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**Embracing Cultural Diversity in
Occupational Therapy Mental Health Practice**

by

Margaret Cheng-Sim Shim



**A thesis submitted to the Faculty of Graduate Studies and Research
in partial fulfillment of the requirements for the degree of**

Doctor of Philosophy

in

Rehabilitation Science

Faculty of Rehabilitation Medicine

Edmonton, Alberta

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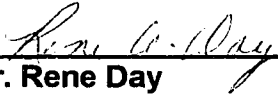
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ABSTRACT

Occupational therapists are concerned with occupational performance, and they know that cultural background affects clients' occupational performance. The objectives of this study were to identify variables associated with cultural competence and to measure related factors in occupational therapy mental health practice. This study was conducted in two phases. The purpose of Phase One was to identify underlying constructs of cultural competence. In Phase One, Stage One of the study, a literature review was conducted to identify underlying constructs of cultural competence, and a group of judges, identified as experts, were given an open-ended questionnaire. The judges' responses were used to corroborate the existence of the constructs identified in the literature as salient to the understanding of cultural competence. These constructs were used in the design of statements for draft one of the Cultural Competence Questionnaire (CCQ-1). The judges also were asked to complete the CCQ-1 and suggest any changes. This resulted in the Cultural Competence Questionnaire draft two (CCQ-2) which was distributed to five Chinese and five non-Chinese participants in the Phase One, Stage Two pilot study. The pilot study participants also were interviewed. Their responses to the open-ended questionnaire corroborated their scores on the CCQ-2. Their feedback resulted in the Cultural Competence Questionnaire draft three (CCQ-3) which was used in the large study in Phase Two. Participants in the

large study were 378 occupational therapists working in the area of mental health.

Linear and multiple regression analyses were performed with knowledge, sensitivity, collaboration, and cultural competence as dependent variables and number of Chinese clients occupational therapists had treated, ethnicity, and formal/informal education in cross-cultural concepts as independent variables. There were no significant relationships. Factor analyses reduced the 35 items in the CCQ-3 to a more parsimonious sub-set of 26 items, 17 of which measured cultural knowledge and nine of which measured cultural application. This resulted in the Shim-Hui Measure of Cultural Understanding - Chinese (SHIMCUE - C) which was judged to demonstrate some preliminary evidence of reliability and validity. The findings of this study are discussed in terms of their practical application and potential for further research.

TO MY PARENTS

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For instilling in me the importance of faith, work ethics, and education

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For supporting and encouraging me in my dreams

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TABLE OF CONTENTS

	Page
Chapter 1 INTRODUCTION	
Background	
- Ethnic Diversity	1
- Demographics	2
- Definitions	2
- Implications for Research	4
Chapter 2 LITERATURE REVIEW	
Occupational Performance	8
Knowledge of Chinese Culture/Beliefs	9
Cultural Competence	16
Components of Cultural Competence	17
Variables Related to Cultural Competence	20
Summary	22
Specific Objectives	23
Study Hypotheses	23
Chapter 3 METHODS	
Overview of Entire Study	25
Phase One: Identify Underlying Constructs of Cultural Competence	28
Stage One: Identify Constructs and Design Questionnaire	
- Participants	29
- Materials	31
- Procedure	32
- Results	36
- Development of CCQ-1	36
Cultural Knowledge	36
Cultural Sensitivity	43
Collaboration	50
Scores of judges	56
Stage Two: Pilot study	
- Participants	60
- Materials	63
- Procedure	64
- Results	66

Table of Contents (continued)	Page
Discussion	78
Cultural Knowledge	78
Cultural Sensitivity	80
Collaboration	81
Summary of Phase One Results	83
Phase Two: Measure Factors Relating to Cultural Competence in Occupational Therapy Mental Health Practice	
- Participants	85
- Materials	92
- Procedure	94
- Data Analysis	94
- Results	95
Chapter 4 DISCUSSION	126
Limitations	132
Importance and Relevance	133
REFERENCES	138
APPENDICES	
A. Open-ended Questionnaire	149
B. Demographic Information Form	154
C. Cultural Competence Matrix	156
D. Cultural Competence Questionnaire for Judges (CCQ-1)	158
E. Cultural Competence Questionnaire Revised for Pilot Study (CCQ-2)	161
F. Cultural Competence Questionnaire Revised for Phase Two (CCQ-3)	164
G Shim-Hui Measure of Cultural Understanding - Chinese (SHIMCUE - C)	167

Table of Contents (continued)		Page
H.	Letter Inviting Judges to Participate in Study	170
I.	Follow-up Letter to Judges	173
J.	Letter Inviting Pilot Study Participants to Take Part in Study	175
K.	Demographic Information Form (French Version)	178
L.	Cultural Competence Questionnaire (CCQ-3 French Version)	180
M.	Letter Inviting Occupational Therapists to Participate in Study (English Version)	183
N.	Letter Inviting Occupational Therapists to Participate in Study (French Version)	186
O.	Reminder Letter to Occupational Therapists (English Version)	189
P.	Reminder Letter to Occupational Therapists (French Version)	191
Q.	Cultural Understanding Matrix	193

LIST OF TABLES

Table	Page
1. Overview of Entire Study	27
2. Demographic Characteristics of Experts/Judges (N-5) in Phase One: Stage One	30
3. Scores of Judges	57
4.1 Descriptive Statistics for Judges' Scores	58
4.2 Number of Judges Who Scored in the Different Categories	59
5. Demographic Characteristics of Group for Pilot Study (N=10)	62
6. Scores of Pilot Study Participants	67
7.1 Minimum, Maximum and Mean Scores for Non-Chinese participants	68
7.2 Minimum, Maximum and Mean Scores for Chinese Participants	69
8. Number of Participants Scoring in the Different Categories	71
9. Initial/Reworded Versions of Statements	77
10.1 Demographic Characteristics of Occupational Therapists (N=378)	87
10.2 Demographic Characteristics of Occupational Therapists (N=378)	88
11. Frequency Distribution of Respondents by Province	89
12. Frequency Distribution of Respondents by Ethnicity	90
13. Non-parametric Correlations for Sets of Statements	97
14. Correlations for Statements and Sub-scores	98
15. Linear Regression Analyses	101

List of Tables (continued)

Table	Page
16. Multiple Regression Analyses	103
17. Frequency Distribution, Means, and Standard Deviation for Each Statement on CCQ-3	106
18. Results of Factor Analysis: 10 Factors	117
19. Factor Loadings of Statements in Factors (10)	119
20. Results of Factor analysis: 3 Factors	120
21. Factor Loadings of Statements in Factors (3)	121
22. Results of Factor Analysis: 2 Factors	124
23. Factor Loadings of Statements in Factors (2)	124

LIST OF FIGURES

Figure	Page
1 Traditional Yin/Yang symbol	13

CHAPTER 1

Introduction

Background

Ethnic Diversity

Ethnic diversity is a growing topic of interest for health care providers, as culture has increasingly come to the fore as a potential determinant of health (Corin, 1995). Hanson (1992) noted that culture guides and bounds life practices. It is also like "a second skin" which people "have grown so accustomed to that they have ceased to notice that it exists" (Lynch, 1992, p. 19). It is not surprising that culture has such a profound influence on behaviour. Therefore, health professionals need to treat clients in ways that match the clients' perceptions of their health problems, partly because the clients most difficult to treat are usually those whose belief systems are most different from the mainstream health care providers (Spector, 1991). Moreover, it has been shown that comprehensive health services can be provided only by clinicians who are culturally competent themselves (Rorie, Paine & Barger, 1996).

As society becomes more heterogeneous, cross-cultural effectiveness has emerged as an essential skill for health care professionals (Hanson, 1992). Culture, coping, and health are inter-related concepts and health care professionals' understanding of them is critical (Marsella & Dash-Scheuer, 1988). It is impossible for health care professionals to know everything about every culture, including language spoken (Dillard, Andonian, Flores, Lai, MacRae & Shakir, 1992) and

within-group differences (Barker, 1992; Li-Repac, 1980). However, one way to begin is to study cultural competence of one group of health professionals (occupational therapists), working with one ethnic group (Chinese), having one group of disorders (mental health). This study was carried out to lay a foundation for health care professionals' understanding of culturally competent care for diverse groups of clients.

Demographics

Statistics from the 1996 Canadian census, the most recent data available, reported 860,150 ethnic Chinese (Statistics Canada, 1996). The most current statistics from the United States came from the 1990 American census. It reported 1,645,472 Chinese Americans (Gaw, 1993), which made them the largest Asian group in the United States.

Definitions

For this study, a therapist's cultural competence related to Hong Kong Chinese referred to:

- (a) knowledge of health, illness, values, and beliefs related to Hong Kong Chinese;
- (b) cultural sensitivity or awareness of how a therapist's own cultural background, experiences, attitudes, values, and biases influence psychological processes (Sue, Arredondo & McDavis, 1995) and an ability to respect and value differences that may exist between the therapist's and client's cultures; and

- (c) collaboration when required in a treatment process which may involve the assistance of members of the client's culture (McGee, 1992; Rorie et al., 1996; Sawyer et al., 1995; Sue et al., 1995; Valle, 1986).

"Chinese", referred to Chinese who have immigrated to Canada from Hong Kong. According to Gaw (1993), since World War II, positive characterizations of the Chinese as a model minority group (Chen-Louie, 1983; Sakauye, 1992; Sue & Sue, 1993), have depicted them as citizens who are hardworking, diligent, law abiding, loyal, and quiet. This has resulted in the myth that the Chinese have low levels of crime and mental illness, as problems may not have been noticed or reported (Takeuchi & Uehara, 1996). This observation is supported by Rosenthal & Kosciulek (1996, p. 30), who noted that "one potential source of bias may be racial and ethnic stereotypes, which lead practitioners to jump to conclusions and make invalid assumptions about clients who are members of minority groups." In reality, "cultural pride and community attitude of shunning public display of one's dirty linen" (Gaw, 1993, p. 253) have prevented acknowledgement of mental health problems in the community.

The stigma of mental illness continues to be a major concern for the Chinese, as it labels not only the patient but the whole family as well (Chen- Louie, 1983; Gaw, 1993; Gold, 1992; Kleinman, 1988a; Kuo & Kavanagh, 1994; Lai & Yue, 1990; Lin, 1982). The family may be ostracised and family members may experience difficulty finding suitable marital partners (Gaw, 1993; Kinzie & Leung, 1993). Therefore, when a family member must seek professional help for mental health

issues, it is perceived as a "loss of face." This is an important issue in Chinese culture, because it suggests that the family is unable to sort out the problem on their own (Chen-Louie, 1983; Lam, Chan & Leff, 1995). Some families try with limited success and for protracted periods of time to cope with the bizarre behaviour of a mentally ill family member before seeking help from mental health authorities (Chen-Louie, 1983; Lam et al., 1995; Lorenzo & Adler, 1984; Sue & Morishima, 1982). Consequently, it is important to understand the role that the family plays in the care of the Chinese client (Chen-Louie, 1983; Lam et al., 1995; Wong, Lu, Shon & Gaw, 1983) and also to involve them in treatment. Studies have shown that "family treatment leads to important social and financial benefits as well as delaying relapses for schizophrenic patients living with families" (Lam et al., 1995, p. 282).

According to Kinzie and Leung (1993), diagnostic procedures should be clearly explained to the family, especially to the head of the family, who should be involved in healthcare decision making. Procedures like basic blood tests are seen as serious matters because loss of blood may be considered to be a loss of the essence of life.

Implications for Research, Assessment and Treatment

According to Coll (1992), there are implications for research and therapy, insofar as a cultural diversity framework informs the core of research questions, theoretical formulations, assessments, and treatment. One example is the gathering of data through certain formalized techniques such as interviews. Interviews may not be suitable in certain Asian contexts, because the interviewee may be apprehensive

in discussing political matters (Ho, 1988) or family problems (Shim, 1997a). Results obtained through such techniques may not be accurate and, with a Western bias in interpretation, may result in pseudo-knowledge (Ho, 1988; Shim, 1997b).

Occupational therapists have always considered themselves to be holistic in their approaches (Jungersen, 1992). When treating clients, they try to discern the clients' physical, spiritual, and cognitive characteristics as well as their abilities and competencies. Yet, one may wonder, how often in their assessments therapists have used assessment devices on Chinese clients that were normed on Western populations (Shim, 1998), how valid these results were, and how often they have imposed their "therapeutic use of self on others" (Mirkopoulos & Evert, 1994, p. 584). An example of the implications of the therapeutic use of self in treatment combined with cultural naivete was provided by Wehrly (1995). In her example, a female Asian American client did not return for counselling after she was encouraged by her college counsellor to move out of her parents' home. Such advice clearly shows that the counsellor was making assumptions about the client from a Western, American, middle class perspective. From the client's perspective, the advice may have seemed completely unrealistic, because children in Chinese families usually live with their parents until the time when they get married. Another point brought up by Rungta, Margolis, and Westwood (1993) focused on the importance of knowing critical information about special groups. For example, counsellors who are not aware that parents' goals and expectations are important factors for many Asian clients in their career choices may inadvertently contribute to

conflict in the family by emphasizing the importance of individual choice.

It is important that occupational therapists be culturally sensitive with clients from other ethnic communities. It is impossible for clinical professionals to be knowledgeable enough to independently meet the needs of all ethnic groups, because there are too many groups with too many differences. Even people from the same ethnic group have within-group differences. According to Hanson (1992), although people of the same cultural background may share tendencies, not all members of a group who share a common history or background will behave in the same manner. An ethnic Chinese immigrating from Vietnam as a refugee may have different experiences from an ethnic Chinese immigrating from Hong Kong as an entrepreneur. Westwood and Lawrance (1990) confirmed that the experiences of refugees might differ markedly from other immigrant groups. They may also differ in their degree of exposure to Western mental health systems (Kinzie & Leung, 1993). In addition, the factors underlying their relocation may have an important impact on their mental health (Berry & Kim, 1988).

There is a tendency to group consumers of health care services into categories that are convenient for record keeping but completely unhelpful as determinants of meaningful service delivery. One common category is the grouping of "Asians." This group usually includes people from many different ethnic/racial groups and subgroups (Fujiki, Cheng, Hansen & Lee, 1983; Kim, McLeod & Shantzis, 1992; Matocha, 1998). Considerable within-group differences must be considered if healthcare is to be optimally effective. Even among the grouping of

Chinese, cultural values may differ depending on their country of origin and their exposure to Western values (Matocha, 1998).

Nonetheless, occupational therapists can attempt to learn more about the various ethnic/racial groups they encounter as health care professionals. This study was one attempt to measure cultural competence of occupational therapists working with Hong Kong Chinese mental health clients.

CHAPTER 2

Literature Review

Occupational Performance

Occupational therapists are concerned with occupational performance, and cultural background affects clients' occupational performance. If occupational therapists impose their own standards regarding independence on Chinese clients, it may be contradictory to a Chinese client's belief. "For an ordinary Chinese, it is better to be mutually dependent, to learn rational control over emotion and desire, and to be harmonious with others and with nature" (Hsu & Tseng, 1972, p. 703).

Understanding how cultural beliefs, practices, and attitudes are related to mental illness (Evans, 1992) will assist occupational therapists in their assessments and treatment. Understanding their own attitude towards Chinese clients and resolving any racial prejudices will go a long way in establishing more therapeutic relationships (Wong et al., 1983).

Jones and Thorne (1987) recognized that minority status or ethnicity is an important source of variance on assessment instruments. Dunn, Brown and McGuigan (1994) noted that context (environment) is a critical factor in human performance but that it has not received the same attention as performance components such as mood, affect, gross and fine movements, sensory integration, and performance areas such as self-care, productivity, and leisure. Dunn et al.

(1994, p. 595) observed that occupational therapy uses many assessment instruments to measure social skills, muscle strength, and use of leisure time, but that "contextual factors such as the physical qualities of an environment, the cultural background of the person or the effect of friendships on performance are often missing from assessment tools typically used in OT." The challenge for occupational therapists is to select tools that incorporate concepts of person-environment (Letts et al., 1994) and to provide treatment that includes an understanding of the beliefs, customs, and behaviours expected of a member of a specific, unique, cultural group.

Knowledge of Chinese Culture/Beliefs

Language

Are occupational therapists aware that there are many different dialects in the Chinese language and that, for example, asking for an interpreter who speaks "Chinese" instead of asking for an interpreter who speaks "Cantonese," may be inappropriate? As a health professional, the principal investigator interpreted for colleagues in a hospital setting. It took some time before hospital staff realized that the translations were of Cantonese instead of Chinese. "Chinese" could include Cantonese, Mandarin, or many other dialects. It is important to understand that a Cantonese-speaking person cannot be understood by someone whose language is Mandarin.

Furthermore, therapists should understand that the status of an elder is threatened if the elder is made dependent on a younger person's interpretation

(Hays, 1996). Asking a child to interpret for his parents or elders could make the elder feel inferior and the therapist's behaviour could be perceived as disrespectful. If the right interpreter is not located, there is a potential for misunderstanding of routines or procedures by the client or of a client's symptoms and concerns by the therapist (Hanson, 1992).

Dependence/Independence

Occupational therapists focus on independence. However, in most non-Western societies, values such as being part of the family, honouring the family, and accepting other people's decisions are more important than independence (Kinebanian & Stomph, 1992). It is important for occupational therapists to discover their own preconceptions and learn to adapt occupational therapy service to patients of other cultures, without imposing the Western middle class values of occupational therapy theory and practice (Kinebanian & Stomph, 1992) and imposing on Chinese clients Western notions of reality as the "gold standard" (Corin, 1995, p. 278).

Immigration

Changes occur when Chinese immigrate and are immersed in North American society. According to Berry and Kim (1988), there are five stages of acculturation (precontact, contact, conflict, crisis, and adaptation) and four modes of acculturation (assimilation, integration, separation, and marginalization). Depending on which stage or mode of acculturation the immigrant is in, mental health status can vary. Acculturative stress may be a phenomenon that underlies a reduction in the health status of individuals (Berry, Poortinga, Segall & Dasen, 1992). Occupational

therapists, who are not familiar with these stages of acculturation, may not take into consideration issues regarding stage of acculturation when planning and conducting their treatment programs with Chinese clients.

Cultural Beliefs and Values.

Chinese civilization is one of the oldest in the world and religious beliefs play a big part in the values as well as behaviours of Chinese people (Gaw, 1993). As such, ancestral worship, which is "based on the belief that the living can directly communicate with the dead" (Gaw, 1993, p. 246), venerates ancestral spirits. Folk religion delves into the spiritual world. Some Chinese offer foods to the gods on special occasions, consult with them before making important decisions, and turn to supernatural healing in times of illness. Such practices may extend into the realm of rehabilitation and prevention of illness.

One common belief is that the wearing of jade ornaments wards off evil. If a client's jade ornament is taken away or broken, the client may believe that "protection from evil" is gone. This happened with a client whose jade piece was inadvertently broken when he was in hospital. He began telling staff members that he had no protection from evil spirits and feared bad things were going to happen to him. One can only wonder how a health professional with no background of this belief would interpret his behaviour.

As noted by Yamamoto (1986, p. 98), there is symbolic meaning to women who commit suicide by hanging. It is believed that the "ghost of those who died by hanging can return to torment the living." Similarly, the principal investigator was told

from a very young age that, when someone commits suicide while dressed in red clothing, that person's ghost could return to haunt the living. It is also believed that there are certain times in the lunar calendar when ghosts are able to roam earth. Therefore, when a Chinese psychiatric client talks about going into a trance and communicating with deceased relatives or being tormented by the ghost of someone who committed suicide, the occupational therapist needs to understand the meaning and context of this behaviour. As occupational therapists, their observation that the client is talking and laughing to himself is reliable, but if they believe this behaviour to be psychotic in the absence of other symptomatology of psychosis, their belief may not be valid because they may not have understood the symbolic and contextual meaning of the behaviour (Kleinman, 1987). Symptoms of psychosis, or any other category of mental health nomenclatures makes sense only when considered within a cultural context (Kaplan & Sadock, 1998; Kleinman, 1987).

Traditional Chinese Medicine

Traditional Chinese medicine dates back to the Shang dynasty, where medical symbols were depicted in oracle bone inscriptions around Thirteen or Fourteen centuries B.C. (Hoizey & Hoizey, 1993; Huard & Wong, 1968). Traditional Chinese medicine continues to play a prominent role in the treatment of mental illness (Matocha, 1998; Sidel, 1972).

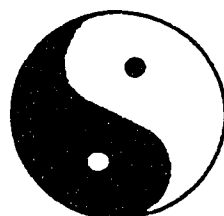
Chinese medicine is not based on a single theory but on a system of theories. They include the fundamental theories of *yin/yang* and the five elements, which are in turn, related to the other five theories of Zang-fu organs; etiology;

pathogenesis; methods of examination and differentiation of symptom complexes (Liu, 1988). Another concept that is important to many aspects of Chinese medicine is "qi - the idea that the body is pervaded by subtle material and mobile influences that cause most physiological functions and maintain the health and vitality of the individual" (Ergil, 1996, p. 195).

The *yin/yang* theory, which is well illustrated by the traditional Taoist symbol (Figure 1), represents the fundamental dualities, polarities and opposites of the universe. *Yin/yang* also represents the unity of the circle and encompassed abstract constellations and natural phenomena, viewed as manifestations of two opposed yet complementary categories that spanned all existence (Pachuta, 1989).

Figure 1

Traditional *yin/yang* symbol



Everything contains *yin/yang*. It is black/white, death/life, hot/cold, earth/heaven.... different yet inseparable: it is impossible to have one without the other (Pachuta, 1989). *Yang* is defined by fire, and objects with properties similar to

those of fire; light and heat are *yang* objects. *Yin* characteristics include dampness and cold (Chen-Louie, 1983; Liu, 1988). Such terminology used in Chinese medicine is strange to the Western ear. For example, "heat" and "wind" are possible causes of certain illnesses (Chen-Louie, 1983; Kaptchuk, 1983; Lai & Yue, 1990) and treatment is aimed at restoring the balance of *yin/yang* in the person. According to Needham and Lu (1969), there is much in Chinese medicine that cannot be conceptualized by Western vocabularies.

