Culture and Stigma towards Mental Illness:

A Comparison of General and Psychiatric Nurses

of Chinese and Anglo-Australian Backgrounds

by

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Abstract

A sample of 208 nurses (a response rate of 63%) participated in a study by responding to a questionnaire comprising of 170 items which examined nurses' attitudes towards mental illness, and the association between contact, cultural values, general and practice stigma. General stigma refers to attitudes towards the mentally ill while practice stigma is informed from differential clinical practice approaches towards the care of two case vignettes describing a patient with mental illness and one with diabetes. Subjects were recruited using the snowballing technique and comprised of nurses (83 Anglo Psychiatric, 41 Anglo General, 49 Chinese Psychiatric and 35 Chinese General) currently practising in Victoria. Age ranged from 21 to 65 years. Principal components analyses were conducted on items to develop subscales related to individualism and collectivism, contact types, general and practice stigma. Analyses of variance and covariance were conducted to examine differences between nurse type and ethnicity and respectively, to account for possible differences in background, contact and in the case of practice stigma, general stigma. The key findings revealed differences according to nurse type and ethnicity in several of the subscales. Psychiatric nurses endorsed a higher level of contact than general nurses with mentally ill people on the variables 'Contact Through Work Situation', 'Patient Help Nurses' and 'External Socialisation with Patient', but not on the variable 'Relative With Mental Illness'. By virtue of more contact, psychiatric nurses also endorsed less general stigma than general nurses, assessed by results from analysing social distancing, but not by negative stereotyping of people with mental illness. With respect to practice stigma, while care and satisfaction did not differ according to patient type and nurse type, psychiatric nurses expressed less authoritarianism and negativity than general nurses towards the mental illness case than general nurses while lesser differences between nurse types were evident for the diabetes case. Chinese nurses when compared with Anglo-Australian nurses, endorsed more highly collectivist values measured by the variables 'Ingroup Interdependence' and 'Ingroup Role Concern' but there was no difference in individualist values. This may reflect acculturation towards Western values but also retention of Chinese values, interpreted in the light of other results on cultural affiliation, as a bicultural position. Chinese nurses endorsed more highly general stigma towards the mentally ill than Anglo nurses when statistically controlling for differences in background demographics and contact factors. Nursing satisfaction did not differ in

ethnicity and patient type. Chinese nurses endorsed more highly care and authoritarianism in their clinical practice approaches than Anglo-Australian nurses, although there was no significant interaction effect between ethnicity and patient type on care and authoritarianism. Chinese nurses endorsed more highly negativity than Anglo-Australian nurses for the mental illness case than the diabetes case, an effect later shown to be mediated by differences in general stigma between the two ethnic groups. Within the Chinese sample, higher contact was associated with lower differential negativity for the mental illness than the diabetes case. Several path analyses suggested Chinese values influenced differential negativity, mediated by general stigma and prior diversified contact with people having a mental illness. It may be concluded from these results that practice stigma is related to cultural values but the relationship is mediated by general stigma and contact. What aspect of the Chinese values specifically correlates with general stigma remains a question for further research, but several possibilities are discussed.

Declaration

I, Tan Kan Ku, declare that this thesis contains no material which has been previously published or accepted for the award of degree or diploma in any university and that the research was conducted in accordance with the guidelines and principles for the ethical treatment of human subjects as approved by the University of Melbourne Human Research Ethics Committee.

This thesis comprises my original work, except where the due reference has been made in the text of this thesis. This thesis is approximately 35,000 words in length, exclusive of tables, figures, footnotes, references and appendices.

Signature:

Date:

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CHAPTER ONE
INTRODUCING THE STUDY

Stigma related to mental illness is an international concern and a long-standing challenge (Clausen & Yarrow, 1955) for research to understand its basis, mechanisms and consequences in order to be able to formulate means by which stigma and its impact may be ameliorated. Research assessing population attitudes towards mental illness (Cohen & Struening, 1962; 1965; Jonannsen, 1969; Levine, 1972; Rabkin, 1972, 1974; 1984; Kirby & James, 1979; Sellick & Goodear, 1985; Cheung, 1990; Ojanen 1992; Pearson & Yiu, 1993; Pearson & Phillips, 1994; Chou & Mak, 1998; Jorm et al., 1999; Alexander & Link, 2003; Angermeyer et al., 2004) as well as studies focused on small samples (Cumming & Cumming, 1965; Laine & Lehtinen, 1973; Malla & Shaw, 1987) reveals that stigma towards the mentally ill is evident in many national and cultural settings. Stigma affects patients, contributing to lowering self esteem (Wahl & Harman, 1989; Link et al., 2001), contributing to the incidence or exacerbation of depression (Teo, 1978; Lin, 1982), minimizing social inclusion (Cheung, 1988; Pearson & Phillips, 1994; Chou et al., 1996) and diminishing social survival by affecting access to employment, housing and other important primary needs, and perhaps, contributing to a cycle of social disadvantage and illness chronicity (Teo, 1978; Johnstone, 2001; Corrigan & Matthews, 2003; Knight et al., 2003; Tsang et al., 2003; Lee et al., 2005). Stigma affects social inclusion of families Wahl & Harman, 1989; Corrigan & Miller, 2004; Kokanovic, Peterson & Klimidis, 2006) and contributes additional burden to their difficult role in care giving (Lin, 1983; Wahl & Harman, 1989; Pearson & Yiu, 1993). Stigma is also implicated as a significant barrier to access to medical care (Lin, 1983; Burkedin, Guilfoyle & Hall, 1993) and informal social network supports which may be important both as a source of relief from psychological distress (Lin, 1983; Pearson & Phillips, 1994) and a means for gaining access to formal treatment and other relevant formal support (Teo, 1978; Fabrega, 1991).

Since stigma is so socially pervasive, crossing national, social and cultural boundaries, it is legitimate to ask what are its effects on those who have a role in the treatment and

support of the mentally ill. Are such professionals less prone to stigmatizing attitudes and if not do such attitudes influence their approach to patient care? Such questions, particularly the last one, have been rarely raised in the international literature and therefore constitute a key focus of this research. In addition, there is a suggestion, though insufficient empirical work in the international literature, that stigma leveled at the mentally ill varies in its intensity cross-culturally (Lin, 1983; Kirmayer, 1989; Fabrega, 1991; Pearson & Phillips, 1994; Ng, 1997), rooted as it is, within different cultural understandings of what constitutes socio-moral transgressions in the worldviews of different cultures. Therefore, the link between cultural background and attitude towards the mentally ill, and particularly with regard to health care providers is an important area for further elucidation and so this is the key focus of the present study.

While health professionals develop skills and training to be able to work with the mentally ill, their preparedness for effective work with those with mental illness may also need to be examined in relation to less obvious factors. For example, people from different national origins may differ in the values, socialization, attitudes and many other elements of culture, which may influence their work attitudes and practices. In the present work, national origin and cultural values are treated as factors that may influence stigmatizing attitudes towards patients and the patient-professional relationship. In the present work, the focus is on nursing professionals with respect to their views of patients suffering from a mental illness. While the focus on nurses may limit generalization of observations, nurses comprise the largest workforce in dealing with those with mental disorder in many nations, including Australia. The focus on examining nurses' attitudes has a number of advantages. Nurses spend a substantial amount of time with patients relative to other health workers (doctors, social workers, psychologists and occupational therapists) and therefore may have greater opportunity to influence patient attitudes and behaviours. In examining the influence of culture, the present study's selection of Chinese versus Anglo-Australian nurses poses another advantage as there is existing knowledge derived from empirical research (Hui & Villareal, 1989; Triandis, McCusker & Hui, 1990; Hofstede, 2001) to indicate that these two groups differ culturally, and especially in the domain of cultural values, which resonate in behaviour, covert and

public. That is, whilst other studies often contrast national groups, the present study, through the use of cultural values as variables, is interested more strictly on the relationship between cultural values and stigma.

1.1 BACKGROUND TO THE STUDY

The study emerged from the researcher's association with nursing colleagues, the majority of whom are either of ethnic Chinese or Anglo background. After working 12 years as a psychiatric nurse in Victoria (Australia) it has become increasingly evident to the researcher that health professionals' attitudes towards mental illness affect their clinical relationships with patients. In the clinical relationship, the availability of the self and the realization of merit and limitation to assist a patient to lessen distress resulting from a mental illness will depend largely on the emergence of the *relationship* between the health worker and the patient. Anecdotal examples led the researcher to recall occasions when patients (Chinese or Anglo Australian) complained about or asked for a change of case manager where they experienced nurses as too 'authoritarian' in their attitudes. The health worker may or may not be conscious of his/her own attitude in viewing the mentally ill person as inferior who requires coercive handling, thus, not allowing the patient certain rights (e.g., handling own finance or weekend leave) for good intention. This often resulted in patients becoming frustrated, angry, and even aggressive. Some patients delayed seeking help for fear of rejection from the health worker, resulting in worsening of the mental condition and increasing the chances of relapse due to a lack of supportive relationships. Impressions on practice included not encouraging the patient to become an empowered citizen, and not providing education to a patient relating to the issue of stigma and patient rights.

Psychiatric nursing is a specialized field of nursing which focuses on meeting the 'mental health needs of the consumer, in partnership with family, significant others and the community in any setting' (Australian & New Zealand College of Mental health Nurses (ANZCMHN) 1995, p.3). As reviewed in mental health research (Good, Berennaum & Nisenson, 2000), variations in health workers' attitudes are influenced by

a range of factors, such as the health workers' beliefs and perceptions about mental illness, patients' characteristics, psychiatric training, and exposure through the interpersonal environment (whether social or through their work). It will be argued here from the evidence that such attitudes are also related to culture and that stigma towards mental illness is more widespread among the Chinese than their Anglo counterparts (Lin, 1983; Ng, 1997). For example, Chinese endorse authoritarian and restrictive attitudes towards those with mental illness (Shokoohi-Yekta & Retish, 1991; Fan & Karnilowicz, 2000).

From the researcher's personal interaction with nurses, the majority of ethnic Chinese nurses known to the researcher currently practising in Victoria have received a Western education up to General Certificate of Education Level (GCE Ordinary or Advanced Level) in their countries of origin, such as Malaysia, Singapore and Hong Kong. In accord with British colonisation, many nurses practising in psychiatry have undertaken nursing training in Britain. Acculturation towards British values may therefore influence their values and practice. A minority of Chinese nurses undertook their training in Australia or in Hong Kong. However, regardless of training exposure to Western values, the researcher believes these ethnic Chinese nurses have been raised in a collectivistic culture and that this may continue to exert an influence on their attitudes and behaviours towards patients. Virtually all Anglo descent nurses the researcher has encountered have acquired their nursing training in their own countries such as Britain, Australia, and New Zealand. Some of the younger age group (21years – late 30s) of Anglo nurses gained their registration through the tertiary education system, whereas the older age group (40 years or more) were hospital-trained. The majority of the tertiary educated nurses hold a Bachelor degree, and some of them have a Post-Graduate Certificate/Diploma in nursing. The one year Post-Graduate Certificate and Diploma Course at a local level is another way of preparing nurses to work in mental health – students acquire exposure to mental illness through practical experience working in various mental health facilities and attend relevant lectures once weekly.

1.2 SIGNIFICANCE OF THE STUDY

There has been an increase in research directed at public and professionals' attitudes towards mental illness among different cultural groups, although the effects of culture on attitudes are not explored specifically (Pearson & Yiu, 1993; Fan & Karnilowicz, 2000; Papadopoulos, Leavey & Vincent, 2002; Angermeyer et al., 2004; Coker, 2005). As well there is research examining doctors' and nurses' career choice of speciality, which could be seen as an indirect measure of stigma to the effect that psychiatry specialization generally ranks poorly among professionals' choices. Such research does not directly measure nurses' attitudes towards the mentally ill but career preferences could reflect professional reactions to the society's stigmatization of mental illness (Hafner & Proctor, 1992; Stevens & Dulhunty, 1992; Rushworth & Happell, 1998). The researcher's literature search revealed a paucity of research specifically directed at qualified registered nurses' attitudes towards mental illness. The present study contributes to filling this vacuum. This study is located in the context of research into attitudes, particularly on the stigma of mental illness, and the individualism-collectivism constructs in relation to cultural values, indicating a theoretical framework developed by social scientists such as Triandis, McCusker and Hui (1990) and Hofstede (2001).

The study is significant because its results have the potential to inform professional education in disciplines that typically manage patients with a mental illness in order to diminish negative attitudes towards such patients. Particularly it can inform the relevant health service providers about the importance of cultural factors in shaping their attitudes towards the care of mentally ill patients. Ultimately patients with a mental illness may benefit by having health care professionals who may be more sensitive to the impact of their own attitudes on clinical practice.

Whether trained in a hospital nursing school or a university, nurses are educated in the knowledge and skills that ostensibly will enable them to cope with challenging behaviour displayed by mentally ill patients and to manage the care of these patients

competently. However, their competence may depend, in part, on the nurses' level of psychiatric exposure, which can vary substantially across training preparation. Nurses whose training was deficient in caring for mentally ill patients may feel helpless, frightened, inadequate and even threatened and uncomfortable with the complexity of behaviours and the multi-skilled approach needed for caring for such patients (Reed & Fitzgerald, 2005). Thus, during their nursing training, nurses are supposed to develop knowledge, skills and attitudes that will enable them to overcome any adverse attitudes towards the patient and be able to provide uniform problem-focused care appropriate to the patient and the illness.

As nursing requires a focus on therapeutic interaction between the nurse and the patient, it is possible what the nurse brings to this interaction may influence his/her care of the patient. It is important to consider the level of influence of nurses' attitudes towards patients in the therapeutic process. The study is concerned with how stigma may influence the health care practices/behaviours of nurses towards patients with mental illness. Several factors can influence nurses' attitudes. From the literature, these include nursing experience and psychiatric exposure, the nurses' own personality traits and cultural background (Malla & Shaw, 1987; Napoletano, 1981; Keane, 1991; Lam, McMaster & Troup, 1993). These variables could influence the treatment of mental illness in terms of the nurses' perception, conception, recognition and acceptance (or rejection) of the mentally ill (Ng, 1997) which ultimately affects nurses' differential practice, and, nurses' desire for psychiatric nursing as a career choice (Steven & Dulhunty, 1992; Hafner & Proctor, 1993; Rushworth & Happell, 1998).

1.3 FOCUS OF THE STUDY

This study specifically explores a number of factors such as contact level, cultural values, stigma towards the mentally ill in general and differential nursing practice, which has been either less explored in the literature or if so, under different contexts. Influences of demographic variables such as age and sex are explored in the overall model. The aims of the study are:

1. To compare cultural values, nursing practice orientations, level of contact with mentally ill patients and attitudes towards mental illness of nurses from Chinese and Anglo backgrounds.
2. To examine the association between attitudes, cultural values, contact level, differential nursing practice and stigma towards mental illness.

This research aims to provide insight into nurses' attitudes towards mental illness and to assess whether culture, especially with reference to the individualism-collectivism construct, in the context of possible acculturation, affects stigmatizing attitudes. The current study is specifically designed to compare ethnic Chinese and Anglo-Australian nurses' attitudes towards mental illness, and how general and psychiatric nurses will differ in their attitudes, termed 'general stigma'. The key comparison is nurses' endorsement of different care practices between two vignettes- mental illness versus diabetes, which is termed 'practice stigma'. Most other studies deal with general stigma, that is, stigma attached to mental illness in general, but not how stigma may translate into practice stigma, that is, stigma expressed in the conduct of clinical practice. The following research questions are explored:

1. Is there a difference between Chinese and Anglo nurses in the level of stigma attached to mental illness?
2. Is there is difference between Chinese and Anglo nurses in their attitudes towards a patient with mental illness relative to a patient with physical illness (diabetes)?
3. Is there a difference between Chinese and Anglo nurses towards mental illness explained by exposure and training and other background factors?
4. Are cultural values related to general and practice stigma?

1.4 STRUCTURE OF THE THESIS

The thesis consists of six chapters as outlined below:-

Chapter I introduces stigma generally and explores its impact, specifies the focus of the current study and research questions.

Chapter II explains the specific details of study variables including a literature review on stigma and in relation to the individualism-collectivism constructs and the influence of level of contact on stigma.

Chapter III describes the research method.

Chapter IV presents the results of the study detailing statistical development of measures and progresses to comparisons between groups in relation to the hypotheses and research questions.

Chapter V presents a discussion on the summary of key findings and reflections on the hypotheses.

Chapter VI addresses the limitations, future research issues and conclusion.

CHAPTER TWO

SPECIFIC STUDY VARIABLES – A LITERATURE REVIEW

The purpose of this chapter is to review the literature on stigma associated with mental illness and particularly in relation to contextualising and understanding the question of discrepancy in nursing approaches (practice stigma). In this context, 'discrepancy' means the inconsistency of nursing approaches between a patient with mental illness and one with a physical condition. As context, a broad range of literature is reviewed in relation to public and professionals' attitudes, to explore cultural influences on attitudes towards mental illness. However, culture in the present review is often a 'hidden' variable particularly represented by national origin of the samples. To arrive at some insight about the effects of culture on stigma, the researcher has divided the literature according to whether studies were conducted in Western (mainly Anglophone) countries or groups, and those in Eastern countries or groups. A small number of cross-national and cross-group comparison studies where groups represent ethno-cultures is reviewed separately.

2.1 DEFINING STIGMA

The word 'stigma' has its origin in Greek and is defined in the dictionary as a mark of disgrace or dishonour; a reproach or slur (New Webster's Dictionary and Thesaurus and Medical Dictionary, 1992). An illustration of the word 'stigma' is its application to the wounds (stigmata in pleural) inflicted on the Lord Jesus when He was crucified. The wounded sores signify that the bearer is a criminal, a slave, a betrayer or a notorious person. 'Stigma' is used often in relation to attitudes of shame, guilt, disgrace or disapproval, and fear of identification with self and others (Goffman, 1970). Stigma is a word that stirs up negative emotion and reaction. Stigmatised individuals are likely to be disliked, rejected and discriminated against.

In relation to mental illness, stigma is associated with people who are often perceived by the general public as untrustworthy and incompetent (Teo, 1978; Angermeyer & Schulze,

2001) and in severe cases, the stigmatised person is 'locked away' and hidden from society (Rabkin, 1974). The mentally ill person is regarded as dangerous, unpredictable and this in part 'justifies' their discrimination by society. The term also implies inner perception of inferiority regarding the self especially after hospitalization and labeling (Link et al., 1991) and leads the individual to behave in such a way that causes others to respond negatively to such self perception and perpetuate feelings of exclusion and inadequacy (Cumming & Cumming, 1965). The degree of stigma is particularly strong when the mentally ill person exhibits unusual or extraordinary behaviours, such as episodes of psychosis (Lin, 1983). The following discussion will focus on stigma attached to mental illness.

2.2 GENERAL PERCEPTION TOWARDS MENTAL ILLNESS

Individuals with mental illness are stigmatised in both Western (Fabrega, 1991; Rabkin, 1974, 1984; Angermeyer, et al 2004) and Eastern cultures (Teo, 1978; Febrega, 1991; Chou et al., 1996; Chou & Mark, 1998). Rabkin (1974, 1984) reviewed attitudes towards mental illness mainly in the Western context from the 60s to the 80s while Fabrega (1991) provided a comparative review of literatures on mental illness beliefs and psychiatric stigma in Western and non-Western contexts through historical cultures. A substantial body of literature has been devoted to investigating public attitudes towards mental illness within different national cultures (Rabkin, 1974; 1984; Green, 1987; Ojanen, 1992; Pearson & Yiu, 1993; Chou et al., 1996; Chou & Mak, 1998; Tsang et al, 2003). Often the studied variables were: age, gender, education, knowledge about mental illness, and contact level with mentally ill patients in an effort to understand how negative attitudes may vary in a given society. Participants included people with mental illness, their carers, relatives, migrants, and members of the general public. Those studies that targeted professionals' attitudes cross-culturally included professionals who were general practitioners, psychiatrists, nurses, occupational therapists, resident doctors, psychologists and social workers (Cohen & Struening, 1962; 1965; Malla & Shaw, 1987; Roskin et al., 1988; Chinnayya et al., 1990; Keane, 1991; Shokkohi-Yetka & Retish, 1991; Packer, 1994; Jorm et al., 1999; Sevigny et al., 1999; Fan & Karniowicz , 2000;

Lai, Hong & Chee, 2000; Penn & Corrigan, 2002). Collectively, the above studies indicate that negative attitudes are held by the lay community and professionals, with the exception of Ojanen's (1992) study, which indicated generally positive attitudes among older Finish people.

Historically, mentally ill people have often evoked negative responses from members of the public in many cultures (Fabrega, 1991; Pearson & Yiu 1993, Sevigny et al., 1999). Early major studies indicated that the public did not differentiate milder and severe forms of psychiatric conditions. Hence, all 'mental' patients were regarded as violent and disturbed and they were viewed with fear and distrust (Rabkin, 1974; 1984). Three general methods were used by researchers to investigate the severity of psychiatric stigma. The first type used a brief vignette case history which described the characteristics of a mentally ill person (Alexander & Link, 2003; Angermeyer & Matschinger, 1996). The second type used a social distancing scale which measured the degree of contact one would avoid with the mentally ill (e.g., Lauber et al., 2004). The third type used 'labelling', that is, whether or not the subject was either formally labeled by a professional, or implied by their contact with a mental health service, or possibly but not so usually, by the process of self-labelling or social labelling in view of the recognition of symptoms (Link, Mirotznik & Cullen, 1991). Phillips (1963) was the first to incorporate a social distancing scale in the context of a vignette study. His influential experiment indicated that a person described in the vignette was rejected more by the general public if the help source involved psychiatric contact (psychiatrist, mental hospital) than if it did not (physician, clergy or no help-source). Phillips (1963) concluded that this had implications in the context of help-seeking and the nature of illness.

The section below provides an overview of literature on stigma associated with mental illness in Eastern and Western contexts taking into account the studied variables of demographics, contact, and knowledge that have been explored as associated with stigma and method of investigation. To gain an appreciation of the cultural foundations of stigma, the literature on Eastern and Western context is divided and reviewed.

2.3 STIGMA AS EXPERIENCED BY THOSE WITH MENTAL ILLNESS

While it is widely accepted that stigmatisation of mentally ill people exists, a literature search reveals more studies were conducted in the Western context than in the Eastern context. Empirical studies investigating stigmatisation experiences of individuals with mental illness and first person accounts have been the work of Gove and Fain (1973), Gallo (1994), Corrigan and Matthews (2003) and Knight et al. (2003) respectively. These investigators report that stigma is one of the most important issues facing those with a mental illness.

2.3.1 Western Studies

Gove and Fain (1973) reviewed stigma related to mental illness and commented that stigma experienced by patients could be influenced, at least in the past, by the traditional psychiatric perspective, suggesting that once a person was labelled as mentally ill, his functional ability would be grossly damaged and his behaviour would be channelled into a deviant role in society. This traditional view was challenged by Gove and Fain (1973) who evaluated the effect of stigma linked with hospitalisation on a group of 429 patients. The outcome was found to be rather positive as most patients perceived hospitalisation as beneficial and reported an improvement in their family relationships and the ability to handle situations (employment and social activities) after hospitalisation. Furthermore, patients reported that they were treated rather generously and fairly in hospitals, and that they were not very concerned with the issue of stigma. In contrast, Gallo's (1994) personal account of self-stigmatisation was that it could be life damaging, which included hiding away from others, believing that others were above her in social worth, and inflicting severe suffering to herself as a result. In other work, patients reported feeling stigmatised following their diagnosis such as schizophrenia and bi-polar affective disorders and they concealed the true nature of their illness from others by saying that they had depression or a physical illness (Dinos et al., 2004). Respondents with schizophrenia, drug addiction and bi-polar affective disorder also reported more

vulnerability to physical abuse from others when compared with those suffering from depression and anxiety disorder.

Ritcher and Phelan (2004) contended that when a person is officially labelled as mentally ill, this can affect their beliefs about themselves leading them to expect to be rejected, discriminated against and to lead to a number of negative consequences in their lives, such as loss of housing, job opportunities, and social network. As well, they experience demoralisation and devaluation, resulting in self-withdrawal for fear of others' reactions. Individuals who have been labeled or who label themselves as 'mentally ill' experience delayed access to care because of incomprehension of their situation, fear of consequences of confirmation of what they are suspicious of, that is, they probably have a mental problem, or, because they believe that they could deal with it effectively on their own or by another way. In order to counteract stigma, the labelled person avoids situations that may challenge his social, psychological and occupational functioning. According to Link, Mirotznik and Cullen (1991), labelling theorists proposed that when one is labelled "mentally ill", a sequence of devaluation, discrimination and stereotyped attitudes are expected from society, and in turn, the mentally ill person expects to be treated with rejection. Link et al. (1989) suggested that patients tend to avoid social situations that may evoke a high risk of stigmatisation, because they learn how people behave towards individuals with mental illness through socialisation. For instance, to avoid rejection, patients will not try to apply for a job.

Two aspects of stigma (perceptions of devaluation-discrimination and social withdrawal because of perceived rejection) have been investigated by Link et al. (2001) in relation to self-esteem in a clubhouse for people with mental illness. Findings indicated that stigma correlated with lowering self-esteem in people with mental illness. A person who scored strongly on devaluation-discrimination and social withdrawal was seven to nine times more likely to report low self-esteem at follow up than someone who had a low score. The correlation between anticipated and actual stigma experience is opened to speculation.

Angermeyer et al. (2004) carried out a study in 2002 comparing patients with schizophrenia and depression from Leipzig, a city and Plauen, a small town, both of which are in Saxony, Germany. Results indicated that there was a small correlation between patients' anticipated stigmatisation and actual stigmatisation experience. Angermeyer et al. (2004) commented that patients with schizophrenia experienced more frequent actual stigmatisation, faced more rejection and were more frequently denied access to social roles than depressed patients. This could be due to the societal stereotypes associated with the severity of the symptoms of the illness. One point of difference regarding the extent of stigmatisation is that patients from the small town anticipated more frequent stigmatisation than those from the city. All patients shared the belief that risk of stigmatisation is higher in rural areas because of higher social control and lower tolerance of deviant behaviour. This predicts a general (main effect) between urban versus rural/town but not the differential effects between diagnoses for rural versus urban settings.

2.3.2 Eastern Studies

Mental illness and physical ailments (tuberculosis and epilepsy) evoke stigmatisation in Singaporean society. However, according to Teo's (1978) account, an epileptic receives some sympathy from society whilst the mentally disordered does not, and instead s/he provokes hostility and rejection due to disturbed behaviour. Singaporean society regards the mentally ill as something frightening and dangerous. Unfortunately, the public generalise their experiences with the mentally ill (regardless of severity of the illness) either through direct contact or via exposure to negative images of the mentally ill presented in the media. This stigmatising attribution affects the rehabilitation process for those patients who have been discharged from hospital, as they find it hard to re-integrate into a society that rejects them. A discharged patient has difficulty getting employment or retaining a job as s/he often finds him/herself stigmatised by his fellow workers. Some depressed patients suffer in isolation to avoid stigmatisation and end up suiciding (Teo, 1978).

A more recent empirical study on stigma was completed in Singapore by Lai, Hong and Chee (2000) using questionnaires designed to elicit patients' views on several forms of discrimination and rejection such as employability and social acceptability. Results showed differences between cardiac (n=50) and psychiatric patients (n=300) in the responses. Psychiatric patients perceived a high level of social rejection with patients having schizophrenia often thinking less of themselves and having difficulty in finding a job. Depressed patients reported unemployment and low self esteem as significant problems. Cardiac patients reported no social rejection and they often received sympathy and words of concern from others. Cardiac patients more often reported support from employers who gave them lighter workloads compared with psychiatric patients. Psychiatric patients had concerns about the way the mentally ill were portrayed by the mass media, which often related the mentally ill with violent and dangerous behaviour. They were alerted to how television programs and news reports related jokes about mental illness. Psychiatric patients in this study felt there was a need to increase public awareness of mental illness.

Lee et al. (2005) studied the experience of social stigma in people with schizophrenia (n=320) and diabetes (n=160) in Hong Kong. Patients with schizophrenia (>40%) reported experiencing stigma from family members, friends, co-workers and partners when compared with patients with diabetes (15%). The social stigma included family members, friends and partners considering the mentally ill as violent, despising them, and family members wanting to conceal from others that they had a mentally ill relative. When the illness had been revealed, patients with schizophrenia (47%) experienced sacking from employment more often than those with diabetes (25%). About 55% of patients with schizophrenia concealed their illness compared with only 29% of diabetic patients.

Lee et al. (2006) commented that medication side effects induced stigma as the lay public may not be aware of and misinterprets these as signs of schizophrenia. Hence, the general public tend to distance themselves from people with mental illness. To avoid social rejection, some patients delay treatment for fear of identity threat and loss

of employment (Lee et al., 2006). Concealment increases medication non-adherence and relapse which subsequently stigmatises the individual further as the condition may have worsened to an extent that there is a need for physical restraint or seclusion on admission to hospital (Teo, 1978; Lee et al., 2006). Insufficient information relating to hospitalisation due to inconsistent mental health policy in Hong Kong, negative staff attitudes, poor quality treatment and inadequate complaint handling procedures may be the agents of structural discrimination in institutional practice, which could contribute to the stigma that patients relate through their subjective experience (Lee et al., 2006).

The effect of stigma is greater in China on the lives of male patients and for patients with a younger age at the onset of the illness (Phillips et al., 2002). This may be associated with the social context of China where there is a greater achievement expectation for men than for women. The mentally ill are considered as more socially inferior than others if, particularly, they are unemployed and unmarried due to mental illness (Phillips et al., 2002).

2.4 STIGMA AND FAMILIES OF THOSE WITH MENTAL DISORDERS

Considerable research has been conducted on the stigmatisation of people with mental illness and its negative consequences, however, less empirical research has addressed the problem of family stigma despite the early and insightful work by Clausen and Yarrow (1955).

2.4.1 Western Studies

Families of the mentally ill identified stigma as damaging their ill relative's self-esteem, in maintaining family relationships between the ill person and his/her family. Families also reported difficulty in finding accommodation, getting employment and anticipating financial assistance for their ill relatives (Clausen & Yarrow, 1955; Wahl & Harman, 1989). The most commonly cited effects of mental illness on families were lowered self-esteem and 'damaged' family relationships. Clausen (1980 cited in Wahl &

Harman, 1989) revealed that negative public attitudes had, to some extent, affected some families. For instance, parents delayed seeking help for their mentally ill child, while some couples were not prepared to define their spouse as mentally ill due to fears of stigmatisation.

Wahl and Harman (1989) argued that improved knowledge of mental illness helped to lessen and deal with stigma, as did interaction with members of other families of mentally ill people. Explaining aetiology as a biological cause of mental illness also helped to reduce guilt and shame for relatives. In Wahl and Harman's (1989) study, families' views about stigma in relation to the role of mental health professionals, were found to be diverse. Some families found talking with mental health professionals helped them to deal with stigma. Other families however, were disappointed with the services provided by mental health professionals, and described them as untrustworthy. Wahl and Harman (1989) commented that mental health professionals were regarded almost universally as adding to the stigma that bothers families. Pearson and Yiu (1993) argued, however, that in the past, people with a mental illness and their family tended not to bring the illness out in the open for fear of stigma, and the mentally ill person was isolated and confined to custodial psychiatric institutions. Phelan, Bromet & Link (1998) reported that among 156 family members of the mentally ill, many did not perceive themselves as being avoided by others due to their relatives' hospitalisation, but half reported concealing the hospitalisation to some extent. Those families that did not live with the mentally ill relative were more likely to conceal the illness, if the ill relative was female, and if the ill relative had less severe positive (therefore visible) symptoms of psychosis.

A more recent review by Corrigan and Miller (2004) reported that family members experienced similar discriminatory impact, shame, stereotyping and prejudice through their association with a relative who had a mental illness. The public often blamed parents for causing their child's illness especially through 'incompetent parenting'; siblings and spouses expressed that they were blamed for not helping the relative with mental illness to adhere to their treatment to prevent relapse (Corrigan & Miller, 2004).

2.4.2 Eastern Studies

The dynamics of family stigma originate from various cultural and aetiological sources as reported by Kirmayer (1989) and Phillips et al. (2002) who conducted research in the Chinese setting. These sources include interpretation of the symptomatology of mental illness (emotional distress, bizarre behaviour, unpredictability and violence) and in the case of Chinese society, the Chinese 'moral view' which regards mental illness as 'hereditary' or 'wrong-doing' caused by ancestors' misbehaviour and is often associated with a sense of guilt in family members of the mentally ill. Family members tend to hide the illness for fear of stigmatization, seek alternative religious healers and only when this fails they bring the sick relative to hospital for treatment (Lin, 1983). Delay in starting psychiatric intervention results in limiting rehabilitation effectiveness and complete recovery, which causes shame to the family (Teo, 1978). According to Phillips et al (2002), prolonged illness caused more difficulty for family members as it was harder to keep the 'family secret'. When more community people were aware of the illness, this led to increased negative social consequences for the family.

