6. Repetitive words and phrases that carry no additional meaning are considered a part of the idea unit that they adhere to, e.g. "...*I know, I know, that I can get over this...*" (1 unit), "*I think, you know, that may be, I guess I'll give him a call*" (1 unit), "*I will call her later, but not today...*" (1 unit), " 我知，我知，

我會冇事 " ， " 我估，你明啦，我估我會遲 D 冇事 " ，等。

Please make a slash (/) clearly after each idea unit identified.

References

Abe, J. S., & Zane, N. W. S. (1990). Psychological maladjustment among Asian and White American college students: controlling for confounds. Journal of Counseling psychology, 37 (4), 437-444.

Acklin, M. W., & Alexander, G. (1988). Alexithymia and somatization: a Rorschach study of four psychosomatic groups. Journal of Nervous and Mental Disease, 176, 343-350.

Akutsu, P. D., Lin, C. H., & Zane, N. W. S. (1990). Predictors of utilization intent of counseling among Chinese and White students: A test of the proximal-distal model. Journal of Counseling Psychology, 37 (4), 445-452.

American Psychiatric Association. (1994). Diagnostic and statistical manual of mental disorders (4th ed.). Washington, DC: Author.

Atkinson, D. R. (1983). Ethnic similarity in counseling psychology: A review of research. The Counseling Psychologist, 11 (3), 79-92.

Beiser, M. (1990). Current mental health issues of our multicultural community with special reference to Chinese Canadians. In R. Peters (Ed.), Conference Proceedings: Mental Health Issues of Chinese Canadians in British Columbia (pp. 8-12). S.U.C.C.E.S.S.

Beiser, M., & Fleming, J. A. E. (1986). Measuring psychiatric disorder among Southeast Asian refugees. Psychological Medicine, 16, 627-639.

Bloom, A. H. (1981). The linguistic shaping of thought: A study in the impact of language on thinking in China and the West. Hillsdale, NJ: Erlgaum Associates.

Bond, M. H., & Lai, T. M. (1986). Embarrassment and code-switching into a second language. Journal of Social Psychology, 126 (2), 179-186.

Brandt, M. E., & Boucher, J. D. (1986). Concepts of depression in emotion lexicons of eight cultures. International Journal of Intercultural Relations, 10, 321-346.

Brody, L. R. (1993). On understanding gender differences in the expression of emotion. In S. L. Ablon, D. Brown, E. J. Khantzian, & J. E. Mack (Eds.) Human feelings: Explorations in affect development and meaning (pp. 87-126). The Analytic Press. Hillsdale, N.J..

Chan, D. W. (1985). Perception and judgment of facial expression among the Chinese. International Journal of Psychology, 20, 681-692.

Chan, D. W. (1985). The Chinese version of the General Health Questionnaire: Does language make a difference? Psychological Medicine, 15, 147-155.

Chan, D. W. (1990). The meaning of depression: the Chinese word associations. Psychologia, 33, 191-198.

Chen, C. N., Wong, J., Lee, N., Chan-Ho, M. W., Lau, J., & Fung, M. (1993). The Shatin community mental health survey in Hong Kong: II. Major findings. Archives of General Psychiatry, 50, 125-133.

Cheng, D., Leong, F. T. L., & Geist, R. (1993). Cultural difference in psychological distress between Asian and Caucasian American college students. Journal

of Multicultural Counselling and Development, 21, 182-190.

Cheng, L. Y., & Lo, H. T. (1991). On the advantages of cross-culture psychotherapy: The minority therapist/mainstream patient dyad. Psychiatry, 54, 386-395.

Cheng, T. (1977). A phenomonological study of emotional experience: a search for cultural differences and similarities in the construction of emotion by a Hong Kong Chinese sample. Unpublished Master's thesis. University of Hong Kong, Hong Kong.

Cheung, F. M. (1982). Psychological symptoms among Chinese in urban Hong Kong. Social Science and Medicine, 16, 1339-1344.