It is culturally acceptable for a Chinese woman not to wash her hair during her menstrual cycle, and for a month after giving birth to a child (Lai & Yue, 1990; Shim, 1997a) because wind could presumably enter the body during periods of vulnerability (Chan, 1992). Chinese mothers who impart their belief systems to their daughters often give this advice. The principal investigator clearly remembers receiving this advice from her mother and being told of the possible consequences that one could suffer as a result of getting "wind" in the system. It would be interesting to speculate how occupational therapists would have assessed hygiene in the area of self-care, if they had no knowledge of these cultural beliefs. The principal investigator remembers being ridiculed by an occupational therapist, who could not believe that she would follow her mother's advice and not wash her hair for a month after the birth of her child.

Individuals function in their daily lives according to what they believe to be true, whether or not there is rational or empirical justification for their behaviour (Watzlawick, 1976). The search and proof for what is "true" lies within the domain of

epistemology, one of the branches of philosophy (Durant, 1961; Russell, 1945).

Chinese Medicine in Hong Kong

In Hong Kong, both traditional Chinese medicine and Western medicine are officially recognized (Topley, 1975). Statutory provisions are made for anyone of Chinese ethnicity to practise traditional Chinese medicine professionally. According to Lee (1980), the sacred tradition of Chinese medicine is accepted by approximately one fifth of the Chinese population in urban Hong Kong and is quite popular among women and people who are less educated. The help seeking process usually follows a route starting with self medication, using both Western and Chinese home remedies, followed by accessing the advice of Western style practitioners, then Chinese style practitioners and finally, if remediation is not achieved, hospitalization (Lee, 1980).

It is not unusual for culturally diverse clients to seek the services of natural healers, herbalists or spiritual healers in their treatment (Mason, Benjamin & Lewis, 1996). Occupational therapists must be prepared to at least accept the involvement of these service providers and ideally work co-operatively with them in a client's treatment. An ability to do so is consistent with a client-centred approach. Baum and Law (1997, p. 283) explained that client-centred "therapists respect the client's values and visions, as well as the client's style of coping, without judging what is right or wrong. They encourage clients to recognize and build on their strengths, using natural community supports as much as possible."

Cultural Competence

Although recognition of cultural diversity has gained prominence in health systems, there exists only one theory and a few models in this area, none of which was designed specifically for occupational therapy (Shim, 1997c). They include the following.

- a) Theory of Culture Care Diversity and Universality in Nursing (Leininger, 1995).
- b) Sunrise Model to depict dimensions of cultural care diversity and universality (Leininger, 1988; Leininger, 1995).
- c) Culturally Competent Model of Care (Campinha-Bacote, 1994; Campinha-Bacote, Yahle & Langenkamp, 1996).
- d) The Child and Adolescent Service System Program Cultural Competence Model (Mason et al., 1996).
- e) Giger and Davidhizar Transcultural Assessment Model (Giger & Davidhizar, 1995).
- f) Purnell's Model for Cultural Competence (Purnell & Paulanka, 1998).

Components of Cultural Competence

According to Sawyer et al. (1995), there are three components of cultural competence (knowledge, cultural sensitivity, and collaboration) which, together with cultural self-awareness (McGee, 1992; Rorie et al., 1996; Sue et al., 1995; Sue & Sue, 1993), were included in this cultural competence study.

Cultural Knowledge

As noted by Sawyer et al. (1995), a researcher's knowledge about culture strongly influences the research process. Sue et al. (1995) recognized that culturally skilled counsellors possess specific information and knowledge about the particular group that they are working with. Clients of Chinese ancestry have a tendency to describe their complaints as physical (Hughes, 1993; Kleinman, 1988b) to avoid being labelled mentally ill. Therefore, it is important that occupational therapists be aware that psychological problems may be masked by physical complaints. If, in the initial encounter, the practitioner understands that the illness idioms have been socialized within a particular collective experience of illness (Kleinman, 1988b), that understanding may facilitate rapport building in this initial meeting. For example, it may be helpful to know that clients from certain cultural backgrounds have a higher tendency to somatize their emotional problems. Cultural awareness, understanding, and rapport all serve to expedite accurate diagnosis and intervention. However, if the illness complaints are not understood, rapport is hindered, leading to an increase in the likelihood of inaccuracies in diagnosis and less effective treatment. It seems that in some clinical settings, misdiagnosis is high among ethnic groups

(Good & Good, 1986). Draguns (1994) warns of the danger of opting for the most disturbed and deviant category of schizophrenia when clinicians are faced with behaviours that may be strange and disturbing. This is a matter of great importance, as there are also implications for treatment (Takeuchi & Uehara, 1996), most of which are psychopharmacological.

Furthermore, the views held by families about mental illness and its causation influence their perception of the need for treatment and their willingness to seek treatment (Hanson, 1992). Occupational therapists can enhance their knowledge base by understanding the family's views and involving them in decision making during the treatment process, thereby increasing the probability of treatment compliance.

Cultural Sensitivity

Sawyer et al. (1995) considered cultural sensitivity to be an essential component of cultural competence. This includes an awareness of participants' cultural differences and an ability to remain open to suggestion of others (Atkinson, Morten & Sue, 1993; Sue et al., 1995), especially in the research process (Sawyer et al., 1995) and treatment (Chen-Louie, 1983; Lai & Yue, 1990; Sue et al., 1995). Lynch (1992) recognized that it is always easier to see the influence of culture, language, and ethnicity in other people than in oneself. Casimir and Morrison (1993) noted that clinicians are frequently unaware of their own world view, which when supported by traditional training, shapes their view of the patients and their problems. It is only when therapists examine their beliefs, patterns of behaviour, and

values that they are able to arrive at a reality not based solely on tradition (Lynch, 1992). Other issues related to cultural sensitivity include personal contact and cultural self-awareness (Andrews, 1995; McGee, 1992; Rorie et al., 1996; Sue et al., 1995). Capers (1994) noted that cultural awareness is essential for the delivery of culturally competent care and is a beginning point for interacting with members of any cultural group. Contact and awareness manifest themselves when culturally skilled counsellors recognize their own limitations as they pertain to their particular helping styles (Sue & Sue, 1990). Pope-Davis, Prieto, Whitaker, and Pope-Davis (1993) emphasized the importance of acquiring information about specific cultures and groups. Dillard et al. (1992, p. 723) added the importance of attitude, stating that "when patients perceive an attitude of open-mindedness from the staff, they may begin to describe methods of healing used in their culture that could be successfully combined with the therapist's recommended treatment." Using case study methodology, Dyck (1992) showed that sensitivity to a patient's life is integral to occupational therapy models of practice.

Collaboration

Sawyer et al. (1995) advocated involving the community in the research process and including members of the culture as equal partners in the research process. Others have identified the value of including minority group members as part of the team in research on minority groups (Sue & Sue, 1990). Inclusion of minority group members could be valuable for treatment too (Atkinson et al., 1993; Sue et al., 1995). For the Chinese, diet, acupuncture, moxibustions, and herbs have

been used for treatment of mental illness. This approach is a logical extension of the belief that etiology of mental illness is based on the principles of balance in both psychological and physical functions (Cheung, 1986; Lai & Yue, 1990). Working hand in hand with practitioners of traditional Chinese medicine may be part of a holistic approach with Chinese clients in occupational therapy mental health practice. For some Chinese, mental illness is a common reason for consultation with fortune tellers and shamans, as ghosts, evil spirits, and sorcery are held to be responsible for illness (Cheung, 1986; Lai & Yue, 1990).

Variables Related to Cultural Competence

Variables related to cultural competence may include the amount of education one has received in cross-cultural issues, one's ethnicity, and number of clients treated by the therapist. Sawyer et al. (1995) emphasized that a researcher's knowledge about the culture influences the research process. Ferns and Madden (1995) discussed the importance of training to equip professionals to take a holistic approach to assessment (Pope-Davis & Dings, 1995) and treatment (Sue et al., 1995). These researchers demonstrate that knowledge of specific cultures affects both research (the questions asked and the process used to answer them) and treatment (the diagnosis and the intervention chosen to address it). Consequently, it is important for all clinicians to have at least a basic understanding of the cultural beliefs of their clients whose background is not mainstream.

Effective ways to learn about other cultures include participating in the daily life of another culture, talking and working with individuals from the culture who act

as cultural mentors or guides, and learning through independent study about the culture (Lynch, 1992). Such knowledge increases the probability of providing the most effective treatment for all clients (Ferns & Madden, 1995; Sue & Sue, 1990). Even in the absence of specific knowledge about other cultures, clinicians who are equipped to deal with cultural diversity in a general way will help make treatment more inclusive for clients of other cultures.

It may be possible to develop a cultural axis in occupational therapy assessments similar to the cultural formulation of psychiatric illness presented by Lewis-Fernandez (1996). This cultural axis could include information on cultural beliefs and values, attitude related to mental illness, immigration status and stage or mode of acculturation. Currently, an individual is evaluated on five axes in the American Psychiatric Association (1994) Diagnostic and statistical manual of mental disorders (4th ed.) multi-axial approach which includes clinical psychiatric syndromes, personality disorders and specific developmental disorders, physical disorders and conditions, severity of psychosocial stress, and global assessment of functioning.

According to Flaskerud and Liu (1991), considerable controversy exists in the literature concerning the effect on therapy process and outcome as a result of a match between therapist and client on ethnicity and language. They found that only ethnicity had a significant effect on drop-out rate. Using videotaped interviews, Li-Repac (1980) found that white therapists tended to describe Chinese clients more negatively, using such terms as awkward, anxious, confused, and nervous.

However, Chinese-American therapists characterized these same clients more positively, with terms like adaptable, alert, honest, and friendly. This finding could have been an artifact of methodology differences. Reports of personal experiences may have differed not only in what the participants said but how they said it (Draguns, 1988).

Another variable may be the number of clients therapists have treated. By working with more Chinese clients, therapists may become more aware of certain cultural practices unique to the Chinese. However, it should be noted that even though they have worked with people from other cultures, some clinicians may continue to be unaware of cultural issues.

Summary

The literature review has shown that occupational therapists focus on occupational performance, and that culture is an important component of occupational performance. Understanding how Chinese cultural beliefs, practices, and attitudes are related to mental illness could assist occupational therapists in their assessments and treatment. The three components of cultural competence are cultural knowledge, cultural sensitivity, and collaboration. In order to meet the special challenges created by cultural diversity in the healthcare system, occupational therapists need to be aware that psychological problems may be masked by physical complaints in some Chinese clients.

Furthermore, the views held by families about mental illness and its causation may influence their perception of the need for treatment. To become more culturally

sensitive, occupational therapists need to examine their own beliefs and remain open to the suggestions of others. Involving members of a client's culture in treatment and working hand-in-hand with practitioners of traditional medicine may be part of a holistic approach in occupational therapy mental health practice. Once occupational therapists have an improved working understanding of the components of cultural competence, they can enhance their ability to work with clients from various ethnic groups.

Specific objectives

The first objective of this study was to identify variables associated with cultural competence. The second objective was to measure factors related to cultural competence in occupational therapy mental health practice where Chinese clients form part of the clientele. It was anticipated that it would be necessary to develop a questionnaire specifically designed to measure concepts related to cultural competence in occupational therapy mental health practice.

Study hypotheses

Hypothesis 1: Cultural competence will correlate with descriptive variables as follows:

- A) Cultural competence will be directly related to the amount of education the occupational therapists have received in cross-cultural issues.
- B) Cultural competence will be related to ethnicity of the occupational therapists.

- C) Cultural competence will be directly related to the number of Chinese mental health clients occupational therapists have treated.
- D) Cultural competence will be predictable from a combination of variables, including amount of education in cross-cultural issues, ethnicity, and number of Chinese mental health clients the occupational therapists have treated.

CHAPTER 3

Methods

Overview of Entire Study

This study was conducted in two phases as shown in Table 1. The purpose of Phase One was to identify underlying constructs of cultural competence. There were two stages in this phase. In Phase One, Stage One of the study, a literature review was conducted to identify underlying constructs of cultural competence and a group of judges, identified as experts, were given an open-ended questionnaire (Appendix A) which was used to identify the underlying constructs of cultural competence and a demographic information form (Appendix B). The questionnaire responses from the judges were then used to corroborate the existence of constructs identified in the literature to be salient in the design of a tool to measure cultural competence. These constructs appear in a Cultural Competence Matrix (Appendix C). Statements describing the concepts related to the underlying constructs of cultural competence (cultural knowledge, sensitivity, and collaboration) were then created. This resulted in a Cultural Competence Questionnaire draft one (CCQ-1). Judges were then asked to complete the CCQ-1 (Appendix D) and suggest any changes they thought would be appropriate to CCQ-1. This resulted in a Cultural Competence Questionnaire draft two (CCQ-2), (Appendix E) which was used in the Stage Two pilot study as a preliminary test of construct validity for the cultural competence questionnaire.

The CCQ-2 was distributed to five Chinese and five non-Chinese participants who provided feedback on the CCQ-2. Their feedback guided further changes to the questionnaire. The CCQ-2 was subsequently revised and a new version, Cultural Competence Questionnaire draft three (CCQ-3), (Appendix F) was used in the large study in Phase Two. The purpose of Phase Two was to measure factors related to cultural competence in occupational therapy mental health practice where Chinese clients form part of the clientele. The CCQ-3 was sent out to occupational therapists working in the area of mental health in Canada. Their responses were then statistically analysed. This process resulted in the design of the Shim-Hui Measure of Cultural Understanding - Chinese (SHIMCUE-C), (Hui, 1998), (Appendix G).

Table 1**Overview of Entire Study**

Phase	Method
One	<p data-bbox="443 667 1238 699"><u>Identify Underlying Constructs of Cultural Competence</u></p> <p data-bbox="443 730 1358 972"> Stage One: Identify Constructs and Design Questionnaire - Conduct literature review - Send open-ended questionnaire to judges - Design Cultural Competence Questionnaire draft one (CCQ-1) - Revise CCQ-1 resulting in Cultural Competence Questionnaire draft two (CCQ-2) for pilot study </p> <p data-bbox="443 1010 1358 1213"> Stage Two: Conduct Preliminary Testing of Construct Validity for CCQ-2 - Use CCQ-2 for pilot study - Interview pilot study participants - Revision of CCQ-2 resulting in Cultural Competence Questionnaire draft three (CCQ-3) </p>
Two	<p data-bbox="443 1287 1198 1350"><u>Measure Factors Relating to Cultural Competence in Occupational Therapy Mental Health Practice</u></p> <ul data-bbox="443 1388 1358 1560" style="list-style-type: none"> - Obtain lists of names of occupational therapists - Send CCQ-3 to occupational therapists - Conduct statistical analyses of results - Design Shim-Hui Measure of Cultural Understanding - Chinese (SHIMCUE-C)

Phase One

Identify Underlying Constructs of Cultural Competence

The objective of Phase One was to identify the underlying constructs of cultural competence. There were two stages in this phase. Phase One, Stage One of the study involved the use of experts to comment on the underlying constructs of cultural competence when working with Chinese clients who have immigrated from Hong Kong. The judges were immigrants from Hong Kong with post-graduate degrees who were practising in the area of mental health. As such they were considered to be "experts" in the area of cultural competence when working with Chinese clients who have immigrated from Hong Kong. The judges were asked to respond to an open-ended questionnaire on constructs underlying cultural competence. They were then asked to comment on a Cultural Competence Questionnaire (CCQ-1) which was designed solely by the principal investigator on the basis of a) pre-existing theory and empirical research described in the literature, and b) the judges' responses to the open-ended questionnaire which had been designed to measure the related concepts underlying the constructs of cultural competence. On the basis of feedback from the five judges, changes were then made to CCQ-1 resulting in the version CCQ-2 that was used in the pilot study. The pilot study involved five Chinese and five non-Chinese participants. Its purpose, carried out in Phase One, Stage Two of the study was to pre-test the statements using two methods: completion of CCQ-2 and an interview. The pilot study was used

as a preliminary test of construct validity for CCQ-2.

Phase One: Stage One

Participants

Participants in Phase One, Stage One of the study were selected as experts in identification of constructs of cultural competence when working with Chinese clients who have immigrated from Hong Kong. These five judges were immigrants from Hong Kong with post-graduate degrees and were working in the area of mental health. Table 2 shows their demographic characteristics. There were four males and one female. Two of the judges had Master's degrees in Social Work, one had a Master's degree in education, one had a doctoral degree, and another had a medical degree. All of them worked full-time in some area of mental health but not occupational therapy, and each of them had lived in Canada for over 20 years. Their stay in Canada ranged from 22 to 24 years with a mean of 23.0 (SD = 1.00) years. Their ages ranged from 36 years to 45 years with a mean of 41.20 (SD = 3.63) years. All the judges spoke their Chinese dialect at home and four of the five judges reported that they also spoke English at home. The minimum number of years of practice in mental health was five years and the longest was eighteen years with a mean of 10.80 (SD = 5.45) years. Their client populations were varied and they worked with clients in acute, long-term, and community settings.

Table 2**Demographic Characteristics of Experts/Judges (N = 5)****Phase One: Stage One**

	n	%
Gender		
Male	4	80%
Female	1	20%
Education		
Doctoral degree	1	20%
Master's degree	3	60%
Medical degree	1	20%
Age		
Mean		41.20
SD		3.63
Minimum		36
Maximum		45
Range		9
Years of Stay in Canada		
Mean		23.00
SD		1.00
Minimum		22
Maximum		24
Range		2
Years Worked in the Area of Mental Health		
Mean		10.80
SD		5.45
Minimum		5
Maximum		18
Range		13

Materials

The materials used in Phase One, Stage One of the study included the following.

1. An open-ended questionnaire (Appendix A) was used to obtain the judges' responses to the open-ended questions. Their responses were then reviewed and used together with the literature review to design a Cultural Competence Questionnaire draft one (CCQ-1), (Appendix D).
2. A demographic information form (Appendix B) was used to obtain information relating to gender, age, ethnic background, employment, educational background, length of stay in Canada, language spoken at home, years of work in the area of mental health, client population, number of Chinese clients treated, and formal/informal education on cross-cultural concepts.
3. Cultural Competence Questionnaire draft one (CCQ-1) was designed to identify the constructs (Appendix C) identified from a literature review and the responses given by the judges. Thirty-five statements were designed to measure the concepts for each of the constructs underlying cultural competence.
4. A letter (Appendix H) was used to invite the judges to participate in the study. It included a brief description of the study, the amount of time that would be required for their participation, reassurance that information about them would be kept confidential, a reminder that their participation was voluntary, reassurance that they would remain anonymous, and a person to contact

about questions regarding participation and someone to contact regarding concerns about the conduct of the study.

5. A follow-up letter (Appendix I) was used to thank them for returning the open-ended questionnaire and requesting them to complete the Cultural Competence Questionnaire (CCQ-1).

Procedure

Judges were sent the letter (Appendix H) inviting them to participate in the study, the open-ended questionnaire (Appendix A), and the demographic information form (Appendix B). The letter of invitation (Appendix H) described the objectives of the study, the amount of time that would be required, and the procedure for returning the questionnaire. Open-ended questions were used for qualitative analysis to identify the underlying constructs of cultural competence. Qualitative methods were used to increase the understanding of the phenomenon of cultural competence as a result of the analysis (Procter, 1995). According to Strauss and Corbin (1990), the grounded theory approach is a qualitative research method that uses a systematic set of procedures to develop an inductively derived grounded theory about a phenomenon. Thematic qualitative analysis of the judges' responses was used to identify the related concepts for constructs underlying cultural competence. This enabled the investigator to convert the responses from the open-ended questionnaire into a data form suitable for analysis (Oyster, Hanten & Llorens, 1987). For example, for the hypothesized construct of knowledge, one related concept identified was knowledge of Chinese traditional concepts of health

and illness, where *yin/yang* theory played an important part. Responses from the judges for this concept included:

- concept of "balance" is also important the balance between "yin" "yang" is also important;
- view health as closely related to food and nutrition;
- believe in herbal supplement/soup for nutritious medicinal purposes.

For any constructs from the open-ended questionnaire to be included in the sets of statements developed for the CCQ-1, at least three out of the five judges must have referred to the concept for the underlying construct of cultural competence in their responses. The three-out-of-five criterion was used to ensure a general agreement among the judges. The demographic information form was used to gather descriptive information about the judges so the findings of the qualitative research could be understood in a broader context.

The constructs identified were then corroborated by comparing them with constructs that had been reported in the research literature (Atkinson et al., 1993; Chen-Louie, 1983; Ferns & Madden, 1995; Hanson, 1992; Jacobsen, 1988; Lai & Yue, 1990; Lynch, 1992; Mason et al., 1996; McGoldrick & Giordano, 1996; Orlandi, 1992; Pope-Davis & Dings, 1995; Sawyer et al., 1995; Sue et al., 1995; Sue & Sue, 1990). The resulting constructs were built into a Cultural Competence Matrix (Appendix C).

To confirm the underlying constructs of cultural competence and to refine

measurement, triangulation across methodologic approaches (DePoy & Gitlin, 1994) involving the open-ended questionnaire and CCQ-1 was used. Triangulation would reveal if there was convergence in the findings across the two methods. For the quantitative portion of the study, related concepts of the underlying constructs of cultural competence were measured using a Likert-type scale that could be numerically coded for analysis (Oppenheim, 1992) in a descriptive design. Sets of statements on related concepts of cultural knowledge, sensitivity, and collaboration were designed from the constructs identified from the literature, and examples given by the judges. This questionnaire version (CCQ-1) contained 35 items. The first twelve items were designed to measure the construct of knowledge, the next twelve items were designed to measure the construct of sensitivity, and the last eleven items were designed to measure the construct of collaboration.