2.4.3 Interim Summary

Individuals with mental illness and their family members experience stigma associated with feelings of shame, guilt and low self esteem. Anticipated and actual stigma could also be correlated to negative stereotyped public attitudes in both Eastern and Western societies. Social context of mental illness and stigma may lead to the 'not in my backyard' phenomenon which prevents integration of the mentally ill into a society that promotes discrimination and prejudice. Encouraging contact with mentally ill people may be able to improve public attitudes. The next section reviews professional attitudes towards mental illness.

2.5 PROFESSIONAL PERCEPTIONS OF MENTAL ILLNESS

Societal stigma as reflected in the measurement of public attitudes, could contribute to career choice among those in the health and helping professions. Professionals' attitudes towards mental illness should be investigated more in depth as professionals may not be immune to the influence of popular negative stereotypes (Eker & Arker, 1991). Several studies have been devoted to examining nurses' choice of speciality (Stevens & Dulhunty, 1992; Rushworth & Happell, 1998), but there is also literature on effects of training on other professions (paramedical health workers) (Chinnayya et al., 1990), and comparative literature related to attitudes towards the mentally ill among professional groups (psychiatrists, social workers, psychologists and nurses) (Roskin et al., 1988), between doctors and nurses (Sevigny et al., 1999), and between professionals and the general public (Jorm et al., 1999; Lauber et al., 2006).

The effects of psychiatric placement and education on medical students' attitudes were examined by Packer et al. (1994), Yamamoto et al. (1996), Baxter et al. (2001), Mas & Hatim (2002), Reddy et al. (2005) and Altindag et al. (2006) and on student nurses' attitudes were investigated by Malla and Shaw (1987), Keane (1991), Hafner and Proctor (1992), Lam, McMaster & Troup (1993), Rushworth and Happell (1998), Evagelou et al. (2005), Madianos et al. (2005) and Surgenor, Dunn and Horn (2005). The influence of contact and knowledge on attitudes of professionals towards mental illness has also been researched (Eker & Arker, 1991; Callaghan et al., 1997). Several studies on professional attitudes included scales (such as authoritarianism, benevolence, social restrictiveness and community mental health ideology) to measure attitudes towards patients with mental illness (Cohen & Struening, 1962; 1965; Levine, 1972; Kirby & James, 1979; Keane, 1991; Sovigny et al., 1999; Evagelou et al., 2005; Madianos et al., 2005). Some studies compared attitudes using vignettes, presentation of a case of schizophrenia and depression (Malla & Shaw, 1987; Caldwell & Jorm, 2001; Mas & Hatim, 2002), and more rarely, compared a case of schizophrenia or dementia with a case of physical illness such as diabetes (Brinn, 2000).

Generally, these studies reported three outcomes. First, there are demonstrations of increased positive attitudes towards mental illness as a result of contact and improved knowledge of mental illness in most of the studies; in particular, after a course of education or psychiatric clinical placement (Chinnayya et al., 1990; Keane, 1991; Lam, McMaster & Troup, 1993; Alexander & Link, 2003; Mas & Hatim, 2002; Evagelou et al., 2005; Madianos et al., 2005; Surgenor et al., 2005; Altindag et al., 2006). Second, there are studies that indicate transient change towards positive attitudes among medical students (Sivakumar et al., 1986; Baxter et al., 2001). Third, there are studies that show negative attitudes among professionals or even imply more negative views than the lay public (Packer et al., 1994; Caldwell & Jorm, 2001; Ucok et al., 2004) and more negative attitudinal change of medical students after exposure to psychiatric training (Yamamoto et al.., 1996). A few studies were devoted to comparing college students' and community attitudes of different cultural backgrounds towards mental illness (Shokoohi-Yekta & Retish, 1991; Fan & Karnilowicz, 2000).

2.5.1 Professionals and Stigma: Choice of Speciality

2.5.1.1 Western Studies

Stevens and Dulhunty (1992) conducted a study in New South Wales, Australia, which surveyed 610 newly-enrolled nursing students with regards to their preferred area of work upon graduation from a list of 10 preferences (ranging from child nursing, intensive care, medical and surgical to psychiatric nursing). Participants were recruited from five universities in New South Wales with a response rate of 99%. Results indicated psychiatric and community mental health nursing were ranked ninth and last in the list.

Another study in Australia by Hafner and Proctor (1992) reported that a nine-week psychiatric nursing program had no influence in 51 students' career choice in psychiatric specialisation. Lam, McMaster and Troup (1993) at the School of Nursing, University of Sydney explored the causes contributing to the decline in the number of new

graduates entering mental health. These authors reported that there was no major change in interest, which was generally low in mental health nursing although they were less likely to endorse avoidance of mental health nursing after a short period of psychiatric placement.

Wilkinson, Greer and Toone (1983) and Wilkinson, Toone and Greer (1983) at the London Medical School examined 94 second year medical students' general attitudes to psychiatry and intention to specialise in the subject before and after an eight-week psychiatric clerkship. Results indicated that the 6% who might specialize in psychiatry rose to 15% between the placement and the final examination. The majority of the students held negative views towards psychiatry. However, there was significantly favourable change after the clerkship and such attitudes were maintained one year after, but did not endure to the end of their first post-graduate year, which was two years after the clerkship (Sivakumar, Wilkinson, Toone & Greer, 1986).

More recently, a study on nurses' career preferences was investigated by Rushworth and Happell (1998) among students enrolled in an undergraduate nursing course in a Victorian (Australia) university. A questionnaire was administered to students during the first week of the first semester to reduce any bias due to nursing education on career choice. Psychiatric nursing was ranked eighth in a list of nine nursing specialties. Within a 18-month period, the questionnaire was administered again to one half of students (experimental group) who completed a study unit in psychiatric nursing and the other half (control group) on long term illnesses. The experimental group at post-test indicated a significant increase in choosing psychiatry as a career preference. Students who ranked psychiatry as their most favourable choice reported an interest in the work and appeared to have a more positive view of psychiatric nursing. Education did not impact much on career choice in the control group. Child nursing was ranked first as a career choice, similar to Stevens and Dulhunty's (1992) finding.

A recent study on the association between attitudes, clinical exposure and career choice was examined by Surgenor, Dunn and Horn (2005) in Christchurch, New Zealand. One

hundred and sixty four students from a tertiary training institution participated in a cross-sectional survey. Results indicated that third year students who had been exposed to theoretical knowledge and clinical experience in psychiatry reported more positive attitudes towards mental illness than first year students who intended to specialize in paediatrics and expressed the most negative attitudes towards psychiatric nursing. Nevertheless, psychiatry remained as the least popular specialty after registration as a qualified nurse. Those with more positive attitudes towards mental illness were more likely to intend on a career in psychiatry. Students who had multiple forms of exposure reported more positive attitudes than those whose contact was only via work. Age and gender were not associated with attitudes.

2.5.1.2 Eastern Studies

A literature search revealed a paucity of studies examining career choice in Eastern countries. Sovigny (1999) claimed that not much work was devoted to examine mental health workers' attitudes in China, and Pearson and Phillips' (1994) study indicated that the effect of psychiatric stigma probably led to a reluctance for doctors and nurses to enter the field of psychiatry in China.

In the Singaporean setting, Lai, Hong and Chee (2000) reported that among 79 psychiatric nurses and 21 psychiatrists who took part in a study for the clarification of the 'myth' leading to stigma attached to mental illness, a high proportion of the mental health workers (60%) reported that others debased them because of their work and 30% were discouraged by their own family members from joining the mental health specialty. Fifty-one percent of nurses and 15% of psychiatrists reported that they would not choose the same profession if given the choice again.

2.5.2 Effect of Training on Stigma towards Mental Illness or The Mentally Ill

2.5.2.1 Western Studies

Malla and Shaw (1987) compared two groups of female nursing students on their attitudes towards mental illness in Ontario, Canada, with Group A (n=34) who had begun training and had no psychiatric exposure, and Group B (n=37) who had completed two years of training (including didactic training in psychiatry and six weeks of contact with mentally ill patients). Students were presented with six randomly ordered vignettes describing a male or female with paranoid schizophrenia (PS), schizotypal personality disorder (PD) and a normal healthy person (H). Participants were asked questions relating to their perception of mental illness, and their attribution of the behaviour to physical/psycho-social etiology by assessing each behaviour separately. Results indicated that students who had completed their training were better able to perceive the presence and rate the severity of mental illness. Both groups were rather optimistic about prognosis and in favour of psychosocial etiology and psychosocial forms of treatment. Nevertheless, both groups of students showed a fairly high score on a social distancing scale especially in relation to the male PS vignettes.

Keane (1991), in Australia, administered the Opinion of Mental Illness (OMI) (Cohen & Struening, 1962) to a group of nursing students (N=111) pre- and post- an eight-week psychiatric nursing course in a six-month period. Half of the students did the course, the other half acted as controls. Findings suggested that the course had significant positive change in the experimental over the control group on two factors - less authoritarianism and more interpersonal etiology. However, there was a negative change on the factor of stereotyped attitudes. The author suggested that caring for chronically mentally ill patients who may exhibit limitations in cognitive and functional skills, and who lack support systems for accommodation and employment, might have contributed to the development of negative stereotypes in the experimental group.

Lam et al.'s (1993) findings based on The Attitudes on Mental Illness Scale (Weller & Grunes, 1988) suggested a period of clinical placement resulted in nursing students becoming less concerned regarding their communication skills and interaction with patients than before placement. Results supported the notion that education and clinical exposure can have positive impact in attitudes towards mental illness.

A local Australian study that explored issues regarding nurses' preparedness to care for patients with mental illness was by Reed and Fitzgerald (2005). These authors interviewed 10 nurses from two wards in a general health setting situated in a rural community. Subjects from one ward had knowledge and support from mental health nurses. Results indicated a general negativity in attitudes that could be ameliorated if nurses received support, safety issues were addressed, knowledge was increased, and if there was an appropriate physical environment to care for mentally ill people. Some nurses reported that good feedback of their care was rewarding. Reed and Fitzgerald (2005) contended that although 50% of the respondents (regardless of which ward they were on) reported a definite dislike for working with the mentally ill, the other half were positive towards caring for the mentally ill. The small amount of education provided as part of this research was suggested to have been effective in reducing nurses' expressing negative stereotyped responses.

When Packer et al. (1994) examined psychiatric residents' attitudes towards mental illness at the University of Toronto in caring for patients with chronic mental illness, no correlation was found between attitudes and years of training or knowledge about mental illness. Residents reported negative attitudes towards chronically mentally ill patients. However, significant positive correlations were found between residents' positive attitudes and training settings where patients were said to receive good-quality care and where supervisors were said to be good role models.

Fabrega's (1995) findings in examining 123 medical students' views of psychiatric patients were that these did not alter much during their psychiatric clerkship at the University of Pittsburgh. These views included the ease of caring for mentally ill

patients in a general medical setting. The more dangerous they judged the patients to be, the more difficulty they anticipated in caring for them.

Baxter et al. (2001) compared two different teaching methods (an eight-week attachment using didactic teaching with a six-week attachment based on seminar and workshop learning) on their effects of medical students' attitudes towards mental illness. Data were collected from medical students at the University of Nottingham (England) at pre-psychiatric placement (Time 1), and at post-psychiatric placement (Time 2). Results indicated a positive change in attitudes after psychiatric attachment in both groups and that teaching style had no influence in attitudinal change. The positive change was transient, however, as it decayed at one-year follow up (Time 3), although there were only 70 (29 in old and 41 new curriculum) final year students from the original recruitment of 110 fourth year students. Indeed attitudes leveled below pre-psychiatric attachment (i.e. were more negative).

2.5.2.2. Eastern Studies

In contrast to the paucity of studies on career choice, there are several studies that explored the effects of training and contact on health workers' attitudes towards mental illness in Eastern countries.

Effects of training on professionals' attitudes were explored by Chinnayya et al. (1990) as part of a national program of mental health in India using a pre-post design. One hundred and fifty workers took part in a-one-week training on rotation in batches of eight to 10 people. Training comprised of lectures, case studies, role plays and a manual on mental health to facilitate the sessions. Baseline assessment was obtained on the trainees' attitudes on the first day of training and repeated at the end of the training. The questionnaire consisted of 35 items to assess various types of psychosis, mental disorder and 'misconceptions' about mental illness. Findings indicated that demographics (age, sex and education) had no influence on baseline attitude, and those

workers with more negative baseline attitudes scored towards less negativity after the training across 25 items of the questionnaire.

The effect of a course of psychiatric secondment and contact with the mentally ill on attitudes towards mental illness was investigated among Hong Kong Chinese student nurses by Callaghan et al. (1997). One of two groups of students undertook a psychiatric secondment. Findings did not support the contact hypothesis as both groups (control and experimental) in this study expressed general positive attitudes towards mental illness (i.e., a ceiling effect). More of the experimental group had lived with a mentally ill relative and undergoing a psychiatric secondment, so their prior social contact might have already led to their positive attitudes before any training. It is unclear why the control group matched them on positive attitudes unless the results can be taken to mean that prior social contact with the mentally ill has no material influence on attitudes.

A comparative study on attitudes of medical students towards mental illness was conducted in two universities in Japan and one in Thailand to elucidate the effects of medical education and contact experience (Yamamoto et al., 1996). Questionnaires on The Attitudes Towards Disabled Persons and the Contact with Disabled Persons Scales were distributed to first year students before the commencement of medicine/psychiatry studies and to fifth or sixth year students who had completed their psychiatry clerkship. Consistent with Keane (1991), all students reported more unfavourable attitudes post-education than pre-education. Thai students who acquired psychiatric clerkship at a local hospital, experienced more in-depth but also more unpleasant contacts with the mentally ill patients, and they demonstrated more unfavourable attitudes than the Japanese, whose psychiatric clerkship was conducted at university hospitals where students had limited contact with the mentally ill.

In Kuala Lumpur (Malaysia), Mas and Hatim (2002) presented to 108 first year and 85 final year medical students in University of Malaysia a schizophrenia vignette and measured social distance and perception of dangerousness to assess their attitudes

towards mental illness. First year students had no prior psychiatric training, although 54% of them knew someone with a mental illness. Final year students had undergone eight weeks of psychiatric placement. The two groups of students were assessed and compared for their knowledge of mental illness in terms of the diagnosis, signs and symptoms and predisposing factors. Findings indicated that final year students endorsed less stigma towards the mentally ill, were more tolerant and regarded the mentally ill as less dangerous, while first year students tended to rate the mentally ill as dangerous and expressed higher social distance from themselves. However, prior contact had no significant effect on first year students' attitudes towards mental illness. Almost 70% of all the respondents rated people with schizophrenia as dangerous and about 80% rated them as unpredictable.

One longitudinal study in a medical school in Malaysia suggested that fourth year medical students who had favourable views towards mental illness at the commencement of clinical clerkship showed subsequent positive increase in attitudes on completion of placement, particularly in female students (Reddy et al., 2005). According to the authors, the existing positive attitude may have been due to previous short periods of contact with the mentally ill in their third year of placement when they gained technique in interviewing and history-taking.

Evagelou et al. (2005) and Madianos et al. (2005) published more recently similar work in Greece using the OMI (with subscales of Social Discrimination, Social Restriction, Social Care, Social Integration, and Etiology) to measure nurses' attitudes in a pre-post design. A sample of 92 undergraduate students in the School of Nursing of the University of Athens participated in a study for assessment of attitudes before and after attending lectures (40 hours) and clinical placement (90 hours) (Madianos et al., 2005). Attitudes were examined before the first lecture (Time 1) and reassessed with vignette presentations after completion of the psychiatric practicum, six months afterwards (Time 2). By Time 2, results showed that students were less authoritarian and scored lower social discrimination and restrictiveness. Students were also more willing to accept a mentally ill person as neighbour or employee. Furthermore, students reported more

positive attitudes towards community integration of the mentally ill, and by Time 2, they had a better knowledge of causes of mental illness.

In a similar design, Evagelou, et al. (2005) assessed 137 undergraduate students' attitudes before (Time 1) and after completion (Time 2) of 105 hours course of psychiatric nursing at a technological nursing school in Athens, Greece. Twenty five students had a relative with mental illness. Results indicated that students endorsed less social restriction and were more positive towards social integration of the mentally ill after the course. Male students endorsed a more positive attitude toward social care after the course. Female students reported more tolerance (i.e., lower endorsement of social restriction of the mentally ill) and were more positive toward social integration of patients with mental illness than male students. The authors suggested the gender difference might be because females are more emotion-focused and humanistic than males and this is reflected in their attitudes towards the mentally ill. Those students who were single, had a relative with mental illness, were raised in an urban place, or had no occupation reported more acceptance of social integration of the mentally ill.

An anti-stigma campaign on mental illness had a positive effect in relation to training medical students in Turkey. Altindag et al. (2006) found that anti-stigma education of a two-hour lecture on schizophrenia and its relationship with violence, aggression and causes of stigma, contact, and watching a film related to schizophrenia had improved medical students' attitudes` in Turkey. Attitude improvements in social distancing were evidenced in more acceptance of the mentally ill as co-workers and neighbours and in viewing patients with schizophrenia as less aggressive. The students showed more respect towards the care and management of the patients after the program. Such positive attitudinal change extended at a one-month follow up assessment, although the change lessened with time. There was no significant change in attitudes in students who had no education on mental health and were shown a film unrelated to mental illness.

The attitudes of 106 general practitioners (GPs) were explored by Ucok et al. (2006) in Turkey with respect to schizophrenia and the change in attitudes in a pre-post test design after a 45-minute anti-stigma interactive training session. Content included the course of illness, current information and treatment on schizophrenia, the impact of stigma on schizophrenia, and the role of GP. Before the session, the GPs completed a questionnaire consisting of 16 items focusing on the views of doctors towards 'general myths' related to schizophrenia. Only 54 GPs completed the follow-up questionnaire three months afterwards. Results indicated significant positive changes in attitudes when compared to attitudes before the training including views on treatability, harmfulness and untrustworthiness of patients with schizophrenia. However, it is unclear in this study if observed attitudinal improvements were due to a bias in participation in the follow up assessment.

2.5.3 Interim Summary

The above review indicates that psychiatry is not a favoured choice of specialty among professionals. In some studies, this appears to be associated with social pressure discouraging such specialization because of the stigma prevalent in that society. Social debasement of those in the mental health workforce appears more strongly evident in Eastern countries. Education and training may contribute to some positive change in attitudes towards mental illness although the benefit seems to lessen over time among medical students. Results are not unanimous however, and elements in the nature of training and exposure appear to be important but largely unexplored. Analyses of demographic factors that may be related to stigma show inconsistencies across studies. Importantly, where positive outcomes are reported for training exposure, these appear to transgress national and cultural boundaries.

2.5.4 Professionals and Stigma: Attitudes towards The Mentally Ill

Contact is considered a major factor in influencing attitudes towards the mentally ill. The effect of contact can better be understood by comparing the varying degrees of

contact with the mentally ill. One means for exploring the effect of contact is to compare professionals attitudes and general public attitudes. Mental health professionals have substantial contact with the mentally ill, but the nature of their contact may lead to different attitudes, for example, they may find it more hectic and burdensome working in an admission ward caring for patients with acute psychotic episode, needing constant assessment and observation due to the acute states of patients, potential for suicide, aggressiveness and unpredictable behaviour. It is usually more relaxed working in a rehabilitation unit where patients do not need constant supervision.

Patients with schizophrenia have a higher propensity than patients with depression to be discriminated against by the general public (Crisp et al., 2000) as well as by professionals (Caldwell & Jorm, 2001), attracting greater social distance ratings (Lauber et al., 2004) probably due to misguided stigmatizinging about dangerousness, unpredictability and violence. Patients with schizophrenia are believed to have poorer prognosis when attitudes are compared across health professionals (Kua et al., 2000). The section below reviews the literature on professional attitudes towards mental illness, some of which also compares such attitudes with general public attitudes.

2.5.4.1 Western Studies

Attitudes towards patients and views about etiology and treatment of illness were compared among different mental health professional group (psychiatrists, social workers, psychologists and nurses) by Roskin et al. (1988). Results showed that psychiatrists who scored more highly in the psychodynamically-oriented approach, adopted more authoritarian-controlling attitudes towards patients than the other professionals. Nurses endorsed more highly a biologically-oriented approach. Psychologists scored highest on nurturant-empathic attitudes towards patients whereas nurses scored the lowest on this measure and highest on distancing-detachment from patients. The latter could be due to nurses having the most direct contact time caring for the severely mentally ill people, and may reflect the effects of ‘burnout’, unlike other disciplines, who have less contact with such patients (Roskin et al., 1988).

Attitudes were compared among 2031 Australian public and 2454 professionals (872 general practitioners, 1128 psychiatrists and 454 clinical psychologists) by Jorm et al. (1999) via a postal survey. One half of each group members was presented with a vignette description that met criteria for depression and the other half schizophrenia. Participants were asked opinions of the prognosis of the person described and the possible prejudice the person might face. Subjects were also asked about their intervention, their work area and the frequency of encountering the problems described. The general public was asked to indicate their contact level with a person similar to the person described in the vignette. Findings indicated that both professionals and the public endorsed higher discrimination for the vignette describing schizophrenia than depression, and overall, professionals endorsed more negative responses than the public. Clinical psychologists had similar attitudes towards the depression case as the public. For the schizophrenia case, the public endorsed more positive outcomes than all three professional types; clinical psychologists endorsed more positive outcomes than GPs, who rated more positive outcomes than psychiatrists. The possible reason for these responses might be because professionals have different levels of knowledge and different types of exposure regarding mental illness. This may mean contact could have counter-productive outcomes on attitudes.

In a study by Caldwell and Jorm (2001), all professional groups were significantly more pessimistic than the public about long-term outcomes for schizophrenia, believing that negative outcomes were more likely to occur. Mental health nurses tended to be more negative than the public but more positive than the other professional groups (GPs, clinical psychologists, psychiatrists) about long-term outcomes and prognosis. Mental health nurses and clinical psychologists believed in less negative outcomes for schizophrenia than GPs and psychiatrists. All groups believed that discrimination would be more likely to be experienced by the schizophrenia than the depression case. The public was the most positive about long-term outcomes for the depression case, and there were no significant differences about long-term positive or negative outcomes between the pubic, clinical psychologists and mental health nurses. Both GPs and

psychiatrists were the least positive about long-term outcomes for the depression case. Mental health nurses were the most positive about prognosis and long-term outcomes for schizophrenia than the other professional groups.

Nurses' attitudes and expectations to care for patients with a mental illness were investigated by Brinn's (2000) postal survey in Cardiff, Britain. Sixty-five nurses were presented with vignette descriptions of an inpatient with unstable diabetes (control), unstable diabetes with dementia, and unstable diabetes with schizophrenia. Majority of participants were general nurses with little training in psychiatry. Results showed that nurses expected more negative behaviours and requiring higher care effort for the schizophrenia and dementia vignettes than the diabetes vignette. Higher level of disruption was also expected for the schizophrenia group and slightly more care was required for the dementia group. Importantly, nurses also reported greater expectation of experiencing fear in response to the vignettes describing the patient with schizophrenia (higher for the schizophrenia than the diabetes vignette), and 'feeling nothing' towards patients with mental illness. Comparatively, nurses expected to have higher experience of positive emotion, relaxed feeling and understanding in relation to the patient with diabetes without mental illness.

Lauber et al. (2006) compared mental health professionals' attitudes and Swiss general public attitudes suggesting unfavourable views about people with mental illness in relation to their employability, their social relationship and housing opportunities. When answers on stereotyped personal characteristics were explored, Lauber et al., (2006) found no difference between mental health professionals and the public concerning 'dangerousness', although the public regarded mentally ill people as more 'unpredictable'. Psychiatrists expressed more stigmatising attitudes when compared with nurses and other professionals, and regarded mentally ill people as more 'dangerous', less 'skilled' and more 'socially disturbing'. Work setting (acute ward, geriatric and in-patient) had no influence on attitudes in this study, neither did employment status of participants. Female participants regarded the mentally ill as less

'socially disturbing' and more 'skilled' than male subjects. Psychiatrists had the most negative attitudes whereas psychologists had the most positive ones.

2.5.4.2 Eastern Studies

As with the rest of the literature, there have been less studies in the East than the West on professionals' attitudes. Kua's et al. (2000) study compared responses to the likely outcome of three mental disorders (schizophrenia, major depression and mania) among medical practitioners. Sevigny et al. (1999) compared a sample of professionals on attitudes toward the mentally ill in China. In recent years, there has been an increase in research in Malaysia and Turkey (Mas & Hatim, 2002; Aydin et al., 2003; Crabtree, 2003; Ucok et al., 2004, 2006; Reddy et al., 2005; Altindag et al., 2006).

Sevigny's et al. (1999) study used the Community Attitudes Towards the Mentally Ill (CAMI), in psychiatric doctors and nurses in China to ascertain their opinions on mental illness. There were 74 nurses and 26 doctors randomly selected for the study. Questionnaire items were modified from the English version into Chinese to suit the socio-cultural context. Results indicated that nurses endorsed more negative attitudes towards the mentally ill than doctors, and doctors were more optimistic about community rehabilitation for the mentally ill. Both doctors and nurses in Sovigny et al.'s (1999) study were similarly sympathetic towards the mentally ill.

One Turkish study specifically investigated experienced nurses' attitudes toward mental illness from two general hospitals in Izmir, Turkey (Eker & Arkar, 1991). Ninety-one nurses were presented with vignette descriptions of cases typical of depression, anxiety (i.e. neurosis) and paranoid schizophrenia. Among other things, participants were asked about their contact experience with people with mental illness, particularly social contact (family member, relative, or friend) and their preferred social distance with respect to the vignette cases. Results indicated that these nurses rated greater social distancing towards the vignette of paranoid schizophrenia than anxiety and depression vignettes.

Kua et al. (2000) assessed responses to three vignettes (schizophrenia, major depression and mania) were presented to out-patient department doctors, GPs and psychiatrists in Singapore. Participants were asked to rate the likely outcome of these three disorders. Schizophrenia was judged to have the worst outcome and depression the best outcome in response to treatment. Psychiatrists were the most optimistic about the outcome following professional help for the three disorders and out-patient department doctors the least optimistic. This is probably due to the psychiatrists' greater opportunity to observe success in treating such patients with medications as usually patients with schizophrenia would be referred to psychiatrists in the Singaporean setting. Psychiatrists rating the patients with depression and mania would have observed a full recovery with or without recurrence of the problem after receiving treatment (Kua et al., 2000). In contrast, a significant percentage of out-patient doctors and GPs rated a partial recovery for patients with these conditions. Greater versus lesser chances to observe recovery rates might have resulted in these inconsistent treatment outcomes reported among medical practitioners. Most participants believed that the schizophrenia and mania patients in the vignettes would be discriminated more so than the depression vignette. However, GPs rated a lower percentage of patients being discriminated when compared with out-patient doctors (Kua et al., 2000).

Aydin et al. (2003) conducted a study which compared the attitudes of hospital staff from various non-psychiatric clinics of Ataturk University Hospital in Erzurum, Turkey. The sample was randomly selected including 40 academics, 40 resident physicians, 40 nurses and 40 hospital employees. Attitudes were compared for vignettes of schizophrenia and depression including questions on preferred social distance, recognition of mental illness, prognosis, and need for hospitalization. Results indicated that despite their low education background, hospital employees reported more positive attitudes (lower social distancing) than the other participants. The authors suggested that this difference might be due to negative effects of medical education, similar to the study by Yamamato et al. (1996) where medical students reported negative attitudinal change post unpleasant contact with mentally ill patients.

The attitudes of psychiatrists towards patients with schizophrenia were investigated by Ucok et al. (2004) in Turkey in a questionnaire consisting of 12 questions on how they informed patients and their relatives of the diagnosis, discussing the patients' possibilities for rehabilitation, and how they felt about meeting patients socially. Sixty psychiatrists participated in the study. Findings indicated that 95% of psychiatrists reported schizophrenia is seen as the most severe mental disorder in lay people's opinion and 88% thought the term 'schizophrenia' was used pejoratively by the public. A total of 43% respondents never informed patients of the diagnosis of schizophrenia and 41% informed them or not on a case-by-case basis. The rate of informing patients of the diagnosis of schizophrenia was significantly lower when compared with a diagnosis of depression, mania and delusional disorder. Psychiatrists were of the opinion that patients/families could not comprehend the meaning of 'schizophrenia' (33%), so they avoided telling them the diagnosis for fear of them dropping out of treatment (Ucok et al., 2004). Thirty-three percent of psychiatrists documented the diagnosis of 'schizophrenia' officially about their patients, 53% wrote only when their patient/family regarded it appropriate and 14% of psychiatrists reported they never documented 'schizophrenia' officially. Forty-three percent of respondents indicated that they would not visit a patient at home, and 55% of respondents felt uncomfortable if they met a patient socially.

Research into mental health matters in Asia such as in Malaysia remains an unpopular area as reported by Crabtree (2003). Crabtree (2003) utilised an ethnographic method in seeking to understand the 'culture' of the work setting in Sarawak, East Malaysia, through extensive critical observation of daily routine, analysis of hospital records and interviews. Observations revealed that professionals referred to the hospital as 'asylum' reflecting their disapproving attitudes when describing the characteristics of care and attitudes towards the mentally ill people. While doctors reported potential risk of violence in assessing patients with psychosis at pre-admission, nurses expressed anxiety and pre-occupation with risks (unspecified) associated with supervision of non-psychotic patients. Such anxiety prevented the staff from establishing a trusting relationship with patients. The response to violence towards staff was dealt with inadequately and led to

staff feeling vulnerable on the job. Respondents also reported high level of stigma associated with reactions from others (doctors alike) who thought it might lead them to insanity by working in a psychiatric hospital. Hence, stigma, not only affected doctors and nurses professionally, but psychologically, regarding their work as 'morally hazardous in its insidious contagion' (Crabtree, 2003, p. 718). Stigma, was regarded as the worst enemy of community acceptance of mentally ill people, with the resulting conviction that some mentally ill patients would be unlikely to be discharged.

2.5.5 Interim Summary

Experience via clinical exposure and education were regarded as means for improving attitudes but qualified by a number of factors related to the nature of care and support. Anti-stigma effort has generally contributed to more positive professional attitudes towards mental illness in Eastern and Western cultures, especially during medical training for doctors. However, it is questionable as to whether or not such improvement endures throughout their medical career. Those studies that measured prognostic expectations of mental disorders by professionals reported patients with schizophrenia to have poorer outcome than depression, and to face greater discrimination and social distancing. There is a need to explore in future research the longevity of attitudinal changes due to anti-stigma interventions among health professionals. The next section provides a literature review on cross-cultural studies of attitudes towards mental illness with culture as a 'hidden' variable.

2.6 CULTURAL COMPARISONS OF STIGMA ON MENTAL ILLNESS

The literature review on "cross-cultural" studies on stigma related to mental illness in the next section could probably be regarded as not being true cross-cultural comparisons of attitudes as they were either cross-national studies or studies of ethnic groups within a particular country. Direct comparative work across national settings were a cross-sectional survey comparing professionals' attitudes in Great Britain, Czechoslovakia, and West Germany (Levine, 1972), examination of the effect of labeling on public

attitudes conducted in Russia, Mongolia and Germany (Angermeyer et al., 2004) and a cross-national comparative study of Australian and Japanese public attitudes (Jorm et al., 2005). A few studies focused on comparing ethnic groups within a single country (Fan & Karniowicz, 2000; Papadopoulos, Leavey & Vincent 2002). However, national origin is not synonymous with culture. None of the studies explored 'culture' as the independent variable, or at least characterise the samples on the basis of cultural variations. A stronger design should be able to relate 'cultural' variations to differential stigma levels.

2.6.1 Public Perception of Mental Illness

Papadopoulos, Leavey and Vincent (2002) compared attitudes of British-born Greek Cypriots with English people. It was hypothesised that Greek-Cypriots would hold more negative and stigmatising views about mental illness, have less knowledge about mental illness and have less contact with people with mental illness than English people. Results showed Greek-Cypriots as having less knowledge and contact with the mentally ill and endorsing more authoritarianism and social restrictiveness than the English. Knowledge about mental illness correlated with positive attitudes towards mental illness. The less educated and lower social class Greek-Cypriots reported more negative attitudes towards mental illness, regarded the mentally ill as less intelligent and more aggressive than other people, and to require social restriction. Age, sex, and marital status had no correlation with attitudes.