Cheung, F. M. (1984). Preferences in help-seeking among Chinese students. Culture, Medicine and Psychiatry, 8, 371-380.

Cheung, F. M., & Lau, B. W. K. (1982). Situational variations of help-seeking behaviour among Chinese patients. Comprehensive Psychiatry, 23 (3), 252-262.

Cheung, F. M., Lau, B. W. K., & Waldman, E. (1980-81). Somatization among Chinese depressives in general practice. International Journal of Psychiatry in Medicine, 10 (4), 361-374.

Cheung, P. (1991). Adult psychiatric epidemiology in China in the 80s. Culture, Medicine and Psychiatry, 15, 479-496.

Cohen, J. (1977). Statistical power analysis for the behavioral sciences (rev. ed.). New York: Academic Press.

Dion, K. L., & Giordano, C. (1990). Ethnicity and sex as correlates of depression symptoms in a Canadian university sample. The International Journal of Social Psychiatry,

36 (1), 30-41.

Draguns, J. G. (1996). Abnormal behaviour in Chinese societies: clinical, epidemiological, and comparative studies. In M. H. Bond (Ed.) The handbook of Chinese psychology (pp. 412-428). Oxford University Press: Hong Kong.

Edwards, A. L. (1976). An introduction to linear regression and correlation. Freeman: San Francisco.

Ekman, P., Friesen, W. V., O'Sullivan, M., Diacoyanni-Tarlatzis, I., Krause, R., Pitcairn, T., Scherer, K., Chan, A., Heider, K., LeCompte, W. A., Ricci-Bitti, P. E., & Tzavaras, A. (1987). Universals and cultural differences in the judgment of facial expressions of emotions. Journal of Personality and Social Psychology, 53, 712-717.

Ellsworth, P. C. (1994). Sense, culture and sensibility. In S. Kitayama, & H. R. Markus (Eds.) Emotion and culture. American Psychological Association. Washington, DC.

Ervin-Tripp, S. (1964). An analysis of the interaction of language, topic, and listener. American Anthropologist, 86 (6), 86-102.

Exner, J. E. Jr. (1973). The Self Focus Sentence Completion: a study of personality. Journal of Personality Assessment, 37, 437-455.

Flaskerud, J. H., & Liu, P. Y. (1990). Influence of therapist ethnicity and language on therapy outcomes of Southeast Asian clients. International Journal of Social Psychiatry, 36 (1), 18-29.

Frijda, N. H. (1988). The laws of emotion. American Psychologist, 43 (5), 349-358.

Fujino, D. C., Okazaki, S., & Young, Kathleen (1994). Asian-American women in the mental health system: An examination of ethnic and gender match between therapist and client. Journal of Community Psychology, 22, 164-176.

Gottschalk, L. A. (1971). Some psychoanalytic research into the communication of meaning through language: the quality and magnitude of psychological states. British Journal of Medical Psychology, 44, 131-147.

Gottschalk, L. A. (1977). Recent advances in the content analysis of speech and the application of this measurement approach to psychosomatic research. Psychotherapy and Psychosomatics, 28, 73-82.

Gottschalk L. A., & Hambidge, G. (1955). Verbal behavior analysis: a systematic approach to the problem of quantifying psychologic processes. Journal of Projective Techniques, 19, 387-409.

Greenson, R. R. (1950). The mother tongue and the mother. International Journal of Psychoanalysis, 31, 18-23.

Guilford, J. P. (1956). Fundamental statistics in psychology and education. New York: McGraw-Hill.

Harre, R., & Gillet, G. (1994). The discursive mind. Thousand Oaks: Sage Publications.

Hoffman, C., Lau, I., & Johnson, D. R. (1986). The linguistic relativity of person cognition: an English-Chinese comparison. Journal of Personality and Social Psychology, 51 (6), 1097-1105.

Holmes, D. E. (1992). Race and transference in psychoanalysis and psychotherapy. International Journal of Psychoanalysis, 73, 1-11.

Hoosain, R. (1986). Perceptual processes of the Chinese. In M. H. Bond (Ed.) The psychology of the Chinese people (pp. 38-72). Oxford University Press, Hong Kong.