A 7-point Likert or summated rating scale (Foddy, 1993) was judged to be the most appropriate tool to be used to include at least six substantive rating categories. Two other categories of "don't know" and "undecided" were also included (Foddy, 1993). Scores of one to seven were assigned to the 7-point scale for 26 statements which were worded such that a high score indicated a high level of cultural knowledge, sensitivity, and collaboration. A score of "7" indicated "Strongly Agree" and a score of "1" indicated "Strongly Disagree". The remaining nine statements were worded such that a high score indicated a high level of cultural knowledge, sensitivity, and collaboration with a score of "1" indicating "Strongly Agree" and a score of "7" indicating "Strongly Disagree" and so were reverse-

scored. This strategy was used to discourage a priming effect because prior questions may have the effect of suggesting what should be said in answer to a question (Foddy, 1993). A score of zero was given to those who indicated "don't know" or "undecided". This resulted in the Cultural Competence Questionnaire draft one (CCQ-1), (Appendix D). Total scores for each of the hypothesized constructs were obtained by summing the individual scores for statements measuring each related concept. The total score for cultural competence was the sum of all scores of the hypothesized constructs. Scoring for each of the constructs was divided into three categories: High, Medium, and Low. Since the maximum scores for knowledge and sensitivity were 84, scores ranging from 0 to 28 were classified as low scores, scores ranging from 29 to 56 were classified as medium scores, and scores ranging from 57 to 84 were classified as high scores. For the construct collaboration, the maximum score was 77. As a result, scores ranging from 0 to 26 were classified as low scores, scores ranging from 27 to 53 were classified as medium scores, and scores ranging from 54 to 77 were classified as high scores. Since the maximum total score for cultural competence was 245, scores ranging from 0 to 81 were classified as low scores, scores ranging from 82 to 163 were classified as medium scores, and scores ranging from 164 to 245 were classified as high scores.

Another letter (Appendix I) was sent to the five judges thanking them for returning the open-ended questionnaire and asking them to give feedback on the CCQ-1 (Appendix D), that identified categories of constructs from the open-ended questionnaire, and to make appropriate comments and changes. They were asked

to add, delete, or change in any way the CCQ-1 on which the underlying constructs of cultural competence were categorized. This process was used to re-design the questionnaire to create Cultural Competence Questionnaire draft two (CCQ-2) for use in the pilot study.

Results

All five judges returned the open-ended questionnaires that were used in the development of the Cultural Competence Questionnaire draft one (CCQ-1). Statements on related concepts of the three hypothesized underlying constructs of cultural competence were then designed.

Development of CCQ-1

The first hypothesized construct was cultural knowledge. Based on the literature review and responses from the judges, statements on related concepts pertaining to cultural knowledge were written. Two statements were created to measure each concept. This was to assess internal consistency using the split half technique. The statements were coded X## where X represented the underlying construct of knowledge (K), sensitivity (S), and collaboration (C), the first # represented a related concept of the construct and the second # represented a subpart of the same concept. For example, a set of statements reflecting a respondent's knowledge of traditional family values would be identified with a "K" to indicate that they measure knowledge, and the first numeral "1" to indicate that they measure the concept of traditional family values. Finally, the second numeral "0-3" would indicate a variation on the wording of the same concept.

K10: Chinese families have a significant impact on children's acquisition of traditional values.

K11 Chinese families have significant impact on treatment outcomes.

Cultural Knowledge: 1 - Traditional Family Values

The first related concept in the underlying construct of cultural knowledge of the Chinese identified was traditional family values. Traditional family values play an important part in the Chinese culture, as the focus is on an extended family concept (Sue & Sue, 1993; Lai & Yue, 1990). Chinese families play an important role in the care of Chinese clients (Gaw 1993; Lam et al., 1995; Wong et al., 1983). This concept was also identified by the some of the judges in their responses to the open-ended questions.

- Traditional family values are still deeply rooted in many Chinese families. (Judge 1)
- The families of my patients have significant impact on the treatment/care aspects that could not be ignored Two sets of parents are definitely affected by traditional superstitious, folklore type of concepts regarding mental health issues, that they believe the cause of mental illness in their son as related to influence of the evil spirit. (Judge 2)

Based on the comments from the judges and the literature review (Atkinson et al., 1993; Gaw, 1993; Lai & Yue, 1990; Lam et al., 1995; Wong et al., 1983), the first set of statements (K10 & K11) were designed.

K10: Chinese families have a significant impact on children's acquisition of traditional values.

K11 Chinese families have significant impact on treatment outcomes.

Cultural Knowledge: 2 -Yin/Yang Theory

The second related concept in cultural knowledge was the *yin/yang* theory. The Chinese strove to maintain harmony with nature. Traditional concepts of health and illness especially the balance of *yin/yang* had been widely accepted by the Chinese (Chen-Louie, 1983; Kapchuk, 1983; Lai & Yue 1990; Liu, 1988). Some of the comments made by the judges reinforced this concept.

- Generally HK [Hong Kong] Chinese believe in herbal supplements/soup for nutritious medicinal purposes. (Judge 2)
- The concept of "balance" is also important the balance between "Yin" "Yang" is also important. (Judge 3)
- The Hong Kong Chinese tend to view health as closely related to food and nutrition. (Judge 4)

The second set of statements (K20 & K21), which was based on literature review (Chen-Louie, 1983; Kapchuk, 1983; Lai & Yue 1990; Liu, 1988) and the comments by the judges, were designed to measure the concept of knowledge of *yin/yang*.

K20 Chinese strive to maintain harmony with nature.

K21 Chinese believe that illness results from an imbalance of *yin/yang*.

Cultural Knowledge: 3 - Dependence/Independence

The third related concept in cultural knowledge was dependence/independence. According to Sue and Sue (1993), the role of family members is highly interdependent, and independent behaviour that could upset the orderly functioning of the family is discouraged. It is important to realize the extended family concept for Chinese families. Children usually stay with their families until marriage and most parents are very much involved in their children's career choices (Lai & Yue, 1990; Rungta et al., 1993) and may be seen as being overprotective at times. Responses from the judges on this concept reinforced the material found in the literature.

- Extended family concept vs adhering to the nuclear familial structure. (Judge 2)
- They continue to have more cohesiveness, among family members, providing support to each other. (Judge 5)
- The "overprotectiveness" of Chinese parents, especially mothers, toward children. (Judge 1)

The third set of knowledge questions (K30 & K31), which was based on the comments made by the judges and the literature review (Rungta et al., 1993; Sue & Sue, 1993; Wehrly, 1995), were designed to measure the concept of dependence/independence.

K30 Chinese parents are more strict than Western parents.

K31 Chinese adult children generally stay with their families until marriage.

Cultural Knowledge: 4 - View of Mental Illness

The fourth related concept in cultural knowledge was how the Chinese view mental illness. Since the stigma of mental illness continues to be a major concern for the Chinese (Gaw, 1993; Gold, 1992; Kleinman, 1988a; Kuo & Kavanagh, 1994; Lin, 1982; Root, 1993), it is important to know their view towards mental illness. The judges illustrated the view of the Chinese towards mental illness in the following comments.

- Most Chinese are less educated with mental illness, and therefore they tend to seek treatment when the illness is in a crisis stage, and prognosis of the illness becomes less desirable. (Judge 1)
- Mental illness still carries a great shame & stigma within the Chinese culture whether it is Hong Kong or in Canada - it is something the parents are too shame [ashamed] to disclose to their friends & relatives that they have a mentally ill son.
(Judge 2)
- View illness as a sign of bad luck; try to avoid at all cost. (Judge 3)
- Like the Western people, the Hong Kong Chinese have a stigma and misunderstanding towards mental illness. (Judge 5)

Based on the literature review (Gaw, 1993; Gold, 1992; Kleinman, 1988a; Kuo & Kavanagh, 1994; Lin, 1982; Root, 1993) and comments from the judges, the fourth

set of statements (K40 and K41) were designed to measure the concept the view of the Chinese towards mental illness.

K40 Chinese view illness as a sign of bad luck.

K41 Most Chinese less educated about mental illness tend to seek treatment when illness reaches a crisis stage.

Cultural Knowledge: 5 - Somatization of Mental Illness

The fifth concept in cultural knowledge was somatization of mental illness. There is a tendency for Chinese clients to describe their complaints as physical to avoid being labelled mentally ill as the stigma of mental illness continues to be a major concern (Chang, 1995; Gaw, 1993; Gold, 1992; Hughes, 1993; Kleinman, 1988b; Kuo & Kavanagh, 1994; Lai & Yue, 1990; Lin, 1982). Comments by the judges illustrated the concept of somatization of mental illness.

- Characteristics of mental illness are usually manifested in physical illness. (Judge 4)
- "Face" how others view oneself is very important. (Judge 3)
- They tend to hide their symptoms of mental illness for fear of being labelled "crazy." (Judge 5)
- Mental illness is still a strong stigma and a taboo subject for HK [Hong Kong] Chinese population in Canada. (Judge 2)

Based on these comments and the literature review (Chang, 1995; Gaw, 1993; Gold, 1992; Kleinman, 1988b; Kuo & Kavanagh, 1994; Lai & Yue, 1990; Lin,

1982), the fifth set of knowledge statements (K50 & K51) were delineated.

K50 Chinese hide symptoms of mental illness for fear of being labelled crazy.

K51 The concept of "loss of face" is crucial to the Chinese population.

Cultural Knowledge: 6 - Traditional Chinese Medicine

The final related concept in cultural knowledge was traditional Chinese medicine that continues to play a role in health and illness (Lai & Yue, 1990; Matocha, 1998; Sidel, 1972). Many Chinese clients continue to practise traditional Chinese medicine even though they may be knowledgeable in Western medicine. This was reflected in the following comments by the judges.

- I believe many Chinese in Canada still use Chinese herbal medicine to deal with common colds and flus. (Judge 1)
- In terms of health and illness they still carry many of the traditional Chinese medicine belief despite their knowledge of Western medicine. (Judge 5)
- From what I have observed of Chinese people from HK [Hong Kong], they/we accept some Western & some Eastern concepts in regard to health, illness, food/nutrition, treatment methods of physical & mental illness. E.G. parents will support my pts [patients] taking Western medicine for their physical and/or mental illness, but will still go to the Chinese monastery/temple to pray to

the gods for recovery & good health. For one person I know who thought he had terminal illness, he did everything, both Western & Eastern medicine to get better. (Judge 2)

The sixth set of statements (K60 & K61) on the concept of traditional Chinese medicine were designed to measure knowledge regarding concepts about people with fevers. Lai and Yue (1990) noted that illness is seen as an imbalance of *yin/yang* and that parents of children with chronic coughs may not allow them to drink cold drinks. Chen-Louie (1983, p. 208) also noted the practice of over-dressing the young to prevent "cold entering the lungs." The practice of covering people, who have high fevers with blankets and not allowing them to drink cold drinks is common among traditional Chinese, as told to and experienced, by the principal investigator.

K60 Chinese people believe that cold drinks are inappropriate for people with high fever.

K61 Chinese believe that people with high fevers are covered with warm blankets.

The second hypothesized construct was cultural sensitivity. Cultural sensitivity is seen as an important component of cultural competence. The concepts related to cultural sensitivity include acquiring information about the group (Chen-Louie, 1983; Lai & Yue, 1990; Pope-Davis et al., 1993), having an open attitude (Atkinson et al., 1993; Chen-Louie, 1983; Dillard et al., 1992; Root, 1993; Sue et al., 1995), cultural self-awareness, personal contact (Atkinson et al., 1993; McGee, 1992; Rorie et al., 1996; Root, 1993), and awareness of client's cultural differences.

Cultural Sensitivity: 1 - Acquire Information about the Group

There is a tendency for people to characterize the Chinese as a model minority group who are hardworking (Gaw, 1993; Sakauye, 1992; Sue & Sue, 1993) but this is a generalization which could be seen as a racial stereotype. Sue and Sue (1993) noted that this popular "model minority" attitude about Asians has often been played up by the press who tend to overlook the problems faced by Asian communities. These generalizations can lead to stereotyping, which is an oversimplified conception, opinion or belief about some aspect of a group of people or an individual (Purnell & Paulanka, 1998). Sue et al. (1995) emphasized the importance of possessing specific knowledge and information about the particular group and becoming familiar with relevant research and latest findings regarding mental health.

In their responses to the open-ended questionnaire, judges gave suggestions on acquiring information about Chinese clients.

- Consult Chinese mental health professionals regarding cases and clients. Invite Chinese professionals to do presentations on particular topics during convention and career development times. (Judge 1)
- Chinese culture, belief and values can be learned by making friends with Chinese immigrants. There are also cultural events and short courses available in the community. (Judge 4)

- They need to expose themselves to the Chinese culture from Chinese friends or colleagues. (Judge 5)

Based on the judges' comments and the literature review (Gaw, 1993; Purnell & Paulanka, 1998; Sakauye, 1992; Sue et al., 1995; Sue & Sue, 1993), the first set of statements (S10 & S11) centred on the concept of the importance of acquiring information about Chinese clients before stereotyping them.

S10 Chinese people are hardworking.

S11 The Chinese are a model minority group.

Cultural Sensitivity: 2 - General Open Attitude

The second set of statements was based on the need for therapists to have an open attitude toward the beliefs, values, and cultural differences of people in other cultures (Atkinson et al., 1993; Root, 1993). Sue et al. (1995) discussed the importance of respecting clients' religious and spiritual values and beliefs about mental and physical functioning. In her discussion on nursing care of Chinese American patients, Chen-Louie (1983) addressed the issue of nurses' communication with Chinese American patients in this example (pp. 212-213),

- When someone does not comprehend the nurse's English and asks her to continuously repeat, does she mutter to herself, "Why don't you learn to speak English first?" or does she try different words and change tonality to facilitate comprehension?

The judges also commented that it was important for therapists to have an open attitude:

- Acknowledge that Western medicine is only one way of treating physical and mental illness, and there are alternate ways to health and wellness. (Judge 1)
- The awareness and sensitivity of our own belief and the different [difference] with our clients. The ability to accept the differences. (Judge 3)

Based on the judges' comments and the literature review (Atkinson et al., 1993; Chen-Louie, 1983; Root, 1993; Sue et al., 1995), statements S20 and S21 were designed to address the concept of the need for therapists to have an open attitude towards the beliefs, values, and cultural differences of people in other cultures. S20 was designed from the comment by Judge 1 who noted that it was important for therapists to "acknowledge that Western medicine is only one way of treating physical and mental illness."

S20 Western scientific medicine is the medical system that should be used worldwide.

S21 All immigrants should learn English.

Cultural Sensitivity: 3 - Cultural Self-awareness

Sue et al. (1995, p. 633) noted that "Culturally skilled counsellors are aware of how their own cultural background and experiences, attitudes, and values and

biases influence psychological processes." Comments from some judges also emphasized this concept of cultural self-awareness.

- Recognition of our own belief and bias. Ability to bridge our own experience and patient's experiences. (Judge 3)
- True to working with any ethnic gp.[group], a culturally competent worker mustn't be judgmental but needs to be accepting of cultural differences/values that may be divergent from our own. (Judge 2)

The third set of statements (S30 & S31) were designed from judges' comments and the literature review (McGee, 1992; Rorie et al., 1996; Sue et al., 1995) to measure the concept of cultural self-awareness. The rationale underlying this concept is that therapists are able to recognize their own limitations and become aware of their own biases which influence treatment. The statements were designed to look at a therapist's worldview which had been shaped largely by his or her own cultural background (Chen, 1995).

S30 Health professionals' cultural backgrounds have impact on assessment and treatment of Chinese clients.

S31 It is difficult to treat people from another culture.

Cultural Sensitivity: 4 - Awareness of Client's Cultural Differences

Sue et al. (1995) stressed the importance of understanding the worldview of the culturally different client and highlighted the need to understand how race, culture, and ethnicity could affect vocational choices, manifestation of psychological

disorders, and help seeking behaviour (Chen-Louie, 1983; Lai & Yue, 1990).

Comments from the judges also emphasized this concept of awareness of client's differences.

- For elderly patients, avoid ask[ing] them to talk about things that bring shame to themselves and their family. (Judge 1)
- Learn more about the new immigrant mentality so that they can understand the stress and the concerns that new immigrants confront in the foreign land. A culturally competent health professional will be able to gain the trust of the mental health patients that he or she can understand the patient's situation and cultural uniqueness. (Judge 4)

Based on the judges' comments and the literature review (Chen-Louie, 1983; Lai & Yue, 1990; Sue et al., 1995), the fourth set of statements (S40 & S41) were designed to measure the concept of awareness of client's differences.

S40 Health professionals must accommodate the cultural needs of their patients.

S41 Health professionals need to understand the world from other culture's points of view.

Cultural Sensitivity: 5 - Open Attitude Towards the Chinese

Kinebanian and Stomp (1992) noted that being part of the family, honouring the family and accepting other people's decisions in non-Western societies were

more important than independence. Lai and Yue (1990, p. 74) recognized that "Traditionally, the elderly are highly respected and the young are obliged to take care of them." Comments from some judges also illustrated this concept.

- For elderly patients, avoid to ask [asking] them to talk about things that bring shame to themselves and family. (Judge 1)
- The family value are [is] strong. Listening to the patient and family needs are critical. (Judge 3)

Based on the literature review (Kinebanian & Stomp 1992; Lai & Yue, 1990) and the judges comments, the fifth set of statements (S50 & S51) were designed to measure the concept of an open attitude towards the Chinese.

S50 Chinese people want their elderly relatives to remain dependent.

S51 When independence is the treatment goal for an elderly patient, family members should not be allowed to take over care.

Cultural Sensitivity: 6 - Personal Contact

The sixth related concept of cultural sensitivity was personal contact (Sawyer et al., 1995; Sue et al., 1995). Sue et al. (1995) discussed the importance of active involvement with minority individuals outside the counselling setting so that their perspective of minorities is more than a helping or academic exercise. Comments from the judges also highlighted the importance of personal contact for cultural sensitivity.

- Motivation to want to know. Attend seminars, workshop, courses etc. Peer consultation is one method I rely on when I am working with ethnic gp. [group] I know nothing of. (Judge 2)
- Invite Chinese professionals to do presentations on particular topics during convention and career development times. (Judge 1)
- They need to expose themselves to the Chinese culture from Chinese friends or colleagues. (Judge 5)
- Chinese culture, belief and values can be learned by making friends with Chinese immigrants. There are also cultural events and short courses available in the community. (Judge 4)

Based on the comments of the judges and the literature review, the sixth set of sensitivity statements (S60 & S61) were designed to measure the concept of personal contact.

S60 Health professionals need to expose themselves to Chinese culture.

S61 Health professionals need to learn more about what new immigrants expect from health care.

The third hypothesized construct underlying cultural competence was collaboration. There is a need to include members of the specific culture in both the research (Sawyer et al., 1995; Sue & Sue, 1990) and treatment process (Atkinson et al., 1993; Sue et al., 1995). The concepts related to collaboration include the use of

an interpreter (Chen-Louie, 1983; Gaw, 1993), involving members of the Chinese community in treatment, including the clients in the treatment process (Root, 1993), involving Chinese mental health professionals and traditional healers (Sue et al., 1995), and involvement in activities of Chinese clients outside of work (Sue & Sue, 1990).

Collaboration: 1 - Use of an Interpreter

Gaw (1993) emphasized the need to facilitate accurate translation when working with non-English speaking patients. Andrews (1995) and Sue et al. (1995) also stressed the need to seek a translator with appropriate professional background and cultural knowledge. In response to the open-ended question on the characteristics of an effective interpreter, comments from the judges included:

- Effective interpreters not only need the fluent language skills in both English and Chinese.... An effective interpreter will be able to relate to the cultural background of the patients so that rapport and trust can be established. (Judge 4)
- Knowledge of basic mental illness and Chinese culture. Not related to the patient. Not a friend of the patient. No contact between them outside of interpretation. (Judge 5)

Based on the literature review (Chen-Louie, 1983; Gaw, 1993; Sue et al., 1995) and the judges' comments, four statements were designed to measure the concept of use of an interpreter in collaboration (C10, C11, C12, & C13). Four statements were

designed for this concept, to include specific comments from judges on this topic, as it is believed to be an important issue in delivering culturally sensitive health care (Chen-Louie, 1983; Gaw, 1993; Sue et al., 1995).

- C10 When using interpreters with Chinese patients, choose same sex interpreters.**
- C11 When using interpreters it is best to use family members.**
- C12 Interpreters should not be friends of the patient.**
- C13 Effective assessment of Chinese patients with extremely limited English skills requires the use of an interpreter.**

Collaboration: 2 - Involve Members of Chinese Community in Treatment

Sue et al. (1995) advocated the need to accommodate beliefs from other cultures and seek consultation from ethnic healers. Comments from the judges also highlighted this concept.

- Flexible and perceptive so that cultural factors can be accommodated and taken into consideration. (Judge 4)
- Familiar with cultural values, beliefs. But the rest of the qualities for competency should not be different from what anyone would expect from a mental health worker (knowledgeable, sensitive, patient, skilful in social skills, communication skills, clinical skills, family dynamics, resource systems etc.). (Judge 2)
- Show respect to indigenous treatments, integrate the indigenous ways into overall intervention. (Judge 1)

Based on the literature review (Sue et al., 1995) and comments from the

judges, the second set of statements (C20 & C21) were designed to measure the concept of involving members of Chinese community in treatment.

C20 Health professionals should accommodate beliefs from other cultures in western treatment.

C21 Health professionals may benefit from consultation with the Chinese healers in treatment of Chinese patients.

Collaboration: 3 - Including Clients in the Treatment Process.

The third related concept was including clients in the treatment process. Sue et al. (1995, p. 636) noted the importance of counsellors taking "responsibility in educating their clients to the process of psychological intervention such as goals, expectations, legal rights, and the counsellor's orientation." Occupational therapists emphasize the importance of a client centred approach in the treatment process. Judges also stressed the importance of a client centred approach.

- Ask what the client "want" - the "want" frame. (Judge 1)
- ... need to be sensitive to the needs of the patient. (Judge 2)

Based on the literature review (Sue et al., 1995) and comments from the judges, the third set of statements (C30 & C31) were designed to measure the concept of including clients in the treatment process.