A cross-national study comparing Australian and Japanese samples was conducted by Jorm et al. (2005). A national representative sample in Australia and a representative sample in Japan were surveyed to obtain opinions in relation to one of four vignettes describing depression, depression with suicidal thoughts, early schizophrenia and chronic schizophrenia. Results indicated more of the Australian public used psychiatric labels than the Japanese, particularly "depression" when asked about the people portrayed in the vignettes. More of the Australians used the term "schizophrenia" for the early schizophrenia vignette than for the chronic case, whereas the Japanese reserved

psychiatric labels only for the more chronic and severe cases of mental disorder. More of the Japanese endorsed 'hiding' the mentally ill within the family and more were reluctant to discuss mental illness with others. The Japanese believed in the help of counsellors, and benefits of treatment, but not of general practitioners, and they were less optimistic about full recovery. Australians were positive about the benefits of seeking professional help from counsellors and general practitioners, but negative about psychiatric medications. Hospitalisation and electro-convulsive therapy were negatively regarded in both countries. The authors suggested the differences in beliefs about treatment and recognition of disorders between Australians and Japanese might be explained by the greater openness among the Australian public toward mental disorders and about acceptance of treatments than the Japanese. According to Jorm et al (2005), Australia emphasises community services whereas Japan emphasises hospital care for the mentally ill, and this was said to influence differences in opinions between the two country samples. Little attempt was made to explain the national differences in view of the well evidenced cultural differences between the two nations (e.g., Argyle et al., 1986; Hofstede, 2001).

Angermeyer et al. (2004) were interested in whether giving a label of mental illness has an effect on public attitudes towards people with schizophrenia. A survey was conducted in 2002 in Germany on patients with schizophrenia and depression (Schulze & Angermeyer, 2003), examining two constructs, anticipated stigmatisation and experienced stigmatisation representing the most frequently mentioned experiences during a preliminary focus group discussion. Findings indicated both patients with schizophrenia and depression anticipated stigmatisation at a similar level, however, the former reported enacted stigmatisation more often than the latter. Further, those patients who lived in a small town (Plauen) anticipated more frequent stigmatisation than those from the city (Leipzig) (Angermeyer et al., 2004). Patients with schizophrenia complained of frequent denial access to social roles (partnership and work). Angermeyer et al. (2004) were also interested to determine whether this result could be replicated in other countries such as Russia and Mongolia.

Novosibirsk (Russia) and Ulaanbaatar (Mongolia) were the cities chosen to compare with the German results. Novosibirsk is the industrial center of Western Siberia, where the majority of residents are Russians, whereas Ulaanbaatar is the largest and capital city of Mongolia where most of the population adheres to a form of Buddism (Angermeyer et al., 2004). Results showed that the effects of labeling on public attitudes were comparable between Russia and Mongolia. Labeling as suffering from mental illness correlated positively with endorsement of the need for help, but there was low endorsement of the stereotype of dangerousness. Small differences were noted between the two cities. In Novosibrisk, the public tended to express a less desire to help, which was related to a stronger desire for social distance, whereas in Ulaanbaatar, labeling was related to desire for greater social distance, consistent with a greater lack of understanding. Greater differences were observed when data from these two cities were compared with Germany, where labeling had significant effect on the endorsement of the stereotype of dangerousness, but also evoked the perception of need for help. The authors suggested wider media coverage of associating mentally ill people with crime in Germany than in Russia and Mongolia might have affected public attitudes evidenced in studies by Angermeyer and Schulze (2001) and Angermeyer and Matschinger (1996). Angermeyer et al. (2004) contended that labeling effects vary among different cultures and are associated with different components of stigma (social distance, need of help and endorsement of stereotypes of dangerousness) and their findings 'support the notion that labeling effects are culturally-related' (p. 420). However, the authors did not venture to detail what aspects of culture are important nor speculate on the relationship between culture and stigma.

2.6.2 Professionals and Stigma

When attitudes of a cross-sectional sample of professionals (students, physicians, nurses and police) in Great Britain, Czechoslovakia, and West Germany (Levine, 1972) were compared with samples of Australian and British doctors (Kirby & James, 1979), no significant difference was found between Australian and British doctors on benevolence, mental hygiene ideology and authoritarianism and social restrictiveness. However, the

mainland European sample scored higher on authoritarianism than Australian and British doctors.

Shokoohi-Yekta and Retish (1991) used the OMI (Cohen & Struening, 1962) to measure attitudes towards mental illness for 83 male graduate students from American and Chinese cultural backgrounds. Chinese subjects were from mainland China. Analyses suggested that Chinese subjects who lived longer in the United States scored lower on social restrictiveness and lower on authoritarianism than those who had only been in the country for a short time. Findings also indicated that Americans were less authoritarian, less socially restrictive and more benevolent towards the mentally ill than the Chinese participants. Comparatively, Americans did not regard the mentally ill as inferior and in need of coercive handling, or posing a danger to society. Chinese subjects scored higher on interpersonal etiology than American participants, including beliefs that mental illness can derive from parental deprivation among other causes, which may be important given that Chinese culture is family-oriented, characteristic of collectivism (Hui & Villareal, 1989; Triandis, 1990). Importantly, the study suggests not only a role of culture in differential attitudes towards the mentally ill, but that attitudes may be subject to acculturation within immigrant samples.

A similar Australian study was conducted by Fan and Karnilowicz (2000) comparing attitudes towards mental illness and knowledge of mental health services among the Chinese and Australian community. Participants were second year psychology students and community groups. Subjects were 129 Chinese-Australians and 106 Anglo-Australians. Results indicated a significant difference in attitudes between Chinese- and Anglo-Australians. Chinese-Australians endorsed more authoritarian and restrictive attitudes toward people with mental illness relative to Anglo-Australians. Chinese-Australians perceived mental illness as due to the inability in establishing interpersonal relationships more than the Anglo-Australians. More contact with people with mental illness was related to less endorsement of authoritarian and restrictive attitudes among the participants. Fewer Chinese-Australians were aware of community mental health services, although in general there was no significant difference in knowledge of mental

health services between Chinese- and Anglo-Australians. Chinese-Australians preferred seeking private practitioners, where it was believed that the illness would not be officially recorded.

2.6.3 Interim Summary

Given the indications from the above studies on the role of culture in relation to stigma, and the particular trends evident, between Eastern and Western studies or more specifically between Chinese samples and Western samples, the next section discusses the concept of culture and cultural variation, particularly the notion of individualism and collectivism. It then progresses to a discussion of additional studies involving Chinese samples, by way of introduction to the present study.

2.7 DEFINING CULTURE

The concept of culture originated from the discipline of anthropology and has historically been one of the most central and important foci of inquiry, particularly in the American tradition of cultural anthropology (Leininger, 1967; Geertz, 1973a; Rosaldo, 1990; Hofstede, 2001). Most anthropologists regard culture as the way people express their embodied experience. It is the acquired knowledge by which people experience and interpret their world. Culture is defined as a distinctive system of beliefs, values, symbols, ideas and attitudes that 'belong' to an individual or a designated group of people (Mendyka & Bloom, 1997; Al-Shahri, 2002). Culture is shared between persons in the form by which meaningful symbols are corresponded through human interaction. Culture is perpetuated from one person to another over time (Mendyka & Bloom, 1997). The values held by individuals are part of these patterns. Thus, cultures are complex patterns that are multi-dimensional. If culture is to be an independent variable in research, there needs to be a way of summarizing such variations (e.g., beliefs and values), which has led to the study of exploring what dimensions underpin cultural differences. Among these explorations has been the study of values (e.g., what people

say is important to them) and within this body of work, the individualism-collectivism construct has been identified as an important dimension of cultural variation.

2.8 INDIVIDUALISM AND COLLECTIVISM

2.8.1 Defining Individualism and Collectivism

The term "individualism" refers to the self, personal and internal dimensions of being, including a sense of self or identity (Hui & Villareal, 1989). Collectivism is primarily characterised by a pattern of family values (typically, but not exclusively) that emphasises hierarchy, obedience, harmony and interdependence (Triandis, 1990). Table 2.1 summarises some aspects of the individualism-collectivism construct. In Hofstede's (2001) view, in individualist culture, relationship is based on 'contractual' agreement between individuals (e.g., in employment); task-orientation prevails over relationship, and freedom of speech and personal expression is encouraged since one is supposed to be self-reliant.

As shown in Table 2.1, in collectivist culture, group needs are of primary importance, relationship prevails over task, confrontation is avoided in communication to maintain harmony, disconnection with others is avoided and to save 'face' (e.g., in a classroom situation, neither teachers or students should lose face) (Hofstede, 2001). Lying for example, can be an acceptable behaviour if it saves 'face' of the in-group (Triandis, 2001).

Table 2.1 Differences between Individualistic and Collectivist Cultures according to Hofstede (2001) and Triandis (1990)

Individualist Culture (self goal oriented)	Collectivist Culture (group goal directed)
• Nuclear family based • Emphasis on independence and value uniqueness of individuals • Learning "how to learn" and a life-long process for participation in "modern world" • High content communication - 'speak up your mind' is encouraged • Emphasis on autonomy, competition self-reliance and equality	• Extended family based • Emphasis on interdependence and value connections with others • Learning "how to do things" for acceptance by society and mainly for young people • High context communication - avoid confrontation and conflict • Emphasis on conformity, obedience co-operation and hierarchy

2.8.2 National Variations in Individualism and Collectivism

Work by Hofstede (2001) and others (Triandis, McCusker, & Hui, 1990) indicates that individualism is highly emphasised in the United States, Britain and British-influenced countries such as North America, Canada, New Zealand and Australia, whilst collectivism is highly emphasised in African, Asian, Southern European and Latin American countries. These researchers suggest that the collectivists hold more concern for other people in a group situation and are more prepared to go along with the group to prevent rejection than individualists. Individualists and collectivists operate differently in similar social situations, so there is the need to incorporate this contrasting approach when evaluating behaviours.

Hofstede (2001) explored cultural variations through studying the results of a multinational company's (International Business Management (IBM)) database of employees in 53 countries in the 60s and 70s. By examining correlations of variables summarized at the level of nation, Hofstede (2001) identified four dimensions: power distance, uncertainty avoidance, masculinity-femininity, and individualism and collectivism, proposing these as indices of cultural variations. Hofstede's (2001)

review indicated that in the context of health, psychopathological symptoms only linked with the individualism and collectivism indices. Hofstede's (2001) observations suggest that depressed people suffer more guilt and find it harder to recover from stress in an individualistic culture than those in a collectivist culture who can continue functioning with the support of their social network. Also, patients with schizophrenia are more likely to be hospitalised in individualistic cultures than in collectivistic cultures as the latter see the illness as a family affair, and so the sufferers are less isolated. However, Draguns' (1990) exploration of the relationship between individualism and collectivism and nature of psychopathology concluded that there are not enough studies to be able to achieve a confident conclusion on these relationships.

Triandis (1990) explains that in a collectivist culture such as Greece and China, retention of cultural identity and in-group goals are of great importance. Therefore, there is a stronger tendency for spreading negative attitudes towards mental illness among in-group members in collectivist nations, unlike in individualist cultures such as Australia, the United Kingdom and United States of America. Hence, a collectivist is more likely to 'hide' the secret of a mentally ill relative for fear of the spread of stigma in the wider family system.

Perceptions of deviance may also differ between individualist and collectivist groups. A comparison of personality traits, mood and valued traits between United States and Filipino students, USA (individualists) had a greater tendency to self-describe as insane, crazy, unresponsive and useless, whereas Filipinos (collectivists) tended to favour self-descriptions of being respectful, cooperative, friendly and tolerating (Grimm et al., 1999). Collectivists, notably, framed their self-description in the inter-personal interactions while individualists focused on personality. Such differences may be one of the reasons why there may be differences in attitudes towards the mentally ill between members of individualist and collectivist cultures.

2.8.3 Chinese Culture and Stigma on Mental Illness

The level of stigma is more attached to social units is important in collectivistic cultures such as the Chinese (Kirmayer, 1989; Tsang et al., 2003). In Chinese culture mental illness is viewed as related to problems in maintaining human relationships. Strange or bizarre behaviour and uncontrolled emotions such as extremes of joy or anger are said to disrupt such relationships (Lin, 1982; 1983). One explanation of mental illness is that 'it runs in the family" (Sovigny, 1992-1993, p. 258). Such beliefs affect the whole family, a unit that is hierarchically structured and supported with a belief in maintaining family integrity, characteristic of collectivist values. A mentally ill person is capable of disrupting the harmony of the family, and attracts not only a stigma to himself, but also to the whole family (Sevigny, 1992-1993). Chinese culture is greatly influenced by Confucianism, a philosophy that emphasizes maintaining harmony in interpersonal relationships between father and son, husband and wife, and among friends. In Chinese society discipline is related to ranking, power and authority. A family unit is based on a vertical structure. The seniors (grandparents or parents and rulers) are supposed to show kindness and benevolence to the juniors (sons and daughters) who are at the bottom of the ranking system, who in turn, are expected to be loyal, obedient, and submit to the rules of filial piety (Hsaio et al., 2006). In Hofstede's (2001) data, this is reflected in a cross-national positive correlation between collectivism and power distance. Failure for a Chinese person to perform according to the rules of harmony and obedience within an interpersonal network, which could possibly be caused by mental health problem, may be viewed as a distinctive feature of a person's 'oddness' or 'abnormality'. Shame and guilt follow due to a negative self image of oneself and failure to fulfill obligations as prescribed by Confucianism which regulates Chinese interpersonal dynamics (Hsaio et al., 2006). When such social fabrics break down due to having a mentally ill relative, there are attempts to conceal the ill relative from others for fear of public shame and marginalisation (Lee et al., 2005). A Chinese family will manage the mentally ill member at home to avoid social rejection and shame. (Lin, 1983). Trusted outsiders, like friends or elders may also provide help in the community, inviting religious healers when the former fail to effectively treat the sick. There is a

preference for a medically qualified specialist to be sought for advice only on an out-patient basis (Lin, 1983). Finally, hospital treatment may be accepted when there is little hope for recovery and the family declare that they 'give up' and attribute the situation to "fate" (Lin, 1983). Abandoning an unmarried relative with mental illness (e.g., schizophrenia) when unable to cope with extra burden of care may be 'necessary' as a means for social survival of other family members (Lee et al., 2005). This is particularly distressing as in Chinese culture, family members are supposed to look after their ill relatives (Chiu & Chan, 2007). Wong (2007) commented that seeking extrafamilial pathway to care (e.g., professional help after exhausting intrafamilial process) among Chinese caregivers who had mentally ill relatives in Hong Kong might be related to 'face saving' associated with stigma (see also Discussion).

2.8.4 Anglo Culture and Stigma on Mental Illness

Stigma, in an individualist culture is bound to the individual; that is, the individual is seen as agency or causal factor of the disorder (Kirmayer, 1989). Accordingly a condition, such as alcoholism or mental illness is said to be linked with one's personal morality through 'bad habits', his/her lifestyle or weakness in the face of stress. Therefore, stigma affects mainly the individual, and less so on others (Lin, 1983; Kirmayer, 1989). Since individualism emphasises independence, each person is viewed as responsible for his/her own actions and mental illness may not be viewed as a concern to others when a person fails to establish interpersonal harmony in a social unit. In terms of stigma, the public in some individualistic nations such as the USA and the United Kingdom report a reluctance to discuss mental disorder with relatives and self-initiated and managed self-help was rated top of the list in Australia and the United Kingdom (Jorm, 2000). In addition, advances in biomedicine to diagnose and treat deviant behaviour and experience are thought to be free from socio-moral implications (Lin, 1983; Kirmayer, 1989), a factor which also contributes to viewing mental illness as caused by biological or bio-chemical factors and not due to 'bad parenting' (Wahl & Harman, 1989) or other social interactions that may attract social network and personal

blame. That is, beliefs in biological causes take away the blame from the individual and importantly dislocate illness from the social system.

2.9 SUMMARY

A literature review on public and professional perception of stigma, family views and first person accounts on stigma across cultures suggests that contact, and knowledge can influence individual perceptions of stigma. Increased contact with the mentally ill and for professionals and students, increased knowledge on mental illness (particularly via professional training) generally improved attitudes. 'Culture' may have been a hidden variable in assessing stigma in the few articles dealing with national comparisons and contrasts of ethno-cultural groups. Chinese people (of collectivist culture) having mental illness appear to be more stigmatized than Anglo people (of individualist culture), probably due to differing philosophical views in interpersonal relationship establishment and cultural knowledge about mental illness. Psychiatric stigma is a widespread phenomenon internationally and in view of the literature, the present study is designed to elucidate the relationships between culture, stigma and contact.

2.10 THE PRESENT STUDY

This study is guided by three main results from the literature. First, the literature suggests contact with people having a mental illness should be associated with more moderate attitudes towards them. The present study compares psychiatric and general nurses on their general attitudes towards the mentally ill using two measures of general stigma derived in the course of the study. One focuses on social distancing and alienation of the mentally ill and the other on negative stereotyping. Psychiatric nurses by virtue of their experience and perhaps specialty choice should endorse more contact and less stigma relative to general nurses.

Second, it is assumed in the literature that general stigma translates to practice stigma as represented by approaches to clinical care of people having mental illness. However,

apart from Brinn's (2000) and Ellsworth's (1965) studies, this assumption has not been extensively tested. In the present study the Nursing Relationship Scale (NRS) is developed to be able to compare relative nursing care approaches endorsed for a case with mental illness versus a case with diabetes. The former case is expected to attract more negative and less positive practice approach ratings (although as expressed in the Discussion what constitutes positive and negative is open to interpretation).

Third, there is suggestion in the literature that stigma attached to mental illness may be subject to cultural variation. However, the relationship between culture and stigma is poorly understood. Several studies and commentaries suggest that stigma is more severe in Asian, and particularly, in Chinese, than Western samples. In the present study, Chinese and Anglo-Australian nurses are compared on general and practice stigma measures. Given the possibility of acculturation among the Chinese, the study also explores whether this group differs from Anglo-Australians on indicators of collectivist and individualist values endorsement. If the expectation that differences in values is borne out by the results, then any attributions of stigma endorsement differences between ethnic group are due to 'culture' would be strengthened.

Lastly, it was expected that within the Chinese group, if 'culture' underpins differences in stigma endorsement, then there would be an association between cultural values endorsement and measures of general and practice stigma. Thus, the following hypotheses were tested in the course of the analyses of the data:

1. Psychiatric nurses by virtue of the specialty choice and greater experience with mentally ill patients will,
   (a) endorse greater level of contact with mentally ill people
   (b) endorse lower level of general stigma
   (c) endorse more positive and less negative approaches to clinical care of a patient with mental illness.
2. The expected differences between nurse types in general (2a) and practice (2b) stigma will be eliminated once confounders (background characteristics and contact) are statistically controlled.

3. Endorsement of contact with mentally ill people will be associated with lower endorsement of,
   (a) general stigma towards the mentally ill, and ,
   (b) more positive and less negative clinical practice approaches (practice stigma).
4. Chinese nurses compared with Anglo-Australian nurses will endorse more highly collectivist values and more lowly individualistic values (but this may vary dependent on acculturation).
5. Chinese group membership (versus Anglo-Australian) will be related to higher ratings of general stigma towards the mentally ill, particularly once confounders are statistically controlled.
6. Chinese group membership (versus Anglo-Australian) will be associated with less positive and more negative clinical practice approaches for the case with mental illness relative to a case with diabetes.
7. If Chinese group membership is related to general and practice stigma), higher endorsement of Chinese values and lower endorsement of individualist values, within the Chinese group will be related to,
   (a) higher endorsement of general stigma
   (b) lower endorsement of positive and higher endorsement of negative clinical practice approaches to the case of mental illness relative to a case with diabetes.

The next chapter focuses on describing the details of design of the study

CHAPTER THREE

RESEARCH DESIGN

3.1 METHODS

3.1.1 Subjects

There were 208 participants in the study. They were 84 Chinese subjects (49 psychiatric and 35 general nurses) and 124 Anglo subjects (83 psychiatric and 41 general nurses). Classification of nurses as psychiatric was on the basis that the nurse completed at least one year of nursing in mental health setting.

Nurses were included if they were Registered nurses (Division one, two and three and those with extra qualifications such as midwifery and for working with the intellectually disabled; post-graduation in Nurse Education, Master and PhD degrees) practising in general, psychiatry, midwifery, community and aged care settings. Age range for inclusion was from 20 to 65 years as 20 years of age is the youngest age that one can practise as a qualified nurse in Australia and 65 years is regarded as the retirement age. Chinese nurses were included if they were born in a Chinese culture country or/and if they self-identified as Chinese. Similarly Anglo nurses were included if they were born in an English speaking country or/and self-identified as Anglo background.

Nurses who practised long term in Operating Theatres, Special Baby Care Units and in Paediatrics were excluded in the study due to their appreciably different specialist role from the intended samples. Further details of the sample are described in the Results Section.

3.1.2 Questionnaire

The questionnaire is presented in Appendix 1. The front page of the questionnaire contained a short description of the research, the conditions of participation, and response instructions.

The first section of the questionnaire (Section A) contained questions concerning demographic details, such as age, sex, country of birth and year of arrival in Australia if not born in Australia, parental birthplace, participants' nominated ethnic background, nursing qualifications, general and psychiatric nursing experience (measured as number of years working in each of these settings), the nurses' current position and chosen speciality, current work setting (general or mental health). This was followed by an assessment of participants' group affiliation/identification with either the Chinese or Anglo culture (for immigrant nurses only). Section B consisted of 21 items asking the nurses to identify different types and level of contact through their encounters with patients, relatives or colleagues who have a mental illness. The source of 'contact' items were derived from an unpublished study by Yamamoto, Klimidis and Minas. This section explored nurses' contact with the mentally ill, such as having 'a long talk', 'brief conversation', 'home visit', 'going to the cinema' among other items. Contact events could also be adverse events such as having to apply 'physical restraints' and 'seclusion' which could occur in their work situation such as in a high dependency unit in an acute mental health setting. This section also measured the nurse's contact with a relative or friend with a mental illness. A score of '1' represented never had contact, '2' for a few times of contact and '3' for many times via each particular means of contact.

Section C contained questions about the nurses' personal attitudes towards undesirable personal attributes and behaviours in general, and later in the questionnaire (Section F), the extent to which these attributes were ascribed by the respondent to people with a 'mental illness'. Each section (C and F) contained 16 attributes such as 'aggressiveness', 'incoherence', 'unmotivated', 'apathy', 'manipulative', 'hostile', 'avoidant', 'suspicious', 'insensitive', and 'unco-operative'. These items were conceived as part of a means of measuring general stigma (viz, negative stereotyping) towards patients with a mental illness. In Section C, there were four 'dislike' responses for each item. A score of '1' represented 'not at all', '2' represented dislike 'a little', '3' represented 'dislike much'. and '4' represented 'dislike very much' for a particular behaviour or attribute. For the attribution score (to people with mental illness) in Section F, each question was responded on the following response scale: '1' for 'not at all', '2' for 'a little', '3' for

'much' and '4' for 'very much' to the question of "To what extent do you think the following attributes describe with people with severe mental disorders?". The product of level of dislike and level of attribution to mentally ill patients was averaged over all items to represent the 'stigma' (DISL) score, referred to as negative stereotyping.

Two hypothetical cases, were presented as vignettes in Sections D and E, of a Mr. Jones with diabetes, and a Mr. Smith with a mental illness, respectively. The use of vignettes in research on attitudes, and more broadly in exploring illness concepts, has a long history (e.g., Phillips, 1963; Gagan, 2000). Following each vignette, 34 items measured aspects of the nurse-patient interaction and approaches to care. A literature review failed to find an appropriate measure to describe nursing approaches. Consequently, items were derived from the researcher's experience as a psychiatric nurse, and by adaptation of nursing practices scales reported in a thesis by Caris-Verhallen (1999). Item construction took into account general and psychiatric settings, the latter of which might involve more restrictive or controlling approaches in relation to the patient's behaviour (e.g., *If Mr. Jones/Smith refuses medication I would try to enforce 'doctor's orders'*). The overall content of this section of the questionnaire included encouragement of communication (e.g., *I would make an effort to encourage Mr. Jones/Smith to talk about his problems or illness*), information provision (e.g., *I would take care, more than usual, to provide Mr. Jones/Smith with an explanation about a treatment or a nursing action*), concern about patient's behaviour (e.g., *I would worry, a little more so than usual, that Mr. Jones/Smith may become aggressive in the ward*), perceived difficulty in patient management (e.g., *I would expect that M.r Jones/Smith would be a more demanding patient than most*), behavioural avoidance (e.g., *I would be more reluctant than usual to persist with an issue that Mr. Jones/Smith does not want to discuss*), emotional avoidance (e.g., *I would feel a 'barrier' between me and Mr. Jones/Smith, more so than with other patients*), and behaviours regarding caregivers (e.g., *Compared with other patients, I would be very supportive to the caregivers of Mr. Jones/Smith*).

The nursing approaches items were designed to be able to compare nursing practice attitudes for the mental illness versus the diabetes vignette. A number of items were negatively worded (e.g., *Working with Mr. Jones/Smith would be monotonous and too routine* versus *Looking after Mr. Jones/Smith would be a challenge that I look forward to*) to reduce temptation for random responding. Responses were on a five-point bi-directional scale with a score representation of '1' for 'disagree', '2' for 'tend to disagree', '3' for 'neither', '4' for 'tend to agree' and '5' for 'agree' regarding each nursing approach item. As evident in the examples, many items took into account the schema held in relation to patients in general, using terminology such as '*than other patients in the ward'*, '*compared with other patients'* and '*more so than usual'* in order to contrast the reactions in relation to the patient who is being rated. Hence, most of the items measure what special efforts, attitudes and actions might be expressed in relation to the patient being rated. In addition, care was taken in constructing items, particularly those measuring undesirable characteristics, so that they were not too extremely worded. For example, the item '*I would not trust that Mr. Jones/Smith could contribute to his care plan'* was changed to '*I would have some doubt that Mr. Jones/Smith can contribute significantly to his care plan'*. This was undertaken to reduce the impact of social desirability that would likely result in the reduction in item variance by skewing responses towards one end of the scale.

Section G consisted of 10 questions, reduced from the Opinion on Mental Illness Scale (OMI) developed by Cohen and Struening (1962) to measure social distancing and alienation of those with mental illness. The OMI Scale has been widely used to measure attitudes by a variety of professional and community groups (Cohen & Struening, 1962; Levine, 1972; Olade, 1979, 1983; Kirby & James, 1979; Napoletano, 1981; Keane, 1991). Rabkin (1972) comments that the OMI Scale is the most reliable and valid instrument to measure opinions on mental illness and about the mentally ill. For the present study, items included '*mental patients should be kept behind locked doors'* and '*a foolish woman would marry a man with mental illness'*, among others (Cohen & Struening, 1962, 1965; Alexander & Link, 2003; Lauber et al., 2004). Because the target of this evaluation is 'mentally ill people', the factor measured (along with the

negative stereotyping measure) is referred to as 'general stigma', differentiating it from 'practice stigma' as measured by the Nursing Relationship Scale (NRS) (as to be seen later).

Section H consisted of 21 items describing individualist and collectivist values. Some items were adapted from the Individualism-Collectivism Scale (INDCOL) (Triandis, McCusker & Hui, 1990) while others were developed from Hsiao's (2002) thesis and by the researcher's own knowledge to reflect Chinese cultural values. This section included items such as '*the only person you can count on is yourself*' and '*my parents' opinions are not important in my choice of spouse or career'* reflecting individualism, and, items '*in all circumstances children should respect their parents and elders'* and '*it is important not to do bad deeds to avoid bringing guilt and disgrace to the family'* reflecting collectivism. Responses were on a 5-point scale: '1' for 'disagree', '2' for 'tend to disagree', '3' for 'neither', '4' for 'tend to agree' and '5' for 'agree'.

The last section of the questionnaire (Section I) contained six questions designed by Klimidis and used in various studies (Rosenthal, Ranteri & Klimidis, 1996; Kiropoulos, Klimidis & Minas, 2004; Klimidis, Hsiao & Minas, 2007). The questions '*How "Australian" do you feel yourself to be'*, '*How important is "being Australian" to you*?' and '*To what extent have you adopted "Australian" ways of doing things*?' were intended to reflect participants' subjective affiliation with Australian culture. The questions '*How much do you feel yourself to be of your parents' culture?'*, '*How important is it to you to be of your parents' culture? '* and '*To what extent do you maintain the traditions of your parents' culture?*' were asked to capture participants' affiliation with their origin culture. This section was meant only for immigrant nurses to complete. The response scales were: '1' for 'not at all', '2' for 'a little, '3' for 'much' and '4' for 'very much'.

Questionnaires were administered in English given that the Chinese sample was practicing in Australia and expected to have little difficulties with this language. Prior to

the key analyses, scales were examined for their psychometric properties and further refined and these findings are reported in the Results Section.

3.2 PROCEDURE

Participants were recruited through friendship networks using the snowballing referral method beginning with a group known to the researcher via her professional contacts as a nurse. This was considered the most efficient approach for attempting to develop samples of Chinese nurses, in particular, and for identifying those with a mental health background. To avert bias in snowballing an initial large pool of nurses (n=20) working in different institutions was identified to be asked to participate in the study and to provide access to other nurses.

After explanation of the study, an initial group of 20 nurses indicated an interest in participating and introduced the researcher to other potential participants for the study. Nurses in the initial pool known to the researcher were asked to talk with other potential participants and ask permission for the researcher to approach them to introduce the study formally. Those nurses who expressed an interest in participating were invited to meet with the researcher for the purpose of further explanation of the nature, purpose and procedures of the study. Noticeably, the Anglo-Australian group generally showed more interest in participating than the Chinese group. A Plain Language Statement (PLS) attached with a Consent Form (Appendix 2) were given to potential participants inviting them to participate. The PLS informed participants of their voluntary participation, anonymity and confidentiality issues regarding participation. All participants gave written consent. The study was approved by the University of Melbourne Human Research Ethics Committee (See Appendix 3). The response rate is discussed in the Results Section. Further details of the sample and analyses are described in the next chapter where results of current study are provided. SPSS 11.0 was used for the statistical analyses. Analyses are described in the relevant sections.

CHAPTER FOUR

RESULTS

4.1 INTRODUCTION

This chapter provides details of the results of this study including the response rate, sample background, and sample characteristics according to the key content variables. For the main variables of the study, the description progresses from the development of scales and psychometric refinement, to basic univariate descriptions of general group trends and to exploring the hypotheses under study.

4.1.1 Response Rate

Three hundred and forty seven (347) questionnaires were distributed either in person or by mail after initial contact with the prospective participants by the researcher. A number of nurses not of the targeted cultural backgrounds were keenly interested in the study and asked to complete a questionnaire. Two hundred and twenty four were returned (response rate of 64%) but 16 of these were not included in the analysis because they came from an ethnic background not targeted for the study (Italy, Greece, Philippines, and Africa). So, 208 subjects out of the 331 relevant participants returned the questionnaires giving a 63% response rate (208/331 $\times$100).

4.1.2 Demographic Characteristics

From the sample of 208, 91 (43.8%) were local Anglo nurses, 33 (15.9%) Anglo immigrant nurses, and all the 84 (40.4%). Chinese were immigrant nurses. Subjects were aged between 21 and 65 years. Participants were either currently practising in general or mental health nursing (Table 4.1).