Hui, C. H., & Triandis, H. C. (1985). Measurement in cross-cultural psychology. Journal of Cross-Cultural Psychology, 16 (2), 131-152.

Jenkins, J. H. (1994). Culture, emotion, and psychopathology. In S. Kitayama, & H. R. Markus (Eds.) Emotion and culture (pp. 307-338). American Psychological Association: Washington, DC.

Kawaga-Singer, M., & Chung, R. C. Y. (1994). A paradigm for culturally based care in ethnic minority populations. Journal of Community Psychology, 22, 192-208.

Keppel, G. (1991). Design and analysis: A researcher's handbook (3rd ed.). Prentice Hall: Englewood Cliffs, NJ.

Kirmayer, L. J. (1984). Culture, affect and somatization. Transcultural Psychiatric Research Review, 21, 159-188.

Kirmayer, L. J. (1991). Three forms of somatization in primary care. Journal of Nervous and Mental Disease, 179 (11), 647-655.

Kitayama, S., & Markus, H. R. (1994). Emotion and culture. American Psychological Association. Washington, DC.

Kleinman, A. M. (1977). Depression, somatization and the "new cross-cultural psychiatry". Social Sciences and Medicine, 11, 3-10.

Kleinman, A. M. (1982). Neurasthenia and depression: a study of somatization and culture in China. Culture, Medicine and Psychiatry, 6, 117-190.

Krystal, H. (1979). Alexithymia and Psychotherapy. American Journal of Psychotherapy, 6, 117-190.

Leff, J. (1973). Culture and the differentiation of emotional states. British Journal of Psychiatry, 123, 299-306.

Leff, J. (1977). The cross-cultural study of emotions. Culture, Medicine and Psychiatry, 1, 317-350.

Leong, F. T. L. (1986). Counselling and psychotherapy with Asian-Americans: review of the literature. Journal of Counseling Psychology, 33 (2), 196-206.

Leong, F. T. L. (1994). Asian American's differential patterns of utilization of inpatient and outpatient public mental health services in Hawaii. Journal of Community Psychology, 22, 82-96.

Lesser, I. R. (1981). A review of the alexithymia concept. Psychosomatic Medicine, 43 (6), 531-543.

LeVine, P. (1991). Morita therapy: a theoretical overview for Australian consideration. Australian Psychologist, 26, 103-106.

Lin, K. M., & Kleinman, A. (1981). Recent development of psychiatric epidemiology in China. Culture, Medicine and Psychiatry, 5, 135-143.

Lin, K. M., Kleinman, A., & Lin, T. Y. (1981). Overview of mental disorders in Chinese cultures: review of epidemiological and clinical studies. In A. Kleinman & T. Y. Lin (Eds.) Normal and abnormal behavior in Chinese cultures. Dordrecht, Netherlands: D. Reidel.

Lin, T. Y. (1953). A study of incidence of mental disorders in Chinese and other cultures. Psychiatry, 16, 313-316.

Lin, T. Y. (1983). Psychiatry and Chinese culture. The Western Journal of Medicine, 139, 862-867.

Liu, L. G. (1985). Reasoning counterfactually in Chinese: Are there any obstacles? Cognition, 21, 239-270.

Lo, W. H. (1981). Culture and depression - with special reference to treatment. Paper presented at the Symposium on Transcultural Psychiatry, Macau.

Lock, M. (1982). Popular conceptions of mental health in Japan. In A. Marsella & G. White (Eds.) Cultural conceptions of mental health and therapy (pp. 215-133). Dordrecht, Holland: Reidel.

Marsella, A. J. (1981). Depressive experience and disorder across cultures. In H. Triandis, & J. Draguns (Eds.) Handbook of cross-cultural psychology. Boston: Allyn & Bacon.

Marsella, A. J., Murray, M. D., & Golden, C. (1974). Ethnic variations in the phenomenology of emotions. Journal of Cross-Cultural Psychology, 5 (3), 312-328.