C30 Patients need to play an active role in the treatment process.

C31 Just listening to a patient's needs for an entire session is a waste of time.

Collaboration: 4 - Involving Chinese Mental Health Professionals and Traditional Healers in the Treatment Process.

Andrews (1995, p. 78) stressed that "traditional healers should be an integral part of the health care team and should be included in as many aspects of the client's care as possible." Sue et al. (1995) also emphasized the importance of consultation with traditional healers in the treatment of ethnic patients and the judges discussed the need to consult with Chinese mental health professionals in these comments.

- To consult Chinese mental health professionals regarding cases and clients. (Judge 1)
- Peer consultation is one method. (Judge 2)

Based on the literature review (Andrews, 1995; Sue et al., 1995) and the judges' comments, the fourth set of statements (C40 & C41) were designed to measure the concept of involving Chinese mental health professionals and traditional healers in the treatment process.

C40 Health professionals may need to seek consultation with Chinese healers in treatment of Chinese patients.

C41 Health professionals can benefit from consulting with Chinese mental health professionals concerning Chinese clients.

Collaboration: 5 - Involvement in Activities of Chinese Outside of Work

In response to the open-ended question "What do you think are things that non-Chinese mental health professionals can do to learn more about the Chinese

culture?" the judges stated the importance of interaction with Chinese clients with these comments:

- Nothing beats knowing Chinese people and interacting with them.
(Judge 2)
- Need to expose themselves to Chinese culture from Chinese friends or colleagues. (Judge 5)

Sue et al. (1995) stressed the importance of actively seeking out experiences to enrich cross-cultural skills. Based on the comments from the judges and the literature review (Sue et al., 1995), the last statement C50 was designed to measure the concept of involvement in the activities of Chinese outside of work

C50 Health professionals benefit from involvement in activities with people from other cultures outside of work.

All 5 judges returned the CCQ-1 and their scores to the questionnaire are listed below (Table 3). One judge suggested the use of the word "traditional Chinese" instead of just using "Chinese" for some of the questions. This suggestion was implemented in the pilot study and the word "traditional" was added to four statements.

Traditional Chinese view illness as a sign of bad luck.

Traditional Chinese believe that cold drinks are inappropriate for people with high fevers.

Traditional Chinese believe that illness results from *Yin/yang*.

Traditional Chinese believe that people with high fevers are covered with warm blankets.

Another judge noted that the study focused on the Chinese and emphasized the importance of working with people of other cultures as well. The other three judges did not make any suggestions to add, delete or change in any way the CCQ-1 on which the constructs were categorized.

The judges' scores from the CCQ-1, which measured the constructs of knowledge, sensitivity, and collaboration, are tabulated in Tables 3, 4.1 and 4.2. For the construct of knowledge, their scores ranged from 66 (78.6%) to 75 (89.3%) with a mean of 69.4 (82.6%) which put all of them in the high range category of knowledge scores. Their scores indicated that all judges were knowledgeable regarding the culture of the Chinese and that these statements were designed to measure the construct of knowledge. For the construct of sensitivity, their scores ranged from 44 (52.4%) to 67 (79.8%) with a mean of 52.4 which meant that four out of the five judges scored in the medium range and one scored in the high range category of sensitivity scores. For the construct of collaboration, their scores ranged from 48 (52.7%) to 70 (76.9%) with a mean of 60.4 which meant that four out of the five judges scored in the high range and only one judge scored in the medium range of collaboration scores.

Table 3**Scores of Judges**

Judge	Knowledge (84)*	Sensitivity (84)*	Collaboration (77)*	Total (245)*
1	66 (78.8%)	54 (64.3%)	70 (90.9%)	190 (77.6%)
2	67 (79.8%)	67 (79.8%)	64 (83.1%)	198 (80.8%)
3	68 (81%)	50 (59.5%)	61 (79.2%)	179 (73.1%)
4	71 (84.5%)	44 (52.4%)	48 (62.3%)	163 (66.5%)
5	75 (89.3%)	47 (56%)	59 (76.6%)	181 (73.9%)

*** Maximum score for category**

Table 4.1**Descriptive Statistics for Judges' Scores**

Description	Minimum	Maximum	Mean	Std Deviation
Knowledge	66	75	69.4	3.65
Sensitivity	44	67	52.4	8.96
Collaboration	48	70	60.4	8.08
Total	163	198	182.2	13.14

Table 4.2**Number of Judges Who Scored in the Different Categories**

Description	Low	Medium	High
Knowledge	0 (0 - 28)	0 (29 - 56)	5 (57 - 84)
Sensitivity	0 (0 - 28)	4 (29 - 56)	1 (57 - 84)
Collaboration	0 (0 - 26)	1 (27 - 53)	4 (54 - 77)
Total score	0 (0 - 81)	1 (82 - 163)	4 (164 - 245)

Note. Numbers in parentheses are upper and lower limits in each category.

For the total score, the scores of the judges ranged from 163 (66.5%) to 198 (80.8%) with a mean of 182.2 (74.4%). All but one judge scored in the high range. The remaining judge was only one point off the score for the high range.

On reviewing the responses to the open-ended questionnaire and the scores on the CCQ-1, one would hope to see a close parallel between comments from the

open-ended questions and items on the CCQ-1. The two judges who were quoted most often had the highest scores of 190 and 198. These two judges were apparently the most culturally competent. This result indicated that there was convergence in findings from CCQ-1 results and responses to the open-ended questionnaire.

Phase One, Stage Two

Participants

Participants in Phase One, Stage Two, which was designed to provide preliminary construct validity, were ten mental health professionals who had graduate degrees. Four were males and six were females. Table 6 shows the demographic characteristics. All ten participants in the pilot study had graduate degrees (four doctoral degrees, four Masters degrees, and two medical degrees). All of these participants were selected for their knowledge of mental health practice, and half of them were selected for their knowledge of the Chinese culture. There were five Chinese, four Caucasians, and one Other in the group. These two groups were included in the pilot study so that comparisons could be made between their scores. Their places of birth included Canada (3), England (1), United States of America (1), and Hong Kong (5). All the non-Chinese participants spoke English at home but the Chinese participants spoke either their mother tongue or a combination of Chinese dialects and English. They worked with a variety of different client groups in acute, long-term, forensic, and community settings. Three participants worked part-time in the area of mental health. Only one participant had

not treated any Hong Kong Chinese mental health clients. The number of Hong Kong Chinese mental health clients treated by the other nine participants ranged from 1 to 100 with a mean of 17.5. Their ages ranged from 28 years to 50 years with a mean age of 41.20 years ($SD = 8.72$). Their stay in Canada ranged from 8 to 38 years with a mean of 21.5 years ($SD = 11.96$). The minimum number of years worked was two and the maximum was 24 with a mean of 11.3 years ($SD = 7.10$). Nine out of the ten participants had formal and/or informal education in cross-cultural concepts. Formal education in cross-cultural concepts included credit courses taken during graduate studies, workshops on native issues, seminar on cross-cultural psychiatry, and presentations in conference. Some respondents gave examples of informal education in cross-cultural concepts such as:

- Had special Hong Kong dinner of snakes Friends - colleagues told me about their experiences in Hong Kong. (Caucasian 1)
- Discussion with mental health professionals with more experience than myself; discussion with friends of other ethnic origins than myself. (Caucasian 5)

Table 5
Demographic Characteristics of Group for Pilot Study (N = 10)

		n	%
Gender:	Male	4	40 %
	Female	6	60 %
Education:	Doctoral degree	4	40 %
	Master's degree	4	40 %
	Medical degree	2	20 %
Place of Birth:	Canada	3	30 %
	Non-Canada	7	70 %
Language Spoken at Home:			
	English only	5	50 %
	Cantonese only	2	20 %
	Cantonese & English	2	20 %
	Cantonese, Mandarin & Mandarin	1	10 %
Age:	Mean	41.20	
	SD	8.73	
	Minimum	28	
	Maximum	50	
	Range	22	
Years of Stay in Canada:	Mean	21.50	
	SD	11.96	
	Minimum	8	
	Maximum	38	
	Range	30	
Years Worked in Mental Health:	Mean	11.30	
	SD	7.10	
	Minimum	2	
	Maximum	24	
	Range	22	

Materials

The materials used in Phase One, Stage Two of the study included the following.

1. An open-ended questionnaire (Appendix A) was used during the interview to obtain the participants' responses to the open-ended questions. Their responses were then reviewed and analysed to determine if the answers corroborated their scores on the CCQ-2.
2. A demographic information form (Appendix B) was used to obtain information relating to gender, age, ethnic background, employment, educational background, length of stay in Canada, language spoken at home, years of work in the area of mental health, client population, number of Chinese clients treated, and formal as well as informal education on cross-cultural concepts.
3. Cultural Competence Questionnaire draft two (CCQ-2) - the questionnaire that resulted from revisions carried out in Phase One, Stage One contained thirty-five statements related to constructs underlying cultural competence and was used to measure each underlying construct as well as the overarching concept of cultural competence.
4. A letter (Appendix J) was used to invite the mental health professionals to participate in the study. It included a brief description of the study, the amount of time required for their participation, assurance that information about them would be kept confidential, a reminder that their participation was voluntary,

assurance that they would remain anonymous, and a person to contact about concerns or questions and someone to contact regarding procedure for returning the questionnaire.

Procedure

Participants in the pilot study were five Chinese and five non-Chinese who were non-occupational therapy professionals with post-graduate degrees and were working in the area of mental health. The coding X# was used to identify the ethnic background of the participants ("C" for Caucasians, "Ch" for Chinese and "O" for Other) and # the number for the participant. They were sent the letter of invitation (Appendix J), the demographic information form (Appendix B), and the CCQ-2 (Appendix E). They were asked if anything should be added, deleted, or changed in any way on the questionnaire.

All ten participants returned the questionnaires. The scores of each participant were tallied and reviewed to compare scores between the Chinese and non-Chinese groups. One of the purposes of the pilot study was to provide preliminary evidence of logical construct validity. This was tested by seeing whether the Chinese participants would score higher in the area of knowledge, and whether participants who had either treated Chinese clients, were non-Caucasian or had education in cross-cultural concepts would score in a higher range for knowledge, sensitivity, and collaboration than participants who had not treated any Chinese clients, were Caucasian and had no education in cross-cultural concepts.

The principal investigator then interviewed the participants (nine face-to-face interviews and one telephone interview), using the open-ended questionnaire (Appendix A). Participants' answers were written verbatim on the open-ended questionnaire. Their responses to the open-ended questionnaire were then compared to how they had scored on each of the concepts on the CCQ-2 related to the underlying constructs of cultural competence. Triangulation was used to enhance credibility of this research strategy (Krefting, 1991). Triangulation, which is the use of multiple independent measures in the study of the same phenomenon, was used to corroborate questionnaire findings with interview results. The purpose of using two different methods to measure the constructs of cultural competence was to see if there was a convergence in the findings. In her paper, Salsali (1995) explored the use of triangulation in research. She noted that between method triangulation or across method triangulation, which used two or more methods to measure the same phenomenon, are effective strategies for increasing reliability and validity. The resulting data were reviewed and analyzed to look for trends in how the participants scored in the areas of knowledge, sensitivity, and collaboration. The CCQ-2 was revised based on input from these participants. On careful review of the questionnaire, the category "Cannot decide," which was used in both the judges' and pilot participants' versions of the CCQ was eliminated. This was done in an attempt to decrease the number of missing values. Instead, a statement, "If your experience or information is so limited that you do not have a belief/opinion, you may choose to leave an item blank" was included at the top of the questionnaire for

those who could not decide. The resulting CCQ-3 (Appendix F) was then ready for data collection in Phase Two.

Results

From Tables 6, 7.1 and 7.2, it can be seen that the scores for the pilot study participants ranged from 22 (26.2%) to 77 (91.7%) for knowledge, 44 (52.4%) to 61 (72.6%) for sensitivity and 49 (53.8%) to 66 (72.5%) for collaboration. Non-Chinese participants' knowledge scores ranged from 22 to 70 compared to the Chinese participants' knowledge scores which ranged from 48 to 77. The sensitivity scores for the non-Chinese group ranged from 44 to 61 and the sensitivity scores for the Chinese participants ranged from 44 to 58. The collaboration scores for the non-Chinese group ranged from 59 to 66 and the collaboration scores for the Chinese participants ranged from 49 to 65.

Table 6**Scores of Pilot Study Participants (n=10)**

PILOT	KNOWLEDGE (84) *	SENSITIVITY (84) *	COLLABORATION (77) *	TOTAL (245) *
C1	22 (26.2%)	61 (72.6%)	59 (64.8%)	142 (58.0%)
C2	44 (52.4%)	48 (57.1%)	63 (75.0%)	155 (63.3%)
C3	43 (51.2%)	46 (54.8%)	65 (71.4%)	154 (62.9%)
O4	70 (83.3%)	52 (61.9%)	61 (67.0%)	183 (74.7%)
C5	57 (67.9%)	44 (52.4%)	66 (72.5%)	167 (68.2%)
Ch 6	48 (57.1%)	50 (59.5%)	59 (64.8%)	157 (64.08)
Ch 7	77 (91.7%)	44 (52.4%)	65 (71.4%)	186 (75.9%)
Ch 8	64 (76.2%)	58 (69.0%)	62 (68.1%)	184 (75.1%)
Ch 9	65 (77.4%)	51 (60.7%)	57 (62.6%)	173 (70.6%)
Ch 10	65 (77.4%)	54 (64.3%)	49 (53.8%)	168 (68.6%)

*** Maximum score for category**

Table 7.1**Minimum, Maximum and Mean Scores for Non-Chinese Participants (n=5)**

Description	Minimum	Maximum	Mean
Knowledge	22	70	47.2
Sensitivity	44	61	50.2
Collaboration	59	66	62.8
Total	142	183	160.2

Table 7.2**Minimum, Maximum and Mean Scores for Chinese Participants (n=5)**

Description	Minimum	Maximum	Mean
Knowledge	48	77	63.8
Sensitivity	44	58	51.4
Collaboration	49	65	58.4
Total	157	186	140

Table 8 shows the number of participants scoring in low, medium, and high categories. For the hypothesized construct knowledge, one Caucasian participant had a low score, two had medium scores and one had a high score. The participant in the Other category had a high score and so did four of the five Chinese participants. One Chinese participant scored in the medium category. For the construct sensitivity, one Caucasian participant obtained a high score and the other four non-Chinese participants scored in the medium category. Similarly, one Chinese participant scored in the high category while the other four Chinese participants scored in the medium category. For the construct collaboration, all the five non-Chinese participants scored in the high category and so did four out of the five Chinese participants. One Chinese participant scored in the medium category.

For the total score, three out of the four Caucasian participants scored in the medium category. One Caucasian participant, one Other participant and four Chinese participants scored in the high category. The remaining Chinese participant scored in the medium category.

Table 8**Number of Participants Scoring in the Different Categories (n=10)**

Description	Low	Medium	High
Knowledge	1C* (0 - 28)	2C 1 Ch** (29 - 56)	1 C 1 O*** 4 Ch (57 - 84)
Sensitivity	0 (0 - 28)	1 O 3 C 4 Ch (29 - 56)	1 C 1 Ch (57 - 84)
Collaboration	0 (0 - 26)	1 Ch (27 - 53)	5 C 4 Ch (54 - 77)
Total score	0 (0 - 81)	3 C 1 Ch (82 - 163)	1 C 1 O 4 Ch (164 - 245)

* Caucasian

** Chinese

*** Other

Note. Numbers in parentheses are upper and lower limits in each category.

The pilot study participants who had responded to the questionnaire yielding the above data were subsequently interviewed. Interview times ranged from approximately 25 minutes to 90 minutes. Data obtained from the open-ended questions in the interview were reviewed, analyzed, and then compared to the scores on the CCQ-2.

In the area of cultural knowledge, the non-Chinese group tended to characterize the Chinese more with traits such as:

- Hardworking, concerned with education. (Caucasian 1)
- Reserved, family elder oriented, disciplinedWillingness to bear whatever burden - life burdens without complaining or seeking outside intervention. (Caucasian 4)
- Loyalty and respect for elders is very strong. (Caucasian 5)

These non-Chinese participants' responses indicated the same positive characterizations of the Chinese that had been noted in the literature (Chen-Louie, 1983; Sakauye, 1992; Sue & Sue, 1993), whereas the Chinese participants focused more on describing how the adjustment process of immigrants had affected their behaviours. They did not specify any of the positive characterizations that were noted by the non-Chinese group.

- Coming from Hong Kong they will find the pace of life relatively slow. (Chinese 9)
- Time spent in Canada makes a difference. (Chinese 7)

- Like to compare local way of life with way of life in Hong Kong and in a way sort of like to keep their original way of life as much as possible. (Chinese 8)

In the area of knowledge of cultural beliefs and values of the Chinese, some of the non-Chinese participants described themselves as having little or no knowledge of the cultural beliefs and values related to food and nutrition as well as health and illness.

- Don't know if values of Chinese towards health is different from Western. (Caucasian 1)
- Food and nutrition - Know nothing. (Caucasian 2)
- Held back by superstition to some degree but don't know too much. (Caucasian 3)

These comments indicated the Caucasian participants' lack of knowledge in the area of Chinese cultural beliefs and values and corroborated their lower scores (Table 6) in the hypothesized construct of knowledge, whereas the Chinese participants, who had higher scores, were able to describe these areas in greater detail.

- Don't like medication, like herbal medicine. (Chinese 6)
- Hong Kong Chinese population try to deny mental problems until it becomes so significant that they will talk to family physician first. Reluctant to go to mental health professionals. (Chinese 10)

- For traditional Chinese, believe in food/health/illness [being] closely related. Therefore eating right food very important, especially those who believe in Chinese medicine because holistic approach to medicine - eat right foods, prevent illness from occurring. (Chinese 9)
- Belief that we can attain more health through better eating e.g. herbs concept of nutrition/health, *yin/yang* Family advise teenagers to get cool stuff if they have pimples/acne e.g. water-melon. (Chinese 8)

For the hypothesized construct of cultural sensitivity, participants from both the non-Chinese and Chinese groups noted the importance of having an open attitude, demonstrating cultural self-awareness, acquiring information about the group, and being aware of clients' cultural differences. Their comments reflected their scores in the area of sensitivity, as all the participants scored in the medium and high categories.

- In-service sessions on Chinese. (Caucasian 1)
- Theoretically - more emphasis on training programs on cultural sensitivity. (Caucasian 2)
- Ask a lot more questions and make fewer assumptions. (Other 4)
- Communicate more with Chinese mental health professionals. (Chinese 9)

- Shake off their own assumptions about what that culture means to them. (Chinese 7)

In the hypothesized construct of collaboration, participants from both groups talked about involvement of members from an individual's native culture in treatment. The participants added the importance of being client-centred and listed some characteristics of effective interpreters and culturally competent health professionals. These comments were similar to those made by the judges in Phase One, Stage One of the study. According to the pilot study participants, characteristics of effective interpreters included:

- Fluent in both languages. Understanding of both cultures. (Chinese 9)
- Some knowledge of mental health. (Other 4)
- No social connections with the client. Able to reassure client of professional impartiality and confidentiality issues. (Caucasian 3)

The pilot study participants also listed characteristics of culturally competent professionals that included:

- More of an advocate. (Caucasian 1)
- Good knowledge base about values, beliefs that may affect people's response to interventions. (Caucasian 2)
- Familiar with resources in the community for those who do not speak Chinese. Therefore can refer to those they are more comfortable seeing. (Chinese 6)

Responses from the participants to the open-ended questionnaire indicated that they were aware of the importance of involving members from an individual's native culture in treatment, and this was reflected in their scores on concepts pertaining to the construct of collaboration. Nine out of the ten participants scored in the high category for this construct with the remaining Chinese participant scoring in the medium category.

Three (1 Other, 1 Caucasian, and 1 Chinese) out of the 10 participants suggested some changes to statements in the CCQ-2. As a result, five statements were reworded. The initial form of the statement is shown next to the reworded version in Table 9.

Table 9**Initial/Reworded Versions of Statements**

Item	Initial Version	Reworded version
K61	Traditional Chinese believe that people with high fevers are covered with warm blankets.	Traditional Chinese believe that people with high fevers should be covered with warm blankets.
S11	The Chinese are a model minority group.	As a group, the Chinese are model citizens.
S51	When independence is the treatment goal for an elderly client, family members should not be allowed to take over care.	Family members should be involved in the care of the elderly patient when independence is a treatment goal.
C10	When using interpreters with Chinese patients, choose same sex interpreters.	When using interpreters with Chinese patients, it is best to choose same sex interpreters.
C12	Interpreters should not be friends of the patient.	Clinicians should not use patient's friends as interpreters.

The resulting version of the questionnaire, CCQ-3 (Appendix F) excluded the category "Cannot decide." The CCQ-3 was then ready for use in Phase Two.

Discussion

The purpose of Phase One was to identify the constructs of cultural competence and design a questionnaire to measure cultural competence. Sawyer et al. (1995) had classified cultural competence into three components: knowledge, cultural sensitivity, and collaboration. From the literature review (Atkinson et al., 1993; Chen-Louie, 1983; Ferns & Madden, 1995; Hanson, 1992; Jacobsen, 1988; Lynch, 1992; Mason et al., 1996; McGoldrick & Giordano, 1996; Lai & Yue, 1990; Orlandi, 1992; Purnell & Paulanka, 1998; Sawyer et al., 1995; Sue & Sue, 1990), a cultural competence matrix (Appendix C) was designed to represent the concepts related to each of the constructs and used as a guide to phrasing the open-ended questions used in Phase One of the study.