Table 4.1: Characteristics of the Sample (N = 208)

	Chinese Psychiatry (n=49)	Chinese General (n=35)	Anglo Psychiatry (n=83)	Anglo General (n=41)	χ^2/F value
Age [#](mean, s.d.)	50.3 (5.8)	47.9 (6.0)	43.1(9.6)	39.5 (11.6)	13.2*** F(1,197)
Sex (male/female)	25/24	1/34	31/52	3/38	35.4***
Qualification (%)					
Div. 1	51.0	91.4	44.6	80.5	31.6***
Div. 2	8.2	2.9	28.9	12.2	17.2**
Div. 3	73.5	0	49.4	0	78.0***
R. Midwife	8.2	37.1	4.8	19.5	23.9***
G. Certificate	6.1	11.4	8.4	22	6.7ns
G. Diploma	18.4	11.4	16.9	14.6	0.9ns
Bachelor	18.4	25.7	21.7	26.8	1.2ns
Master	2.0	5.7	4.8	2.4	1.2ns
Psy. training(%)	95.9	28.6	90.4	61.0	67.3***
Course	80.9	90.0	84.0	100	5.5ns
In-service	6.4	0	12.0	0	5.0ns
Others	12.8	10.0	6.7	0	3.9ns
Current Work Environment (%)					135***
General	18.4	100	12.0	95.1	
Mental	81.6	0	88.0	4.9	
Current Position (%)					
NUM	2.0	2.9	4.8	7.3	1.7ns
CNS	18.4	20.0	6.0	2.4	11.1*
CN	14.3	2.9	18.1	2.4	9.7*
Midwife	4.1	14.3	1.2	9.8	9.3*
ACN	28.6	14.3	24.1	19.5	2.7ns
Direct Care	34.7	42.9	44.6	43.9	1.5ns
Agency	2.0	8.6	0	4.9	7.2ns
Others[1]	0	0	0	4.9	8.2*
[2]	0	5.7	3.6	2.4	2.6ns
[3]	2.0	0	1.2	2.4	0.9ns
Years in Mental Health Nursing (mean, s.d.)					F(1,200)
	19.5 (10.4)	0.03 (0.1)	12.9 (9.2)	0.07 (0.2)	68.8***
Years in General Nursing (mean, s.d.)					F(1,204)
	7.7 (10.5)	23.1 (9.0)	6.1 (9.3)	15.6 (12.5)	27.3***

Manager (NUM), Clinical Specialist (CNS), Community Nurse (CN), Associate Charge Nurse (ACN), Direct Care Worker and Agency, Others [1]Director of Nursing (DON), [2] Nurse Educator, [3] Supervisor
7 missing cases are excluded from the analysis. *p<.05, **p<.01, ***p<.001; ns, not significant.
For all χ^2 analyses, df=3.

As shown in Table 4.1, the mean age differed across combinations of nurse type and ethnicity. Two-way analysis of variance (ANOVA) indicated significant main effect of ethnicity ($F(1, 197) = 34.93$, $p<.001$) and nurse type ($F(1, 197) = 5.25$, $p<.05$). The interaction term was not significant ($F(1,197)=.18$, $p>.05$). Inspection of mean age revealed that the psychiatric nurses were generally older than the general nurses, and the Chinese group was also older than Anglo group. The mean age of the sample is comparable with data provided by the Nurse Work Force Planning (Auditor General Victoria, 2002) indicating that in 2001, 40-44 year range was the largest group of Division Two nurses and that there were more aged 40 plus years Division One nurses. However, the figure given by the Nurses Board of Victoria (NBV) (2005) in its recent publication (Nexus) indicated that most nurses (58.3%) fall into the 36 to 55 years age group, compared with the age group (71.6%) in the present sample, this difference achieving statistical significance ($\chi^2(2) = 14.80$, $p<.001$). The difference may be due to the fact that nurses in the sample include greater contribution to the mean by psychiatric nurses and Chinese immigrants who may be older generally than the overall nurse population represented in the NBV statistics.

The sample was biased towards females (148 / 71.2%) compared with males (60 / 28.8%). This pattern may reflect gender biases in the profession, especially in general nursing where there were only three Anglo males and one Chinese male. Published statistics (in Nexus) by the NBV (2005) indicate that the number of registrations of female nurses (72,018) far outweighs that of male nurses (6,730), consistent with, but more biased than the present sample.

4.1.3 Country of Birth of Subjects

Within the Chinese group, 61 (72.9%) were born in Malaysia, 12 (14.3%) in Hong Kong, five (6%) in Singapore and three (3.6%) in Vietnam. Within the Anglo group of nurses, 91 (73.4%) were born in Australia, 21 (16.9%) in Britain, seven (5.6%) in New Zealand, and one was born in each of the following countries: Germany, South Africa, Canada, Italy and Brazil, each accounting for 0.8%.

4.1.4 Time of Arrival in Australia

Most of the immigrant nurses arrived in Australia between the period 1980-1989. Table 4.2 shows the trend of their arrival. The Anglo group (mean=1977.21, s.d.=14.12) generally arrived in Australia earlier than the Chinese group (mean=1982.68, s.d.=6.16).

Table 4.2 Number of Immigrant Nurses and Period of Arrival in Australia

Period of Arrival	Chinese Nurses frequency (%)	Anglo Nurses frequency (%)
1950-1959	0 (0.0%)	4 (12.1%)
1960-1969	2 (2.4%)	6 (18.2%)
1970-1979	29 (34.5%)	7 (21.1%)
1980-1989	46 (54.8%)	9 (27.3%)
1990-1999	4 (7.1%)	4 (18.2%)
2000-2002	1 (1.2%)	1 (3.0%)

4.1.5 Nominated Ethnic Background

When asked about their own nomination of ethnic background, in the Chinese group, 81 (96.4%) nominated as Chinese, two (2.4%) as Chinese Malaysian and one (1.2%) as of Hong Kong identity. In the Anglo group, 80 (64.5%) nominated themselves as Australian, 38 (30.6%) nominated as British, five (4.0%) as New Zealand, and one (0.8%) as Canadian.

4.1.6 Parental Country of Birth

With respect to the parents' country of birth, the Anglo group reporting having Australian parents was 76 (36.5%%), 34 (16.3%) reported as having mothers born in Britain, and 32 (15.4%) as having fathers born in Britain. Eight subjects (3.8%) reported having fathers and seven (3.4%) having mothers born in New Zealand. Only

one Anglo subject (0.5%) reported having father and two subjects (1.0%) reported having mothers born in Germany. Only two subjects (1.0%) have father, and one subject (0.5%) has mother born in Canada. Among the Anglo subjects, only one person (0.5%) reported having both parents born in Italy, Holland and Ukraine respectively, one subject reported having father born in Czechoslovakia and in China respectively and one subject having mother born in India, each accounting for 0.5%. In the Chinese group, 44 subjects (21.6%) reported having father born in China, 36 (17.3%) in Malaysia, two in Hong Kong and Singapore, each accounting for 1.0% respectively. Thirty seven subjects (17.8%) reported having mothers born in China, 41 (19.7%) in Malaysia, three (1.4%) in Singapore, two (1.0%) in Hong Kong and one (0.5%) in Vietnam.

4.1.7 Interim Summary – demographic details

The above demographic data clearly showed that the Chinese group had a strong ethnic Chinese heritage and origin, with Malaysia as their prominent country of birth as well as their parents, and that China was also a prominent birth country of their parents. The Anglo group was strongly constituted by British and Australian heritage. The results also indicated that the Chinese group was generally older than the Anglo group, and over 60% of them arrived in Australia since 1980.

4.1.8 Qualifications

As indicated in Table 4.1, the Anglo group had more Division 2 nurses [1] than the Chinese group. This was higher for psychiatric nurses than general nurses in both ethnic groups, which was statistically significant. Other registered nurses were those who held the qualifications of Division 1 [2] and 3 [3]. Examination of the results revealed that there

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1 Division 2 are State Enrolled Nurses
2 Division 1 are Registered General Nurses
3 Division 3 are Registered Psychiatric Nurses

were more Chinese nurses with Division 1 qualification than the Anglo group, which was statistically significant. This was also true when comparing nurses with Division 3 qualifications, which was statistically significant. Similar results applied to nurses with midwifery qualifications in both groups. Proportions of nurses who held additional qualifications were not different across ethnic groups with respect to the following: Graduate Certificate, Graduate Diploma, Bachelor, Master, and PhD. There were eight nurses with a Masters and only one Chinese general nurse with a PhD degree.

4.1.9 Psychiatric Training

With regards to whether or not the nurses had received psychiatric training, the results indicated that a large number (over 90%) of psychiatric nurses in the sample had psychiatric training. As indicated in Table 4.1, a smaller number of general nurses than psychiatric nurses, and a smaller number of Chinese General nurses than Anglo nurses, had psychiatric training. This difference was statistically significant. Though the majority of nurses underwent nursing training through a course of study, ranging between 80% to 100%, when comparing the sources of training there were no significant differences in relation to training course, in-service training or other forms of experience.

4.1.10 Current Work Environment

The sample also showed that the majority of psychiatric and general nurses worked currently in their choice of specialty as indicated in Table 4.1. This result was statistically significant. All of the Chinese general nurses (100%) and 95% of Anglo general nurses worked in general health setting, whereas 81.6% of Chinese psychiatric nurses and 88 % of Anglo psychiatric nurses currently worked in mental health.

4.1.11 Current Position

With respect to the nurses' current positions, the majority of the nurses in the sample worked as direct care workers which was not significant statistically across nurse type

and ethnicity. Second to this category, they held positions as Associate Charge Nurse (ACN), Community Nurse (CN) and Clinical Nurse Specialist (CNS).

There were no differences across nurse type and ethnicity regarding the pattern of ACN. There were more Anglo psychiatric nurses working as CN than Chinese psychiatric nurses and more Chinese nurses holding the positions of CNS which was statistically significant. The number of nurses holding the position of Midwife was almost double in the Chinese group (18.4%) than in the Anglo group (11%) which was statistically significant. A minority of nurses held higher position such as Nurse Unit Manager, and others such as, Educator, and Supervisor which indicated no significant variation, with the exception of Anglo general nurses (4.9%) holding the position of Director of Nursing. Only a very small number of nurses worked as Agency nurses [1] which was not statistically significant between groups.

4.1.12 Years in Mental Health Nursing

The overall mean for the number of years working in mental health nursing was 9.84 (s.d.=10.97). A two-way analysis of variance (ANOVA) indicated a significant main effect of nurse type ($F(1,200) = 199.37$, $p<.001$) as expected under the definition of psychiatric nurses versus general nurses in this study. Inspection of the mean scores indicated that psychiatric nurses (mean=15.42, s.d.= 10.16) had higher mean years in mental health nursing than general nurses (mean=.05, s.d.= .13). The main effect of ethnicity was also significant ($F(1,200) = 7.99$, $p<.01$). The mean number of years in mental health nursing was higher in Chinese nurses (mean=11.51, s.d.= 12.47) than in

[1] Agency nurses are employed by a private company and hired in temporary assignment in public or other health care settings

Anglo nurses (mean=8.70, s.d.= 9.70). In addition, the interaction effect was significant ($F(1,200 = 8.16, p<.01$), indicating that the mean number of years in mental health nursing varied according to both nurse type and ethnicity, as indicated in Table 4.1. A plot of the interaction suggested that Anglo and Chinese general nurses had a similar low level of experience, and Anglo and Chinese psychiatric nurses differed substantially (see Table 4.1), favouring a higher number of years for the Chinese.

4.1.13 Years in General Nursing

For the overall sample the mean for number of years of working in general nursing settings was 11.2 (s.d.= 12.01). Analysis of variance (ANOVA) indicated a significant main effect of nurse type ($F(1, 204) = 69.44, p<.001$). General nurses (mean=19.05, s.d.=11.58) had higher mean years in general nursing than psychiatric nurses (means=6.68, s.d.=9.74). The main effect of ethnicity was also significant ($F(1, 204) = 9.63, p<.0.01$). The mean number of years as general nurses was higher in Chinese nurses (mean=14.16, s.d.=12.43) than in Anglo nurses (mean=9.20, s.d.=11.34). The interaction effect was also significant ($F(1, 204) = 3.92, p<05$), indicating that the mean number of years in general nursing differed according to nurse type and ethnicity. A plot of the interaction showed that Anglo psychiatric nurses had a similar level of experience with the Chinese psychiatric nurses, but there was a difference between Anglo and Chinese general nurses, with the latter having more general nursing experience.

4.1.14 Interim Summary – work related experience

Analysis of work-related characteristics showed that majority of nurses obtained their qualifications through a course of study and worked as direct care workers in their specialist area of either mental or general health setting. There were very few nurses with higher degrees such as Masters. Those nurses who worked in management and education were mainly in the Anglo group. Chinese nurses had more years of experience working in mental and general health settings than Anglo nurses, and

particularly Chinese psychiatric nurses more mental health experience than their Anglo counterparts.

4.2 SCALE DEVELOPMENT AND SAMPLE GROUP COMPARISONS

The following section deals with sample characteristics according to key content variables. For each section of the questionnaire psychometric properties are examined, and where relevant, subscales are developed. This is followed by comparative analyses between the four groups of nurses on derived variables, referred to later in the text as the 'Simple Model', connoting that any covariates are not taken into account in the analyses.

4.2.1 Scale Development: Contact with Psychiatric Patients (CPP)

A principal components (PCA) analysis was conducted on the items from the CPP to identify items that may be possibly combined into subscales. Table 4.3 indicates the final solution showing the pattern matrix (oblique rotation). Factor selection was aided by use of the scree test and in consideration of the Kaiser criterion of eigenvalues greater than or equal to one. Four factors were identified and one item was removed from the final solution due to its low correlation with any of the four factors. The four dimensional solution accounted for 67.3 percent of the variance in the items.

Treating each of the factors as scales, reliability analysis revealed relatively good internal consistency among scale items. Alpha coefficients are summarised in Table 4.3.

Table 4.3: Pattern Matrix for the CPP Scale.

Item	F1	F2	F3	F4	Communality
QB2 discuss their life	**.91**	.15	.03	-.14	.84
QB1 long talk	**.90**	.16	.07	-.17	.81
QB5 brief conversations	**.88**	.15	.10	-.13	.80
QB8 try to help them	**.81**	.09	.11	.04	.76
QB19 seclude a patient	**.79**	-.12	-.04	.24	.80
QB4 high dependency	**.79**	-.91	.02	.20	.75
QB16 verbal abuse	**.78**	-.10	.05	.15	.70
QB7 physical restraint	**.77**	-.08	-.04	.23	.75
QB13 physical violence	**.59**	-.12	-.05	.24	.49
QB6 meal with	**.55**	**.35**	-.02	.13	.61
QB9 they help me	-03	**.78**	-.15	.06	.60
QB3 discuss my life	.15	**.76**	-.10	-.09	.63
QB17 they visit me	-.32	**.53**	**.30**	**.38**	.58
QB10 colleague suffers	**.41**	**.52**	-.08	.10	.59
QB21 friend suffers	.11	**.49**	.30	-.05	.43
QB20 distant relative suffers	.10	-.12	**.82**	-.12	.65
QB18 close relative suffers	.01	.00	**.80**	.13	.69
QB15 taken them cinema	.22	.02	.02	**.67**	.62
QB14 driven someone	**.44**	.00	-.06	**.60**	.76
QB12 visit someone	.29	.17	.03	**.58**	.65
Percent variance	44.8	10.9	6.5	5.2	Total variance= 67.3
Cronbach's alpha	.94	.73	.55	.81	.

The first factor was labelled Contact Through Work Situation (CWS) as items included situations such as 'secluding a person with a mental illness', use of 'physical restraint' among other situations and activities that can be considered to occur in patient contact within an acute psychiatric environment. Factor 2 identifies items relating to close contact where the nurse is receiving support or allows interaction in relation to the nurse's private life from a person with a mental illness. Two items suggest that the 'patient' may be a colleague or friend. This factor was labelled Patient Helps Nurse (PHN). The third factor, comprised of only two items, indicates whether the nurse has a relative with a mental illness, labelled Relative with Mental Illness (RMI). The last factor, composed of three items, relates to contact with a person with a mental illness outside of the work environment reflecting some level of socialization, labelled External Socialization with Patient (ESP).

It was originally thought that positive and negative encounters may also be a useful distinction (in view of Yamamoto et al's, 1996 delineation of unpleasant contact), however, in this analysis positive and negative contact experience seem to be related to the same factor (Factor 1).

4.2.2 Group Contrasts of Contact with Psychiatric Patients Scores

Two way analysis of variance was used to examine differences in the contact scales between nurse type and ethnic groups (2 nurse types X 2 ethnic groups). The first analysis focused on examining Contact Through Work Situation (CWS) scores. The main effect of nurse type was significant ($F(1,204)= 571.39$, $p < .001$) as was the main effect of ethnicity ($F(1,204)= 14.11$, $p < .001$). Inspection of the means indicated that psychiatric nurses (mean= 2.73, s.d.=.26), as might be expected, endorsed higher contact levels than general nurses (mean=1.69, s.d.=.39) on this variable. Additionally, Chinese nurses (mean=2.22 , s.d.=.66) reported lower overall contact with psychiatric patients according to this scale than Anglo nurses (mean=2.44, s.d.=.52). Furthermore, the interaction term was significant ($F(1,204)=11.86$, $p < .01$) indicating that contact level differed across nurse types and ethnic groups. Inspection of the plot of the interaction indicated that while there were little differences between psychiatric nurses from Chinese and Anglo backgrounds in their responses (despite their former greater mental health work experience shown earlier), Chinese general nurses reported lower contact than Anglo general nurses.

The second analysis focused on examining Patient Helps Nurse (PHN) scores. The main effect of nurse type was significant ($F(1,204)=25.56$, $p<.001$) as was the main effect of ethnicity ($F(1,204)=5.06$, $p<.05$). The interaction effect was not significant (($F(1,204)=<1$). Inspection of the means indicated that psychiatric nurses (mean= 1.63, s.d.=.36) endorsed more support to themselves from someone with a mental illness than general nurses (mean= 1.35, s.d.=.37). Anglo nurses (mean= 1.59, s.d.=.40) generally reported higher level of such contact than Chinese nurses (mean= 1.45, s.d.=.36).

The third analysis examined Relative with Mental Illness (RMI) scores. The main effect of ethnicity was significant ($F(1,204)=4.94$, $p<.05$). The main effect of nurse type was not significant ($F(1,204)=1.72$, $p>.05$). Anglo nurses (mean= 1.50, s.d.=.47) reported higher overall contact with psychiatric patients according to this scale than Chinese nurses (mean=1.34, s.d.=.44). The interaction effect was not significant ($F(1,204)=<1$).

In relation to External Socialisation with Patient (ESP) scores, the main effect of nurse type was significant ($F(1,204)=154.09$, $p<.001$) but the main effect of ethnicity was not ($F(1,204)=<1$). The interaction term was not significant ($F(1,204)=<1$). Inspection of the means indicated that psychiatric nurses (mean=2.18, s.d.=.54) had higher such contact levels than general nurses (mean=1.29, s.d.=.38).

Results suggest that psychiatric than general nurses have experienced more formal and informal contact with people having a mental illness and they appear to have had greater experience of relationships where social competency is implicated on the part of the mentally ill. That is, they endorsed more support received from people with mental illness compared with general nurses. Similarly Anglo nurses appear to have had greater informal and 'competent-patient' exposure than Chinese nurses.

For the purpose of some further analyses below (Section 4.4.8), a single summation of the items was made deriving a score reflecting level and diversified contact with people having mental illness. The alpha coefficient for this was .93.

4.2.3 Scale Development: Cultural Affiliation Scale (CAS)

For the following analysis only overseas born subjects are included. That is, all Chinese nurses (n=84) and Anglo immigrant nurses (n=33). As before a PCA was conducted to examine the six items from the Cultural Affiliation Scale (CAS) to develop subscales. Table 4.4 indicates the final solution showing the pattern matrix (oblique rotation). All six items were retained due to their high correlation with the factors selected. Two factors were identified, aided by use of the scree test and in accord with the Kaiser

criterion. The final two dimensional solution accounted for 78.6% of the variance in the items.

Table 4.4: Pattern Matrix for the CAS Scale.

Item	F1	F2	Communality
QI1 feel Australian	**.90**	-.03	.81
QI4 being Australian important	**.89**	.07	.80
QI5 adopted Australian ways	**.88**	-.04	.77
QI3 maintain parents traditions	-.01	**.90**	.81
QI6 parents culture important	-.04	**.88**	.88
QI2 feel of parents country	.01	**.87**	.87
Percent variance	42.4	36.3	Total variance = 78.6
Cronbach's alpha	.87	.86	

The first factor was labelled Australian identification (AID) as items indicate nurses' subjective attachment to Australian culture. The second factor identified items relating to affiliation with their culture of origin (i.e., framed as parental culture). This factor was labelled origin culture identification (OCI). Treating each of the factors as scales, reliability analysis indicated relatively high internal consistency among scale items. Alpha coefficients are shown in Table 4.4.

4.2.4 Group Contrasts of Cultural Affiliation Scores

Two-way analysis of variance was conducted to examine differences between nurse type and ethnic groups (that is, considering immigrant Anglo and Chinese nurses). The first analysis focused on examining the Australian identification (AID) scores. The main effect was not significant for nurse type ($F(1,123=<1)$ or ethnicity ($F(1,123)=3.60$, $p>.05$). Inspection of the means indicated that Anglo nurses (mean=3.00, s.d.=.95) had a higher level of Australian identification than Chinese nurses (mean=2.74, s.d.=.72), but this was not significant ($F(1,123=3.60$, $p>.05$). The interaction term was not significant ($F(1,123)=<1$) suggesting that Australian identification did not vary across ethnic groups or nurse types. The overall mean score was 2.83 (s.d.=.81) indicating that

affiliation with Australian culture was between ‘a little’ and ‘much’ but favouring the latter response category.

The second analysis focused on origin culture identification (OCI) scores. The main effect of ethnicity was significant ($F(1,123)=8.10$, $p<.05$). The main effect of nurse type was not ($F(1,123)=2.93$, $p>.05$). Inspection of the means indicated that Chinese nurses (mean=2.84, s.d.=.68) identified more with their original culture than Anglo immigrant nurses (mean=2.46, s.d.=.75). The interaction term was not significant ($F(1,123)=<1$). For Anglo nurses their mean score implies a rating at the center of the scale between ‘a little’ and ‘much’. For Chinese nurses their affiliation with their culture of origin was more biased towards the latter category.

Overall results also suggest that Anglo immigrant nurses endorsed a stronger affiliation with Australian culture than their origin while Chinese nurses reported about equal affiliation with each. For the Chinese group a bi-cultural position appears apt, on the basis of these measures, although as to be reported later, this may not translate into the endorsement of expressed cultural values.

4.2.5 Scale Development: Cultural Values Scale (CVS)

A PCA analysis conducted on the items from the CVS resulted in the solution shown in Table 4.5. indicating the final pattern matrix. As above, factor selection was guided by use of the scree test and by adopting the Kaiser criterion. Rotation method was oblique to help interpret the factor loadings. Three factors were identified after dropping two items from the final solution due to their low loading with any of the factors. The three dimensional solution accounted for 43.4% of the variance in the items.

Table 4.5: Pattern Matrix for the CVS Scale.

Item	F1	F2	F3	Communality
QH14 eldest son inherits best portion	**.79**	-.10	.01	.45
QH20 should work without pay in family business	**.72**	-.09	-.18	
QH11 failure shames family	**.71**	.03	.10	.57
QH8 jealous ingroup do better than me	.**59**	.03	-.06	.35
QH15 husband breadwinner, decision maker	.**56**	-.03	.**37**	.55
QH16 young stay home until married	**.50**	-.03	.**39**	.50
QH7 be successful for family honour	.**46**	.25	.**39**	.57
QH9 rely only self	.18	**.71**	-.02	.58
QH21 do whats best regardless of family	-.17	.**70**	-.12	.50
QH3 resent privacy invasion by ingroup	-.08	.**55**	.22	.34
QH12 parent view unimportant career, marital	-.07	.**49**	-.**32**	.33
QH17 should live independent of others	.06	.**47**	.**31**	.40
QH5 prefer tackle problems alone	.**38**	.**44**	-.12	.38
QH13 young should respect parent view, life decision	.05	-.09	.**74**	.56
QH6 children should respect elders	.02	.09	.**70**	.51
QH19 best to rely on family when in trouble	.07	-.03	.**55**	.33
QH17 should live close to ingroup	-.16	-.10	.**45**	.20
QH8 avoid bad deeds to avoid disgrace	.29	.12	.**40**	.34
QH10 children should look after elderly parents	.07	.21	.**39**	.30
Percent variance	24.58	10.6	8.2	Total variance = 43.4
.Cronbach's alpha	.58	.54	.76	

The first factor was labelled Ingroup Interdependence (INT), comprised of seven items relating to cultural values such as 'children should respect elders', 'avoid doing bad deeds to prevent disgrace', and 'be successful for family honour'. The second factor was labelled Individualism (IND) as it contained six items relating to values such as 'relying on self', 'living independently of others', and 'parents' views are unimportant to an individual's making decisions in career choice and marriage. The third factor was termed Ingroup Role Concern (IRC), comprised of seven items relating to family integrity, such as 'whether or not the eldest son should claim the best portion of family inheritance', or 'one should work without pay in family business'. The first and third factors can be conceptualised as measures of collectivism. Treating each of the factors as subscales, reliability analysis indicated moderate internal consistency among scale items. Alpha coefficients are shown in Table 4.5.

.2.6 Group Contrasts of Cultural Values Scores

Two way analysis of variance was conducted to examine differences between nurse type and ethnic groups. The first analysis was directed to examining Ingroup Interdependence (INT) scores. The main effect of nurse type was not significant ($F(1,204)=1.02$, $p>.05$) but the main effect of ethnicity was significant ($F(1,204)=24.45$, $p<.001$). Chinese nurses (mean=2.02, s.d.=.74) endorsed ingroup interdependence more highly than Anglo nurses (mean=1.57, s.d.=.50). The interaction term was not significant ($F(1,204)=<1$). In fact, both groups tended to disagree on average with such items but disagreement was higher in the Anglo group.

Analysis of Individualism (IND) scores revealed no significant main effect of nurse type ($F(1,204)=2.22$, $p>.05$), or ethnicity ($F(1,204)=2.32$, $p>.05$). The interaction term was not significant ($F(1,204)= .06$, $p>.05$).

The third analysis examined Ingroup Role Concern (IRC) scores. The main effect of nurse type was not significant ($F(1,204)=1.14$, $p>.05$), but the main effect of ethnicity

was significant ($F(1,204)=52.93$, $p<.001$). Inspection of the means indicated that Chinese nurses (mean=3.84, s.d.=.65) ('tend to agree') had higher IRC scores than Anglo nurses (mean=3.11, s.d.=.65) ('neither agree or disagree'). The two-way interaction was not significant ($F(1,204)=1.22$, $p>.05$).

Results point to differences in collectivism but not individualism between ethnic groups. Table 4.6 indicates correlations between cultural affiliation and cultural values, suggesting that only collectivist values correlate with origin culture identification, prevalent in Chinese nurses, and particularly so regarding Ingroup Role Concern (IRC).

Table 4.6: Pearson Correlations between Cultural Affiliation and Cultural Values in Chinese Nurses (n=84)

	INT	IRC	IND
AID	.07ns	.10ns	.19ns
OCI	.19ns	.34**	.18ns

** p<.01, ns, not significant
INT=Ingroup Interdependence; IRC=Ingroup Role Concern; IND=Individualism;
AID= Australian Identification; OCI= Origin Culture Identification.

Table 4.7: Pattern Matrix for the NRS Scale showing the Final Five Component Solution (D identifies 'diabetes' and M to 'mental illness' items)

	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5	h^2
QD14 'give more treatment explanation'	**.83**	.04	.15	-.11	.06	.68
QM14 'give more treatment explanation'	**.72**	.09	.01	-.22	**-.32**	.74
QD15 'explain more, rules regulations'	**.80**	.04	.09	.13	.17	.65
QM15 'explain more, rules regulations'	**.68**	.06	.06	-.21	-.27	.65
QD16 'ask more about his health'	**.81**	-.02	.10	.10	.10	.66
QM16 'ask more about his health'	**.69**	-.05	.05	-.07	-.22	.63
QD23 'encourage to discuss hospital concerns'	**.78**	-.12	-.17	.03	.01	.66
QM23 'encourage to discuss hospital concerns'	**.64**	-.12	-.10	-.08	**-.30**	.63
QD22 'I would support carer more'	**.78**	-.05	-.16	.11	.02	.65
QM22 'I would support carer more'	**.65**	-.01	-.13	-.03	**-.32**	.65
QD21 'encourage relatives to be supportive'	**.75**	-.01	-.11	.13	.06	.58
QM21 'encourage relatives to be supportive'	**.65**	-.05	-.04	.01	-.24	.59
QD7 'encourage more, self care'	**.72**	.11	.11	.01	.08	.50
QM7 'encourage more, self care'	**.50**	.09	.10	-.15	-.17	.35
QD13 'take more gentle approach'	**.59**	-.05	.02	.28	.02	.47
QM13 'take more gentle approach'	**.43**	-.12	-.02	.13	**-.44**	.56
QD5 'is a challenge'	-.04	**-.80**	-.04	.07	.02	.63
QM5 'is a challenge'	-.12	**-.78**	.06	-.12	-.06	.62
QM1 'special skills'	-.03	**-.78**	.05	-.03	-.03	.59
QD1 'special skills'	.03	**-.74**	.09	.24	.17	.59
QD2 'monotonous'	.07	**.60**	.25	-.01	.03	.44
QM2 'monotonous'	.01	**.55**	.12	.24	.12	.41
QM3 'special effort'	**.36**	**-.47**	-.09	-.07	-.11	.44
QD3 'special effort'	**.36**	**-.41**	-.01	.07	.27	.37
QD10 'not trust his treatment opinion'	-.13	-.10	**.72**	.26	.10	.57
QM10 'not trust his treatment opinion'	-.07	.11	**.57**	-.09	**-.38**	.53
QD8 'enforce doctors orders'	.00	-.04	**.64**	.10	.12	.41
QM8 'enforce doctors orders'	-.07	-.02	**.61**	-.09	-.19	.42
QD11 'hesitate give early leave'	.09	.06	**.57**	.07	.08	.36
QM11 'hesitate give early leave'	-.03	-.02	**.52**	-.14	**-.44**	.50

Table 4.7 Continued: Pattern Matrix for the NRS Scale showing the Final Five Component Solution (D identifies 'diabetes' and M to 'mental illness)

	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5	h^2
QD9 'doubt his ability, self care'	.26	.22	**.52**	-.06	.06	.40
QM9 'doubt his ability, self care'	.09	.29	**.40**	-.07	**-.42**	.54
QD20 'I feel barrier between us'	.09	.14	.03	**.72**	-.07	.63
QM20 'I feel barrier between us'	0.0	.14	-.01	**.34**	**-.61**	.63
QD31 'reluctant develop care plan with him'	-.05	**.30**	-.06	**.61**	-.07	.52
QM31 'reluctant develop care plan with him'	-.10	**.31**	.16	.19	**-.52**	.55
QD19 'avoid confrontation'	.19	.01	-.10	**.55**	-.19	.47
QM19 'avoid confrontation'	.10	.02	-.12	**.32**	**-.53**	.50
QD30 'am not positive about his prognosis'	-.01	-.04	.28	**.56**	.04	.39
QM30 'am not positive about his prognosis'	-.02	.10	.19	.23	**-.34**	.29
QM24 'encourage that he talk about problems'	.13	**-.39**	**.30**	**-.41**	.07	.44
QD24 'encourage that he talk about problems'	.22	**-.41**	.26	**-.37**	.10	.46
QD28 'expect him to be demanding'	-.03	-.12	.26	**.43**	-.27	.38
QM28 'expect him to be demanding'	.15	.04	.18	.01	**-.68**	.64
QD29 'regard that he require more privacy'	-.04	-.13	.03	**.44**	**-.30**	.35
QM29 'regard that he require more privacy'	.08	-.08	-.07	.05	**-.69**	.52
QD33 'more patient with him'	**.37**	-.24	-.05	**.41**	-.25	.54
QM33 'more patient with him'	**.30**	-.03	-.04	.10	**-.59**	.60
QD18 'keep my private life secret'	**.32**	.12	.13	**.41**	.03	.35
QM18 'keep my private life secret'	**.34**	.06	.11	.09	**-.45**	.49
QM34 'ease off on touchy issues'	.23	-.02	-.05	.04	**-.57**	.48
QD34 'ease off on touchy issues'	.29	-.04	-.02	.17	**-.33**	.32
Percent variance	24.9	12.2	6.0	4.7	4.1	Total variance = 51.9
Cronbach's alpha D[1]	**.91**	**.75**	**.65**	**.78**	**_**	
Cronbach's alpha M[1]	**.91**	**.75**	**.73**	**_**	**.85**	

[1] D = diabetes case; M = mental illness case

4.2.7 Scale Development: Nursing Relationship Scale (NRS)

A number of preliminary principal components analyses were conducted to explore the dimensionality of the NRS within each patient type – diabetes and mental illness. This exploration revealed generally similar factors with nine factors having eigenvalues greater than or equal to one. Scree tests indicated that three, four or five factor solutions were reasonable to examine further for their coherence in content. To incorporate cross-patient type variation in addition to within-patient type variation both patient type responses were factor analysed together. A five-factor structure appeared to be most optimal. Factors were rotated obliquely as to allow an examination of their interdependence and to help interpret loadings. Item composition was then examined for consistency in item loadings. Here the one concern was to see if corresponding items from the two patient types would load on the same factor. In the majority this was the case for the first three factors while factor four and five appeared to be the same in content but reflecting ratings of the diabetes patient and mental illness patient respectively. Thus, conceptually there were four dimensions. Any items from the two patient types that did not load on the same factor or did not load on the corresponding fourth or fifth factor were removed from the analysis. Typically these had low communalities and loadings on the various factors.