Mesquita, B., & Frijda, N. H. (1992). Cultural variations in emotions: a review. Psychological Bulletin, 412, 179-204.

Ngan, J. C. (1989). An investigation into the stress-alexithymia hypothesis in somatizing children in Hong Kong. Unpublished Master's thesis, University of Hong Kong, Hong Kong.

Ots, T. (1990). The angry liver, the anxious heart and the melancholic spleen. Culture, Medicine and Psychiatry, 14, 21-58.

Oxman, T. E., Rosenberg, S. D., Schnurr, P. P., & Tucker, G. J. (1985). Linguistic dimensions of affect and thought in somatization disorder. American Journal of Psychiatry, 142 (10), 1150-1155.

Peters, R. (1990). Improving mental health services for Chinese Canadians in British Columbia. In R. Peters (Ed.), Conference Proceedings: Mental Health Issues of Chinese Canadians in British Columbia (pp. 49-57). S.U.C.C.E.S.S.

Potter, S. H. (1988). The cultural construction of emotion in rural Chinese social life. Ethos, 16, 181-208.

von Rad, M., Lalucat, L. & Lolas, F. (1977). Differences of verbal behavior in psychosomatic and psychoneurotic patients. Psychotherapy and Psychosomatics, 28, 83-97.

Rotter, J. B., & Willerman, B. (1947). The Incomplete Sentence Test as a method of studying personality. Journal of Consulting Psychology, 11, 43-48.

Russell, J. A. (1991). Culture and the categorization of emotions. Psychological Bulletin, 110 (3), 426-450.

Russell, J. A., & Yik, M. S. M. (1996). Emotion among the Chinese. In M. H. Bond (Ed.) The handbook of Chinese psychology (pp. 166-188). Oxford University Press, Hong Kong.

Seegmiller, R. A., & Epperson, D. L. (1987). Distinguishing thinking-feeling preferences through the content analysis of natural language. Journal of Personality Assessment, 51 (1), 42-52.

Sifneos, P. E. (1973). The prevalence of "alexithymic" characteristics in psychosomatic patients. Psychotherapy and Psychosomatics, 22, 255-262.

Singer, K. (1975). Depressive disorders from a transcultural perspective. Social Science and Medicine, 9, 289.

Stearns, C. Z., & Stearns, P. W. (1988). Emotion and social change. New York: Holmes and Meier.

Sue, D., & Sue, S. (1987). Cultural factors in the clinical assessment of Asian Americans. Journal of Consulting and Clinical Psychology, 55 (4), 479-487.

Sue, D. W., & Kirk, B. A. (1975). Asian Americans: use of counseling and psychiatric services on a college campus. Journal of Counseling Psychology, 22 (1), 84-86.

Sue, D. W., & Sue, S. (1972). Counseling Chinese-Americans. Personal and Guidance Journal, 50, 637-644.

Sue, D. W., Wagner, N., Ja, D., Margullis, C., & Lew, L. (1976). Conceptions of mental health illness among Asian and Caucasian-American students. Psychological Reports, 38, 703-708.

Sue, D. W., & Zane, N. (1987). The role of culture and cultural techniques in psychotherapy: A critique and reformulation. American Psychologist, 42 (1), 37-45.

Sue, S. (1988). Psychotherapeutic services for ethnic minorities. American psychologist, 43 (4), 301-308.

Sue, S., & Sue, D. W. (1974). MMPI comparisons between Asian-American and non-Asian students utilizing a student health psychiatric clinic. Journal of Counseling Psychology, 21 (5), 423-427.

Suinn, R. M., Rickard-Figueroa, K., Lew, S., & Vigil, P. (1987). The Suinn-Lew Asian Self-Identity Acculturation Scale: An initial report. Educational and Psychological Measurement, 47, 401-407.

Suinn, R. M., Ahuna, C., & Khoo, G. (1992). The Suinn-Lew Asian Self-Identity Acculturation Scale: Concurrent and factorial validation. Educational and Psychological Measurement, 52, 1041-1046.