Cultural knowledge

The literature suggested that cultural knowledge of the Chinese includes knowledge of traditional values, *yin/yang*, dependence/independence, their view and somatization of mental illness, and traditional Chinese medicine (Chan, 1992; Gaw, 1993; Kleinman, 1987; Lee, 1980; Liu, 1988; Kaptchuk, 1983; Needham & Lu, 1969, Pachuta, 1989; Shim, 1997a). The comments and examples given by the judges, together with the literature review, were used to design the CCQ-1 in the knowledge area. The first six sets of knowledge statements were based on the judges' comments and in some instances were direct quotes from the judges.

One way of determining the Phase One participants' cultural knowledge of Hong Kong Chinese was to look at their total scores for the 12 knowledge related statements. From Table 5 and Table 8, the Other participant and nine out of the ten Chinese participants (90%) scored in the high category compared to only one out of the four Caucasian participants. None of the Chinese participants scored in the low score category whereas one Caucasian participant scored in this category. These numbers indicated that the Chinese participants were more knowledgeable about Chinese cultural values and beliefs than the Caucasian participants. These scores were corroborated by the responses to the open-ended questionnaires. Caucasian participants indicated a lack of knowledge in the area of Chinese cultural values and beliefs, but the Chinese participants were able to describe Chinese cultural values and beliefs in more detail. In addition, the person, whose ethnic category was Other in the non-Chinese group scored 70 (the highest score in the non-Chinese group). This individual noted in interview responses that there were similarities between her own cultural beliefs and those of the Chinese, and she was able to elaborate on the use of folk remedies.

From the means of all ten pilot study participants and judges discussed above, the Chinese group obtained higher scores, and in effect, were more knowledgeable about the Chinese culture. This would indicate that the statements were testing the knowledge construct. Nine out of the ten Chinese participants scored in the high category whereas only one out of the four Caucasian scored in the high category. In addition, the mean of the Chinese group, the so-called

"experts" was 66.6 compared to the mean of 47.6 in the non-Chinese group. Because there were very few participants, statistical significance was not hypothesized. Scoring trends were considered to be interesting indices of the constructs.

Cultural sensitivity

In the area of sensitivity, the judges' scores ranged from 44 to 67 with a mean of 52.4, and the scores for the pilot participants ranged from 44 to 61 with a mean of 50.8. For the non-Chinese group, the scores ranged from 44 to 61 with a mean of 50.2, while the scores for the Chinese participants ranged from 44 to 58 with a mean of 51.4. As noted in Table 5 and Table 8, all the participants in the pilot study and the judges scored in the medium and high score categories. This indicated that there was little difference in the way they scored for sensitivity. Sensitivity includes awareness of participants' cultural differences, an ability to remain open to the suggestions of others, personal contact, and cultural self-awareness (Andrews, 1995; Atkinson et al., 1993; Capers, 1994; Casimir & Morrison, 1993; Chen-Louie, 1983; McGee, 1992; Lai & Yue, 1990; Rorie et al., 1996; Sue et al., 1995). In their responses to the cultural competence questionnaires (CCQ-1 & CCQ-2) and the open-ended questionnaire, the participants and judges showed that they were culturally sensitive. Some of their comments included:

- Have to ask a lot more questions and make fewer assumptions....
Ability to pace appropriately and integrate cultural needs with
mental health treatment needs. (Caucasian 4)

- Open minded and trying to be consciously sensitive to Chinese tradition. (Chinese 6)
- Professionals should know their own limitations. (Caucasian 1)
- Shake off their [health professionals] own assumptions about what that culture means to them. (Chinese 7)
- Generic characteristic - empathy. Specifically Western therapists need to be sensitive to the issues to cultural atmosphere. (Chinese 8)

Both the judges' and pilot study participants' responses to the open-ended questionnaire corroborated their scores on the CCQ-1 and CCQ-2 respectively. Comments by the judges and participants indicated that they were culturally sensitive. These results supported the scoring trend, in that all of the judges and participants scored in the medium and high categories.

Collaboration

Similarly, for the underlying construct of collaboration, all the participants in the pilot study and the judges scored in the medium and high categories. The scores for the judges ranged from 48 to 70 with a mean of 60.4. The scores for the non-Chinese group in the pilot study ranged from 59 to 66 with a mean of 62.8, whereas the scores of the Chinese group ranged from 49 to 65 with a mean of 58.4. This indicated that there was little difference in the way they scored for the collaboration construct. Concepts related to collaboration were identified in the literature as use of

interpreters, involving members of the Chinese community in treatment, including clients in the treatment process, involving Chinese mental health professionals and traditional healers, and involvement in activities of Chinese community outside of work (Atkinson et al., 1993; Chen-Louie, 1983; Gaw, 1993; Root, 1993; Sawyer et al., 1995; Sue et al., 1995; Sue & Sue, 1990). All of these concepts were referred to by the judges and participants in their responses to the open-ended questionnaire.

- Go to colleagues whose background is of the same background as client; practically, don't always know what to ask things that could make a difference unless someone tells you involving oneself in cultural activities not related to work. (Caucasian 2)
- Working with people, important to have professionals available for consultation Being willing to listen to clients. (Caucasian 3)
- To consult Chinese mental health professionals regarding cases and clients. (Judge 1)
- Hear more from professionals within the culture. (Other 4)
- Try to appreciate strengths of both cultures and integrate them. (Chinese 7)
- Familiar with resources in Chinese community for those who do not speak Chinese, therefore can refer to those they are more comfortable seeing. (Chinese 6)
- Exposure to cultural events that go on within the community; and

exposure to some of the foods, going to that part of town.

(Caucasian 5)

- Effective interpreters not only need the fluent language skills in both English and Chinese, they also need to have a good understand [ing] of the culture, value, and beliefs of both Hong Kong Chinese and Canadian culture. (Judge 4)

Both the judges' and pilot study participants' responses to the open-ended questionnaire corroborated their scores on the CCQ-1 and CCQ-2 respectively for the collaboration construct. Comments by the judges and participants indicated that they were aware of the concepts underlying collaboration, and these results supported the scoring trend in that all of the judges and participants scored in the medium and high categories.

Summary of Phase One results

Phase One resulted in the design of the CCQ-3 which was to be used in Phase Two. The use of two methods to measure the construct of cultural competence was one way to increase validity and reliability. Pilot study results indicated that the Chinese and Other participants scored higher than Caucasian participants on the construct of knowledge, which implied that ethnicity could have played a part in scoring of the knowledge construct. The participants' responses to the open-ended questions corroborated their scores on the CCQ-2. Caucasian participants described themselves as having little knowledge of Chinese cultural values and beliefs, whereas the Chinese participants were able to describe these

values and beliefs in detail. Scores for the constructs of sensitivity and collaboration were less well differentiated, in that all the participants scored in the medium and high categories. Their responses to the open-ended questions indicated that they were aware of the concepts relating to these two constructs, which could have accounted for their higher scores in these categories. This could have been due to the fact that four out of the five non-Chinese participants had either treated Chinese clients or had formal/informal education on cross-cultural concepts. Exposure to Chinese clients and/or formal/informal education on cross-cultural concepts may have increased their awareness of cultural issues and resulted in similar scores for sensitivity and collaboration compared to the Chinese participants.

Phase Two

Measure Factors Relating to Cultural Competence in Occupational Therapy Mental Health Practice

The objective of Phase Two was to measure factors relating to cultural competence in occupational therapy mental health practice. Phase Two was designed to explore the factor structure of the newly created CCQ-3. Participants in this phase were occupational therapists practising in the area of mental health in Canada. They were asked to complete the CCQ-3 and accompanying demographic form. Their responses were then reviewed and analyzed.

Participants

Participants were 378 occupational therapists working in the area of mental health in Canada. They were very diverse with respect to ethnicity, age, years worked in the area of mental health, and areas of practice. The demographic characteristics of the 378 respondents are listed in Tables 10.1 and Table 10.2. They included 341 females and 32 males. Five respondents did not circle the response for gender. There were 290 respondents with baccalaureate degrees, 43 with Master's degrees, 39 with diploma certificates, one with a doctoral degree, one with postgraduate education, and two presently pursuing doctoral education. Two respondents did not indicate their educational level. Approximately one quarter of the respondents were foreign born. This included 87 who were born in countries such as England, Hong Kong, India, New Zealand, United States of America etc.

The other 291 respondents were born in Canada. For language spoken at home, 341 spoke only one language, English (307), French (24), Chinese dialect (6), and other (4); 30 spoke two languages at home; and seven respondents spoke three languages at home. In the area of employment, 249 worked full-time, 114 worked part-time as occupational therapy professionals in mental health, four were not working, and one was a graduate student. Ten respondents did not respond in this category.

Table 10.1

Demographic Characteristics of Occupational Therapists (N = 378)

		n	%
Gender:	Male	32	8.5 %
	Female	341	90.2 %
	Missing *	5	1.3 %
Education:	Doctoral degree	1	0.3 %
	Master's degree	43	11.4 %
	Bachelor's degree	290	76.7 %
	Diploma	39	10.3 %
	Missing *	2	0.5 %
	Post graduate	3	0.8 %
Place of Birth:	Canada	291	77.0 %
	Non-Canada	87	23.0 %
Language Spoken at Home:	English only	307	81.2 %
	French only	24	6.3 %
	Chinese dialect	6	1.6 %
	Other	4	1.1 %
	2 or more languages	37	9.8 %
Employment in the Field of Occupational Therapy:	Full-time	249	65.9 %
	Part-time	114	30.2 %
	Graduate student	1	0.3 %
	Not working	4	1.1 %
	Missing *	10	2.5 %
Ethnicity:	White Caucasian	306	81.0 %
	Chinese	22	5.8 %
	Other	26	6.9 %
	Missing *	24	6.3 %

* Indicated that respondents did not circle appropriate answer or fill in the blanks for that category

The number of Hong Kong Chinese mental health clients treated by the respondents ranged from zero to 100 with a mean of 3.58 (SD = 10.45). As reported in Table 10.2, their ages ranged from 24 years to 65 years with a mean age of 37.9 years (SD = 8.32). Their stay in Canada ranged from three to 60 years with a mean of 33.3 years (SD = 10.56). The minimum number of years worked was 0.1 years and the maximum was 33 years with a mean of 8.06 years (SD = 6.90).

Table 10.2

Demographic Characteristics of Occupational Therapists (N = 378)

Age:

Mean	37.9
SD	8.32
Minimum	24
Maximum	65
Range	41

Years of Stay in Canada:

Mean	33.3
SD	10.56
Minimum	3
Maximum	60
Range	57

Years Worked in Mental Health:

Mean	8.06
SD	6.90
Minimum	0.1
Maximum	33
Range	32.9

As noted in Table 11, there was representation from all ten provinces: Alberta (59), British Columbia (66), Manitoba (18), New Brunswick (11), Newfoundland (5), Nova Scotia (24), Ontario (163), Prince Edward Island (2), Quebec (26), and Saskatchewan (4).

Table 11

Frequency Distribution of Respondents by Province

	n	%
Alberta	59	15.6 %
British Columbia	66	17.5 %
Manitoba	18	4.8 %
New Brunswick	11	2.9 %
Newfoundland	5	1.3 %
Nova Scotia	24	6.3 %
Ontario	163	43.1 %
Prince Edward Island	2	0.5 %
Quebec	26	6.9 %
Saskatchewan	4	1.1 %

As reported in Table 12, there were 306 white Caucasians, 22 Chinese and 26 Other (Black, Asian including East Indians, Filipino and Japanese). The remaining 24 respondents did not indicate what their ethnic backgrounds were.

Table 12

Frequency Distribution of Respondents by Ethnicity

	n	%
Caucasian	306	80.95
Chinese	22	5.82
Other		
Asian	22	5.82
Black	4	1.06
Missing	24	6.35

In the area of education, occupational therapists gave many examples of having had formal/informal education on cross-cultural issues. These included:

Credit Courses:

- Professional practice courses.
- Incorporated in course work, some lectures during bachelor program.

Workshops:

- Cultural sensitivity - 1 day workshop.
- CAOT [Canadian Association of Occupational Therapists] pre-conference workshop.

Presentations, Seminars, and Lectures:

- Part of curriculum at McMaster O.T. [Occupational Therapy] Programme.
- Lecture on cultural diversity and impact of culture on occupational performance.

Cultural Events:

- Participated in events in Trinidad and England.
- I have travelled in China visiting Chinese hospitals, clinics, rural & urban cities.

Books and Articles:

- Mental health articles.

- Mostly from CJOT [Canadian Journal of Occupational Therapy] and AJOT [American Journal of Occupational Therapy].
- Cross-cultural Caring - A Handbook for Health Professionals [Waxler-Morrison, Anderson & Richardson, 1990].

Others:

- I live in a community where there has been a massive influx of Chinese immigrants over the past few years - my experience /education comes from living and working in my community.
- From clients and co-workers I worked with in a very ethnically diverse setting for 3 years.
- Lived in other countries of different cultural background.
- Best friend of 35 years Cantonese.
- I have studied TCM [Traditional Chinese Medicine], Qi Gong [Gong], familiar with acupuncture, Feng Shui.

Materials.

The materials used in Phase Two included French and English versions of the demographic form, the questionnaire, the invitation letter, and a follow-up letter:

1. A demographic information form (Appendix B) was used to obtain information relating to gender, age, ethnic background, employment, educational background, length of stay in Canada, language spoken at home, years of work in the area of mental health, client population, number of Chinese clients treated, and formal as well as informal education on cross-cultural

concepts.

2. French version of the demographic form (Appendix K).
3. Cultural Competence Questionnaire draft three (CCQ-3) - a questionnaire designed to identify the constructs (Appendix C) from literature review and responses given by the judges and pilot study participants. Thirty-five statements on related concepts for the constructs underlying cultural competence were designed to measure the concepts.
4. French version of CCQ-3 (Appendix L).
5. A letter (Appendix M) was used to invite the occupational therapists to participate in the study. It included a brief description of the study, the amount of time that would be required for their participation, reassurance that information about them would be kept confidential, a reminder that their participation was voluntary, reassurance that they would remain anonymous and a person to contact about questions and someone to contact regarding concerns.
6. French version of the letter inviting them to participate (Appendix N).
7. A follow-up letter (Appendix O) thanking those who had returned the open-ended questionnaire and reminding those who have not yet responded to complete the Cultural Competence Questionnaire (CCQ-3).
8. French version of the follow-up letter (Appendix P).

Procedure

Lists of names of occupational therapists working in the area of mental health were obtained from the Alberta Association of Registered Occupational Therapists and the Canadian Association of Occupational Therapists. Letters in English (Appendix M) containing consent information were sent to 1,609 potential participants together with the CCQ-3, (Appendix F) on August 31, 1998. This letter was sent using University of Alberta stationery, and each copy was individually signed. A stamped, self-addressed envelope also was enclosed. These steps were taken to increase the response rate. The letter also included a Chinese saying "A journey of a thousand miles begins with a single step" written in English and Chinese. Similar letters in French (Appendix N) together with the French version CCQ-3 (Appendix L) also were sent out to 100 French speaking OT's on the same day.

Follow-up letters in English (Appendix O) were sent to 1599 occupational therapists, thanking those who had returned the questionnaire and asking those who had not returned the questionnaire to do so by September 18, 1998. Similarly 100 follow-up letters in French (Appendix P) were sent to all those who had not responded by September 7, 1998.

Data Analysis

SPSS for Windows, Release 8.0 was used for simple descriptive, correlational, and multiple regression analyses. For multiple regression analysis, the predictor variables were ethnicity, number of Chinese clients therapists had treated,

place of birth, number of years worked, and type of education in cross-cultural issues. Resulting sub-scale scores and the total scores of all the constructs combined on the CCQ-3 were then used as criterion variables in subsequent multiple regression analyses. When there was no significant predictability of the dependent variables from the independent variables, t-tests were used in an attempt to find different levels of occupational therapists' cultural competence that had been dichotomously grouped on the basis of their culturally relevant demographics. Factor analyses were used to reduce the large set of measures to smaller more manageable subsets of underlying factors.

Results

The Alberta Association of Registered Occupational Therapists and the Canadian Association of Occupational therapists provided the principal investigator with 113 and 1596 names respectively.

A total of 675 responses were received through e-mail, letters, faxes, and telephone calls, however only 378 responses were useable. These respondents met the criterion of having either previously worked or were currently working in the area of mental health. Not included in the analyses were 297 respondents, 221 of whom noted that they had never worked in the area of mental health, and 76 of whom sent letters that were either received after the cut off date or were returned as undeliverable. The deadline was September 18, 1998, so a week's grace was given and the final cut off date was September 25, 1998. The response rate for the survey was 39.5% for all occupational therapists working in the area of mental health in

Canada. The response rate of occupational therapists working in the area of mental health in Alberta was 52.2%.

Questionnaire

In order to check for data-entry reliability, 20 questionnaires were randomly chosen, and their scores were re-checked with the data that were entered originally. Point-to-point comparison for all items resulted in 97.3% accuracy. All inaccurate entries were corrected.

Since there were 35 statements in the questionnaire representing 17 related concepts, a Spearman correlation coefficient was calculated to test whether the statements measuring each concept were correlated with each other. This was referred to as the paired item correlation. The findings for each set of statements are summarized in Table 13. Results indicated that correlations for all but one set of statements (S50 & S51) were significant at the 0.01 level. However it was noted that four sets of statements (S20 & S21; S30 & S31; S50 & S51; & C30 & C31) had correlations below 0.20. Cronbach's alpha was used to check for internal consistency of the questionnaire. Four Cronbach's alphas were calculated. One looked for the mean relationship among knowledge statements. A second looked for the mean relationship among sensitivity statements. A third looked for the mean relationship among collaboration statements, and the fourth looked at the mean relationship among all cultural competence statements. The findings are summarized in Table 13. The Cronbach's alpha for the 35-statement questionnaire was 0.875, which indicated strong internal consistency among the statements.

Table 13:
Non-parametric Correlations for Sets of Statements

Concepts	Sets of Statements	Correlation for paired items	Internal consistency Cronbach's alpha Constructs		CC*				
Knowledge	K10 & K11	0.454 **	0.874	0.875					
Knowledge	K20 & K21	0.262 **							
Knowledge	K30 & K31	0.426 **							
Knowledge	K40 & K41	0.371 **							
Knowledge	K50 & K51	0.527 **							
Knowledge	K60 & K61	0.703 **							
Sensitivity	S10 & S11	0.278 **	0.502			0.875			
Sensitivity	S20 & S21	0.182 **							
Sensitivity	S30 & S31	- 0.151 **							
Sensitivity	S40 & S41	0.417 **							
Sensitivity	S50 & S51	0.055							
Sensitivity	S60 & S61	0.401 **							
Collaboration	C10 & C11	0.265 **	0.664					0.875	
Collaboration	C12 & C13	0.302 **							
Collaboration	C20 & C21	0.350 **							
Collaboration	C30 & C31	0.194 **							
Collaboration	C40 & C41	0.365 **							

* Cultural competence

** significant at 0.01 level (2-tail)

Another statistical correlation was obtained for each set of statements that had correlations below 0.20 and for the subtotal of the scores for each of the constructs. This was done to ascertain which statement correlated best with the subscore for that construct. The results are indicated in Table 14.

Table 14

Correlations for Statements and Sub-scores

Statement *	Correlation Coefficient
S20	0.38
S21	0.21
S30	0.51
S31	0.17
S50	0.54
S51	0.29
C30	0.12
C31	0.22

Note. Paired statements were S20 & S21, S30 & S31, S50 & S51, and C30 & C31.

The correlation coefficients in Table 14 indicate that each set of statements correlated differently with the sub-score total, in that one statement in the set had a higher correlation with the sub-score total than did the other statement. As noted in Table 14, for the set of statements (S50 & S51), scores for S50 were more highly correlated with the sub-score for sensitivity than were the scores for S51, which then resulted in a low correlation between the two statements that were supposed to be measuring the concept of an open attitude towards the Chinese.

Linear regression analyses were performed to check for relationships between the dependent variable, total scores of all the constructs and the independent variables of ethnicity, number of Chinese clients occupational therapists had treated, and type of education in cross-cultural concepts. Similar regression analyses were performed for the sub-scores of knowledge, sensitivity, and collaboration with the independent variables of ethnicity, number of Chinese clients occupational therapists had treated, and type of education in cross-cultural concepts. The results are shown in Table 15. The proportion of variance explained by the independent variables (ethnicity, number of Chinese clients occupational therapists had treated, and type of education in cross-cultural concepts) for the dependent variables (sub-scores of knowledge, sensitivity, and collaboration, and the total score of all the constructs added together) were very small, ranging from 0.003 to 0.106. The results indicated that there were no significant relationships between the dependent variables (sub-scores for knowledge, sensitivity, and

collaboration) and the independent variables (ethnicity, number of Chinese clients occupational therapists had treated, and type of education in cross-cultural concepts).

Table 15**Linear Regression Analyses**

Dependent Variable	Independent Variable	Correlation (R)	Variance Explained
Total Score	Number treated	0.220	0.049
Total Score	Ethnic	- 0.257	0.066
Total Score	Informal	0.264	0.070
Total Score	Formal	0.259	0.067
Knowledge	Number treated	0.261	0.068
Knowledge	Ethnic	- 0.326	0.106
Knowledge	Informal	0.228	0.052
Knowledge	Formal	0.213	0.045
Sensitivity	Number treated	0.056	0.003
Sensitivity	Ethnic	- 0.104	0.011
Sensitivity	Informal	0.210	0.044
Sensitivity	Formal	0.224	0.050
Collaboration	Number treated	0.113	0.013
Collaboration	Ethnic	- 0.055	0.003
Collaboration	Informal	0.197	0.039
Collaboration	Formal	0.197	0.039

Multiple regression analyses were also performed for the dependent variables of total score for all the constructs combined and sub-scale scores of knowledge, sensitivity, and collaboration with the independent variables of ethnicity, number of Chinese clients occupational therapists had treated, and formal/informal education in cross-cultural concepts. The correlational coefficient and amount of variance explained by the independent variables for each of the dependent variable are indicated in Table 16.