After removal of these items principal components analysis led to the solution depicted in Table 4.7. The five factors together accounted for 52 percent of the variation in the items. Examination of the correlation matrix between factors revealed low values (ranging from .00 and .34) suggesting their relative independence. The highest correlation was between Factor 5 which was negatively correlated with Factor 1 (r=-.34). The four 'conceptual' dimensions reflect the following constructs: Caring/Supportive Approach (CARE) (the tendency to spend time explaining relevant issues, taking extra care, providing encouragement, and, giving more care and treatment explanation); Nursing Satisfaction (SATI) (perceptions that the nursing of this patient is both challenging and satisfying); Authoritarian Stance (AUTH) (taking control of the

management regardless of the patient's involvement), and Negativity (NEGA) (felt barrier with the patient, avoidance, misgivings about prognosis). Alpha coefficients are also represented in Table 4.7 indicating moderate to high level of internal consistency among scale items.

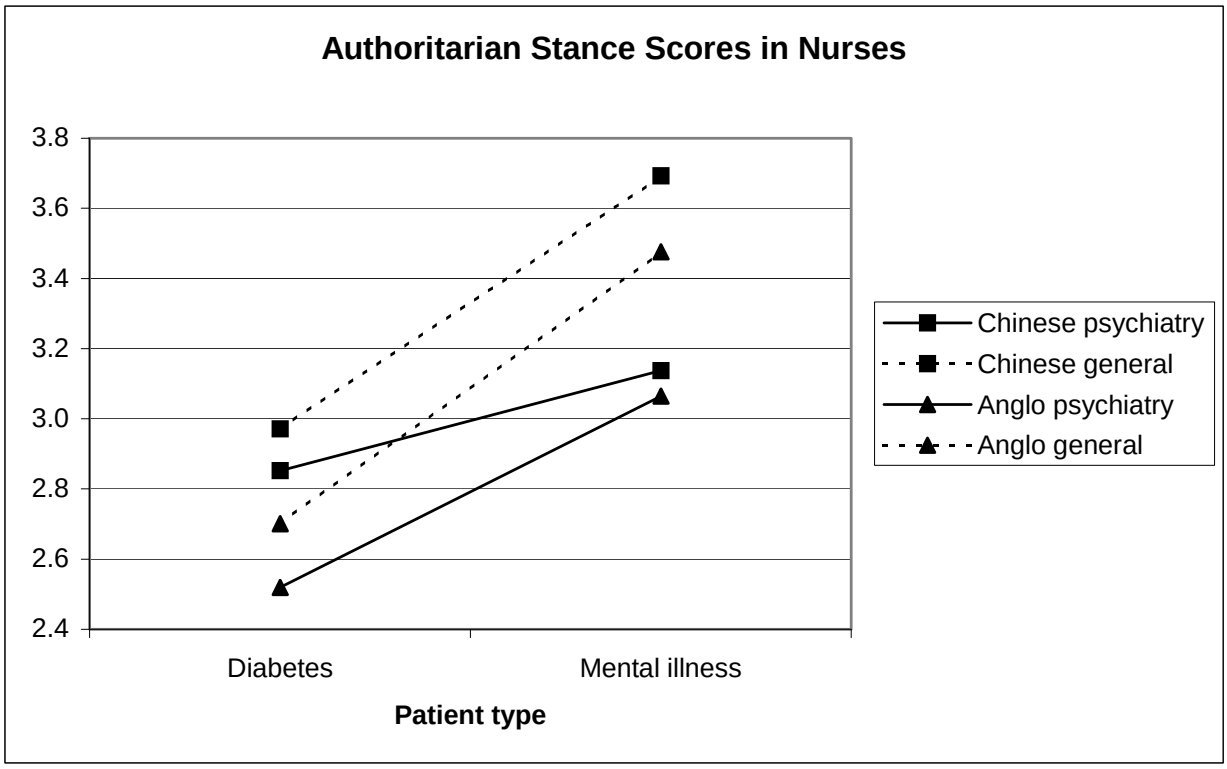
4.2.8 Group Contrasts of Nursing Relationship Scores

Analyses of variance were conducted to compare differences in mean scores between nurse types, ethnicity and in this case particularly, patient type (diabetes versus mental). The last factor was a repeated measures factor. The first analysis focused on examining the CARE scores. The main effects of ethnicity ($F(1,204)=8.15$, $p<05$) and patient type ($F(1, 204)=8.15$, $p<.05$), were statistically significant but not nurse type ($F(1,204)=2.65$, $p>.05$). Chinese nurses (mean=3.84, s.d.=.70) scored higher on caring approach than Anglo nurses (mean=3.04, s.d.=.95). The mentally ill patient also attracted slightly higher care scores (mean=3.42, s.d.=.92) than the diabetic patient (mean=3.31, s.d.=.96). The interaction terms were not statistically significant (across nurse types and ethnic group ($F(1,204)=1.48$, $p>.05$), ethnicity and patient type ($F(1, 204)=2.12$, $p>.05$), nurse type and patient type ($F(1, 204)=3.11$, $p>.05$), ethnicity, nurse type and patient type ($F(1, 204)=1.85$, $p>.05$)). Overall mean (3.36, s.d.=.89) indicates 'tend to agree' with the preparedness to take extra care of the patient.

Analysis of nursing satisfaction (SATI) scores revealed that the main effects of ethnicity ($F(1, 204)=3.15$, $p>.05$) and patient type ($F(1, 204)=.10$, $p>.05$) were not significant, but was significant for nurse type ($F(1,204)=10.35$, $p<01$). Inspection of the means indicated that psychiatric nurses (mean=3.91, s.d.=.70) scored higher on nursing satisfaction than general nurses (mean=3.62, s.d.=.79). The interaction terms were not significant for (ethnicity and nurse type, ethnicity and patient type, nurse type and patient type ($F(1, 204)=<1$)) and across ethnicity, nurse type and patient type ($F(1, 204)= 3.41$, $p>.05$)). Overall mean (3.80, s.d.=.67) indicates a level of 'tend to agree' to satisfaction in the care of patients.

The third analysis focused on examining the authoritarian stance (AUTH) scores. The main effects were statistically significant according to ethnicity ($F(1, 204)=4.39$, $p<.05$) nurse type ($F(1,204)=8.84$, $p<.05$), and patient type ($F(1, 204)=106.81$, $p<.001$). Inspection of the means indicated that Chinese nurses (mean=3.63, s.d.=.90) endorsed authoritarian stance more highly than Anglo nurses (mean=2.89, s.d.=.80). In addition, general nurses endorsed more highly authoritarian stance (mean=3.16, s.d.=.81) than psychiatric nurses (mean=2.85, s.d.=.83). The mentally ill patient received higher scores on authoritarian stance (mean=3.27, s.d.=.88) than the diabetic patient (mean=2.71, s.d.=.82). Several interaction terms were not significant including ethnicity and nurse type ($F(1,204)=<1$), ethnicity and patient type ($F(1, 204)=1.93$, $p>.05$), and patient type, ethnicity and nurse type ($F(1, 204)=<1$). However, the interaction of nurse type and patient type was significant ($F(1, 204)=8.72$, $p<.01$). Figure 4.1 shows the difference in authoritarian stance between nurse type and patient type. The overall mean (2.99, s.d.=.75) indicates 'neither' suggesting that overall nurses did not particularly agree or disagree with the need of enforcing control of patient's management. However, while psychiatric and general nurses similarly endorsed authoritarian stance for the diabetic patient, general nurses endorsed this more for the mentally ill patient compared with psychiatric nurses. The overall higher endorsement of authoritarianism for the mentally ill patient is also evident in Figure 4.1, as is the higher endorsement of authoritarianism among general than psychiatric nurses, and among Chinese than Anglo nurses.

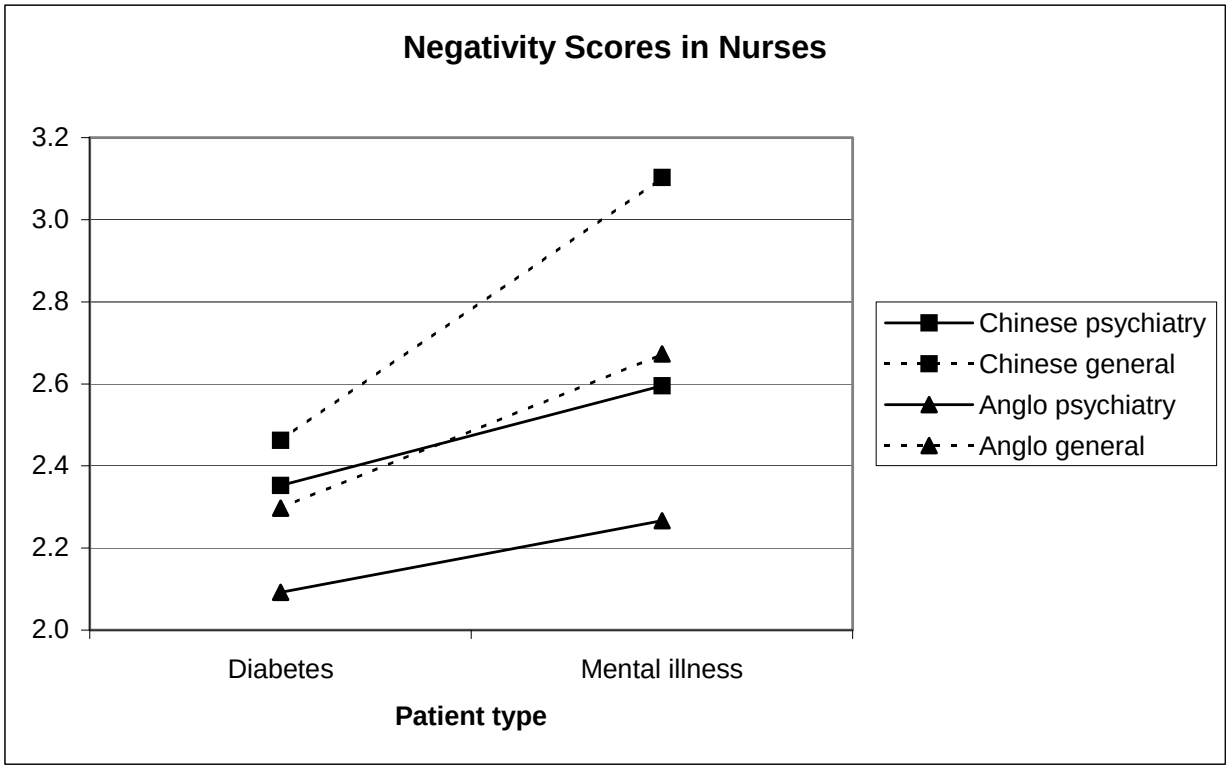
Figure 4.1: Authoritarian Scores according to Ethnicity, Nurse Type and Patient Type



Analysis of negativity (NEGA) scores revealed that the main effects of ethnicity ($F(1,204)=13.55$, $p<.001$), nurse type ($F(1,204)=14.60$, $p<.001$) and patient type (($F(1, 204)=86.46$, $p<.001$) were significant. Inspection of the means indicated that general nurses (mean=2.37, s.d.=.56) reported higher negativity than psychiatric nurses (mean=2.19, s.d.=.56). Moreover, Chinese nurses (mean=2.40, s.d.=.46) reported higher negativity than Anglo nurses (mean=2.16, s.d.=.61). The mentally ill patient (mean=2.56, s.d.=.72) received higher negativity ratings than the diabetic patient (mean=2.26, s.d.=.57). The interaction term for ethnicity and nurse type was not significant ($F(1,204=<1)$. The interaction terms of ethnicity and patient type ($F(1, 204)=4.68$, $p<.05$), nurse type and patient type ($F(1, 204)=15.06$, $p<.001$) were significant, but not the ethnicity, nurse type and patient type interaction ($F(1, 204)=1.61$, $p>.05$). Overall mean of the sample (2.41, s.d.=.59) indicates 'tend to disagree' with an expressed barrier with a patient. Inspection of the plots of the three way interaction as

shown in Figure 4.2 indicated that there were little differences among psychiatric and general nurses from Anglo and Chinese backgrounds in their negativity responses towards the diabetic patient case. On the other hand, Chinese general nurses endorsed higher negativity than Anglo general nurses. With respect to the mentally ill patient, the interaction plot indicates that while there was little difference between psychiatric nurses from Chinese and Anglo backgrounds in their responses, Chinese general nurses endorsed more negativity than Anglo general nurses, and negativity was highest among Chinese general nurses for the mentally ill patient.

Figure 4.2: Negativity Scores according to Ethnicity, Nurse Type and Patient Type



To examine differential approaches in nursing care between the two patient types, arithmetic difference scores were created subtracting diabetes vignette scores from mental illness vignette scores for each subscale of the NRS for each subject. These are referred to as DIFF_CARE, DIFF_SATI, DIFF_AUTH, and DIFF_NEGA, and constitute the main outcome measures in assessing the influences of other factors on

differential nursing approaches between the two vignettes. These scores relate to the construct of practice stigma as outlined in the Introduction.

Within the Simple Model, that is, when covariates are not included in the analysis, two-way analysis of variance was conducted to examine the score differences between nurse types and ethnic groups for these four differential nursing approaches scores. The main effects were not significant for nurse types ($F(1,204)=3.11$, $p>.05$), ethnicity ($F(1,204)=2.12$, $p>.05$) or the interaction ($F(1,204)=1.85$, $p>.05$) for differential caring/supportive approach (DIFF_CARE) score. No effects proved significant for differential nursing satisfaction (DIFF_SATI) scores, but are reported for comprehensiveness as follows: the main effect of nurse types ($F(1,204)=<1$), ethnicity ($F(1,204)=<1$) and interaction term ($F(1,204)=3.46$, $p>.05$) did not reach statistical significance. However, when examining differential authoritarian stance (DIFF_AUTH) scores, the main effect of nurse type was significant ($F(1,204)=8.72$, $p<.01$). General nurses (mean=.75, s.d=. 69) endorsed higher authoritarian stance (towards the mentally ill patient than the diabetic patient) than psychiatric nurses (mean=.45, s.d.=.81). The main effect of ethnicity was not significant ($F(1,204)=1.93$, $p>.05$). The interaction effect for authoritarian stance was not significant ($F(1,204)=.84$, $p>.05$). For differential negativity (DIFF_NEGA), the main effect was significant for nurse type ($F(1,204)=15.06$, $p<.001$). General nurses (mean=.50, s.d.=.57) reported higher differential negativity towards the mental illness case than diabetes case compared with psychiatric nurses (mean=.20, s.d.=.50). The main effect of ethnic groups was also significant ($F(1,204)=4.68$, $p<.05$). Chinese nurses (mean=.41, s.d.=.67) reported higher differential negativity than Anglo nurses (mean=.24, s.d.=.44). However, the interaction term was not significant ($F(1,204)=1.61$, $p>.05$) suggesting that differential negativity did not vary across nurse types and ethnic groups.

4.2.9 Scale Development: Stigma towards Psychiatric Patients (STPP)

A PCA analysis was conducted on the social distancing and alienation items. Table 4.8 shows the component matrix as only one factor was extracted according to the Kaiser criterion. This one dimension accounted for 43.5% of the variance in the items by

dropping one item with low loading (that is, '*mentally ill people are no more dangerous than others'*). All the other nine items accounted for the high reliability (.81, Table 4.8) relating to opinions expressed towards psychiatric patients, such as '*fear of mental patients living in neighbourhood'*, '*cannot trust psychiatric patients as baby sitters'*, and '*foolish for women to marry mental patients'*. This measure, as intended, captures the construct of social distancing and alienation of those with a mental illness, and as said, is referred to as general stigma in the ensuing discussion.

Table 4.8: Component Matrix for the STPP Scale.

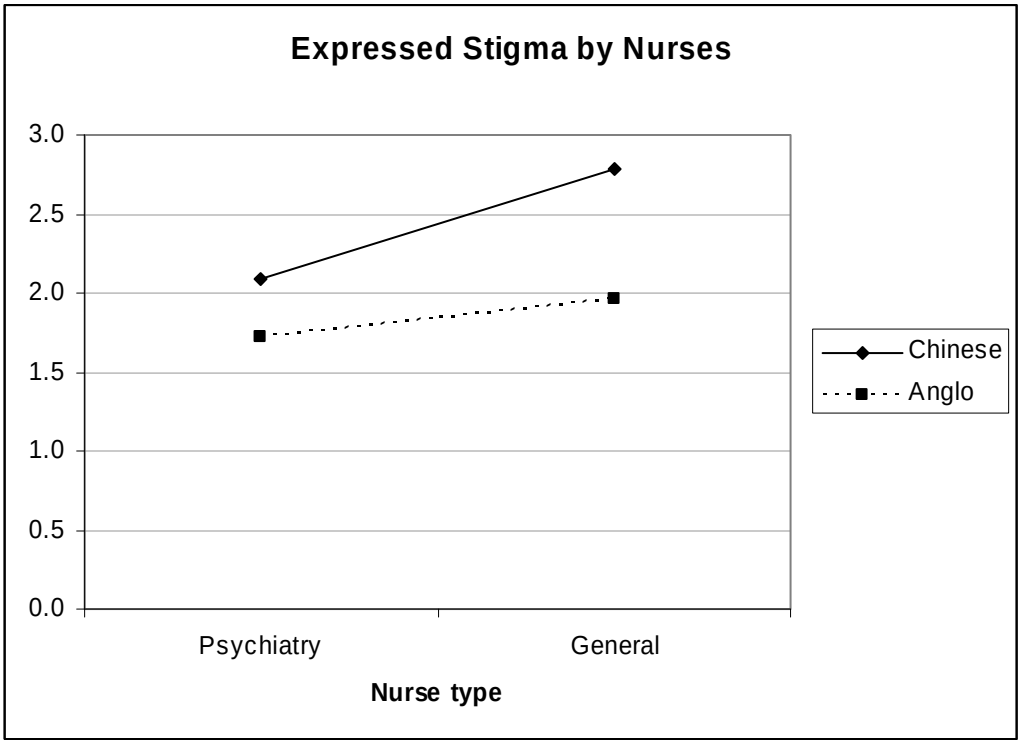
Item	Component 1	Communalities
QG2 fear they live in neighbourhood	**.84**	.70
QG9 patients are difficult to like	**.77**	.60
QG5 don't give high responsible job	**.76**	.57
QG10 can't trust them as baby sitter	**.74**	.55
QG8 dangerous to forget their madness	**.68**	.46
QG7 should be immediately hospitalised	**.68**	.46
QG6 foolish women marry mental patients	**.64**	.40
QG1 keep behind locked doors	**.57**	.33
QG4 should be isolated from community	**.51**	.26
Percent variance		Total variance = 43.5
Cronbach's alpha	.81	

4.2.10 Group Contrasts of Stigma towards Psychiatric Patient Scores

Two way analysis of variance examined differences in scores between nurse groups and ethnic groups as before. The main effect of nurse type was significant ($F(1, 203)=22.84$, $p<.001$) as was the main effect of ethnicity ($F(1,203)=36.68$, $p<.001$). Examination of the means indicated that Chinese nurses (mean=2.38, s.d.=.81) reported higher stigma than Anglo nurses (mean= 1.81, s.d.=.64) and general nurses (mean=2.34, s.d.=.83) higher than psychiatric nurses (mean=1.87, s.d.=.67). Additionally, the interaction effect was also significant ($F(1,203)=5.35$, $p<.05$) indicating that stigma differed across ethnic groups and nurse types. Chinese general nurses (mean=2.80, s.d.=.78) scored highest on this scale than the other three groups of nurses: Chinese psychiatric nurses

(mean=2.08, s.d.=.71), Anglo general nurses (mean=1.96, s.d.=.66), and Anglo psychiatric nurses (mean=1.73, s.d.=.61), as evident in Figure 4.3.

Figure 4.3: Social Distancing by Nurses



It is of interest to examine directly the proportion of nurses that may have social distancing attitudes towards the mentally ill. This was done of the level items from the STPP scale to also appreciate the variation of endorsement across the items. Results are shown in Table 4.9 representing percentages of the sample disagreeing or agreeing with the 10 statements (including the one omitted from the scale) of social distancing specifically. The original responses of 'Disagree', 'Tend to disagree' were coded as 'Disagree', and 'Tend to agree' and 'Agree' were coded as 'Agree'. Since the last item is reverse scored the sum of 'Tend to disagree' and 'Disagree' is represented in the 'Agree' category. Of most interest in Table 4.9 is that at least one in five nurses endorsed agreement with half of the items. Table 4.10 shows results broken down by ethnicity and nurse type. Across items it is evident that more of the Chinese and the

general nurses endorsed social distancing and alienation towards the mentally ill than the Anglo group and psychiatric nurses, respectively.

Table 4.9: Stigma Scale for Measuring Social Distancing

Item	Disagree Frequency (%) [1]	Agree Frequency (%) [2]
Should be isolated from community	189 (90.0)	6 (2.9)
* Keep behind locked doors	187 (89.9)	9 (4.3)
Patients are difficult to like	167 (80.3)	20 (9.6)
Should be immediately hospitalised	167 (80.3)	23 (11.1)
Fear they live in neighbourhood	150 (72.1)	25 (12)
Dangerous to forget their madness	133 (63.9)	41 (19.7)
Foolish women marry mental patients	113 (54.3)	47 (22.6)
Don't give high responsibility job	136 (65.4)	52 (25)
No more dangerous than others [3]	113 (54.3)	63 (44.7)
Can't trust them as baby sitters	84 (40.4)	72 (34.6)

[1] Recode 'Disagree' and 'Tend to disagree' to 'Disagree' (0).
[2] Recode 'Tend to agree' and 'Agree' to 'Agree' (1).
[3] Reverse scored item

* Omitted item from the scale

Table 4.10: Percent Agreement on Items from the STPP Scale (N=208)

	Effect of Ethnicity & Nurse Type Agree (%)					Effect of Ethnicity Agree (%)		Effect of Nurse Type Agree (%)	
	Chinese Psychiatry (n=49)	Chinese General (n=35)	Anglo Psychiatry (n=83)	Anglo General (n=41)	χ^2	Chinese (n=84)	Anglo (n=124)	Psychiatry (n=132)	General (n=76)
Should be isolated from community	2.0	12.9	1.3	0.0	12.2**	6.3	0.9	1.6	5.9
Keep behind locked doors	6.3	12.1	2.6	0.0	7.1ns	8.6	1.7	4.0	5.6
Patients are difficult to like	8.9	36.7	1.3	11.4	28.5***	20.0	4.5	4.1	23.1
Should be immediately hospitalized	19.6	31.0	3.9	5.3	18.7***	24.0	4.3	9.8	16.4
Fear they live in neighbourhood	9.3	48.4	2.9	12.9	37.8***	25.7	5.9	5.3	30.6
Dangerous to forget their madness	22.2	50.0	7.5	34.4	23.4***	33.3	16.2	11.5	34.2
Foolish women marry mental patients	42.9	51.9	22.2	11.4	16.6**	46.8	18.4	22.6	29.0
Don't give high responsibility job	38.1	64.7	10.7	16.2	38.9***	50.0	12.5	20.5	39.4
Can't trust as baby sitter	52.4	92.6	23.3	40.7	36.9***	68.1	28.7	35.3	66.7
No more dangerous than others [1]	25.5	53.6	31.9	50.0	9.1*	36.0	37.5	29.4	51.7

*p<.05, **p<.01, ***p<.001; ns, not significant
[1] Reverse scored item
For all χ^2 analyses, df=3

Table 4.11: Dislike Scale for Measuring Negative Stereotyping

Item	Personal Dislike of Characteristics Frequency (%) [1]	Characteristics Ascribed to Mental Illness Frequency (%) [2]	
Aggressiveness	172 (92.7)	Suspiciousness	139 (67.8)
Manipulative	166 (79.8)	Unmotivated	136 (66.7)
Hostility	160 (76.9)	Aggressiveness	122 (59.5)
Controlling	150 (72.5)	Unreliability	121 (59.0)
Insensitivity	137 (65.9)	Hostility	118 (57.5)
Unreliability	133 (64.0)	Incoherence	116 (56.9)
Demanding	133 (63.9)	Avoiding	114 (55.6)
Attention seeking	125 (60.0)	Impulsiveness	112 (54.6)
Unco-operativeness	113 (54.3)	Insensitivity	111 (54.4)
Suspiciousness	90 (43.2)	Demanding	107 (52.7)
Apathy	75 (36.2)	Unco-operativeness	106 (52.0)
Unmotivated	72 (35.1)	Manipulative	106 (51.9)
Submissiveness	66 (31.9)	Apathy	100 (49.0)
Avoiding	61 (29.3)	Attention seeking	88 (43.3)
Incoherence	60 (29.9)	Controlling	77 (37.7)
Impulsiveness	40 (19.2)	Submissiveness	55 (27.1)

[1] Sum of ordinal scale, much and very much (3+4) of Questionnaire Item C.
[2] Sum of ordinal scale, much and very much (3+4) of Questionnaire Item F.

4.2.11 Scale Development: Dislike of Negative Behaviour (DISL)

As stated in the Methods Section, the dislike scale as itemised in Table 4.11, represents the second approach developed in the study to measure attitudes towards the mentally ill, that is, general stigma, which proposes a score based on the product of negatively regarded personal attributes (in general) and the extent to which these are attributed to those with a mental illness.

Proportions of the sample reporting dislike for the attributes appear on the left of Table 4.11 and proportions of the sample ascribing the attributes to patients with mental illness on the right. For example, aggressiveness, was disliked in people in general by the overwhelming majority of the sample (93%) and nearly 60 percent of nurses ascribed this as typical of a person with mental illness. The most generally disliked personal attributes (with higher than 50% of the sample disliking them) were: aggressiveness, manipulative, hostility, controlling, insensitivity, unreliability, demanding, attention seeking, and unco-operativeness. The frequency responses of ascribing these characteristics to the mentally ill (50% and above) indicated that the mentally ill were regarded as suspicious, unmotivated, aggressive, impulsive, unreliable, hostile, incoherent, impulsive, avoiding, unco-operative, manipulative and apathetic.

A PCA was conducted on the dislike scale items (that is, product scores which weight one's ascription of a characteristic relating to mentally ill patients by one's level of general dislike of that characteristic) to identify possible subscales. Using the Kaiser's criterion, three components were extracted with eigenvalues higher than or equal to one. However, the first factor accounted for 50.5% of the variance in the items suggesting that possibly one dimension may be sufficient to describe a general negative attitude towards those with mental illness. Also, higher dimensional solutions did not suggest any interpretable content themes for the various factors. Table 4.12 shows the item loadings of the one factor extraction. Most items, with the exception of submissiveness and impulsiveness had at least 40% of their variance explained by this component. Treating the items as a scale, reliability analysis revealed very high internal consistency among the items with an alpha coefficient of .93, as indicated in Table 4.12.

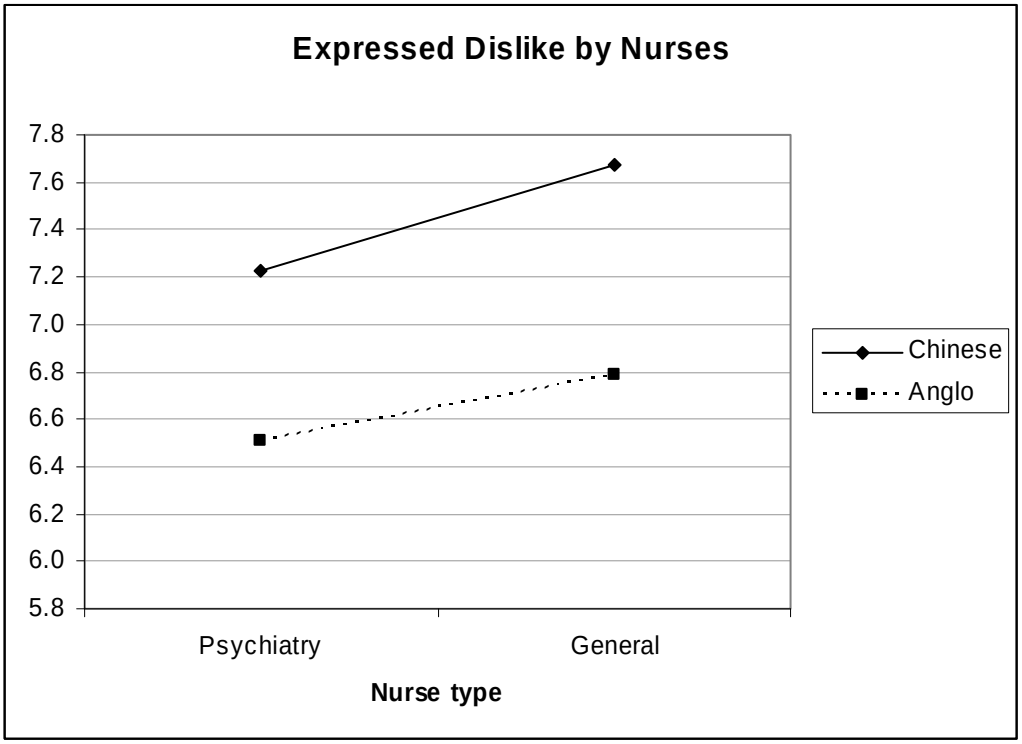
Table 4.12: Component Matrix for the DISL Scale.

Item	Component 1	Communality
Avoiding	.79	.62
Demanding	.78	.61
Hostility	.78	.60
Controlling	.77	.59
Unco-operativeness	.76	.58
Manipulative	.76	.57
Attention seeking	.75	.56
Suspiciousness	.75	.56
Unmotivated	.70	.50
Aggressiveness	.70	.49
Apathy	.69	.48
Insensitivity	.69	.47
Incoherence	.68	.46
Unreliability	.66	.44
Submissiveness	.60	.36
Impulsiveness	.45	.20
Percent variance		Total variance = 50.5
Cronbach's alpha	.93	

4.2.12 Group Contrasts of Dislike Attributed to Mental Illness Scores

A two-way analysis of variance was conducted to explore the differences in DISL scores between ethnic groups and nurse types. The main effect of ethnicity was statistically significant ($F(1,201)=4.85$, $p<.05$). Inspection of the means indicated that Chinese nurses scored higher on this scale (mean=7.41, s.d.=2.56) than Anglo nurses (mean=6.60, s.d.=2.41). The main effect for nurse type ($F(1,201)=1.01$, $p>.05$) and the interaction term ($F(1,201)=.05$, $p>.05$) were not significant. It is suggested in Figure 4.4 that again Chinese general nurses scored highest in this 'stigma' scale (mean=7.67, s.d.= 2.87) than the other three groups of nurses: Chinese psychiatric nurses (mean=7.22, s.d.= 2.33), Anglo general nurses (mean=6.79, s.d.=2.24), and Anglo psychiatric nurses (mean=6.51, s.d.=2.50), but the main statistically reliable difference was only due to nurse ethnicity.

Figure 4.4: Negative Stereotyping by Nurses



4.3 ASSOCIATION BETWEEN GENERAL STIGMA AND OTHER FACTORS

Correlations between general stigma and other measures are summarized in Table 4.13. These are direct correlations without taking account possible confounding between variables. Nevertheless it is instructive to examine these with the view to further 'unpacking' of the relationships among variables to appear later in the text. First, it is clear that the two stigma factors relate differently to other measures and indeed, though correlated, their correlation coefficient was .27 ($p<.001$). This suggests that the two measures may involve different types of stigmatization and that further analysis would be more insightful if they were treated as separate measures. Second, social distance and alienation of the mentally ill (STPP) is positively correlated with, particularly, age, amount of general nursing experience, all value scores (but more strongly with indicators of collectivism), affiliation with one's origin culture, and, greater negativity towards the patient with mental illness than the diabetic patient. Moreover, experience

in mental health nursing and all forms of contact were negatively correlated with STPP scores. Dislike attributed to the mentally ill (DISL) scores were only positively correlated with values, nursing satisfaction and differential negativity towards the mentally ill patient. Discussion will return to the implications of this pattern in the last section of the Results.

Table 4.13: Pearson Correlations between General Stigma and other Measures (N=208)

	Social Distancing (STPP Score)	Negative Stereotyping (DISL Score)
Background Factors		
AGE	.18*	-.04 ns
SEX	.13 ns	.12 ns
YR_MH_NU	-.16*	-.04 ns
YR_GE_NU	.26***	.09 ns
Contact Factors		
CWS	-.39***	-.08ns
PHN	-.30***	-.07 ns
RMI	-.14*	.04 ns
ESP	-.32***	-.12 ns
Cultural Affiliation		
AID	.03 ns	.11 ns
OCI	.18*	.04 ns
Cultural Values		
INT	.52***	.21**
IRC	.45***	.25***
IND	.24**	.17*
Nursing Approaches		
DIF_CARE	.03 ns	.06 ns
DIF_SATI	.01 ns	.18**
DIF_AUTH	.06 ns	.15 ns
DIF_NEGA	.22**	.28***

*p<.05, **p<.01, ***p<.001; ns, not significant.