Tanaka-Matsumi, J., & Marsella, A. J. (1976). Cross-cultural variations in the phenomonological experience of depression. Journal of Cross-Cultural Psychology, 7 (4), 379-396.

109

Tseng, W. S. (1975). The nature of somatic complaints among psychiatric patients: the Chinese case. Comprehensive Psychiatry, 16 (3), 237-245.

Tseng, W. S., Asai, M., Jieqiu, L., Wibulswasdi, P., Suryani, L. K., Wen, J. K., Brennan, J., & Heiby, E. (1990). Multi-cultural study of minor psychiatric disorders in Asia: symptom manifestations. The International Journal of Social Psychiatry, 36 (4), 252-264.

Tseng, W. S., Di, X., Ebata, K., Hsu, J., & Yuhua, C. (1986). Diagnostic pattern for neuroses in China, Japan, and the United States. American Journal of Psychiatry, 143 (8), 1010-1014.

Tseng, W. S., & Hsu, J. (1969). Chinese culture, personality formation and mental illness. International Journal of Social Psychiatry, 16, 5-14.

Unschuld, P. U. (1987). Traditional Chinese medicine: Some historical and epistemological reflections. Social Science and Medicine, 24 (12), 1023-1029.

Viney, L. L. (1983). The assessment of psychological states through content analysis of verbal communications. Psychological Bulletin, 94, 542-563.

Westwood, M. J. (1983). Cross-cultural counselling: Some special problems and recommendations for the Canadian counsellor. Canadian Counsellor, 17 (2), 62-66.

White, G. M. (1982). The role of cultural explanations in "somatization" and "psychologization". Social Science and Medicine, 16, 1519-1530.

Wierzbicka, A. (1986). Human emotions: universal or culture-specific? American Anthropologist, 88, 584-594.

Wierzbicka, A. (1992). Talking about emotions: semantics, culture, and cognition. Cognition and Emotion, 6, 285-319.

Wierzbicka, A. (1994). Emotion, language, and cultural scripts. In S. Kitayama, & H. R. Markus (Eds.) Emotion and culture. American Psychological Association. Washington, DC.

Wu, D. Y. H. (1982). Psychotherapy and emotion in traditional Chinese medicine. In A. J. Marsella, & G. M. White (Eds.) Cultural conceptions of mental health and therapy. Dordrecht, Netherlands: D. Reidel.

Yap, P. M. (1965). Phenomenology of affective disorders in Chinese and other cultures. In A. De Reuck & R. Porter (Eds.) Transcultural Psychiatry. Boston: Little, Brown.

Yap, P. M. (1971). Guilt and shame, depression and culture: a psychiatric cliche re-examined. Community Contemporary Psychiatry, 1(2), 35.

Yi, K. (1995). Psychoanalytic psychotherapy with Asian clients: Transference and therapeutic considerations. Psychotherapy, 32 (2), 308-316.

Ying, Y. (1990). Explanatory models of major depression and implications for help-seeking among immigrant Chinese-American women. Culture, Medicine and Psychiatry, 14, 393-408.

Ying, Y., & Miller, L. S. (1992). Help-seeking behavior and attitude of Chinese Americans regarding psychological problems. American Journal of Community Psychology, 20 (4), 549-556.

Zane, N., Enomoto, K., & Chun, C. (1994). Treatment outcomes of Asian- and White-American clients in outpatient therapy. Journal of Community Psychology, 22, 177-191.

Zane, N., Hatanaka, H., Park, S. S., & Akutsu, P. (1994). Ethnic-specific mental health services: Evaluation of the parallel approach for Asian-American clients. Journal of Community Psychology, 22, 68-81.

Zheng, X., & Berry, J. W. (1991). Psychological adaptation of Chinese sojourners in Canada. International Journal of Psychology, 26 (4), 451-470.

Zheng, Y., Xu, L., & Shen, Q. (1986). Styles of verbal expression of emotional and physical experiences: a study of depressed patients and normal controls in China. Culture, Medicine and Psychiatry, 10, 231-243.