Table 16**Multiple Regression Analyses**

Dependent Variable	Independent Variable	Correlation (R)	Variance Explained (R Square)
Total Score	Formal education Informal education Number treated Ethnicity	0.44	0.194
Knowledge	Formal education Informal education Number treated Ethnicity	0.476	0.227
Sensitivity	Formal education Informal education Number treated Ethnicity	0.277	0.077
Collaboration	Formal education Informal education Number treated Ethnicity	0.246	0.060

Although the correlations for total score and sub-score for knowledge with the independent variables of ethnicity, number of Chinese clients occupational therapists had treated, and formal/informal education were higher than those for sensitivity and collaboration with the same independent variables, the correlations were not significant. The amounts of variance in the dependent variables of knowledge, sensitivity, collaboration, and cultural competence that were predicted by the independent variables were low, and the F-ratio was not statistically significant. Therefore, there were no significant relationships between the dependent variables of knowledge, sensitivity, collaboration, and cultural competence, and the independent variables of ethnicity, number of Chinese clients occupational therapists had treated, and formal/informal education in cross-cultural concepts.

The frequency distribution of the scores for each of the statements, their means and standard deviations were then reviewed to check for a trend in the distribution of the scores. This is tabulated in Table 17. The results indicated that the means of scores were lowest on the knowledge construct. This could imply an overall lack of knowledge in Chinese cultural values and beliefs. The mean scores were highest for four statements (S40, S41, C30, & C31). These statements are shown below with the mean scores in parentheses.

S40 Health professionals must accommodate the cultural needs of their patients. (6.4)

S41 Health professionals need to understand the world from other culture's points of view. (6.3)

C30 Patients need to play an active role in the treatment process. (6.7)

C31 Just listening to a patient's needs for an entire session is a waste of time. (6.4)

These scores seem to indicate that occupational therapists are client centred.

Unpaired t-tests were carried out to test for various levels of cultural competence of occupational therapists who had been grouped on the basis of their demographic background. This was done by comparing the means of the dependent variables of knowledge, sensitivity, collaboration, and cultural competency with dichotomous groupings based on the independent variables of number of Chinese clients occupational therapists have treated, ethnicity, and formal/informal education in cross-cultural concepts. All results were not significant.

Table 17

Frequency Distribution, Means and Standard Deviation
for Each Statement on CCQ-3

Item	Don't Know	1	2	3	4	5	6	7	Missing	Means	SD
K10	69	1	0	0	14	53	119	115	7	5.0	2.5
K20	133	1	6	14	47	75	59	33	10	3.3	2.7
K30	110	3	6	14	38	71	82	39	5	3.6	2.6
K40	219	2	10	6	23	52	38	17	11	2.0	2.6
K50	163	1	2	5	14	68	69	43	13	3.1	2.9
K60	304	3	3	1	6	15	19	13	14	0.9	2.1
K11	113	0	3	2	30	65	103	49	13	3.9	2.7
K21	154	0	2	1	32	56	67	58	8	3.3	2.9
K31	137	4	11	10	41	65	68	30	12	3.2	2.7
K41	183	0	7	7	17	46	71	37	10	2.8	2.9
K51	124	0	3	3	21	62	73	80	12	3.8	2.9
K61	316	3	3	5	10	9	9	14	9	0.7	1.85

Note. The scores are scaled from 0 to 7 with a high score meaning greater knowledge of concept.

Table 17 continued

Frequency Distribution, Means and Standard Deviation**for Each Statement on CCQ-3**

Item	Don't Know	1	2	3	4	5	6	7	Missing	Means	SD
S10	60	90	95	62	53	3	2	0	13	1.9	1.3
S20	23	5	7	27	62	69	95	83	7	4.9	1.9
S30	23	7	14	6	35	74	108	105	6	5.2	1.9
S40	4	0	1	2	6	26	99	237	3	6.4	1.0
S50	177	5	18	23	28	24	59	27	17	2.5	2.7
S60	22	5	8	23	73	84	80	66	17	4.8	1.8
S11	124	3	20	41	123	21	16	9	21	2.6	2.1
S21	5	66	64	96	78	28	24	11	6	3.1	1.6
S31	4	14	40	116	86	38	57	19	4	3.9	1.6
S41	1	1	0	4	15	35	114	207	1	6.3	0.9
S51	10	2	6	4	32	52	93	169	10	5.9	1.6
S61	5	1	2	4	31	74	119	138	4	5.9	1.3

Note. The scores are scaled from 0 to 7 with a high score meaning greater knowledge of concept.

Table 17 continued

Frequency Distribution, Means and Standard Deviation
for Each Statement on CCQ-3

Item	Don't Know	1	2	3	4	5	6	7	Missing	Means	SD
C10	181	6	9	11	30	45	46	42	8	2.6	2.8
C11	68	10	14	16	44	62	88	69	7	4.3	2.5
C12	82	14	38	34	71	42	41	50	6	3.4	2.4
C13	15	1	1	4	19	39	96	202	1	6.0	1.6
C20	6	1	2	10	33	73	132	118	3	5.7	1.3
C30	0	1	0	1	3	13	61	299	0	6.7	0.6
C40	59	9	10	14	46	92	86	52	10	4.3	2.3
C50	14	0	3	6	30	71	114	135	5	5.7	1.6
C21	8	0	1	4	18	64	130	149	4	6.0	1.3
C31	5	5	11	0	6	10	70	270	1	6.4	1.4
C41	20	0	1	3	12	47	115	177	3	5.9	1.7

Note. The scores are scaled from 0 to 7 with a high score meaning greater knowledge of concept.

In the area of knowledge, many respondents answered "Don't know" to the statements. The number doing so ranged from 69 for statement K10 to 316 for statement K61 (Table 17).

K10 Chinese families have a significant impact on children's acquisition of traditional values

K61 Traditional Chinese believe that people with high fevers should be covered with warm blankets

This lack of knowledge was evident in some of the following comments:

- I have limited knowledge of Hong Kong mental health pts [patients].
- By completing this questionnaire, I realized I do not know enough about this culture.
- Have no experience working with clients from Hong Kong.

However, there were many comments confirming that the statements were measuring the related concepts of cultural knowledge. Some respondents also commented on the impact families had on treatment:

- Families tend to be very controlling.
- We have seen many Chinese patients and have seen both extremes in terms of family support of their depressed family members.
- Family issues were striking.

- I have worked with 5 teens. (4 were actively psychotic and parents sought Tx [treatment] in crisis situations, 1 was autistic). All but 1 had been treated with traditional Chinese healers. All the families of these 5 were very protective and very reluctant to disclose information.
- Their strong loyalty to family and suspicion of professionals & others outside the family is often a barrier to identifying actual issues and concerns.

Others commented on the importance of knowledge in the area of practice but some also noted the practicality of having to learn about all the different cultures of their clients as well as the need to consider other factors affecting culture.

- I believe that it is necessary to be versed/educated in Chinese culture especially when Chinese clients are on one's case load.
- In our area, we have not had a single client of Chinese origin that I am aware of. Therefore it seems unnecessary to acquaint ourselves with their culture.
- Respect for belief & value for other culture is important.
- We can't be expected to know everything about all cultures.

The continued use of traditional Chinese medicine in treatment was evident in these statements:

- Understanding of superstitious beliefs.
- I remember wearing my pyjamas and being covered in a blanket in bed when I had a fever. My mother claims if I sweat it out, my body temperature will cool down - thus fever will be gone.

For knowledge, the therapist who scored highest (80) in this area had extensive background knowledge of Chinese cultural values and beliefs. That Caucasian therapist had studied traditional Chinese medicine and Qi Gong and was familiar with acupuncture. This occupational therapist also had travelled widely in China, had treated fewer than 20 Chinese clients, and had both formal and informal education in cross-cultural concepts. One example of a therapist who scored zero in this category was a white Caucasian who had not treated any Chinese clients and had no formal/informal education in cross-cultural concepts.

In the area of sensitivity, some therapists commented on the dangers of racial stereotyping and generalization in some of the questionnaire statements.

- People need to be aware that ethnicity would not and should not be the main or only consideration in cultural views, other factors impacting on one's culture could be social class, urbanization, length of residency in Hong Kong, education, and their acculturation experience in Canada etc.

- Your statements are designed to be extreme, but in real life, the answer is usually "it depends"
- The wording "should" has a judgmental tone - I prefer the word encouraged. (All immigrants should learn to speak English)

Therapists also commented on the importance of having an open attitude, being aware of the client's cultural differences, and experiencing personal contact in these comments:

- I feel that the Chinese patients or community are similar in many ways to the East Indian community which is why I am more cognizant of cultural issues in my practice.
- I think it is very important for all health care professionals to be sensitive to the differences of various cultures and not attempt to assimilate other cultures to Western thinking - it is not necessarily better or worse, just different.
- I think that we as professionals impose our cultural stereotypes onto our clients, at least initially, despite our training. We still need to treat client as individual i.e. not all Canadians have same values and beliefs, not all people from Hong Kong do etc.
- I believe therapists who are from another cultural background (other than Western) are more empathetic in their understanding of cultural diversities.

In the area of sensitivity, there were significantly fewer uses of the "don't know" category than in the area of knowledge. For nine of the statements, there were fewer than 23 "don't know" responses. However, for statements, S10, S50, and S11 there were more "don't know" responses (included in the parenthesis).

S10 Chinese people are hardworking. (60)

S11 As a group, the Chinese are model citizens. (124)

S50 Chinese people want their elderly relatives to remain dependent. (177)

When asked to add comments, some therapists noted the importance of treating the client as an individual and advised against stereotyping the person. The danger of over-generalizing in some of the statements (S10, S11, & S21), was noted and some therapists stressed the importance of not imposing cultural stereotypes on clients. Some of their comments are included in parentheses next to the statements.

S10 Chinese people are hardworking. (Some are, some aren't; generalization)

S11 As a group, the Chinese are model citizens. (too many variables; Who is?; Aren't all cultural groups?)

S21 All immigrants should learn English. (depends on situation; depends on the social situation, age)

The therapist who scored highest in this category (73) was a white Caucasian who spoke both English and a European dialect at home, had treated one Chinese client, and had formal/informal education in cross-cultural concepts.

Collaboration

In the area of collaboration, therapists commented on the importance of: (a) being client centred, (b) including the clients in treatment, and (c) involving the members of the minority group in treatment.

- I think if you are client centred, you will try to learn as much about the person/culture in order to develop a trusting, meaningful OT/client relationship.
- The psychosocial issues and cultural issues are very multifaceted and each client must be dealt with differently based on their own family history and experience dealing with health care professionals.

Regarding the use of interpreters, some therapists noted the difficulty arranging for and finding interpreters in some instances:

- Finding the "right" interpreter was always difficult.
- This is a difficult task especially when a patient does not speak English.... It remains difficult to get an interpreter.
- It is difficult because of the arrangements that often need to be made for interpreters, other family members to be present during

assessment/treatment etc.

Some therapists commented on the importance of consultation and involvement of Chinese co-workers in the treatment process.

- In homecare, we often use our Chinese coworkers as "consultants" and/or translators. Many referrals are funnelled directly to these staff to improve service provision.
- To consult different practitioners if they are involved.
- Readiness to learn from another human being is also important.
- Each situation (individual Chinese patient) needs to be assessed carefully with the selection of interpreters. Initial assessment requires an uninvolved objective interpreter to have discussions with the patient about their situation, who they would like to interpret during the sessions and consent to occupational therapy intervention if appropriate.

In the area of collaboration, there were significantly fewer instances of "don't know" than in the area of knowledge. Only three statements C10, C11, and C12 had more than 60 "don't know" responses. These numbers are included in the parentheses next to the statements.

- C10 When using interpreters with Chinese patients, it is best to choose same sex interpreters. (181)**
- C11 When using interpreters it is best to use family members. (68)**

**C12 Clinicians should not use patient's friends as interpreters.
(82)**

One of the two therapists who had perfect scores for this area (77) also had the highest score for sensitivity. The second therapist was a Chinese occupational therapist who was born in Hong Kong and had treated two Chinese clients but had no formal/informal education in cross-cultural concepts.

Factor analyses

To reduce the large set of measures to smaller more manageable sub-sets, factor analysis was performed. Ten factors with eigenvalues greater than 1.0 were identified. Together they accounted for 60.2 % of the variance. Rotational methods were then applied and the solution of choice was the rotated factor matrix using Varimax with Kaiser Normalization. The results are tabulated in Table 18. Criterion for inclusion of a statement in the factor loading was a value of 0.4 or greater.

Table 18**Results of Factor Analysis: 10 factors**

Factors	Variance Explained	Statements Loading
1	20.458	K10; K20; K30; K40; K50; K11; K20; K21; K31; K41; K51; S50; S11
2	8.389	C13; C40; C50; C21; C41
3	5.111	C10; C11; C12
4	4.824	K60; K61
5	4.437	S60; S41; S61
6	3.784	S20; S21; S51; C30
7	3.721	S30; S40
8	3.360	S10; S11; C31
9	3.161	C20; C51
10	2.965	S31

From Table 18, 38 statements loaded on the ten factors. The knowledge statements tended to load on Factors 1 and 4; the sensitivity statements on Factors 5,6,7,8, and 10; and the collaboration statements tended to load on Factors 2, 3, and 9. There also were some overlapping of items in Factors 1, 6, and 8. As noted in Table 14, S11 and S50 were statements for which 124 and 177 respondents indicated "don't know" in their responses respectively. From the factor loadings, the two statements S11 (As a group, the Chinese are model citizens) and S50 (Chinese people want their elderly relatives to remain dependent) were measuring the construct of knowledge. The loadings for statements included in Factor 1 were between 0.413 and 0.753. The ranges of the factor loadings on each of the factors are indicated in Table 19.

Table 19**Factor Loadings of Statements in Factors (10)**

Factor	Minimum loading	Maximum loading
1	0.413	0.753
2	0.482	0.777
3	0.448	0.846
4	0.849	0.861
5	0.522	0.745
6	0.409	0.687
7	0.699	0.795
8	0.495	0.641
9	0.434	0.596
10	0.861*	0.861*

*** Only one statement**

Another factor analysis specifying a 3-factor solution was performed. The presumed three underlying constructs were hypothesized by the principal investigator on the basis of literature review and feedback from the judges and pilot study participants in Phase One. The results are listed in Table 20.

Table 20

Results of Factor Analysis: 3 factors

Factors	Statements Loading
1 (Knowledge)	K10; K20; K30; K40; K50; K60; K11; K21 K31; K41; K51; K61; S50; S11; C10
2 (Collaboration)	S40; S41; S61; C20; C40; C50; C21; C41
3 (Sensitivity)	S10; S20; S21; C11; C12

For this analysis, 28 statements loaded onto the three hypothesized factors, as indicated in Table 20. Five statements all of which had correlations below 0.52 were missing from the solution (See Table 14). The knowledge items loaded on

Factor 1 (Knowledge) as in the 10-factor matrix (Table 18) above with the addition of statement C10 (When using interpreters with Chinese patients, it is best to choose same sex interpreters). As noted in Table 14, 181 respondents indicated "don't know" to this statement which could have meant that this statement was a measure of knowledge rather than collaboration. Altogether fifteen statements loaded on Factor 1. For Factor 2 (collaboration), there were three sensitivity statements and five collaboration statements, and for Factor 3 (sensitivity), there were three sensitivity statements and two collaboration statements. The ranges of the factor loadings on each of the factors are indicated in Table 21.

Table 21

Factor Loadings of Statements in Factors (3)

Factor	Minimum loading	Maximum loading
1 (Knowledge)	0.511	0.711
2 (Collaboration)	0.476	0.713
3 (Sensitivity)	0.409	0.502

Seven statements (S30, S31, S51, S60, C13, C30, & C31) that had previously loaded on one of the ten factors were not loading on the three factors and thus were eliminated. They were:

- S30 Health professionals' cultural backgrounds have impact on assessment and treatment of Chinese clients.**
- S31 It is difficult to treat people from another culture.**
- S51 Family members should be involved in the care of the elderly patient when independence is a treatment goal.**
- S60 Health professionals need to expose themselves to Chinese culture.**
- C13 Effective assessment of Chinese patients with extremely limited English skills requires the use of an interpreter.**
- C30 Patients need to play an active role in the treatment process.**
- C31 Just listening to a patient's needs for an entire session is a waste of time.**

On further review of the statements loading on the three factor solution, the statements in Factor 3 (Sensitivity) had more "should" statements but the statements in Factor 2 (Collaboration) were more generalized.

- S20 Western scientific medicine is the medical system that should be used worldwide. (Sensitivity)**
- S21 All immigrants should learn English. (Sensitivity)**
- C12 Clinicians should not use patient's friends as interpreters. (Sensitivity)**
- S41 Health professionals need to understand the world from other culture's point of view. (Collaboration)**

- S61 Health professionals need to learn more about what new immigrants expect from health care. (Collaboration)**
- C21 Health professionals may benefit from consultation with the Chinese healers in treatment of Chinese patients. (Collaboration)**

A careful review of the statements in Factor 2 (Collaboration) and Factor 3 (Sensitivity), revealed that they seem to indicate processes whereby health professionals need to apply what they have learned about the individual's cultural background in their therapeutic interactions with their clients. For example, to work effectively with culturally diverse clients, in this instance the Chinese, the therapist could benefit from: (a) consulting with Chinese healers and Chinese mental health professionals in the treatment of Chinese clients, (b) learning what new immigrants expect from health care, (c) understanding that they can benefit from consultation with the Chinese community, and (d) accommodating the cultural needs of their clients. Since there was an overlap of both sensitivity and collaboration statements in Factor 2 (Collaboration) and Factor 3 (Sensitivity) of the three factor solution, it was hypothesized that sensitivity and collaboration could be combined under one construct that could be referred to as "cultural application" (Vargo, 1998).

Factor analysis specifying a 2-factor solution was performed and the results are shown in Table 22.

Table 22**Results of Factor Analysis: 2 factors**

Factors	Items Loading
1 (Knowledge)	K10; K20; K30; K40; K50; K60; K11; K21 K31; K41; K51; K61; S50; S11; C10; C11; C12
2 (Application)	S20; S40; S41; S61; C20; C40; C50; C21; C41

As indicated in Table 23, the loadings for Factor 1 (Knowledge) were between 0.402 and 0.719 and the loadings for Factor 2 (Application) were between 0.425 and 0.707.

Table 23**Factor Loadings of Statements in Factors (2)**

Factor	Minimum loading	Maximum loading
1 (Knowledge)	0.402	0.719
2 (Application)	0.425	0.707

From the results of the 2-factor analysis, 26 statements loaded on the two factors. The knowledge factor had two more statements loading onto it (C11 & C12) which were originally in Factor 3 (Sensitivity), (Table 20). This could indicate that C11 (When using interpreters, it is best to use family members) and C12 (Clinicians should not use patient's friends as interpreters), statements on the use of interpreters, were actually knowledge statements. As noted earlier in Table 14, more than 60 respondents indicated "don't know" in their responses to these statements, which may indicate a lack of knowledge rather than a lack of collaboration. The second factor (application) also had S20 (Western scientific medicine is the medical system that should be used worldwide) added to it. Statement S20 loaded previously on Factor 3 (sensitivity). However, statements S10 (Chinese people are hardworking) and S21 (All immigrants should learn English) no longer loaded on any of the two factors and thus were eliminated. Another revised version of the CCQ based on the results of the factor analyses and comments from the participants was then designed. Each statement retained in the final version only loaded significantly on one factor. The revised questionnaire, the Shim-Hui Measure of Cultural Understanding - Chinese (SHIMCUE-C), (Appendix G) has 26 items, including 17 statements on cultural knowledge and nine statements on cultural application.

Chapter 4

Discussion

The objectives of this study were to identify variables associated with cultural competence and to measure factors related to cultural competence in occupational therapy mental health practice. There were many within-group differences, even within the grouping of Chinese. People's cultural values differ depending on their exposure to Western values and on their country of origin (Matocha, 1998), so this study defined Chinese as Chinese who had immigrated from Hong Kong.

According to Sawyer et al, (1995), there are three components of cultural competence (cultural knowledge, cultural sensitivity, and collaboration). McGee (1992) and Rorie et al. (1996) also stressed the importance of cultural self-awareness in cultural competence. Since occupational therapists are concerned with occupational performance, and clients' cultural background affects their occupational performance, understanding the cultural beliefs related to mental illness (Evans, 1992) would assist therapists in their assessments and treatments.

As the focus of the study was on Chinese who had immigrated from Hong Kong, knowledge of Chinese culture was seen as important when working with Chinese clients. From the literature review, knowledge of Chinese culture included knowledge and understanding of: (a) beliefs and values, (b) dependence/independence, (c) stage of acculturation, (d) acculturative stress, (e) ancestral

worship, folk religion, and traditional Chinese medicine, (f) concept of *yin/yang*, and (g) use of traditional healers (Berry & Kim, 1988; Berry et al., 1992; Chan, 1992; Gaw, 1993; Hays, 1996; Hanson, 1992; Kinebanian & Stomph, 1992; Mason et al., 1996; Matocha, 1998; Shim, 1997a; Sidel, 1972; Yamamoto, 1986).

From the literature review, cultural sensitivity was considered to be an essential component of cultural competence. Cultural sensitivity includes being aware of cultural differences, examining therapists' own biases, acquiring information about the patients, recognising their own limitations, and examining their own beliefs and values (Lynch, 1992; McGee, 1992; Morrison, 1993; Pope-Davis et al., 1993; Rorie et al., 1996; Sawyer et al., 1995). Sensitivity was seen as an integral part of the occupational therapy model of practice (Dyck, 1992).

The third component of cultural competence was collaboration which included involving other members of the culture in the treatment and research process and working with practitioners of traditional Chinese medicine (Cheung, 1986; Sawyer et al., 1995; Sue & Sue, 1990).