YR_MH_NU= Years in Mental Health Nursing; YR_GE_NU=Years in General Nursing; CWS=Contact Through Work Situation; PHN=Patient Helps Nurse; RMI=Relative with Mental Illness; ESP=External Socialisation with Patient; AID=Australian Identification; OCI=Origin Culture Identification; INT=Ingroup Interdependence; IRC=Ingroup Role Concern; IND=Individualism; DIF_CARE=Differential Caring Approach; DIF_SATI=Differential Nursing Satisfaction; DIF_AUTH=Differential Authoritarian Stance; DIF_NEGA=Differential Negativity.

Table 4.14: Pearson Correlations between Contact Factors and Practice Stigma (N=208)

	CWS	PHN	RMI	ESP	TOTAL CONTACT
DIF_CARE	-.10 ns	-.04 ns	-.03 ns	-.08 ns	-.08 ns
DIF_SATI	.05 ns	.12 ns	.13 ns	.07 ns	.12 ns
DIF_AUTH	-.18**	-.06 ns	.07 ns	-.22**	-.15*
DIF_NEGA	-.26***	-.06 ns	-.02 ns	-.26***	-.23**

*p<.05, **p<.01, ***p<.001; ns, not significant.

CWS=Contact Through Work situation; PHN= Patient Helps Nurse; RMI=Relative with Mental Illness; ESP=External Socialisation with Patient; DIF_CARE=Differential Caring Approach; DIF_SATI=Differential Satisfaction; DIF_AUTH=Differential Authoritarian Stance; DIF_NEGA=Differential Negativity.

4.3.1 Relationship between Contact and Practice Stigma

While Table 4.13 indicates the association between contact and general stigma, Table 4.14 indicates the association with practice stigma as represented by differential scores in nursing approaches. Generally contact, and especially types measured by CWS and ESP, was negatively correlated with differential authoritarian stance and negativity. That is, the latter forms of nursing approaches were less differentiated between the cases of mental illness and diabetes as respondents tended to endorse higher levels of contact.

4.4 COMPARISONS OF GENERAL AND PRACTICE STIGMA

This section explores complex association of factors with stigma measures and then with differential nursing practice approaches. As indicated earlier when analysing the STPP measure and the contrasts on STPP scores, analysis of variance had shown significant effects of nurse type, ethnicity and the interaction term. When examining the group contrasts on DISL scores (negative stereotyping ascribed to those with mental illness), earlier results showed only a significant main effect of ethnicity. For convenience these results are summarised as under the heading Simple Model in Table 4.15 and Table 4.16. However, results from these contrasts may have been due to differences in other factors (background demographics, contact level) between groups. Therefore in this section the

possible effect of these factors are taken into account by analyses of covariance, in exploring group differences (nurse type x ethnicity).

Table 4.15: Relationship between Background Variables and STPP Scores

	F Values		
	Simple Model	Model 1 with background factors	Model 2 with background and contact factors
Nurse type	22.84***	6.50*	0.12 ns
Ethnic group	36.68***	22.72***	14.46***
Interaction	5.35*	2.87 ns	2.13 ns

*p<.05; **p<.01; ***p<.001; ns, not significant; [1] covariates = age, sex, years of mental nursing experience, years of general nursing experience; [2] covariates = age, sex, years of mental nursing experience, years of general nursing experience, and contact levels (via work, patients helping nurse, relatives with mental illness, socialising with person with mental illness).

4.4.1 Relationship between Group Membership and STPP Scores

Two-way analysis of covariance was used to examine differences in scores between nurse types and ethnic groups while accounting for the contribution of background, and contact factors, respectively. As shown in Model 1 (Table 4.15) when background demographics and work experience were entered as covariates, the main effects were statistically significant according to nurse type ($F(1,188)=6.50$, $p<.05$) and ethnicity ($F(1,188)=22.72$, $p<.001$). Inspection of the means indicated that Chinese nurses (mean= 2.37, s.d.=.79) reported higher stigma than Anglo nurses (mean=1.80, s.d.=.64). Chinese general nurses (mean=2.74, s.d.=.76) reported higher stigma than Chinese psychiatric nurses (mean=2.11, s.d.=.72). Anglo general nurses (mean=1.95, s.d.=.66) also reported higher stigma than Anglo psychiatric nurses (mean=1.72, s.d.=.61). The interaction term was not significant ($F(1,188)=2.87$, $p>.05$). Compared with the Simple Model (where background factors were not in the model) the effect of nurse type was much reduced but not eliminated by the inclusion of background covariates. Similarly, the effect of ethnicity was reduced but not eliminated by the inclusion of these background factors. Each individual covariate such as age ($F(1,188)=1.36$, $p>.05$), and

(sex, years in mental nursing, and years in general nursing (F(1, 188)=<1)) had no simple effect. While years of mental health nursing was used to define nurse type, it appears that it does not entirely proxy the nurse type effect in relation to its influence on STPP scores, nor alone does it seem to account for the reduction in the effect size of nurse type on STPP scores, consistent with the low negative correlation between years of mental health nursing experience and STPP scores (Table 4.15).

In Model 2, contact type scores were added to background demographics as covariates. The main effect of nurse type was now not significant (F(1,184)=<1). However, the main effect of ethnicity remained as significant (F(1,184)=14.46, p<.001). This is an indication that background demographics but particularly contact factors are important correlates of stigma and account entirely for the effect of nurse type. Examination of the means adjusted for the effects of covariates suggested that Chinese nurses (mean=2.37, s.d.=.79) again reported higher stigma than Anglo nurses (mean=1.80, s.d.=.64). The interaction effect was not significant (F(1,184)=2.13, p>.05). Each demographic and contact factor had no simple effect: age (F(1,184)=1.12, P>.05, contact via work (F(1,184)=1.69, p>.05), patients helping nurse (F(1,184)=2.97, p>.05), and (sex, years in mental health nursing, years in general nursing, relatives with mental illness, and socialising with person with mental illness (F(1,184)=<1)).

To summarise, the main results here are that the nurse type effect on social distancing is most probably due to the combined influence of background characteristics, work experience, and contact levels with psychiatric patients. To some extent these factors also mediate the effect of ethnicity on social distancing. However, the effect of ethnicity is not entirely accounted for by such mediators suggesting that ethnicity has an additional (non-mediated) effect on social distancing, or that some other unmeasured factor that is strongly related to ethnicity is related to social distancing.

Table 4.16: Relationship between Background Variables and DISL Scores

	F Values		
	Simple Model	Model 1 with background factors	Model 2 with background and contact factors
Nurse type	1.01 ns	.06 ns	.07 ns
Ethnic group	4.85*	4.12 *	4.68*
Interaction	.05 ns	.04 ns	.01 ns

*p<.05; ns, not significant; [1] covariates = age, sex, years of mental nursing experience, years of general nursing experience; [2] covariates = age, sex, years of mental nursing experience, years of general nursing experience, current work environment, and contact levels (via work, patients helping nurse, relatives with mental illness, socialising with person with mental illness).

4.4.2 Relationship between Group Membership and DISL Scores

In regard to DISL scores, as reported earlier in the Simple Model (shown in Table 4.16), there was only a significant main effect of ethnicity with Chinese nurses endorsing higher dislike attributes than Anglo nurses towards the mentally ill.

As above, analysis of covariance was conducted to examine differences in DISL scores between nurse type and ethnic groups accounting for the effects of background demographics and contact factors. As shown in Model 1 (Table 4.16) when background demographics were entered as covariates, the main effect of nurse type was not significant ($F(1,186)=<1$). The main effect of ethnicity remained significant ($F(1,186)=4.12$, $p<.05$). Chinese nurses (mean=7.40, s.d.=2.53) reported higher dislike attributed to the mentally ill than Anglo nurses (mean=6.67, s.d.=2.43). The interaction term was not significant ($F(1,186)=<1$) indicating that dislike attributes did not vary across ethnicity and nurse type. There was no simple effect for each individual covariate: age ($F(1,186)=3.73$, $p>.05$), sex ($F(1, 186)=2.14$, $p>.05$), years in mental health nursing ($F(1, 186)=1.22$, $p>.05$), and years in general nursing ($F(1, 186)=2.30$, $p>.05$).

In Model 2, when contact type factors were added to demographics as covariates, the main effect of nurse type was not significant ($F(1,182)=<1$). The main effect of

ethnicity remained as significant (F(1,182)=4.68, p<.05), and not appreciably altered. As before, examination of the means indicated that Chinese nurses (mean=7.40, s.d.=2.53) again reported higher attributed dislike than Anglo nurses (mean=6.67, s.d.=2.43). The interaction effect was not significant (F(1,182)=<1). Thus, it would seem that factors other than background demographics and contact level are associated with higher stigma level reported by Chinese nurses as measured by negative attributes ascription to the mentally ill. Again, each demographic and contact factors alone did not account for any effect: age (F(1, 182)=3.35, p>.05), sex (F(1, 182)=2.13, p>.05), years in mental health nursing (F(1, 182)=1.21, p>.05), years in general nursing (F(1,182)=2.00, p>.05), contact via work (F(1, 182)=1.08, p>.05), patients helping nurse (F(1,182)=<1), relatives with mental illness (F(1, 182)=<1), and socialising with person with mental illness (F(1, 182)=1.33, p>.05).

In general it would appear that the effect of ethnicity on general stigmatising attitudes, whether measured by social distancing and alienation, or by the ascription of unfavourable personal qualities, is not entirely accounted for by the other factors measured presently, and of importance, not accounted for by exposure to people with mental illness.

Table 4.17: Differential Caring Support towards Mental Illness-Diabetes

	F Values			
	Simple Model	Model 1 with background factors	Model 2 with background and contact factors	Model 3 with background, contact, and stigma
Nurse type	3.11 ns	.76 ns	.45 ns	.04 ns
Ethnic group	2.12 ns	1.63 ns	1.55 ns	1.92 ns
Interaction	1.85 ns	1.95 ns	1.89 ns	1.93 ns

ns, not significant; [1] covariates = age, sex, years of mental nursing experience, years of general nursing experience, [2] covariates = age, sex, years of mental nursing experience, years of general nursing experience, and contact levels (via work, patients helping nurse, relatives with mental illness, socialising with person with mental illness), [3] covariates = age, sex, years of mental health nursing experience, years of general nursing experience, contact levels (via work, patients helping nurse, relatives with mental illness, socialising with person with mental illness),and stigma (STPP & DISL) scores.

4.4.3 Factors Contributing to Differential Nursing Practice Approaches

In this section, background, contact and stigma are examined for their contribution to differential nursing practice between the case with mental illness and the case with diabetes. As reported earlier, analysis of the Nursing Relationship Scale (NRS) indicated four factors, caring/supportive approach, nursing satisfaction, authoritarian stance and negativity. What follows is a series of analyses examining NRS differential scores and the effects of group membership (nurse type and ethnicity), with and without the covariates of background, contact level and in this instance, and the general stigma measures (STPP and DISL).

4.4.4 Relationship between Group Membership and Differential Caring Support

In these analyses, (and similar ones to follow) an additional model is tested (Model 3), that explores the impact of adding general stigma scores to the model, while holding constant all other factors statistically. While it is clear from Table 4.17 that no effects proved statistically significant in relation to DIFF_CARE score, the specific results are detailed below only for the sake of comprehensiveness in reporting.

When background factors were entered as covariates as showed in Model 1 (Table 4.17), the main effects were still not significant for nurse types ($F(1,189)=<1$), ethnicity ($F(1,189)=1.63$, $p>.05$), and interaction term ($F(1,189)=1.95$, $p>.05$). There was no simple effect for each covariate: age ($F(1,189)= 1.14$, $p>.05$), sex ($F(1,189)=<1$), years in mental health nursing ($F(1,189)=1.70$, $p>.05$), and years in general nursing ($F(1, 189)=2.98$, $p>.05$). When contact factors were added as covariates, as indicated in Model 2, the main effects were not significant for nurse types ($F(1,185)=<1$), ethnicity ($F(1,185)=1.55$, $p>.05$) and interaction ($F(1,185)=1.89$, $p>.05$). Each covariate had no simple effect: age ($F(1,185)=1.01$, $p>.05$), years in mental health nursing ($F(1,185)=1.67$, $p>.05$), years in general nursing ($F(1,185)=2.72$, $p>.05$), and in (sex, contact via work, patients helping nurse, relatives with mental illness, and socialising with person with mental illness ($F(1,185)=<1$)). When stigma (STPP and DISL) scores were added as

covariates as shown in Model 3, the main effects were not significant for nurse types (F(1,180=<1), ethnicity (F(1,180)=1.92, p>.05), and interaction (F(1,180)=1.93, p>.05). Again, each covariate did not account for any effect: age (F(1,180)=1.16, p>.05), years in mental health nursing (F(1,180)=1.72, p>.05), years in general nursing (F(1,180)=2.92, p>.05), and in (sex, contact via work, patients helping nurse, relatives with mental illness, socialising with person with mental illness, stigma towards psychiatric patient, and dislike attributed to mental illness (F(1,180)=<1)).

Table 4.18: Differential Nursing Satisfaction towards Mental Illness-Diabetes

	F Values			
	Simple Model	Model 1 with background factors	Model 2 with background and contact factors	Model 3 with background, contact and stigma
Nurse type	.10 ns	3.00 ns	.00 ns	.00 ns
Ethnic group	.45 ns	.69 ns	2.11 ns	1.06 ns
Interaction	3.46 ns	2.08 ns	2.52 ns	2.43 ns

ns, not significant; [1] covariates = age, sex, years of mental nursing experience, years of general nursing experience; [2] covariates = age, sex, years of mental nursing experience, years of general nursing experience, and contact factors (via work, patients helping nurse, relatives with mental illness, socialising with person with mental illness); [3] covariates = age, sex, years of mental health nursing experience, years of general nursing experience, contact factors (via work, patients helping nurse, relatives with mental illness, socialising with person with mental illness), stigma (STPP &. DISL) scores.

4.4.5 Relationship between Group Membership and Differential Nursing Satisfaction

No effects proved significant on differential nursing satisfaction scores between nurse type and ethnic group, but are reported for comprehensiveness as follows. When background demographics were added as covariates as showed in Model 1 (Table 4.18), the main effects were not significant for nurse types (F(1,189)=3.00, p>.05), ethnicity (F(1,189)=<1) and interaction (F(1,189)=2.08, p>.05). No simple effect were significant for the covariates: age (F(1,189)=<1), sex (F(1,189)=1.74, p>.05), years in mental health nursing (F(1,189)=3.39, p>.05), and years in general nursing (F(1, 189)=<1). In Model 2, contact factors were added as covariates, the main effects were not significant according to nurse types (F(1,185)=<1), ethnicity (F(1,185)=2.11, p>.05)

and interaction (F(1,185)=2.52, p>.05). No simple effect was significant for the covariates: age (F(1,185)=1.53, p>.05), sex (F(1 185)=2.23, p>.05), years in general nursing (F(1,185)=<1), contact via work (F(1,185)=1.06, p>.05), patients helping nurse (F(1,185)=<1), relatives with mental illness (F(1,185)=1.90, p>.05), and socialising with person with mental illness (F(1,185)=<1), with the exception of years in mental health nursing (F(1,185)=6.16, p<.05). In Model 3, stigma towards psychiatric patients and dislike attributed to mental illness were added as covariates, the main effects of nurse types (F(1,180)=<1), ethnicity (F(1,180)=1.06, p>.05) and interaction (F(1,180)=2.43, p>.05) did not achieve statistical significance. No main effects were found for the following covariates: age (F(1,180)=2.34, p>.05), sex (F(1,180)=1.32, p>.05), years in general nursing (F(1,180)=1.31, p>.05), relatives with mental illness (F(1,180)=1.17, p>.05), socialising with person with mental illness (F(1,180)=2.43, p>.05) and in (contact via work, patients helping nurse, and stigma towards psychiatric patients (F(1,180)=<1)). However, there were two main effects for years in mental health nursing (F(1,180)=7.00, p<.01) and dislike attributed to mental illness (F(1,180)=5.88, p<.05).

Table 4.19: Differential Authoritarian Stance towards Mental Illness-Diabetes

	F Values			
	Simple Model	Model 1 with background factors	Model 2 with background and contact factors	Model 3 with background, contact, and stigma
Nurse type	8.72**	.12 ns	.01 ns	.01 ns
Ethnic group	1.93 ns	.80 ns	.67 ns	1.20 ns
Interaction	.84 ns	.04 ns	.08 ns	.11 ns

**p<.01; ns, not significant; [1] covariates = age, sex, years of mental nursing experience, years of general nursing experience; [2] covariates = age, sex, years of mental nursing experience, years of general nursing experience, and contact levels (via work, patients helping nurse, relatives with mental illness, socialising with person with mental illness); [3] covariates = age, sex, year of mental health nursing experience, years of general nursing experience, contact levels (via work, patients helping nurse, relatives with mental illness, socialising with person with mental illness), and stigma (STPP & DISL) scores.

4.4.6 Relationship between Group Membership and Differential Authoritarian Stance

As above, analysis of covariance was conducted examining differences in differential authoritarian stance between nurse types and ethnic groups. As indicated in Model 1 (Table 4.19), when background factors were added as covariates, the main effects were not statistically significant ($F(1,189)=<1$) according to nurse type, ethnicity and the interaction term. No particular background covariate had an obvious effect with only years in mental health nursing reaching significance ($F(1,189)=3.80$, $p=.05$). Other covariates had no simple effect ($F(1,189=<1$) including: age, sex and years in general nursing. When contact factors were added as covariates in Model 2, the main effects were not significant ($F(1,185)=<1$) for nurse types, ethnicity, and interaction term. The main effects were not significant for all covariates: years in mental health nursing ($F(1,185)=2.44$, $p>.05$), relatives with mental illness ($F(1,185)=1.02$, $p>.05$), and ($F(1,185)=<1$) in age, sex, years in general nursing, contact via work, patients helping nurse, and socialising with person with mental illness. In Model 3, the results did not achieve statistical significance for nurse type ($F(1,180)=<1$), ethnicity ($F(1,180)=1.20$, $p>.05$) and interaction term ($F(1,180)=<1$) with only dislike attributed to mental illness approaching significance ($F(1,180)=3.13$, $p=.07$). No simple effects on the other covariates: years in mental health nursing ($F(1,180)=2.51$, $p>.05$), and in (age, sex, years in general nursing, contact via work, patients helping nurse, relatives with mental illness, socialising with person with mental illness, and stigma towards psychiatric patients ($F(1,180)=<1$)).

In summary, the original nurse type effect on authoritarian stance was accounted for by the inclusion of background demographics and work experience factors.

Table 4.20: Differential Negativity towards Mental Illness-Diabetes

	F Values			
	Simple Model	Model 1 with background factors	Model 2 with background and contact factors	Model 3 with background, contact, and stigma
Nurse type	15.06***	1.68 ns	.80 ns	.61 ns
Ethnic group	4.68*	6.89**	6.83*	3.06 ns
Interaction	1.62 ns	1.15 ns	1.25 ns	1.03 ns

*p<.05; **p<.01; ***p<.001; ns, not significant; [1] covariates = age, sex, years of mental nursing experience, years of general nursing experience; [2] covariates = age, sex, years of mental nursing experience, years of general nursing experience, and contact levels (via work, patients helping nurse, relatives with mental illness, socialising with person with mental illness); [3] covariates = age, sex, years of mental health nursing experience, years of general nursing experience, contact levels (via work, patients helping nurse, relatives with mental illness, socialising with person with mental illness), and stigma (STPP & DISL) scores.

4.4.7 Relationship between Group Membership and Differential Negativity

As previously indicated differential negativity was higher for general than psychiatric nurses and higher for Chinese than Anglo nurses (see Simple Model, Table 4.20). In Model 1, when background demographics were added as covariates to the Simple Model, the main effect of nurse type was no longer significant ($F(1,189)=1.68$, $p>.05$) but the main effect of ethnicity remained significant ($F(1,189)=6.89$, $p<.01$). The interaction term was not significant ($F(1,189)=1.15$ $p>.05$). There was no simple main effect for each covariate: sex ($F(1,189)=2.20$, $p>.05$), and (age, years in mental health nursing and years in general nursing ($F(1,189)=<1$)).

In Model 2, contact levels were added as covariates, analysis of covariance showed no significant main effect of nurse type ($F(1,185)=<1$). The main effect of ethnicity, however, continued to be significant ($F(1,185)=6.83$, $p<.05$) with Chinese nurses (mean=.44, s.d.=.68) reporting higher differential negativity (towards the mentally ill patient than the diabetic patient) than Anglo nurses (mean=.26, s.d.=.43). The interaction effect was not significant ($F(1,185)=1.25$, $p>.05$). Again, there was no simple effect for each covariate: sex ($F(1, 185)=2.05$, $p>.05$), patients helping nurse ($F(1,185)=1.02$, $p>.05$), and (age, years in mental health nursing, years in general

nursing, contact via work, relatives with mental illness, and socialising with person with mental illness ($F(1,185=<1)$). Evidently covariates eradicated the effect on nurse type but this was not a simple association attributable to any particular covariate.

Finally the addition of stigma measures (STPP and DISL scores) as covariates in Model 3, indicated no significant main effect for nurse type ($F(1,180)=<1$), but importantly, the effect of ethnicity was no longer significant ($F(1,180)=2.64$, $p>.05$). The interaction term was also not significant ($F(1,180)=3.06$, $p>.05$). In particular the covariate 'dislike attributed to mental illness' (DISL scores) achieved significance ($F(1,180)=9.01$, $p=.003$) suggesting that general stigma associated with mental illness may account for differential practice-based negativity between Chinese and Anglo nurses toward the mentally ill patient case. No main effects for other covariates were found: patients helping nurse ($F(1,180)=1.45$, $p>.05$), stigma toward psychiatric patient ($F(1,180)=1.38$, $p>.05$ and in (age, sex, years in mental health nursing, years in general nursing, contact via work, relatives with mental illness, and socialising with person with mental illness ($F(1,180)=<1$)). It is evident that differential negativity between ethnic groups could be attributable to general stigma and particularly related to the personal negative attributes ascribed to those with a mental disorder.

The next section examines more strictly the relationship between cultural values and practice factors among Chinese nurses.

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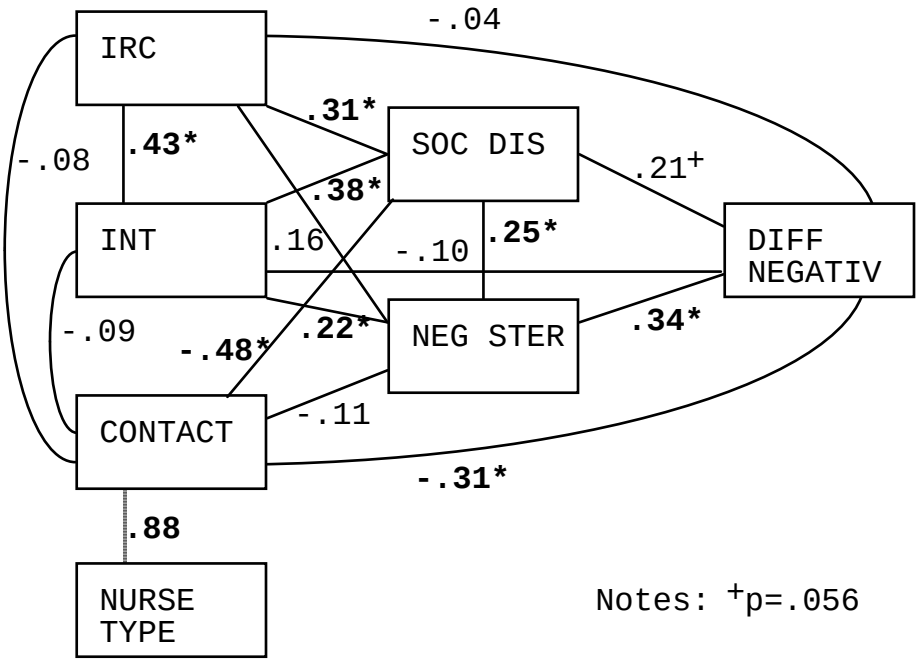
4.5 RELATIONSHIP BETWEEN CULTURAL VALUES, CONTACT, GENERAL AND PRACTICE STIGMA AMONG CHINESE NURSES

Previous analyses dealt with ethnic group membership indicating a relationship between Chinese background and stigma and that differential negativity between groups could be explained by taking into account endorsement differences in general stigma. If the earlier results based on group membership reflect cultural effects then it is expected that indicators of culture, that is, level of endorsement of cultural values, should be related to stigma and differential negativity. This section, within the Chinese sample, examines the

relationship between Chinese cultural values, (IRC and INT), general stigma (social distancing and negative stereotyping) and differential negativity. In addition it is of interest to examine the influences of level of contact with the mentally ill and nurse type on these relationships.

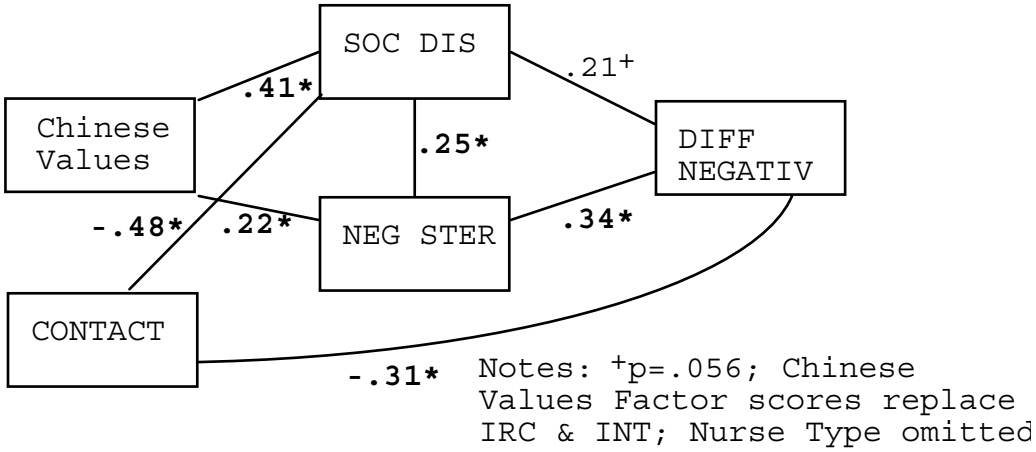
Figure 4.5A: Representation of correlations



As a starting point, correlations among these measures were mapped as shown in Figure 4.5A in a provisional model that treats contact level as a possible influence on general stigma measures in addition to Chinese cultural values, and explores direct and indirect relationships between these and differential negativity. As shown in Figure 4.5A, nurse type and contact level (with mentally ill people) was highly correlated, sharing about 80% of their variance. Thus, given the importance of contact in the literature and the strong co-variation with nurse type, the latter was not considered further in modeling the relationships among the variables. Contact level is evidently uncorrelated with Chinese cultural values, nor are cultural values directly related to differential negativity. Contact level is strongly negatively correlated with social distancing but not with negative stereotyping (despite these two being correlated), and it is correlated negatively with differential negativity. IRC is correlated with social distancing but not with negative

stereotyping while INT is correlated with both general stigma measures. Higher endorsement of these values (which are significantly correlated) is associated with higher endorsement of stigma towards the mentally ill. Stigma, in turn, seems positively correlated with differential negativity although the correlation between social distancing and negativity only approached significance (p=.056). Contact level was also correlated negatively with differential negativity.

Figure 4.5B: Representation of significant correlation



In Figure 4.5B, non-significant correlations are removed for clarity. In addition, given the correlation between the two values a factor score based on the two values appears in their place. The score was derived by principal components analysis showing one dimension, termed here 'Chinese Values', that explained 71.28% of the scale scores variance. As seen in Figure 4.5B, Chinese Values, as a measure, behaves similarly to the items in showing positive relationships with stigma indicators and no relationships with contact level and differential negativity. (Nurse type is omitted in Figure 4.5B for reasons outlined earlier).

Figure 4.5C: Path Analysis Panel B Model

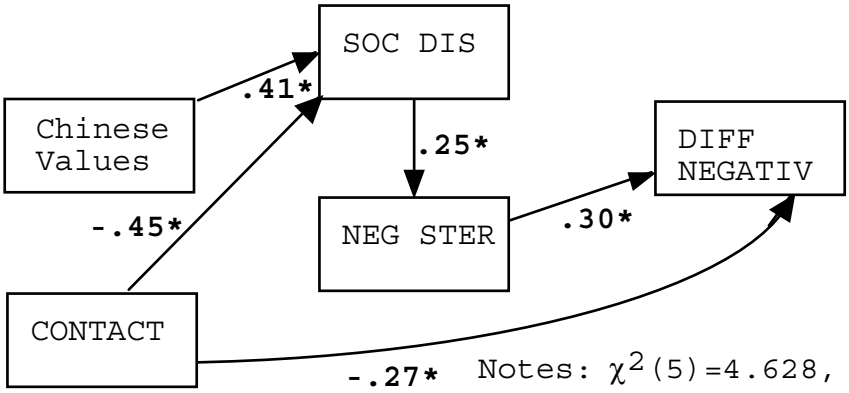


Figure 4.5C shows results of path analysis conducted with AMOS-5 (Arbuckle, 2003). Preceding this outcome a previous model with contact level excluded from the analysis indicated significant paths between Chinese Values and negative stereotyping, and the 'weak' path between social distancing and differential negativity. However, once contact level was entered in the analysis these paths were no longer significant. Although the model shows good fit statistics to the data the relationships shown in Figure 4.5C suggest that contact level could be considered as a mediator of the relationship between social distancing and differential negativity.

Figure 4.5D: Path Analysis Respecified Model 1

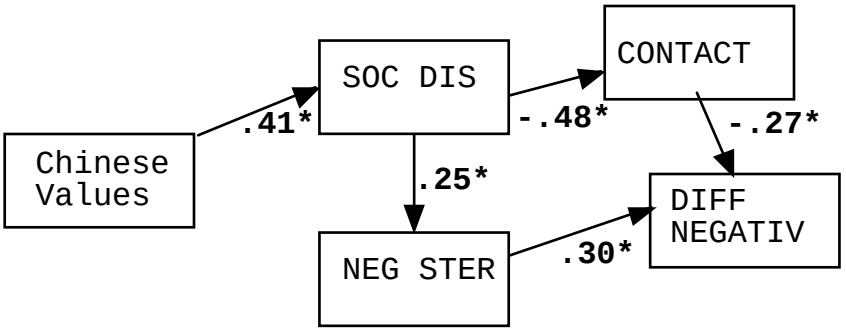
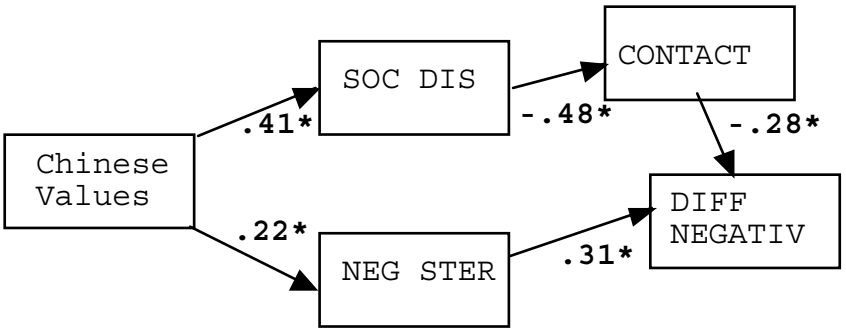


Figure 4.5D shows the model specifying contact level as a mediator between social distancing and differential negativity, with only slight changes in fit statistics.

As argued earlier the correlation between social distancing and negative stereotyping was small enough (though significant) to warrant keeping them as separate measures of general stigma. In the model in Figure 4.5E they are treated as independent, and in doing so, Chinese Values are seen to be associated with negative stereotyping. No additional paths were indicated.

Figure 4.5E: Path Analysis Respecified Model 2



Notes: $\chi^2(5)=6.208$, p=.287; CFI=.978; RMSEA=.054, PCLOSE=.401

The model of Figure 4.5E was re-expanded by including the measurement model for Chinese Values and this is shown on the left part of Figure 4.5F. That is, Chinese Values is estimated as a latent variable based on IRC and INT and these are analysed together with the rest of the path model. As shown, there is a slight increase in path coefficients between Chinese Values and general stigma indicators but no other changes. The overall model fit is well within acceptable limits. However, examination of modification indices suggested one additional path, between INT and differential negativity. This is shown in the model represented in Figure 4.5G, though the additional path was barely significant (p=.046). Of interest, the relationship is negative, that is, higher endorsement of INT is associated with lower differential negativity, in the presence of the latent variable Chinese Values in the model.

Figure 4.5F: Path Analysis Respecified Model 3

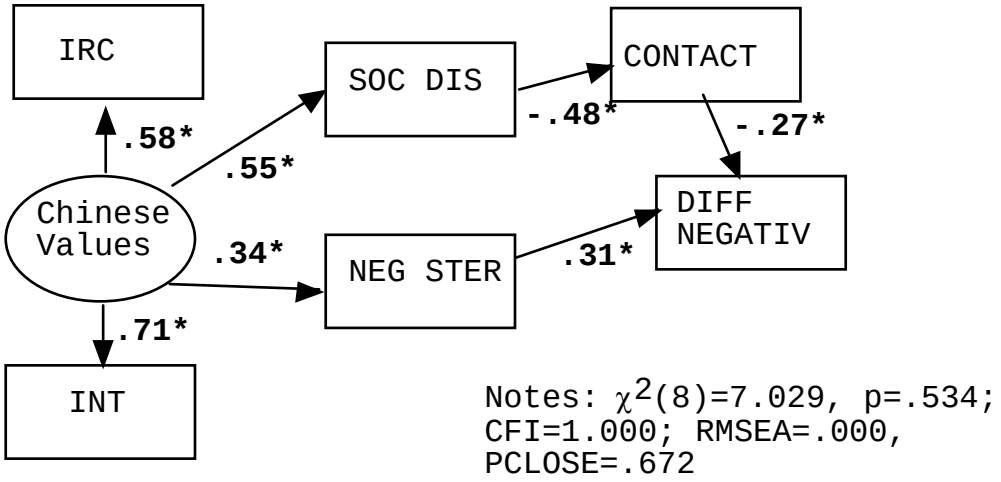
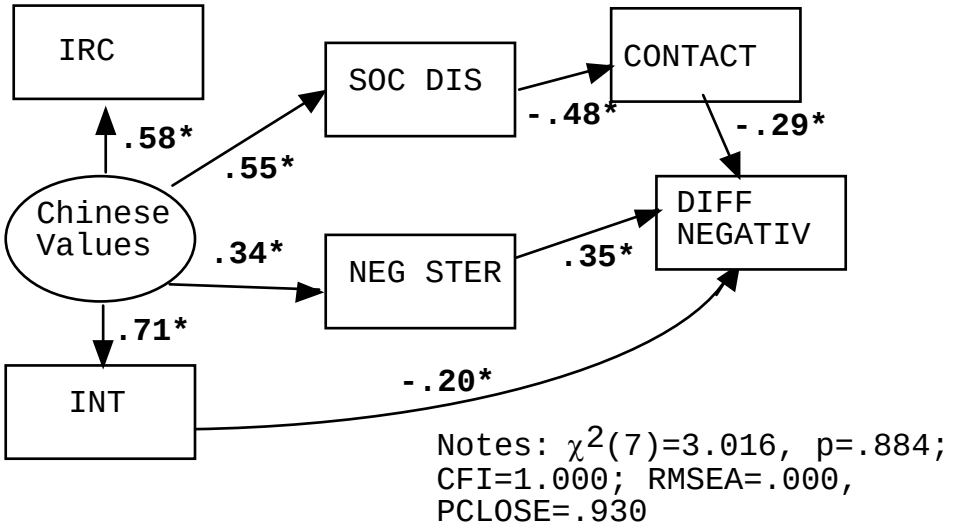


Figure 4.5G: Path Analysis Respecified Model 4



Regardless of the details of the various alternative models, which are essentially similar in fit, the main general results suggest that Chinese cultural values are related to differential negativity, but mainly indirectly, that is, mediated by stigma and especially social distancing. Second, while contact level was expected to influence social distancing and negative stereotyping, given the causal association given to it in the literature in reducing stigmatizing attitudes, the results suggest that it is better placed as a mediator between social distancing and differential negativity. Negative stereotyping is

not mediated by contact level but is directly positively associated with differential negativity.

The next chapter focuses on discussing the key findings of present study and reflections on the hypotheses tested.

CHAPTER FIVE

DISCUSSION

This chapter discusses the main research results. Although there are a number of reportable findings, such as those in the development of the instruments, the main discussion here is focused on key findings to do with 'general' and 'practice' stigma. The chapter explores and critically examines the three main independent variables (nurse type, culture and contact primarily) and their relationships with general and practice stigma. General stigma has been widely researched in the literature, as documented in Chapter Two, but not practice stigma.

5.1 GENERAL STIGMA

In the present study general stigma was measured using the social distancing and alienation of the mentally ill (STPP Scale) and negative stereotyping attitudes towards mental illness (DISL Scale). Nurses seemed to highly endorse STPP and DISL items similar to what could be expected for the general public. For example, it was shown that for several of the STTP items, as many as 20 and 40 percent of nurses endorsed these. Particularly items that suggested the theme of dangerousness (e.g., 'not allowing a person with mental illness to baby sit') seemed to be highly endorsed. Similarly, many of the items depicting negative stereotypes in the DISL Scale, were also highly endorsed (e.g., aggressiveness, unmotivated, suspiciousness, incoherence) in at least 60% of the nurses. These findings are similar to the results of Jorm (1999), Caldwell and Jorm (2001) and Lauber et al. (2006) although those studies were done with other professional groups. As indicated in the previous work, Lauber et al. (2006) found that psychiatrists endorsed more stigmatizing attitudes than other professionals (psychologists, nurses) including higher negative stereotype endorsement. It seems that professionals in a role to provide care to people with mental illness are no less likely to carry stigmatizing attitudes towards those with a mental illness.

It is shown presently that social distancing and negative stereotyping varied according to nurse type and cultural background of the nurse. In fact, in relation to nurse type, negative stereotyping did not differ between general and psychiatric nurses. On the other hand, it was clear that endorsement of social distancing was lower among psychiatric nurses. This might be expected, to some extent, because psychiatric nurses had more experience (by definition of the groups in this study) of people with mental illness and therefore they may feel safe in their knowledge and skills for interacting with the mentally ill, because they have a personal interest in caring for the mentally ill, as shown by their choice of specialty, or, because they have experienced people with mental illness in a wider variety of settings and roles (as measured by the CPP Scale). Further, the nurse type effect was reduced by controlling for differences based on background factors (including amount of mental health nursing experience) and contact as measured by the CPP Scale. Indeed, once accounting for these factors, there were no differences in general stigma between two nurse type groups. This implies that contact, experience and choice of specialty may be significant determinants of general stigma towards people with a mental illness amongst nurses. There have not been any other comparative studies between general and psychiatric nurses to be able to suggest that these findings generalize to other settings. The few studies of other disciplines show mixed results (Roskin et al., 1988: Jorm et al., 1999; Kua et al., 2000; Caldwell & Jorm, 2001).

In Caldwell and Jorm's (2001) study, for example, psychiatric nurses were more optimistic about outcomes for the mentally ill than other professionals. However, these professional groups also included psychiatrists and clinical psychologists who may be similar to the psychiatric nurses in choosing mental health as their specialty. Kua et al. (2000) on the other hand compared general medical practitioners and psychiatrists. Findings suggested more optimism amongst psychiatrists who endorsed better outcomes for the mentally ill, consistent in principle with present findings for nurses. However, clearly, these previous studies measured constructs that could be related to stigmatizing attitudes but did not directly measure such attitudes. On the other hand, studies of mental health training of generalist health care professionals (Chinnayya et al., 1990),

students (including nurses) (Surgenor, Dunn & Horn, 2005; Evagelou et al., 2005; Madianos et al., 2005) and medical students (Wilkinson, Toone & Greer, 1983) have shown some reductions in negative attitudes towards the mentally ill. Such results are consistent with present findings, but are more specifically indicative of the effects of training exposure and short term experience on attitudes rather than effects due to choice of specialty. However, training effects have been inconsistent and are probably due to specific factors (Reed & Fitzgerald, 2005), and may not last (Sivakumar et al., 1986; Baxter et al., 2001) as reviewed in Chapter Two.

Lastly, there are the results from comparing mental health professionals and public attitudes in Lauber's et al (2006) work. In that study, psychiatrists were said to hold as negative an attitude towards the mentally ill as was held by the general public. This is not consistent with the present findings that argue that experience, knowledge and contact should be related to less stigmatizing attitudes. On the other hand, Lauber's et al. (2006) findings are inconsistent with the more general literature regarding the benefits of contact in reducing negative attitudes towards those with mental illness (Penn & Corrigan, 2002; Alexander & Link, 2003; Couture & Penn, 2003).

As said, general stigma also varied according to cultural group membership of the nurses. Chinese nurses were shown to endorse more highly both social distancing and negative stereotyping of those with mental illness. With respect to social distancing as measured by responses on the STPP scale, Chinese nurses, who were also shown to differ from Anglo nurses on the collectivist values, and particularly, general nurses among the Chinese group endorsed more highly social distancing attitudes. Results suggest a relationship between culture and general stigma, but do not clarify why, specifically, such a relationship exists. None of the previous studies reviewed earlier (Chapter Two) effectively show cultural differences in general stigma as they mainly dealt with within-culture depiction of social distancing (or negative stereotyping) towards the mentally ill.

The two measures of stigma used in this study appeared to differ in the processes of stigma. On the one hand STPP, in view of the literature (Cohen & Struening, 1962) is

predominantly a measure of social distancing regarding the mentally ill. It includes an attitude of mistrust, sensitivity to potential threat and a willingness to endorse mechanisms of social restriction in order to avoid contact with the mentally ill. The DISL measure on the other hand captures a wider stereotype relating to the negatively regarded personal attributes ascribed to the mentally ill. The measure does not imply any social consequences as to how to behave towards the mentally ill but it does cover personal characteristics that may dictate behaviour in relation to those with mental illness and particularly one's personal aversion for such subjects on the basis of their behaviour. Results suggest that Chinese group membership and higher collectivist values influence social distancing based on threat possibilities, but also influence interpretations of the character of the mentally ill person through his behaviour.

The present study indicated that the cultural differences in social distancing were not attributable to differences between groups in relation to background variables and in relation to contact with people having a mental illness. When such factors were taken into account as covariates there remained significant difference between cultural groups in social distancing. Furthermore, the findings extended to when general stigma was measured by negative stereotyping.

Some insight into the relationship between Chinese cultural values and general stigma is suggested by Lau and Wong's (in press, 2007) study of willingness to seek support among Hong Kong women with post natal depression, centered on the concept of 'face'. This study indicated lower willingness to seek support was related to higher endorsement of face acquisition and face maintenance in the context of face threat. Face, in the Chinese, represents one's public image but beyond the Western concept of the management of others' impression of oneself, it is also subserves the management of the image of one's important in-group – in most instances the family. In the present study, also in an effort to understand the specific mechanisms in the relationship between Chinese cultural values and general stigma towards the mentally ill, correlations were inspected (post hoc) between individual items comprising the collectivism scales and social distancing and stereotyping scores within the Chinese sample. The highest

correlations with social distancing were found for the two items referring to face management: 'avoid bad deeds to avoid disgracing the family'($r(83)=.32$, $p<.001$), and 'achieve success for the honour of the family' ($r(83)=.43$, $p<.001$). These respectively refer to face saving and face acquisition, commensurate with Lau and Wong's (in press, 2007) measures. In addition the latter item was correlated with negative stereotyping ($r(83)=.26$, $p<.05$). It may be speculated that potential stigmatisers who hold higher (than lower) concerns for face prefer to dissociate themselves from people who may be subject to social stigma (e.g., those with a mental illness), thus, preserving their view of high self-status. On the other hand, if they succumbed to mental illness, they, like the sample in Lau and Wong's (in press, 2007) study, they might engage in greater avoidance of situations that could expose their conditions to others and potentially reaffirm the precarious social status afforded to them by their mental illness. Further work is needed in this specific area that might gain fruitfully from social comparison theory (Festinger, 1954; Buunk & Gibbons, 2007) in relation to the management of social impressions of the self and how, this might apply to the Chinese construct of 'face' in relation to mental illness.

To summarise, it may be concluded that general stigma among nurses towards the mentally ill varies dependent on nurse type, and this variation is likely underpinned by differences in career choice but especially having varied contact with the mentally ill, and, varies dependent on cultural background, though for the latter, the specific reasons for such variations are not clear from this study. What can be said with some confidence is that the cultural differences in general stigma are unlikely to be due to more contact and career choice.

5.2 PRACTICE STIGMA

In the present study stigma was explored through the development of the Nursing Relationship Scale (NRS) and specifically defined by the differences in item endorsement when nurses considered the vignette cases depicting mental illness and diabetes. As shown in the items, the NRS reflected four dimensions termed

Caring/Supportive Approach, Nursing Satisfaction, Authoritarian Stance and Negativity. Initial analysis comparing nurse type and cultural group membership of nurses on Care indicated only main effects of patient type and ethnicity. That is, the case with mental illness generally attracted higher Care scores than the case of diabetes and Chinese nurses endorsed higher Care than Anglo nurses. It should be remembered that NRS Care items reflect the view that the nurse will provide 'extra' care than usual towards the target patient. It may be relatively higher care ratings for the mental illness case is due to perceptions of extra demand or need for care in this case relative to the diabetes case, consistent with Brinn's (2000) results. Whether this reflects a view that the mental illness patient is seen by nurses to be less capable than the diabetes case, that is, a perception deriving from stereotyped views of incapability regarding the mentally ill, is not entirely clear from this study as no direct assessment was made of negative stereotyping ascribed to diabetes. However, post-hoc examination revealed a significant correlation between higher care towards the mental illness case with higher negative stereotyping for mental illness in general ($r(204)=.22$, $p<.01$), and indeed, with higher scores on social distancing ($r(206)=.32$, $p<.001$), suggesting higher care for the specific vignette case could be influenced by more general stigmatizing attitudes related to a view of greater ineptitude in people having a mental illness. In other work using the OMI, the dimension of benevolence has also been identified which may be related to the NRS Care dimension. In some studies benevolence is positively correlated with attitudes reflecting social restrictiveness (e.g., Olade, 1979). Consistent with Cohen and Struening's (1962) interpretation, benevolence appears co-prevalent with perceptions that the mentally ill differ from 'normal', that they are restricted in role functioning and that they engender fear in others. Apparently, while some people (including nurses) believe that mentally ill individuals should be isolated from society, they endorse at the same time a need for the mentally ill to be 'taken care of'. Similarly, Keane's (1991) results indicate there can be an increase in negative stereotyping after nurses are exposed to caring for chronically mentally ill patients. Ellsworth (1965) suggested that while hospital staff may endorse attitudes of benevolence towards mentally ill patients, these do not necessarily reflect in their behaviour towards patients. Independent assessment of

staff behaviour by patients indicated that those staff highly endorsing protective benevolence were seen by patients to be aloof, placating and avoidant (Ellsworth, 1965).

Higher care was also endorsed for any patient by the Chinese than Anglo nurses in this study. It is not clear from the results why this may have occurred. As members of a collectivist culture it is possible that Chinese nurses, relative to the Anglo group, value more altruism since collectivists often sacrifice personal goals for others' interest. However, this explanation is not entirely satisfactory because collectivists' altruism is differentiated dependent on whether the target of altruistic behaviour is or is not a member of one's ingroup. It is difficult to imagine, given the high rate of social distancing found among Chinese nurses particularly, that patients with mental illness may qualify as a member of the ingroup.

Nursing Satisfaction scores were found to be high regardless of patient type. Scale scores reflected a combination of perceived challenge and interest in the nursing task related to the two cases depicted. Initial analysis comparing nurse type and cultural group membership of nurses on satisfaction indicated only main effects of nurse type. It would appear from the nurses' responses, that despite the nature of the illness complicated by psychosocial difficulty, nurses adopted a positive approach to care for these patients. Further analysis revealed a significant correlation between higher satisfaction and higher negative stereotyping ($r(204)=.20$, $p<.05$) and less social distancing ($r(206)=-.15$, $p<.05$) respectively for mental illness, suggesting that higher satisfaction for caring for the mental illness vignette case could be influenced by less social distancing, even though the social distancing attitudes remained high. It is possible that psychiatric nurses by virtue of their nursing role, are already engaged in challenging tasks, hence, they endorsed higher nursing satisfaction than general nurses for the cases depicted.

Initial analysis comparing nurse type and cultural group of nurses on Authoritarian Stance indicated main effects of nurse type, patient type and ethnicity. Authoritarian items reflect a lack of trust in self-care in the patient and a taking of control of care.

General nurses adopted a more authoritarian approach for the case of mental illness than psychiatric nurses. The relative lack of psychiatric nursing training, limited skills in alternative management of mentally ill patients, and lack of experience working with them may have led to general nurses endorsing a more authoritarian approach than psychiatric nurses**.** Indeed nurse type differences on Authoritarian Stance were eradicated once background demographics and experience factors were included as covariates in the present analyses. Analysis also revealed higher authoritarianism towards the mental illness than diabetes case. Other work using the OMI dimension of authoritarianism by Keane (1991) and Madianos et al. (2005), found a significant improvement on authoritarianism scale in nursing students' attitudes after clinical exposure and a course of study. In fact, in Madianos' et al. (2005) study, the improvement extended to endorsement of less social restriction of the mentally ill.

Higher authoritarianism was also endorsed for any patient by the Chinese than the Anglo group of nurses in this study. One possible explanation of this may be related to Chinese cultural values that emphasise higher level of authoritarian stance towards mental illness compared with English-speaking background groups (Shokoohi-Yekta & Retish, 1991; Fan & Karnilowicz, 2000). As indicated, according to Hofstede's (2001) results, collectivism is related to power distance. Power distance is a dimension reflecting a presence of hierarchical relationships within the cultural group but also an interdependence between those in power and those lacking it. In Chinese society this is reflected in higher respect for the elders and generally males or for those with ascribed power in specific relationships (e.g., teacher, doctor, employer). In the present study this is captured by the IRC factor that deals with within family variations of power, that particularly distinguished the two cultural groups of nurses. It may be that Chinese nurses endorsed more authoritarianism within a nurse-patient relationship because their values emphasise interdependent hierarchy. Post-hoc examination revealed a significant correlation between authoritarian stance and IRC factor ($r(83)=.35$, $p<.01$). As summarized by Argyle et al. (1986), in Eastern cultural groups, leadership styles are more successful if they are paternalistic and authoritarian in style and this is complemented by obedience of subordinates.

Initial analysis on Negativity revealed main effects of nurse type, patient type and ethnicity. Negativity items reflect a felt barrier with the patient together with reluctance to risk creating potential trouble or disturbance in the patient. Findings indicated a greater endorsement of negativity in relation to the mental illness case than the diabetes case and this trend was more prominent in general nurses than psychiatric nurses. While mental illness attracted higher negativity ratings than diabetes across all nurses, psychiatric nurses were less likely to discriminate between the diabetes and the mental illness cases compared with general nurses. Again, the findings bring into perspective the possible effects of lack of psychiatric training and exposure in general nurses. Post-hoc examination revealed a significant correlation between higher negativity towards the mental illness case and higher negative stereotyping ($r(204)=.24$, $p<.01$) and, higher social distancing ($r(206)=.50$, $p<.001$). Higher negativity may parallel to the concept of 'distancing' identified by Bray (1999) within mental health nursing settings where challenging behaviour appears to be associated with greater avoidance strategies.

Chinese nurses endorsed higher negativity towards mental illness case than Anglo nurses. One possibility, given that negativity reflects the tendency to avoid confrontation and possible discrimination of the patient, is that higher negativity by the Chinese may be associated with their values to preserve harmonious relationships, a philosophy typical of Confucianism, and to avoid public expression of (negative) emotion (either on their part or in the patient) (Argyle et al., 1986; Hsiao et al., 2006). However, this would suggest that within the Chinese sample, negativity should be correlated with Chinese values but this was not found to be the case – that is, there were no direct correlations between values and negativity. On the other hand, the present measures of collectivist values, IRC and INT, did not include specific items to capture elements of harmony maintenance and social rules regarding public expression of emotion.

5.3 DIFFERENTIAL PRACTICE STIGMA

The present study highlighted the link between general stigma and practice stigma which had not been researched before other than in Ellsworth's (1965) study. Initial analyses

of variance were conducted to examine whether there were nurse type and ethnicity effects in differential practice approaches using the NRS as detailed in Chapter Four.

As said, among the measures of differential nursing approaches, authoritarian stance was found to be related to nurse type (only) and this effect was eliminated once accounting for background factors. On the other hand, differential negativity was related to nurse type and to the nurse's cultural background. The former effect was shown to be dependent on background factors since once these were introduced as covariates the nurse type effect was entirely eliminated. With respect to the effect of cultural background neither background factors nor contact eliminated this effect, suggesting that some aspect associated with Chinese culture is associated with more negativity towards mental illness case than diabetes case. Indeed further analyses revealed that entering general stigma measures as covariates resulted in eliminating the culture effect, suggesting that general stigma (on especially negative stereotyping) was a mediator of the culture effect.

To further clarify the relationship between culture, general stigma, contact level and differential negativity, analysis was conducted within the Chinese sample. Raw correlations indicated significant associations between Chinese values and both general stigma measures. While contact level was correlated with differential negativity (negatively as expected) there were no direct significant correlations between Chinese values and differential negativity. Instead, effects of cultural values on negativity appeared to be mediated by general stigma. A series of path analyses suggested several alternative models that fitted the data. In general, Chinese values influenced differential negativity through the mediation of general stigma and prior contact with those having mental illness. Specifically, in the Chinese group, higher endorsement of Chinese values was related to higher endorsement of social distancing and negative stereotyping of the mentally ill (viz, general stigma). While endorsement of negative stereotypes was related directly to higher endorsement of differential negativity, the effect of social distancing was found to be mediated by prior level of contact with the mentally ill. That is, higher social distance was related to lower contact and higher contact was negatively

related to differential negativity. It may be concluded from these results in general that indeed either aspects of the cultural values measured or some unmeasured variables related to these values are associated with general stigma, which then influences practice stigma**.** Consistent with the role of contact in the nurse type effect in relation to authoritarianism and negativity, for the overall group differential authoritarianism and differential negativity were found to be negatively correlated with CWS and ESP types of contact. The next section reviews hypotheses outcomes.

5.4 OUTCOMES IN RELATION TO HYPOTHESES TESTING

5.4.1 Contact Hypothesis between Psychiatric and General Nurses

The study provided support for hypothesizing that when compared with general nurses, psychiatric nurses would endorse greater contact with mentally ill people (Hypothesis 1a). Greater contact was observed on factors measuring work related contact, CWS and PHN, but also on external socialisation (ESP) which may or may not be related to their care delivery role (pp. 66-67). No difference was observed on contact due to access to a relative having a mental illness (RMI) (p. 67).

Hypothesis 1b stated that psychiatric nurses should endorse lower level of general stigma than general nurses. Results supported this in relation to social distancing and alienation measures (pp. 81-82) but not negative stereotyping (p. 87), supporting the contention that these two measures of general stigma, though correlated, should be treated analytically separately.

Thirdly, it was expected that psychiatric nurses relative to general nurses, would endorse more positive and less negative approaches to the clinical care of mentally ill patients (as depicted in the vignettes). Results indicated that ostensibly positive approaches reflected in care and satisfaction scores, which did not differ between nurse types in relation to the mental illness vignette (relative to the diabetes vignette) (p. 76). For negative approaches however, it was shown that general nurses endorsed higher

authoritarianism and negativity approaches than psychiatric nurses for the case with mental illness compared with the case of diabetes. That is, Hypothesis 1c is supported in relation to ostensibly negative clinical care approaches (pp. 76-77).

5.4.2 General and Practice Stigma Hypotheses between General and Psychiatric Nurses

Hypothesis 2 stated that differences between nurse types in general (Hypothesis 2a) and practice (Hypothesis 2b) stigma would be eliminated once background and contact factors were statistically controlled. First, there was no nurse type effect on negative stereotyping (DISL) (p. 87) and this did not change with the addition of possible confounders in the model (p. 93). However, the differences that were observed in social distancing (STPP) between nurse types were reduced by the inclusion of background factors and entirely eliminated by additional inclusion of contact factors in the model (p. 91). In relation to practice stigma, as said, there were no significant relevant interaction effects for care and satisfaction factors. With respect to authoritarianism and negativity, in analyses of differential authoritarianism and differential negativity, the main effect of nurse type was eliminated by controlling background factors alone (pp. 98-99). In general, Hypothesis 2a and 2b were supported, and it would appear that the nurse type effect on general and practice stigma was mediated by background and/or contact factors. It is worth noting that negative stereotyping does not seem to be related to background or contact factors in these analyses (p. 93).

5.4.3 Contact Hypothesis Associated with General and Practice Stigma

Hypotheses 3a and 3b were about expecting a negative association between contact and general and practice stigma, respectively. First, the elimination of the nurse type effect on social distancing by introducing contact into the analysis (having already controlled for background factors) suggested a negative relationship between contact and social distancing (p. 91). Further, direct correlations between general stigma and contact levels were significant and negative (p. 89) for social distancing scores (STPP). However, there was no relationship found between negative stereotyping and contact. Thus,

Hypothesis 3a was supported only in relation to social distancing (p. 89). With respect to practice stigma, direct correlations between practice stigma and contact factors (CWS and ESP) were negative and significant for differential authoritarianism and differential negativity (p. 90). Further, within the Chinese group, higher contact was associated with lower differential negativity, but this also appeared to act as a mediator between the latter and social distancing and alienation of mentally ill people. Thus, there was evidence to support Hypothesis 3b.

5.4.4 Cultural Value Hypothesis between Chinese and Anglo-Australian Nurses

Hypothesis 4 stated that Chinese nurses would endorse more highly collectivist values and more lowly individualist values than Anglo-Australian nurses. This was partly supported (pp. 71-72). Results supported this in relation to the dimensions of ingroup interdependence (INT) and ingroup role concern (IRC), both considered as indicators of collectivist values, but there was no difference in individualism (IND). Furthermore, analysis of group affiliation scores suggested that Chinese nurses occupied a bicultural position since they reported equal affiliation with Chinese (origin culture) and Australian culture. The pattern of findings may reflect acculturation towards Western values in Chinese group while maintaining their Chinese values. Although it is beyond the scope of this study, such apparent cultural 'shift' suggests that individualism and collectivism may vary independently in the acculturative context.

5.4.5 General Stigma Hypothesis between Chinese and Anglo-Australian Nurses

Hypothesis 5 stated that Chinese group membership (versus Anglo-Australian) would be related to higher ratings of general stigma towards mentally ill people, particularly when confounders (background and contact factors) were statistically controlled. Results supported this in relation to social distancing and alienation measures (STPP) (pp. 81-82), and negative stereotyping scores (p. 87). The STPP effect was moderated by nurse type with differences between ethnic group being greater between general nurses than psychiatric nurses (pp. 81-82). Group differences were found on nine out of 10 STPP

items favouring higher agreement for Chinese and particularly Chinese general nurses (p. 84). The ethnic group differences, though reduced, were not eliminated by statistically controlling for background and contact factors in STPP scores (p. 90) and in DISL scores (p. 93). Hence, Hypothesis 5 was supported as Chinese nurses did indeed endorse more highly general stigma towards the mentally ill than Anglo-Australian nurses, regardless of group differences in background and contact factors.

5.4.6 Practice Stigma Hypothesis between Chinese and Anglo-Australian Nurses

Hypothesis 6 expected that Chinese nurses relative to Anglo-Australian nurses, would endorse less positive and more negative approaches to the clinical care of a mentally ill patient relative to a case with diabetes (as depicted in the vignettes). Results (pp. 76-77) indicated no significant interaction effects of ethnicity and patient type for care, satisfaction, and authoritarianism. Chinese nurses endorsed more highly care, authoritarianism and negativity than Anglo-Australian nurses (i.e., regardless of patient type). However, with respect to negativity, the ethnicity and patient type interaction was significant (pp. 78-79). As well, in analysing differential negativity, significant main effect was found between Chinese and Anglo nurses favouring higher negativity towards the mentally ill patient than the diabetes patient for Chinese than Anglo nurses (p. 79). Accounting for background and contact factors did not eliminate the ethnicity main effect, but it was discovered that this effect could be eliminated by statistically controlling for general stigma differences between the ethnic groups (pp. 99-100**).** While comparisons of NRS scores failed to support Hypothesis 6 across all measures, analyses focused on negativity provided such support, and further, this effect appeared to be associated with differences in general stigma between the two ethnic groups.

5.4.7 Chinese Collectivist Value Hypothesis Associated with Differential Practice

Hypothesis 7 stated that higher endorsement of collectivist values and lower endorsement of individualist values in the Chinese group would be related to higher endorsement of general stigma (7a) and less positive and more negative clinical care approaches to a case of mental illness relative to a case of diabetes (as depicted in the

vignettes) (7b). Results indicated that collectivist values were correlated with general stigma (both STPP and DISL) (pp. 101-105), supporting Hypothesis 7 (a) and strengthening the view that 'culture' may influence attitudes towards the mentally ill. The relationship between Chinese cultural values and practice stigma was more complex than anticipated. First, analyses were confined to differential negativity (DIFF_NEGA) scores where ethnic group differences prevailed after accounting for background and contact factors. Next it was found that there was no direct correlation between Chinese values and DIFF_NEGA. The path modeling showed that Chinese values were related to general stigma and this was then associated with DIFF_NEGA. But this was not a simple association in the case of social distancing (STPP). While negative stereotyping was related directly with DIFF_NEGA, positively, social distancing effects on DIFF_NEGA were suggested to be mediated by level and diversity of prior contact with people having a mental illness. Thus, Hypothesis 7 (b) was supported but association was indirect (pp. 104-108).

5.5 SUMMARY

Findings in this study suggest that choice of specialty and experience in mental health nursing, and contact influenced general and practice stigma towards mental illness among nurses of Chinese and Anglo-Australian backgrounds. Collectivist values correlated with higher endorsement of general stigma. Mediated with prior contact with mentally ill people, in particular, Chinese values influenced differential negativity among Chinese nurses. It is unclear which variables associated with Chinese values influenced general stigma. The results support the notion that 'culture' influences the stigma towards mental illness and has an effect on endorsement of differential nursing practices towards the mentally ill.

The next section addresses several limitations of the current study that may limit conclusions and generalization of the findings.

5.6 LIMITATIONS

5.6.1 Sample

First, although demographic characteristics (age and sex) of the sample conform to the general trend in the Victorian nursing workforce (Nurses Board of Victoria, 2005), the results may not be representative of the nursing population in Victoria. The sample comprised only of nurses from Metropolitan Melbourne who were self-selected to participate, which might imply interest in mental health issues that may not be shared by the wider nursing community (especially given the evidence regarding specialty choice in the literature). This is a particularly important consideration given the small sample involved in the study constituting only a small fraction of the overall nursing community.

5.6.2 Vignette Method

Second, the study used a vignette method to represent patients and their behaviour. This method is limited in the range and depth of information about a patient compared with actual patient-nurse encounters. Particularly situational factors and interpersonal factors that play a role in the relationship between nurse and patient are neglected by this method. Thus while vignettes provide a general picture of the patient and his behaviour, the moderating effects on attitudes and nursing approaches of the ongoing nursing relationship with the patient are not able to be assessed by the present method.

5.6.3 Stigma Measure

Third, a general problem in assessing stigma especially in health professionals, is that measurements of stigma may be subject to social desirability influences. It is likely that participants in the present study may have presented their position on measures such as social distancing and attribution of negative stereotypes, and indeed, with regard to their practice approaches, in a more positive light than their real opinions. Especially among the helping professionals it may be socially undesirable to report negative attitudes and

stereotypes towards patients and to report that their practice might be discriminatory if the patient has a mental illness than somatic problem. In anticipation of this, at least in relation to the NRS, care was taken to develop the items as not to be too extreme as to restrict the range of responses. In any event, estimates of general stigma made in the present sample may be under-estimates.

5.6.4 Cultural Values Measure

Fourth, while the study's findings pointed to the effects of 'culture' on stigmatising, the specific factors within different cultural groups relating to stigma remain open to speculation. All that could be said from the present results is that cultural variation may be an important dimension to further elucidate in future research. Chinese cultural values (and Chinese group membership) appear to be related to higher negative attitudes towards the mentally ill, or some unmeasured factor related to Chinese cultural values is related to higher negative attitudes towards them. These observations are not insignificant, however, in view of the lack of 'true' cross-cultural comparative research, that is, research that attempts to measure in-depth the independent variable of culture. Furthermore, if the argument is that 'culture' influences stigma, a study that includes a variety of carefully selected cultural groups with known and (like in the present study) empirically verified, cultural differences, is needed to strengthen the argument.