The questionnaires designed in Phase One included actual quotes from the judges which covered the areas of traditional family values, harmony with nature, concept of *yin/yang*, dependence/independence, stigma of mental illness, somatization of mental illness, and traditional Chinese medicine. The comments by the judges and pilot participants highlighted the concepts found in the literature review (Berry & Kim, 1988; Berry et al., 1992; Chan, 1992; Cheung, 1986; Gaw, 1993; Hays, 1996; Hanson, 1992; Kinebanian & Stomph, 1992; Lynch, 1992;

McGee, 1992; Morrison, 1993; Mason et al., 1996; Matocha, 1998; Pope-Davis et al., 1993; Rorie et al., 1996; Sawyer et al., 1995; Shim, 1997a; Sidel, 1972; Sue & Sue, 1990; Yamamoto, 1986). As a result, the statements in the CCQ-3 can be construed to measure the concepts making up the constructs underlying cultural competence.

The CCQ-3 with 35 statements was used in Phase Two and the results were analyzed. No significant relationships were found between the dependent variables: knowledge, sensitivity, collaboration and the independent variable of ethnicity. As noted by Flaskerud and Liu (1991), considerable controversy continues to exist in the literature with regard to effect on therapy process and outcome as a result of a match between therapist and client on ethnicity. More research needs to be done in this area. Similarly, there were no significant correlations between the dependent variables: knowledge, sensitivity, collaboration and the independent variables of number of Chinese clients occupational therapists had treated as well as formal/informal education. Ferns and Madden (1995) discussed the importance of training professionals to take a holistic approach, and Sawyer et al. (1995) noted that the researcher's knowledge about a culture influenced the research.

Although the results of testing/analyses showed no significance, the comments by the participants reinforced the importance of education and knowledge:

- In any case, further education and enlightenment on all cultures can only benefit us as therapists.

- I also believe that there are also potential cultural issues related to spirituality and ADL [activities of daily living] practices that health professionals need to learn more about.
- I am a big believer that one must really understand an individual's culture in order to properly understand what is important to that person only then can an OT [occupational therapist] make a proper treatment plan with appropriate goals.
- A curriculum course/option or elective may be useful.

Factor analyses were performed to reduce the large set of measures to a more parsimonious subset for practical use. Ten factors with eigenvalues of more than 1.0 and accounting for 60.2 % of the variance were obtained. However when the statements that loaded on the ten factors were reviewed, it was noted that there was extensive overlap of statements in Factor 1, Factor 6, and Factor 8.

As it was hypothesized that there were three underlying constructs on the basis of a literature review and feedback from the judges and pilot study participants in Phase One, factor analysis specifying a three-factor solution resulted in only 28 statements loading on the three factors which were hypothesized to be knowledge, sensitivity, and collaboration. The amount of variance accounted for was 34%. On careful review of the statements, although all the twelve knowledge statements loaded on Factor 1 (Knowledge), two sensitivity statements and one collaboration statement also loaded on the hypothesized knowledge construct. This indicated that these three statements may have been included incorrectly in the sensitivity and

collaboration constructs and should have been included in the knowledge construct instead. This may have had an effect on the finding of insignificant relationships between cultural knowledge and the independent variables of ethnicity, number of Chinese clients occupational therapists had treated, and formal/informal education in cross-cultural concepts. In addition, Factor 2 (Collaboration) and Factor 3 (Sensitivity) had both sensitivity and collaboration statements loading on them with five collaboration and three sensitivity statements in Factor 2 (Collaboration) and three sensitivity and two collaboration statements in Factor 3 (Sensitivity). This would suggest that these two factors included a combination of sensitivity and collaboration statements (Cheung, 1986; Lynch, 1992; McGee, 1992; Morrison, 1993; Pope-Davis et al., 1993; Rorie et al., 1996; Sawyer et al., 1995), which also could have had an effect on the findings of insignificant relationships between sensitivity and collaboration and the independent variables of ethnicity, number of Chinese clients occupational therapists had treated, and formal/informal education in cross-cultural concepts. On careful review of these statements, they seem to indicate some processes whereby the health professionals need to apply their cultural knowledge of the Chinese in order to provide optimum therapeutic interventions for the Chinese client. This could be categorized under a construct called cultural application. The word "application" can be defined as putting into effect a general rule or principle, turning to practical use, concentrated effort, diligence in work or duty (Websters, 1988). Cultural application then would be the implementation of cultural knowledge to work effectively with culturally diverse

clients.

Another factor analysis using a two-factor solution was performed. It resulted in Factor 1 (cultural knowledge) having 17 statements and Factor 2 (cultural application) having nine statements and accounting for 28.9 % of the variance. As noted by the participants, some of the statements had "should" (Health professionals should accommodate beliefs from other cultures in western treatment) which could be changed to words like "encouraged" (Health professionals could be encouraged to accommodate beliefs from other cultures in western treatment). As a result, some of the statements were reworded resulting in another instrument to measure the constructs of cultural knowledge and cultural application.

Sue et al., 1995 had stressed the importance of having cross-cultural competencies and standards in multicultural counselling. It is important to have competencies in cross-cultural interactions, but the word "cultural competence" which has been used in the literature (Orlandi, 1992; Purnell & Paulanka, 1998; Rorie et al., 1996), indicates a continuum that could range from culturally incompetent to some levels of cultural awareness to cultural competence. In Purnell's Model of Cultural Competence (Purnell & Paulanka, 1998, p. 8) "a non-linear concept of cultural consciousness" ranged from "Unconsciously Incompetent," "Consciously Incompetent," "Consciously Competent" to "Unconsciously Competent." Incompetence has a very negative connotation, when it may well be that a person is simply culturally tabular rasa in terms of cultural experience rather than culturally incompetent. Rather than use the word "cultural competency" in the

revised 26-statement measure, the word "cultural understanding" was used to include the two constructs of cultural knowledge and cultural application. Therefore cultural understanding would mean that a health professional is able to provide culturally sensitive care by applying cultural knowledge of the individual client in assessments and treatments. Accordingly, the questionnaire was renamed the Shim-Hui Measure of Cultural Understanding - Chinese (SHIMCUE-C). Preliminary indications are that the SHIMCUE-C is capable of identifying variables associated with cultural understanding and can be used to measure two factors related to cultural understanding in health care.

Limitations of the study

The response rate for the survey was 39.5% for all occupational therapists in Canada. With the exception of Alberta therapists, these numbers included a large percentage of occupational therapists who indicated that they did not work in the area of mental health. Out of the 113 Alberta therapists, 59 or 52.2% responded. Since only the responses of occupational therapists working in the area of mental health were included in the analyses, the results are applicable only to occupational therapists working in the area of mental health. With the selectivity inherent in the study participants, the results may not be generalizable to all occupational therapists.

Although more than one method was used to measure the constructs of knowledge, sensitivity, and collaboration, threats to construct validity for the 35 statement CCQ-3 included problems with conceptualization of the statements.

Sensitivity and collaboration statements were found to be loading on the knowledge construct when factor analyses were performed. The redesigned 26-item SHIMCUE-C needs to be further validated in a future study, because some statements were reworded.

Importance and Relevance

This study was only a beginning to the continual quest to meet the cultural challenge noted by Mirkopoulos and Evert (1994). They proposed strategies such as providing information and research on culture, ongoing development of clinical training in cultural sensitivity, and developing minority recruitment, promotion and retention programs and strategies in both educational and clinical settings. The study also provided a start to the endless process of striving for cultural understanding. This project enabled the investigators to better understand some factors related to cultural understanding in occupational therapy mental health practice where Chinese clients form part of the clientele and resulted in the development of a 26-item measure (SHIMCUE-C) of two of those factors. It provided some preliminary evidence of potential validity for this measurement device.

Factor analyses had indicated that five sensitivity and collaboration statements in the CCQ-3 should have been included in the knowledge construct. This may have had an effect on the finding of insignificant relationships between the dependent variables (knowledge, sensitivity, collaboration, and cultural competence) and the independent variables (ethnicity, number of Chinese clients the occupational therapist had treated, and formal/informal education in cross-cultural

concepts). Future studies using the SHIMCUE-C could assist with identification of factors related to cultural understanding in occupational therapy practice.

Although no significant relationships were found between scores on the CCQ-3 and the independent variables (ethnicity, number of Chinese clients occupational therapists had treated, and formal or informal education in cross-cultural concepts), a trend was observed whereby a larger percentage of therapists, who had either informal or formal education in cross-cultural issues or had treated at least one Chinese client or were from a different ethnic background, had slightly higher total CCQ scores as well as higher sub-scale scores for knowledge, sensitivity, and collaboration than those who did not. Some occupational therapists noted the importance of education in cross-cultural concepts and others indicated that they had benefited from education in cross-cultural concepts. In spite of the non-significant findings, the principal investigator believes that the practice of occupational therapy in mental health can be made more culturally sensitive by inserting courses on cultural knowledge and cultural application into required curricula. Some participants noted that they had learned about cross-cultural issues in their curriculum but that this type of information was not available in all occupational therapy programs. Results from this study indicated that one Caucasian therapist who had extensive education in Chinese values and beliefs was very knowledgeable about Chinese culture, more so than even the Chinese occupational therapists. Incorporating both formal and informal education in cross-cultural concepts for both students in occupational therapy and practising

occupational therapists could result in increased levels of cultural understanding and ultimately in improved occupational therapy services to culturally diverse clients. The importance of including issues of multiculturalism in the education and training of occupational therapists (Mirkopoulos & Evert, 1994) should be emphasized, if occupational therapy is to provide a holistic view of occupational performance (Pope-Davis et al., 1993). Participants in this project commented on the importance of this type of research, and expressed a greater awareness of and interest, in the area of ethnic diversity in occupational therapy mental health practice as a result of their involvement.

- I hope this research assists therapists in being more culturally competent.
- I would be very grateful for a concise guide re: questions and issues of which to be more aware when treating Chinese clients.
- Very interesting project.

The need for such an approach is noted by Hanson (1992, pp. 17).

"Our cultural and ethnic identities help to shape our beliefs and practices, and who we are as individuals and as family members. These identities are not the script for our behaviour, but they do provide a texture and a richness - and they can both bind us together in groups and separate us from one another. Knowledge and understanding, sensitivity, and respect for these cultural differences can significantly enhance the effectiveness of service providers in the helping professions."

Based on the literature review (Mirkopoulos & Evert, 1994; Pope-Davies et al., 1993), the respondents' comments, and the principal investigator's own

convictions, there seems to be a general belief that cultural understanding is important to effective delivery of services. The fact that no correlations could be found between the demographic variables that should relate to cultural competence and actual measures of cultural competence does not mean that cultural competence is unimportant to effective delivery of services. This study did not measure quality of service delivery, so one cannot conclude that there is no relationship between demographic variables that should be related to cultural competence and quality of service delivery to culturally diverse clients. In fact, there is only an assumed relationship between cultural competence and quality of service delivery. This is a potential area of future research using the SHIMCUE-C.

In conclusion, this study focused on a subset of health professionals, namely occupational therapists who work in mental health and have treated clients with a Chinese background. It resulted in the development of a measure of cultural understanding for use with occupational therapists working in the area of mental health with preliminary content and construct validity. The existing version of the SHIMCUE-C can be adapted easily for preliminary work in a physical medicine environment with the deletion of two statements on mental health. The SHIMCUE-C, in its present form, may be applicable for use with other mental health professionals since participants in Phase One included doctors, psychologists, and social workers. After further refinement, this tool might also serve as a template for the development of similar tools to measure cultural understanding for other ethnic groups. This research was a beginning in research on cultural understanding that should

eventually expand beyond Chinese ethnicity, mental health, and occupational therapy. It is hoped that this study will foster more culturally relevant and appropriate research and give birth to a theory of cultural understanding in occupational therapy. These findings have provided a foundation on which future investigations can build to assess the quality of occupational therapy mental health services as they relate to cultural understanding and measure factors related to cultural understanding. Future research could compare occupational therapists who have less cultural understanding with those who have a better cultural understanding to see if there is any difference in quality of service delivery to culturally diverse clients.

In a society as culturally diverse as Canada, much needs to be done to help professionals effectively meet the special challenges created by cultural diversity in the healthcare system. Future research undoubtedly will add much to the achievement of this ambitious goal. As noted in Bond & Hwang (1986), there is a Chinese proverb that states "a journey of a thousand miles begins with a single step."

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APPENDIX A

In the discussion that follows, a therapist's cultural competence related to Hong Kong Chinese refers to: a) competent knowledge of health, illness, values, and beliefs related to Hong Kong Chinese; b) cultural sensitivity or awareness of your own culture and the differences that may exist between that culture and that of people of other cultures with which you may work; and c) collaboration: when required in a treatment process, involves the assistance of members of your patient's culture.

What do you perceive are some social, emotional, and psychological characteristics of the Hong Kong Chinese population in Canada?

What do you perceive are some of the cultural beliefs and values related to health and illness, food/nutrition and treatment of physical and mental illness of the Hong Kong Chinese population?

What do you consider are some of your own cultural beliefs and values related to health and illness, food/nutrition and treatment of physical and mental illness?

What do you think are things that non Chinese mental health professionals can do to learn more about Chinese culture, beliefs and values?

What do you perceive are characteristics of effective interpreters working with Hong Kong Chinese mental health patients?

What do you consider are characteristics of a culturally competent health professional working with Hong Kong Chinese mental health patients?

Please add any other comments that you may have about cultural competence of mental health professionals working with Hong Kong Chinese patients.

This image shows a single sheet of white paper with horizontal blue or grey ruling lines. The lines are evenly spaced and run across the width of the page. There is no handwriting or other markings on the paper.

APPENDIX B

**EMBRACING CULTURAL DIVERSITY IN
OCCUPATIONAL THERAPY MENTAL HEALTH PRACTICE
QUESTIONNAIRE**

Date: _____

For the following items, please circle the appropriate response and fill in the blanks.

Gender: Male/Female Employment: Part time/Full time Ethnic background: _____

In what country were you born? _____ Education: Highest earned degree _____

How long have you been in Canada? _____ Age: _____

What language do you speak at home? _____

How many years have you worked in the area of mental health (FTE)? _____

What is your client population? Acute / Long-term / Community / Other (Specify) _____

Have you treated Chinese mental health patients who are from Hong Kong? Yes / No

If "Yes", about how many? _____

Did you receive formal/informal education on cross cultural concepts? Yes / No

If "Yes", please check and specify where appropriate.

_____ Credit courses:

_____ Workshops:

_____ Presentations, Seminars, and Lectures:

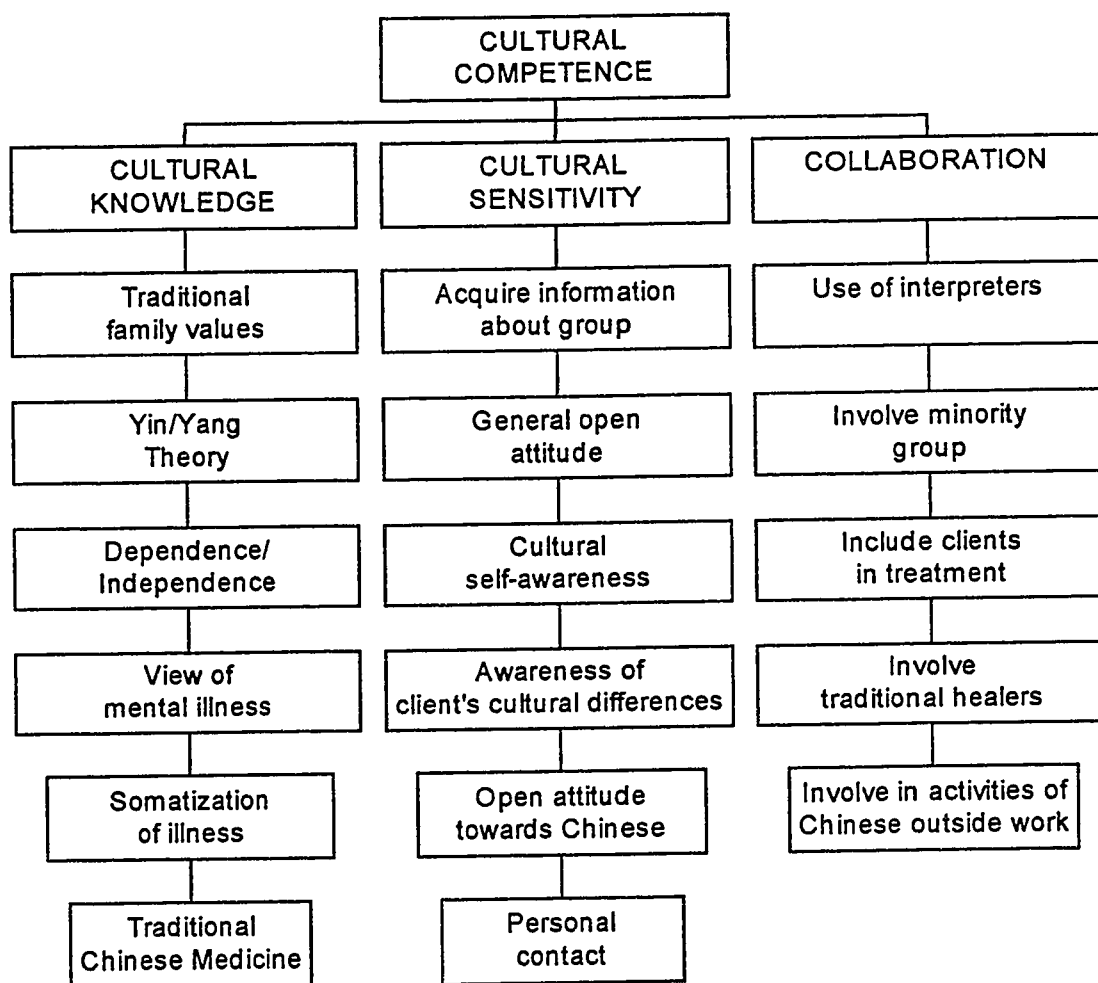
_____ Cultural events:

_____ Books and articles:

_____ Others:

APPENDIX C

Cultural Competence Matrix



APPENDIX D

APPENDIX E

APPENDIX F

CULTURAL COMPETENCE QUESTIONNAIRE (CCQ)

Please make a check mark to indicate your response to each of the following statements and answer each question without referring back to earlier questions. If you have no information or experience related to an item, indicate "Don't know". If your experience or information is so limited that you do not have a belief/opinion, you may choose to leave an item blank.

Your feedback on the questionnaire is very important to us and we thank you for your assistance in the research project. Please feel free to make comments on the back of this questionnaire.

Thank you.

	Strongly agree					Strongly disagree		Don't know
	1	2	3	4	5	6	7	
Chinese families have a significant impact on children's acquisition of traditional values								
Chinese strive to maintain harmony with nature								
Chinese parents are more strict than western parents								
Traditional Chinese view illness as a sign of bad luck								
Chinese hide symptoms of mental illness for fear of being labelled crazy								
Traditional Chinese people believe that cold drinks are inappropriate for people with high fevers								
Chinese families have significant impact on treatment outcomes								
Traditional Chinese believe that illness results from an imbalance of yin/yang								
Chinese adult children generally stay with their families until marriage								
Most Chinese less educated about mental illness tend to seek treatment when illness reaches a crisis stage								
The concept of "loss of face" is crucial to the Chinese population								
Traditional Chinese believe that people with high fevers should be covered with warm blankets								
Chinese people are hardworking								
Western scientific medicine is the medical system that should be used worldwide								
Health professionals' cultural backgrounds have impact on assessment and treatment of Chinese clients								
Health professionals must accommodate the cultural needs of their patients								
Chinese people want their elderly relatives to remain dependent								
Health professionals need to expose themselves to Chinese culture								
As a group, the Chinese are model citizens								

	Strongly agree					Strongly disagree		Don't Know
	1	2	3	4	5	6	7	
All immigrants should learn to speak English								
It is difficult to treat people from another culture								
Health professionals need to understand the world from other cultures points of view								
Family members should be involved in the care of the elderly patient when independence is a treatment goal								
Health professionals need to learn more about what new immigrants expect from healthcare								
When using interpreters with Chinese patients, it is best to choose same sex interpreters								
When using interpreters, it is best to use family members								
Health professionals should accommodate beliefs from other cultures in western treatment								
Patients need to play an active role in the treatment process								
Health professionals may need to seek consultation with Chinese healers in treatment of Chinese patients								
Health professionals benefit from involvement in activities with people from other cultures outside of work								
Clinicians should not use patient's friends as interpreters								
Health professionals may benefit from consultation with the Chinese community where appropriate								
Just listening to a patient's needs for an entire session is a waste of time								
Health professionals can benefit from consulting with Chinese mental health professionals regarding Chinese clients								
Effective assessment of Chinese patients with extremely limited English skills requires the use of an interpreter								

Please add any other comments that you may have about cultural competence of occupational therapists working with Hong Kong Chinese mental health patients.

Thank you for taking the time to complete the questionnaire.

多謝各位填交問卷

APPENDIX G

SHIM-HUI MEASURE OF CULTURAL UNDERSTANDING - CHINESE (SHIMCUE-C)

Please make a check mark to indicate your response to each of the following statements and answer each question without referring back to earlier questions. If you have no information or experience related to an item, indicate "Don't know". If your experience or information is so limited that you do not have a belief/opinion, you may choose to leave an item blank.

Your feedback on the questionnaire is very important to us and we thank you for your assistance in the research project. Please feel free to make comments on the back of this questionnaire.

Thank you.