The next chapter addresses recommendation for future research and brings the report to conclusion.

CHAPTER SIX

CONCLUSION

6.1 PRESENT STUDY

An issue in the present study is with the concept of general stigma, presently measured by social distancing preferences and negative stereotyping. Essentially, one or the other measure in some results proved to be important, and in view of their demonstrated low (but significant) correlation, they were considered presently as separate processes of stigmatising but under the broad rubric of general stigma. It may be important to consider separately each of these processes in future work, particularly as other groups (e.g., Lauber et al., 2006) are beginning to use alternative measures to social distancing.

Like a number of studies, the present study supports the view that contact with those having mental illness is associated with less negative attitudes towards them. Moreover, the present measure of contact reflects a 'diversified contact' construct including through work and informal modalities. Encountering those having a mental illness directly and in a variety of roles may be helpful in moderating negative attitude biases because, particularly, the person with mental illness may be seen to be defined by more than the illness itself. That is, people with mental illness may be appreciated in their successful conduct of their roles and their behaviour may not as readily subjected to generalisation made from negative stereotypes. Of interest, length of experience in mental health work indicated in the present analyses as a background factor, played little role in explaining variations in attitudes. It may be more important to consider the nature of the contact and experience of people with mental illness in relation to attitudes. However, 'contact' is only partly important in attitudinal variation.

The present study suggests, as speculated in the Introduction, that nurses may bring 'something more' to the clinical relationship that originates from their personal development within a particular cultural context. Cultural differences emerged in relation to general negative attitudes towards the mentally ill and, as far as the design of

the study allows, these appear to translate into the nurse-patient interactions in the process of care. It may be important to understand how cultural factors interplay (interface) with patient care processes and how culturally-determined attitudes may influence practice approaches and actual practice. Some models of improving cross-cultural competency in clinicians (e.g., Pedersen, 2002), stress the need for professionals to be aware of and understand their own attitudes and values that are brought to the clinical encounter and patient care process. Some of the influences of culture on behaviour are preconscious (or unconscious), often brought to the fore in situations of culture challenge or conflict, and even then attributions of influence due to culture are often mislaid to personality, pathology or other factors. Increasing personal awareness in relation to cultural influences may be important with respect to moderating professionals' attitudes towards patients with mental illness. Thus the nature of education of nurses and other professionals with similar helping roles with respect to the mentally ill may need to consider, not just exposure to theory and people with mental illness, but also what may be powerful in reducing possible negative attitudes towards such patients, including the recognition of cultural determinants.

6.2 RECOMMENDATION AND FUTURE RESEARCH

6.2.1 Sample

Given the paucity of Australian research on professionals' attitudes towards mental illness, future research may be directed to include other health professionals (doctors, psychologists, occupational therapists, social workers) working in different mental health settings in order to compare their views as a result of their work, personality style and interactional style rather than culture.

6.2.2 Methodology

The quantitative design of the present study is a cross-sectional survey which is researcher controlled and aiming at obtaining generalisation of findings. Furthermore as

already mentioned that using a vignette method could only provide moderate effect on attitudes and nurse-patient encounters. Thus, in future research, it is essential to incorporate qualitative data in attitudinal study to ascertain the lived experience of participants. This method of triangulating across paradigms using multiple sources (survey and personal interviews) in a single study aims to offset the limitations of each approach by counterbalance biases (entail research control in quantitative survey) and to achieve credibility (one dimension of trustworthiness in qualitative method).

6.2.3 Stigma and Culture

Research into health professionals' attitudes towards mental illness is paramount and timely given the diverse cultural groups of our population and the increase in the prevalence of mental illness. We have begun in the present study which contributes to the knowledge of nurses' attitudes towards mental illness. Future research can extend beyond the current findings to focus on linking the issues of 'saving face' and social comparison theory and specifically comparing individualist and collectivist values and the endorsement of stigma towards mental illness across different cultural groups at a national or international level to obtain a more global picture which is lacking in the present study.

6.2.4 Evidence-based Nursing in Mental Health

While recognising there is a need for the nursing profession to base their practice on evidence by implementing research-based interventions to justify high-quality, cost-effective care, there are barriers preventing nurses from doing research as the researcher explored this subject by reviewing various journals and articles written by nursing academics worldwide. These barriers include lack of time, negative attitudes towards research, little experience to access the Internet or the library for search of references, limited access to articles and pertinent research findings, no support from administration and colleagues, financial; legal; religious and moral constraints, lack of entry-level academic credential to do research, and lack of mentorship in drafting research proposal.

Despite these barriers, the time has come for nurses to function as professionals, which means basing our practice on empirical work, not tradition, intuition, directives from authority, or borrowing from other disciplines. It is hopeful that the present well selected project will lend itself to a worthwhile nursing research program.

6.3 CONCLUSION

The findings from this present study seem sufficient to answer several of the research questions 1: “There is a significant difference between Chinese and Anglo nurses in the level of stigma attached to mental illness.” , 2: “There is a significant difference between Chinese and Anglo nurses in their nursing approaches towards a patient with mental illness relative to a patient with diabetes.” , 3: “There is a significant difference between Chinese and Anglo nurses in attitudes towards mental illness unexplained by exposure, training, background demographics and contact factors.” and 4, “Cultural values are related to general and practice stigma.”. Additionally, the study highlights a relationship between Chinese values and stigmatising of mental illness which appears to then influence practice stigma. In the Chinese group, negative stereotypes appear to act directly on practice stigma by being related to greater negativity in practice orientation while the effect of social distancing depends on the mediation by prior and diversified contact with people having a mental illness. The study makes contribution to the understanding of the association between contact, mental health experience, cultural values and stigma among nurses of ethnic Chinese and Anglo background. However, what actually correlates Chinese values with general stigma remains as a question that requires further exploration.

REFERENCES

Alexander, L. A. & Link, B. G. (2003). The impact of contact on stigmatizing attitudes towards people with mental illness. *Journal of Mental Health, 12(3),* 271-289.

Al-Shahri, M.Z. (2000). Culturally sensitive caring for Saudi patients. *Journal of Transcultural Nursing, 13(2),* 133-138.

Altindag, A., Yanik, M., Ucok, A., Alptekin, K. & Ozkan, M. (2006). Effects of an antistigma program on medical students' attitudes towards people with schizophrenia. *Psychiatry and Clinical Neuroscience, 60,* 283-288.

Angermeyer, M.C. & Matschinger, H. (1996). The effect of violent attacks by schizophrenic persons on the attitude of the public towards the mentally ill. *Social Science and Medicine, 43(12),* 1721-1728.

Angermeyer, M.C. & Schulze, B. (2001). Reinforcing stereotypes: How the focus on forensic cases in news reporting may influence public attitudes towards the mentally ill. *Internaitonal Journal of Law and Psychiatry, 24,* 469-486.

Angermeyer, M.C., Beck, M., Dietrich, S. & Holzinger, A. (2004). The stigma of mental illness: Patients' anticipations and experiences. *International Journal of Social Psychiatry, 50(2),* 153-162.

Angermeyer, M.C., Buyantugs, L. Kenzine, D.V. & Matschinger, H. (2004). Effects of labelling on public attitudes towards people with schizophrenia: are there cultural differences? *Acta Psychiatrica Scandinavica, 109,* 420-425.

Arbuckle, J.L. (2003). AMOS-5 (Software). Chicago. Smallwaters Core.

Argyle, M., Henderson, M., Bond, M., Iizuka, Y. & Contarello, A. (1986). Cross-cultural variations in relationship rules. *International Journal of Psychology, 21,* 287-315.

Auditor General Victoria (2002**).** *Nurse Work Force Planning.* No.153 – Session 1999-2002. Victoria.

Australian & New Zealand College of Mental Health Nurses (1995). *Standards of Practice*. Greenacres, South Australia. Australian & New Zealand College of Mental Health Nurses Inc.

Aydin, N., Yigit, A., Inandi, T. & Kirpinar, I. (2003). Attitudes of hospital staff toward mentally ill patients in a teaching hospital, Turkey. *International Journal of Social Psychiatry. 49(1),* 17-26.

Baxter, H., Singh, S.P., Standen, P. & Duggan, C. (2001). The attitudes of 'tomorrow's doctors' towards mental illness and psychiatry: Changes during the final undergraduate year. *Medical Education, 35, 381-383.*

Brinn, F. (2000). Patients with mental illness: general nurses' attitudes and expectations. *Nursing Standard*, March 22, *14(27),* 32-36.

Burdekin, B., Guilfoyle, M. & Hall D. (1993). *Human Rights and Mental Illness: Report of the National Inquiry into the Human Rights of People with Mental Illness (2 Volumes).* Canberra. Australian Government Printing Service.

Buunk, A.P. & Gibbon, F.X. (2007). Social comparison: The end of a theory and the emergence of a field. *Organizational Behaviour and Human Decision Processes, 102(1),* 3-21.

Caldwell, T.M. & Jorm, A.F. (2001). Mental health nurses' beliefs about likely outcomes for people with schizophrenia or depression: A comparison with the public and other health care professionals. *Australian and New Zealand Journal of Mental Health Nursing, 10,* 42-54.

Callaghan, P., Shan, C.S., Yu, L.S., Ching, L.W. & Lai, T. (1997). Attitudes towards mental illness: testing the contact hypothesis among Chinese student nurses in Hong Kong. *Journal of Advanced Nursing, 26,* 33-40.

Caris-Verhallen ,W.M.C.M. (1999). *Nurse-patient Communication in Elderly Care: An Observational Study into Verbal and Nonverbal Communication in Nursing Practice*. Doctoral Thesis submitted to the University of Utrech/ Netherlands Institute of Primary Care, Utrecht, the Netherlands.

Cheung, F.M. (1990). People against the mentally ill: Community opposition to residential treatment facilities. *Community Mental Health Journal, 26,* 205-212.

Chinnayy,a H.P., Chandrashekar, C.R., Moily, S. Puttamma , Raghuram, A., Subramanya, K.R., Shanmugham, V. & Udaykumar, G.S. (1990). Training primary care health workers in mental health care: Evaluation of attitudes towards mental illness before and after training. *International Journal of Social Psychiatry, 36,* 300-307.

Chiu, M.Y.L. & Chan, K.K.L. (2007). Community attitudes towards discriminatory practice against people with severe mental illness in Hong Kong. *International Journal of Social Psychiatry, 53(2),* 159-174.

Chou, K.L, .Mak, K.Y., Chung, P.K. & Ho, K. (1996). Attitudes towards mental patients in Hong Kong. *International Journal of Social Psychiatry, 42(3),* 213-219.

Chou, K.L.& Mak, K.Y. (1998). Attitudes to mental patients among Hong Kong Chinese: A trend study over two years. *International Journal of Social Psychiatry, 44(3),* 215-224.

Clausen, J. A. & Yarrow, M. R. (1955). The impact of mental illness on the family. *The Journal of Social Issues, 11(4),* 3-67.

Cohen, J.S. & Struening, E.L. (1962). Opinions about mental illness in the personnel of two large mental hospitals. *Journal of Abnormal and Social Psychology, 64,* 349-360.

Cohen, J.S. & Struening, E.L. (1965). Opinions about mental illness: Hospital differences in attitudes for eight occupational groups. *Psychological Reports, 17,* 25-26.

Coker, E.M. (2005). Selfhood and social distancing: Toward a cultural understanding of psychiatric stigma in Egypt. *Social Science and Medicine, 61,* 920-930.

Corrigan, P.W., River, L.P., Lundin, R.K., Penn, D.L., Uphoff-Wasowski, K., Campion, J., Mathisen, J., Gagnon, C., Bergman, M., Goldstein, H. & Kubiak, M.A. (2001). Three strategies for changing attributions about severe mental illness. *Schizophrenia Bulletin, 27(2),* 187-195.

Corrigan, P. W. & Matthews, A. C. (2003). Stigma and disclosure: Implications for coming out of the closet. *Journal of Mental Health, 12(3),* 235-248.

Corrigan, P.W. & Miller, F.E. (2004). Shame, blame, and contamination: A review of the impact of mental illness stigma on family members. *Journal of Mental Health, 13(6),* 537-548.

Couture, S.M. & Penn, D.L. (2003). Interpersonal contact and the stigma of mental illness: A review of the literature. *Journal of Mental Health, 12(3),* 291-305.

Crabtree, A. S. (2003). Asylum blues: staff attitudes towards psychiatric nursing in Sarawak, East Malaysia. *Journal of Psychiatric and Mental Health Nursing, 10,* 713-721.

Crisp, A.H., Gelder, M.G., Rix S., Meltzer, H.I. & Rowlands, O.J. (2000). Stigmatisation of people with mental illnesses. *British Journal of Psychiatry, 177,* 4-7.

Cumming, J. & Cumming, E. (1965). On the stigma of mental illness. *Community Mental Health Journal, 1(2),* 135-143.

Dinos, S., Stevens, S., Serfaty, M., Weich, S. & King M. (2004). Stigma: The feelings and experience of 46 people with mental illness. *British Journal of Psychiatry, 184,* 176-181.

Draguns, J.G. (1990). Normal and abnormal behaviour in cross-cultural perspective: Specifying the nature of their relationship. In J.J. Berman (Ed.), *Nebraska Symposium on Motivation, 1989: Cross-cultural perspectives, 37,* 235-277. Lincoln, NE: University of Nebraska Press.

Eker, D. & Arkar, H. (1991). Experienced Turkish nurses' attitudes towards mental illness and the predictor variables of their attitudes. *International Journal of Social Psychiatry, 37(3),* 214-222.

Ellsworth, R.B.A. (1965). A behavioural study of staff attitudes toward mental illness. *Journal of Abnormal and Social Psychology, 70,* 194-200.

Evagelou, H., Adali, E., Koukia, E., Katostaras, F., Priami, M. & Toulia, G. (2005). The influence of education of nursing students on the formation of attitudes toward psychiatric illness. *ICUS and Nursing Web Journal, Issue 23,* 1-8.

Fabrega, H. Jr. (1991). The culture and history of psychiatric stigma in early modern and modern Western societies: A review of recent literature. *Comprehensive Psychiatry, 32(2),* 97-119.

Fabrega, H. Jr. (1991). Psychiatric stigma in non-Western societies. *Comprehensive Psychiatry, 32(6),* 534-551.

Fabrega, H. Jr. (1995). Does a clerkship affect students' views of psychiatric patients? *The Journal of Nervous and Mental Disease, 183 (12),* 736-742.

Fan, C. & Karnilowicz, W. (2000). Attitudes towards mental illness and knowledge of mental health services among the Australian and Chinese community. *Australian Journal of Primary Health-Interchange, 6(2),* 38-48.

Festinger, L. (1954). A theory of social comparison processes. *Human Relations, 1,* 117-140.

Gagan, M.J. (2000). Using vignettes to study nurse practitioners' performance in suspected domestic violence situations. *Journal of Nursing Measurement, 8(1),* 7-22.

Gallo, K.M. (1994.) First person account: Self-stigmatization. *Schizophrenia Bulletin, 2,* 407-410.

Geertz, C. (1973a). Think description: Toward an interpretive theory of culture. In C. Geertz (Ed.), *The Interpretation of Cultures (pp.3-32).* New York. Basic Books.

Good, L.T., Berennaum, H. & Nisenson, L.G. (2000). Residential caregiver attitudes Towards seriously ill persons. *Commentary Psychiatry, 63(1*), 23-33.

Gove, W.R. & Fain, T. (1973). The stigma of mental hospitalisation, an attempt to evaluate its consequences. *Archives of General Psychiatry, 28,* 494-500.

Green, D.E., McCormick, I.A., Walkey, F.H. & Taylor, J.W. (1987). Community attitudes to mental illness in New Zealand twenty-two years on. *Social Science and Medicine, 24(5),* 417-422.

Green G., Hayes C., Dickinson D., Whittaker A. & Gilheany B. (2003). A mental health service users perspective to stigmatisation. *Journal of Mental Health, 12(3),* 223-234.

Goffman, E. (1970). *Stigma: Notes On the Management of Spoiled Identity.* Harmondsworth, UK. Penguin Books Ltd.

Grimm, S.D., Church, A.T., Katigbak, M.S. & Reyes, J.A.S. (1999). Self-described traits, values, and moods associated with individualism and collectivism: Testing I-C theory in an individualistic (U.S.) and a collectivistic (Philippine) culture. *Journal of Cross-Cultural Psychology, 30,* 466-500.

Hafner, R. J. & Proctor, N. (1992). Student nurses' specialty choice: The influence of personality and education. *Contemporary Nurse, 2,* 38-43.

Hofstede, G. H. (2001). *Culture's Consequences: Comparing Values, Behaviours, Institutions, and Organizations across Nations (2nd Edition).* Thousand Oaks, California: Sage.

Hsiao, F-H., Klimidis S., Minas, I. H. & Tan, E.S. (2006). Cultural attribution of mental health suffering in Chinese societies: The views of Chinese patients with mental illness and their caregivers. *Journal of Clinical Nursing, 15,* 998-1006.

Hsiao, F-H. (2002). *Chinese-Australian families' help-seeking behaviour for mental illness*. PhD Thesis. Department of Psychiatry, The University of Melbourne, Australia.

Hui, C.H. & Villareal, M.J. (1989). Individualism-Collectivism. Their relationships in two cultures. *Journal of Cross-cultural Psychology, 20(3),* 310-323.

Johannsen, W. (1969). Attitudes toward mental patients: A review of empirical research. *Mental Hygiene, 53(2),* 218-228.

Johnstone, M. (2001) Stigma, social justice and the rights of the mentally ill: Challenging the status quo. *Australian and New Zealand Journal of Mental Health Nursing, 10,* 200-209.

Jorm, A.F., Korten, A.E., Jacomb, P.A., Christensen, H. & Henderson, S. (1999). Attitudes towards people with a mental disorder: A survey of the Australian public and health professionals. *Australian and New Zealand Journal of Psychiatry, 33,* 77-83.

Jorm, A.F. (2000). Mental health literacy. Public knowledge and beliefs about mental disorders. *British Journal of Psychiatry, 177,* 396-401.

Jorm, A.F., Nakane, Y., Christensen, H., Yoshioka, K., Griffiths, K.M. & Wata, Y. (2005). Public beliefs about treatment and outcome of mental disorders: A comparison of Australia and Japan. *BioMed Central, 3(12).* www.biomedcentral.com/1741-7015/3/12.

Keane, M. (1991). Acceptance vs. rejection: Nursing students attitudes about mental illness. *Perspectives in Psychiatric Care, 27,* 13-18.

Kirby, R.J. & James, A. (1979). Attitudes of medical practitioners to mental illness. *Australian and New Zealand Journal of Psychiatry, 13,* 165-168.

Kirmayer, L.J. (1989) Cultural variations in the response to psychiatric disorders and emotional distress. *Social Science and Medicine, 29,* 327-339.

Kiropoulos, L.A., Klimidis, S. & Minas, I.H. (2004). Depression and anxiety: A comparison of older-aged Greek-born immigrants and Anglo-Australians. Australian and New Zealand Journal of Psychiatry, *38(9),* 714-724.

Klimidis, S., Hsiao, F-H. & Minas, I.H. (2007). Chinese-Australians' knowledge of depression and schizophrenia in the context of their under-utilisation of mental health care: An analysis of labeling. *International Journal of Social Psychiatry, 53(5),* 464-479.

Knight M.T.D., Wykes T., & Hayward, P.(2003). 'People don't understand': An investigation of stigma in schizophrenia using Interpretative Phenomenological Analysis (IPA). *Journal of Mental Health, 12(3),* 209-222.

Kokanovic, R., Peterson, A. & Klimidis, S. (2006). 'Nobody Can Help Me…I am Living Through it Alone': Experience of caring for people diagnosed with mental illness in ethno-cultural and linguistic minority communities. *Journal of Immigration and Minority Health, 8(2),* 125-135.

Kua, J.H.K., Parker, G., Lee, C. & Jorm A.F. (2000). Beliefs about outcomes for mental disorders: A comparative study of primary health practitioners and psychiatrists in Singapore. *Singapore Medical Journal, 41(11),* 542-547.

Lai, Y.M., Hong, C.P.H. & Chee, C.Y.I. (2000). Stigma of mental illness. *Singapore Medical Journal, 42(3*), 111-114.

Laine, A. & Lehtinen, V. (1973). Attitudes toward mental illness and their relationship to social structure and mental hospital bed utilization in two Finnish rural communities. *Social Psychiatry, 8,* 117-123.

Lam, A., McMaster, L. A. & Troup, C. (1993). A pilot study: Nursing students' attitudes interest, and concerns in the mental health field. *The Australian Journal of Mental Health Nursing, 2(6),* 281-286.

Lau, Y. & Wong, D.F.K. (in press, 2007). Are concern for face and willingness to seek help correlated to early postnatal depressive symptoms among Hong Kong Chinese women? A cross-sectional questionnaire survey. *International Journal of Nursing Studies.* Retrieved 14 September 2007 from www.elsevier.com/locate/ijnurstu

Lauber, C., Nords, C., Falcato, L. & Rossler, W. (2004). Factors influencing social distance toward people with mental illness. *Community Mental Health Journal, 40(3),* 265-274.

Lauber, C., Nordt, C., Braunschweig, C. & Rossler, W. (2006). Do mental health professionals stigmatize their patients? *Acta Psychiatrica Scandinavica, 113 (Suppl. 429),* 51-59.

Lee, S., Lee, M.T.Y., Chiu, M.Y.L. & Kleinman A. (2005). Experience of social stigma by people with schizophrenia in Hong Kong. *British Journal of Psychiatry, 186,* 153-157.

Lee, S., Chiu, M.Y.L., Tsang, A., Chui, H & Kleinman, A. (2006). Stigmatizing experience and structural discrimination associated with the treatment of schizophrenia in Hong Kong. *Social Science & Medicine, 62, 1685-1696.*

Leininger, M. (1967). The culture concept and its relevance in nursing. *Journal of Nursing Education, 6,* 27-39.

Levine, D. (1972). A cross-sectional study of attitudes towards mental illness. *Journal of Abnormal Psychiatry, 80(2),* 111-114.

Lin, T. (1982). Culture and psychiatry: A Chinese perspective. *Australian and New Zealand Journal of Psychiatry, 16,* 235-245.

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

Link, B.G., Mirotznik, J. & Cullen, F.T. (1991). The effectiveness of stigma coping orientations: Can negative consequences of mental illness labelling be avoided? *Journal of Health and Social Behaviour, 32,* 302-320.

Link, B.G., Struening, E.L., Neese-Todd, S., Asmussen, S. & Phelan, J.C. (2001). The consequences of stigma for the self-esteem of people with mental illnesses. *Psychiatric Services, 52(12),* 1621-1626.

Link, B.G., Cullen, F.T., Struening, E., Shrout, P.E., Dohrenwend, B.P. (1989). A modified labeling theory approach to mental disorders: An empirical assessment. *American Sociological Review, 54,* 400-423.

Madianos, M., Priami, M., Aleviscopoulous, G., Koukia, E. & Rogakou, E. (2005). Nursing students' attitudes change towards mental illness and psychiatric case recognition after a clerkship in psychiatry. *Issues in Mental Health Nursing, 26(2),* 169-183.

Malla, A. & Shaw, T. (1987). Attitudes towards mental illness: The influence of education and experience. *International Journal of Social Psychiatry, 33,* 33-41.

Mas, A. & Hatim, A. (2002). Stigma in mental illness: Attitudes of medical students towards mental illness**.** *Medical Journal of Malaysia**,** 57(4),* 433-444.

Mendyka, B E. & Bloom, F R. (1997). Reaffirming the relevance of culture for nursing. *Scholarly Inquiry for Nursing Practice: An International Journal, 11(3),* 179-197.

Napoletano, M.A. (1981). Correlates of changes in attitudes towards mental illness among vocational nursing students.. *Psychological Reports, 49,* 147-150.

New Webster's Dictionary and Thesaurus and Medical Dictionary (1992). New York. Ottenheimer Publishers, Inc.

Ng, C. H. (1997). The stigma of mental illness in Asian cultures. *Australian and New Zealand Journal of Psychiatry, 31,* 382-390.

Nurses Board of Victoria (2005). *Nexus, 12 (2),* 1-11. Melbourne. Nurses Board of Victoria.

Ojanen, M. (1992). Attitudes towards mental patients. *International Journal of Social Psychiatry, 38,* 120-130.

Olade, R.A. (1979). Attitudes towards mental illness: A comparison of post-basic nursing students with science students. *Journal of Advanced Nursing, 4*, 39-46.

Packer, S., Prendergast, P., Wasylenki, D., Toner, B. & Ali, A. (1994). Psychiatric residents' attitudes toward patients with chronic mental illness. *Hospital and Community Psychiatry, 45(11),* 1117-1121.

Papadopoulos, C., Leavey, G. & Vincent, C. (2002). Factors influencing stigma: A comparison of Greek-Cyproit and English attitudes towards mental illness in North London. *Social Psychiatry and Psychiatric Epidemiology, 37,* 430-434.

Pearson, V. & Yiu, M.Y. (1993). Public attitudes towards mental health facilities: A study in Hong Kong. *Social Work & Social Sciences Review, 4(1),* 59-82.

Pearson, V. & Phillips, M. (1994). The social context of psychiatric rehabilitation in China. *British Journal of Psychiatry, 165 (suppl. 24),* 11-18.

Pedersen, P.B. (2002). The making of a culturally competent counselor. In W.J. Lonner, D.L. Dinnel, S.A. Hayes, & D.N. Satter (Eds.), Retrieved 14 September 2007 from *Online Readings in Psychology and Culture (Unit 10, Chapter 2).* (http://www.wwu.edu/~culture), Centre for Cross-Cultural Research, Western Washington University, Bellingham, Washington, USA.

Penn, D. L. & Corrigan, P. W. (2002). The effects of stereotype suppression on psychiatric stigma. *Schizophrenia Research, 55,* 269-276.

Phelan, J.C., Bromet, E.J. & Link, B G. (1998). Psychiatric illness and family stigma. *Schizophrenia Bulletin, 24(1),* 115-126.

Phillips, D.L. (1963). Rejection: A possible consequence of seeking help for mental disorders. *American Sociological Review, 28,* 963-972.

Phillips, M.R., Pearson, V., Li, F., Xu Minjie & Yang L. (2002). Stigma and expressed emotions: A study of people with schizophrenia and their family members in China. *British Journal of Psychiatry, 181,* 489-493.

Rabkin, J.G. (1972). Opinions about mental illness: A review of the literature. *Psychological Bulletin, 77,* 153-171.

Rabkin, J.G. (1974). Public attitudes towards mental illness: A review of the literature. *Schizophrenia Bulletin, 10,* 9-33.

Rabkin, J.G. (1984). Community attitudes and local psychiatric facilities. In J. Talbot (Ed.). *The Chronic Mental Patient,* (*pp. 325-335).* Orlando, Florida. Grune & Stratton, Inc.

Reddy, J.P., Tan, S.M.K., Azmi, M.T., Shaharom, M.H., Rosdinom, R., Maniam, T., Ruzanna, Z.Z. & Minas, I.H. (2005). The effect of a clinical posting in psychiatry on the attitudes of medical students towards psychiatry and mental illness in a Malaysian medical school. *Annals, Academy of Medicine, Singapore, 34,* 505-510.

Reed, F. & Fitzgerald, L. (2005). The mixed attitudes of nurse's to caring for people with mental illness in a rural general hospital. *International Journal of Mental Health Nursing, 14(4),* 249-257.

Ritcher, J.B. & Phelan, J.C. (2004). Internalized stigma predicts erosion of morale among psychiatric outpatients. *Psychiatry Research, 129,* 257-265.

Rosaldo, M. Z. (1990). Toward an anthropology of self and feeling. *In Culture theory: Essays on mind, self and emotion (pp. 137-157).* Cambridge. Cambridge University Press.

Rosenthal, D., Ranteri, N. & Klimidis, S. (1996). Vietnamese adolescents in Australia: Relationships between perceptions of self and parental values, intergenerational conflict and gender dissatisfaction. *International Journal of Psychology, 31(2),* 81-92.

Roskin, G., Carson, M.L., Rabiner, C.J. & Marell, S.K. (1988). Attitudes towards patients among different mental health professional groups. *Journal of Psychiatric Education, 10(1),* 40-49.

Rushworth, L. & Happell, B. (1998). Psychiatric nurse education: Doing the impossible? *Archives of Psychiatric Nursing, XII(6),* 319-325.

Schulze, B. & Angermeyer, M.C. (2003). Subjective experiences of stigma: A focus group study of schizophrenic patients, their relatives and mental health professionals. *Social Science and Medicine, 56,* 299-312.

Sellick, K. & Goodear, J. (1985). Community attitudes towards mental illness: The influence of contact and demographic variables. *Australian and New Zealand Journal of Psychiatry, 19,* 293-298.

Sevigny, R. (1992-1993). Psychiatric practice in China: Some preliminary elements for further analysis. *Culture Health, 9,* 253-270.

Sevigny, R., Wenying, Y., Peiyan, Z., Marleau, J.D., Zhouyun, Y., Guowang, L., Dong, X.. Yanling, W. & Haijun, W. (1999). Attitudes toward the mentally ill in a sample of professionals working in a psychiatric hospital in Beijing (China). *International Journal of Social Psychiatry, 45(1),* 41-55.

Shokoohi-Yekta, M. & Retish, P.M. (1991). Attitudes of Chinese and American male students toward mental illness. *International Journal of Social Psychiatry, 37,* 192-200.

Sivakumar, K., Wilkinson, G., Toone, B. & Greer, S. (1986). Attitudes to psychiatry in doctors at the end of their first post-graduate year: two-year follow-up of a cohort of medical students. *Psychological Medicine, 16,* 457-460.

Stevens, J. A. & Dulhunty, G. M. (1992). New South Wales nursing students' attitudes towards a career in mental health. *The Australian Journal of Mental Health Nursing, 2(2),* 59-64.

Statistical Package for Social Science (SPSS) 11. Chicago. SPSS Inc.

Surgenor, L.J., Dunn, J. & Horn, J. (2005). Nursing student attitudes to psychiatric Disorders in New Zealand. *International Journal of Mental Health Nursing, 14,* 103-108.

Teo, S. H. (1978). The stigma of mental illness. *The Nursing Journal of Singapore, 18(1),* 59-61.

Triandis, H.C. (2001). Individualism-collectivism and personality. *Journal of Personality, 69(6),* 907-924.

Triandis, H.C. (1990). Cross-cultural studies on individualism and collectivism. In: J.J. Berman (Ed.), *Nebraska Symposium on Motivation, 1989: Cross-cultural perspectives, 37,* 41-135. Lincoln, NE: University Press of Nebraska.

Triandis H.C., McCusker, C. & Hui, C.H. (1990). Multimethod probes of individualism and collectivism. *Journal of Personality and Social Psychology, 5(5),* 1006-1020.

Tsang, H.W.H., Tam, P.K.C., Chan, F., & Cheung ,W.M. (2003). Stigmatizing attitudes towards individuals with mental illness in Hong Kong: Implications for their recovery. *Journal of Community Psychology, 31(4),* 383-396.

Ucok, A., Polat, A., Sartorus, N., Erkoc, S. & Atakli,C. (2004). Attitudes of psychiatrists toward patients with schizophrenia**.** *Psychiatry and Clinical Neurosciences, 58,* 89-91**.**

Ucok, A., Soygur, H., Atakli, C., Kuscu, K., Sartorius, N., Duman, Z. E., Polat, A., & Erkoc, S. (2006). The impact of antistigma education on the attitudes of general practitioners regarding schizophrenia. *Psychiatry and Clinical Neuroscience, 60,* 439-443.

Wahl, O.F. & Harman, C.R. (1989). Family views of stigma. *Schizophrenia Bulletin, 15(1),* 131-139.

Weller, L. & Grunes, S. (1988). Does contact with the mentally ill affect nurses' attitudes to mental illness? *British Journal of Medical Psychology, 61,* 277-284.

Wilkinson, D.G., Greer, S. & Toone, B.K. (1983). Medical students' attitudes to psychiatry, *Psychological Medicine, 13,* 185-192.

Wilkinson, D.G., Toone, B.K. & Greer, S. (1983). Medical students' attitudes to psychiatry at the end of the clinical curriculum. *Psychological Medicine, 13,* 655-658.

Wong, D. F. (2007). Uncovering sociocultural factors influencing the pathway to care of Chinese caregivers with relatives suffering from early psychosis in Hong Kong. *Culture, Medicine and Psychiatry, 31,* 51-71.

Yamamoto, K., Randall, M., Takeda, M & Leeamanit, W. (1996). Attitudes of medical students towards persons with mental disorders: A comparative study between Japan and Thailand. *Psychiatry and Clinical Neuroscience, 50,* 171-180.

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