	Strongly agree					Strongly disagree		Don't know
	1	2	3	4	5	6	7	
Chinese families have a significant impact on children's acquisition of traditional values								
Chinese strive to maintain harmony with nature								
Chinese parents are more strict than western parents								
Traditional Chinese view illness as a sign of bad luck								
Chinese hide symptoms of mental illness for fear of being labelled crazy								
Traditional Chinese people believe that cold drinks are inappropriate for people with high fevers								
Chinese families have significant impact on treatment outcomes								
Traditional Chinese believe that illness results from an imbalance of yin/yang								
Chinese adult children generally stay with their families until marriage								
Most Chinese less educated about mental illness tend to seek treatment when illness reaches a crisis stage								
The concept of "loss of face" is crucial to the Chinese population								
Traditional Chinese believe that people with high fevers should be covered with warm blankets								
Chinese people want their elderly relatives to remain dependent								
As a group, the Chinese are model citizens								
When using interpreters with Chinese patients, it is best to choose same sex interpreters								
When using interpreters, it is best to use family members								
Clinicians should not use patient's friends as interpreters								

	Strongly agree					Strongly disagree		Don't Know
	1	2	3	4	5	6	7	
Western medicine is the medical system that could be used worldwide along with traditional healing from other cultures								
Health professionals need to accommodate the cultural needs of their clients								
Health professionals need to understand the world from other cultures' points of view								
Health professionals need to learn more about what new immigrants expect from healthcare								
Health professionals could be encouraged to accommodate beliefs from other cultures in western treatment								
Health professionals may need to seek consultation with Chinese healers in treatment of Chinese patients								
Health professionals benefit from involvement in activities with people from other cultures outside of work								
Health professionals may benefit from consultation with the Chinese community where appropriate								
Health professionals can benefit from consulting with Chinese mental health professionals regarding Chinese clients								

Please add any other comments that you may have about cultural competence of occupational therapists working with Hong Kong Chinese mental health patients.

Thank you for taking the time to complete the questionnaire.

APPENDIX H



University of Alberta
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Faculty of Rehabilitation Medicine
Office of the Dean

3-48 Corbett Hall
Telephone (403) 492-5949
Fax (403) 492-1626

EMBRACING CULTURAL DIVERSITY IN OCCUPATIONAL THERAPY MENTAL HEALTH PRACTICE

Dear _____
(Name of judge)

I enjoyed talking to you over the phone and want to thank you for agreeing to participate in the above study.

As discussed, I am a graduate student in Rehabilitation Science at the University of Alberta and I am conducting my doctoral research on cultural diversity in occupational therapy mental health practice. The objectives of the study are to: a) identify variables related to cultural competence and b) measure factors related to cultural competence in occupational therapy mental health practice where Chinese (defined as immigrants from Hong Kong) clients form part of the clientele. This cultural competence study is a start in our continual quest to meet challenges of working with clients from other ethnic groups and the beginnings of a process aimed at achieving cultural competence. There are three parts to this study.

The first part of this study will be to identify the constructs of cultural competence and a panel of 6 Chinese mental health professionals, who are immigrants from Hong Kong, will form the panel of judges. As a judge on this panel, you will be asked to give feedback on an open-ended questionnaire. Responses to these questions will be used to modify the draft version of the Cultural Competence Questionnaire (CCQ) which has been designed to categorise the constructs of cultural competence. You will then be asked to check off appropriate categories in the CCQ and give additional feedback so that the CCQ can be revised.

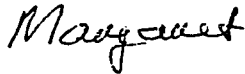
The second part of this study will be to pilot the CCQ with 10 mental health workers once content validity is obtained. For the final part of this study, the CCQ will be sent to occupational therapists working in the area of mental health to solicit their responses.

My goal is to use your responses to validate the CCQ and understand better the constructs of cultural competence. Approximately 2 hours of your time will be required to complete the open-ended questionnaire and make appropriate feedback and comments on the CCQ where items from the identified constructs of the first questionnaire are categorised. Your name will not appear in any presentations or publications of the findings. Responses will be coded and only the principal investigator will have access to them. All responses and the key for the code will be stored in a locked cupboard and kept for 7 years before being destroyed. There are no known adverse effects on participants. It is hoped that this study will lay the foundation for more culturally relevant and appropriate research.

You may withdraw consent and end your participation at any time without consequence.
If you have any further questions or concerns regarding your participation, please do not hesitate to contact me at 492-4519 (W), 473-8347 (H), 492-1626 (FAX) and E-mail me at mshim@gpu.srv.ualberta.ca. If you have concerns about the conduct of this study, you can contact Dr. Anne Rochet, Chair of the Graduate Program Committee at 492-9674 (W).

Once again, thank you for sharing your expertise.

Sincerely,

A handwritten signature in black ink that reads "Margaret". The script is cursive and fluid, with the first letter 'M' being particularly large and stylized.

Margaret Shim, MSc OT, OT(C)
Doctoral Student
Faculty of Rehabilitation Medicine
University of Alberta

APPENDIX I



University of Alberta
Edmonton

Canada T6G 2G4

Faculty of Rehabilitation Medicine
Office of the Dean

3-48 Corbett Hall
Telephone (403) 492-5949
Fax (403) 492-1626

EMBRACING CULTURAL DIVERSITY IN OCCUPATIONAL THERAPY MENTAL HEALTH PRACTICE

Dear _____

Thank you for returning the open-ended questionnaire. Your information was combined with that of the other respondents to revise the CCQ. Enclosed is a copy of the revised CCQ, which contains statements that attempt to identify the constructs of cultural competence which resulted from the responses to the open-ended questionnaire.

Please complete the revised CCQ and provide any feedback.

As noted in the previous letter, your name will not appear in any presentations or publications of the findings. Further ethics approval would be sought if there is any secondary analysis of the data. Responses will be coded and only the principal investigator will have access to them. All responses and the key for their codes will be stored in a locked cupboard for 7 years, then destroyed. There are no known adverse effects on participants. The only direct benefit to the participant would be a somewhat heightened awareness of cultural issues in clinical practice. You may withdraw consent and end your participation at any time without consequence. If you choose to participate and there are any questions that you do not wish to answer, please omit them and move on to the next question.

Once again, thank you for sharing your expertise. It is hoped that this study will lay the foundation for more culturally relevant and appropriate research. Please return your questionnaire in the stamped pre-addressed envelope by date.

If you have any further questions or concerns regarding your participation, please do not hesitate to contact me at 492-4519 (W), 473-8347 (H), 492-1626 (FAX) and E-mail me at mshim@gpu.srv.ualberta.ca. If you have concerns about the conduct of this study, you can contact Dr. Anne Rochet, Chair of the PhD Program Committee in the Faculty of Rehabilitation Medicine, at 492-9674 (W).

Sincerely,

Margaret

Margaret Shim, MSc OT, OT(C)
PhD Candidate
Faculty of Rehabilitation Medicine
University of Alberta

APPENDIX J



University of Alberta
Edmonton

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Faculty of Rehabilitation Medicine
Office of the Dean

3-4S Corbett Hall
Telephone (403) 492-5949
Fax (403) 492-1626

EMBRACING CULTURAL DIVERSITY IN OCCUPATIONAL THERAPY MENTAL HEALTH PRACTICE

Dear _____
(Name of Respondent)

I enjoyed talking to you over the phone and want to thank you for agreeing to participate in the above study.

As discussed, I am a graduate student in Rehabilitation Science at the University of Alberta and I am conducting my doctoral research on cultural diversity in occupational therapy mental health practice. The objectives of the study are to: a) identify variables related to cultural competence and b) measure factors related to cultural competence in occupational therapy mental health practice where Chinese (defined as immigrants from Hong Kong) clients form part of the clientele. This cultural competence study is a start in our continual quest to meet challenges of working with clients from other ethnic groups and the beginnings of a process aimed at achieving cultural competence. There are three parts to this study. The first part of the study resulted in the design of the Cultural Competence Questionnaire (CCQ).

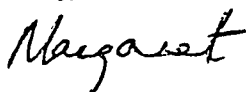
The second part of this study will be to pilot the CCQ with 10 mental health workers. As a respondent in this pilot study, you will be asked to check off appropriate categories in the CCQ and give feedback on the questionnaire. In addition, you will be interviewed by the principal investigator to solicit your comments on cultural competence. For the final part of this study, the CCQ will be sent to occupational therapists working in the area of mental health to solicit their responses.

My goal is to use your responses to validate the CCQ and understand better the constructs of cultural competence. Approximately 20 minutes of your time will be required to complete the CCQ and approximately 45 minutes of your time will be needed for the interview. Your name will not appear in any presentations or publications of the findings. Responses will be coded and only the principal investigator will have access to them. All responses and the key for the code will be stored in a locked cupboard and kept for 7 years before being destroyed. There are no known adverse effects on participants. It is hoped that this study will lay the foundation for more culturally relevant and appropriate research.

You may withdraw consent and end your participation at any time without consequence. If you have any further questions or concerns regarding your participation, please do not hesitate to contact me at 492-4519 (W), 473-8347 (H), 492-1626 (FAX) or e-mail: mshim@gpu.srv.ualberta.ca. If you have any concerns about the conduct of this study, you can contact Dr. Anne Rochet, Chair of the Graduate Program Committee at 492-9674 (W).

Once again, thank you for sharing your expertise.

Sincerely,

A handwritten signature in black ink that reads "Margaret". The script is cursive and fluid, with the first letter 'M' being particularly large and stylized.

Margaret Shim, MSc OT, OT(C)
Doctoral Candidate
Faculty of Rehabilitation Medicine
University of Alberta

APPENDIX K

Intégrer la diversité culturelle dans
la pratique de l'ergothérapie en santé mentale

Date: _____

Pour chaque item suivant, soit écrire ou encercler la réponse appropriée.

Genre: Féminin/Masculin Travail: Plein temps/Mi-temps Ethnicité: _____

Pays natal: _____ Education: diplôme atteint _____

Vous habitez le Canada depuis combien d'années? _____

Age: _____ Langue parlée à la maison _____

Années d'expérience en santé mentale _____

Quelle est votre clientèle? soins zigus /soins prolongés/communautaires/ autres (précisez) _____

Avez vous, auparavant, soigné des gens provenant du Hong Kong? oui/non.

Si 'oui' , combien? _____

Avez-vous reçu de l'instruction, formelle ou informelle, au sujet de concepts interculturels? oui/non

Si oui cochez et précisez :

_____ Cours crédités _____

_____ Ateliers: _____

_____ Présentations, séminaires, conférences: _____

_____ Événements culturels _____

_____ Livres/publications: _____

_____ Autres: _____

APPENDIX L

CULTURAL COMPETENCE QUESTIONNAIRE

Tout en évitant de vous reporter aux questions précédentes, indiquez par un crochet le degré de votre accord avec chaque énoncé. Si vous n'avez aucune expérience ou information à quelque question que ce soit, indiquez simplement 'ne sais pas'. Il est acceptable d'omettre les questions auxquelles vous préférez ne pas répondre. Votre collaboration nous est très importante et nous vous remercions de votre assistance. Veuillez vous sentir libre d'ajouter des remarques à la fin de ce questionnaire.

Merci.

	Tout à fait d'accord					Pas du tout d'accord		Ne sais pas
	1	2	3	4	5	6	7	
Les familles chinoises ont un impact significatif sur l'acquisition de valeurs traditionnelles chez leurs enfants								
Les chinois recherchent l'harmonie avec la nature								
Les parents chinois sont plus sévères que les parents occidentaux								
Les chinois traditionnels perçoivent la maladie comme un signe de malchance								
Les chinois cachent leurs symptômes de maladie mentale par crainte d'être traités de "fou"								
Les chinois traditionnels croient que les boissons froides ne devraient pas être données aux personnes atteintes de fièvre élevée								
Les familles chinoises ont un impact important sur les résultats de traitements								
Les chinois traditionnels croient que la maladie survient du fait d'un déséquilibre entre le yin et le yang								
Habituellement les enfants adultes chinois demeurent chez leurs parents jusqu'à leur mariage								
Les chinois moins instruits au sujet des maladies mentales ont tendance à ne recourir à un traitement que lorsque leur maladie atteint un niveau critique								
Le concept du déshonneur est primordial pour la population chinoise								
Les chinois traditionnels croient que les personnes ayant une fièvre élevée doivent être habillées de couvertures chaudes								
Les chinois sont vaillants								
La médecine scientifique occidentale devrait être utilisée dans le monde entier								
Le milieu socio-culturel du professionnel de la santé a un impact sur son approche envers les patients chinois								
Tout professionnel de la santé doit s'accommoder aux besoins culturels de ses patients								
Les chinois encouragent la dépendance chez leurs parents âgés								
Les professionnels de la santé doivent se mettre à jour au sujet de la culture chinoise								
En tant que groupe les chinois sont des citoyens modèles								
Tout immigrant devrait apprendre à parler le français								
Il est difficile de soigner une personne provenant d'une autre culture								
Les professionnels de la santé doivent comprendre la vie du point de vue d'autres groupes culturels								

	Tout à fait d'accord				Pas du tout d'accord			Ne sais pas
	1	2	3	4	5	6	7	
La famille devrait participer au soins de la personne âgée lorsque le but visé est l'indépendance du client								
Les professionnels de la santé devraient prendre conscience des attentes des immigrants face au système de santé								
Les interprètes chinois devraient être du même sexe que le patient								
Dans la mesure du possible, l'interprète devrait être membre de la famille								
Les professionnels de la santé devraient s'accommoder aux croyances culturelles de leurs patients dans le cours de leur traitement								
Le patient doit jouer un rôle actif dans le processus de soins								
Les professionnels de la santé auraient parfois intérêt à consulter des guérisseurs chinois lorsque le patient est chinois								
La participation du professionnel de la santé dans les activités de personnes d'autres cultures en dehors du contexte thérapeutique serait bénéfique								
Les interprètes ne devraient pas être des amis du patient								
Les professionnels de la santé pourraient bénéficier de consultations avec les membres de la communauté chinoise								
Une session entière passer à écouter le patient exprimer ses besoins est une perte de temps								
Les professionnels de la santé peuvent bénéficier de consultations avec des donneurs de soins mentaux chinois au sujet de patients chinois								
L'évaluation efficace d'un patient chinois qui parle très peu le français requiert le recours à un interprète								

Prière de partager tout autre commentaire que vous avez au sujet de la compétence culturelle chez des professionnels de la santé oeuvrant auprès de patients chinois provenant du Hong Kong.

Merci d'avoir prit le temps de répondre ce questionnaire

多謝各位填交問卷

ADDENDUM

Une copie du questionnaire dans sa langue première (anglais) est en annexe au cas vous voudriez y vérifier l'intention.

APPENDIX M



UNIVERSITY OF ALBERTA

August 31, 1998

EMBRACING CULTURAL DIVERSITY IN OCCUPATIONAL THERAPY MENTAL HEALTH PRACTICE

Dear _____,

I am a doctoral candidate in Rehabilitation Science at the University of Alberta. My research is on cultural diversity in occupational therapy mental health practice. This study has two objectives. The first objective is to identify variables related to cultural competence. The second is to measure factors related to cultural competence in occupational therapy mental health practice where immigrants from Hong Kong form part of the clientele. This study is a start in our continual quest to meet some of the challenges of working with clients from other ethnic groups. It could also begin a process aimed at achieving cultural competence. There are three parts to this study. The first and second parts of this study resulted in the design of the Cultural Competence Questionnaire (CCQ) which is enclosed.

The third part of this study will use your responses and those of other occupational therapists working in the area of mental health to ensure that the CCQ measures the constructs of cultural competence and to measure factors related to cultural competence in occupational therapy mental health practice where Chinese (defined as immigrants from Hong Kong) form part of the clientele. Here is where I need your help. I am asking you to complete the CCQ and return it to me in the stamped pre-addressed envelope by September 18, 1998. Approximately 20 minutes of your time will be required for this task.

Your name will not appear in any presentations or publications of the findings. Further ethics approval would be sought if there is any secondary analysis of the data. Questionnaires will be coded and only the principal investigator will have access to them. All questionnaires and the key for their codes will be stored in a locked cupboard for 7 years, then destroyed. There are no known adverse effects associated with participation. The only direct benefit to you may be a somewhat heightened awareness of cultural issues in clinical practice. You may withdraw consent and end your participation at any time without consequence. If you choose to participate, and there are any questions that you do not wish to answer, please omit them and move on to the next question. Your return of the enclosed questionnaire will be taken as your consent to participate.

Faculty of Rehabilitation Medicine
Office of the Dean

3-48 Corbett Hall • University of Alberta • Edmonton • Canada • T6G 2G4
Telephone: (403) 492-2903/5991 • Fax: (403) 492-1626
www.ualberta.ca

Once again, thank you for sharing your expertise. It is hoped that this study will lay the foundation for more culturally relevant and appropriate research. A summary of the results of the study will be made available to participants.

If you have any further questions or concerns regarding your participation, please do not hesitate to contact me at (403) 492-4519 (W), (403) 492-1626 (FAX) or E-mail me at mshim@gpu.srv.ualberta.ca. If you have concerns about the conduct of this study, you can contact Dr. Anne Rochet, Chair of the PhD Program Committee in the Faculty of Rehabilitation Medicine, at (403) 492-9674 (W).

Sincerely,



Margaret Shim, MSc OT, OT(C)
Doctoral Candidate
Faculty of Rehabilitation Medicine
University of Alberta

"A journey of a thousand miles begins with a single step"

向前踏出新一步
走上成功萬千路

APPENDIX N



UNIVERSITY OF ALBERTA

Le 31 aout

Intégrer la diversité culturelle dans la pratique de l'ergothérapie en santé mentale

Mme _____

Je suis étudiante au doctorat en Sciences de la réadaptation à l'Université de l'Alberta. Ma recherche porte sur la diversité culturelle dans la pratique de l'ergothérapie dans le domaine de la santé mentale. Mon étude a deux objectifs principaux. Le premier est d'identifier les variables liées à la compétence culturelle. Le second est de mesurer les facteurs relatifs à la compétence culturelle en ergothérapie dans le champs de la santé mentale lorsque les immigrants du Hong Kong font partie de la clientèle. Cette étude représente un début dans nos efforts d'identifier les défis rencontrés par les ergothérapeutes qui interviennent auprès de clients d'autres cultures. Cette enquête comprend trois étapes. Les deux premières ont abouti au développement du Cultural Competence Questionnaire (CCQ) ci-inclus.

La troisième étape utilisera vos réponses, et celles d'autres ergothérapeutes oeuvrant en santé mentale, pour s'assurer que le CCQ mesure bien les composantes de la compétence interculturelle, ainsi que les facteurs spécifiques aux compétences culturelles en ergothérapie lorsque les chinois immigrés du Hong Kong font partie de la clientèle. Je vous serais donc très reconnaissante de bien vouloir remplir le CCQ et de me le faire parvenir l'enveloppe fournie, avant le 18 septembre.

Votre nom ne paraîtra dans aucune publication ou présentation. Si une analyse secondaire des données est entreprise, l'approbation spécifique du comité d'éthique sera obtenue. Les questionnaires seront codés et seule l'enquêtrice principale y aura accès. Ils seront entreposés sous clef et seront détruits après sept ans. Il n'y a aucun effet adverse associé à votre participation dans cette étude. Le seul bénéfice direct pour vous pourrait être une sensibilisation rehaussée aux diversités culturelles dans la pratique clinique. Vous pouvez, en tout temps retirer votre participation de cette étude sans conséquences. Si vous choisissez d'y participer il est acceptable d'omettre les questions auxquelles vous préférez ne pas répondre. La réception de votre questionnaire rempli sera interprété comme votre consentement à participer.

Faculty of Rehabilitation Medicine
Office of the Dean

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www.ualberta.ca

Encore une fois, merci d'avoir partager votre compétence. Il est souhaité que cette étude deviendra le fondement de recherches appropriées et pertinentes au contexte de pratique interculturelle. Un sommaire des résultats sera mis à la disposition de tous les participants.

Si vous avez des questions ou commentaires au sujet de votre participation n'hésitez pas à me contacter au (403) 492-4519 (bureau), (403) 492-1626 (télécopieur), ou par courrier électronique au mshim@gpu.srv.ualberta.ca. Si vous avez des inquiétudes au sujet de la conduite de cette étude, vous pouvez communiquer avec Anne Rochet, PhD., présidente du comité du programme de doctorat de la faculté de Sciences de la réadaptation au (403) 492-9674.

Veuillez agréer mes meilleurs sentiments,



Margaret Shim, MscOT, OT
Doctoral Candidate
Faculty of Rehabilitation Medicine
University of Alberta

Un voyage de mille milles débute par un unique pas.

向前踏出新一步
走上成功萬千路

APPENDIX O



UNIVERSITY OF ALBERTA

September 7, 1998

**EMBRACING CULTURAL DIVERSITY IN
OCCUPATIONAL THERAPY MENTAL HEALTH PRACTICE**

Dear _____,

I am writing to thank you in advance for taking the time to share your expertise in my study of cultural diversity in occupational therapy mental health practice. Your input is extremely important to improve our understanding of this area of health practice.

If you have already returned your completed questionnaire, please accept my sincere thanks for contributing to the growth of culturally relevant research in occupational therapy. If you have not had the opportunity to complete the questionnaire and you still wish to do so, please accept this letter as a friendly reminder that I will need your input by no later than September 18, 1998.

I look forward with eagerness to receiving your completed questionnaire.

Sincerely,

Margaret Shim, MSc OT, OT(C)
Doctoral Candidate
Faculty of Rehabilitation Medicine
University of Alberta

**Faculty of Rehabilitation Medicine
Office of the Dean**

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www.ualberta.ca

APPENDIX P



UNIVERSITY OF ALBERTA

Le 7 septembre

Intégrer la diversité culturelle dans la
pratique de l'ergothérapie en santé mentale

Mme _____,

Par la présente, je vous remercie d'avance pour votre participation dans mon étude sur la diversité culturelle en ergothérapie pratiquée dans le domaine de la santé mentale. Votre expertise m'aidera à augmenter notre compréhension de ce champs de pratique.

Si vous avez déjà complété et envoyé votre questionnaire, agréez mes sincères remerciements pour votre contribution à la croissance de recherche en ergothérapie qui est culturellement pertinente.

Si vous n'avez pas eu l'occasion de répondre au questionnaire, je vous prie d'accepter cette lettre comme rappel discret. Je vous rappelle que j'aimerais recevoir votre questionnaire avant le 18 septembre.

Veuillez agréer l'assurance de mes meilleurs sentiments.

Margaret Shim, MscOT, OT
Doctoral Candidate
Faculty of Rehabilitation Medicine
University of Alberta

Faculty of Rehabilitation Medicine
Office of the Dean

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APPENDIX Q

Cultural Understanding Matrix

