STAGES OF CHANGE, SELF-STIGMA, AND TREATMENT COMPLIANCE AMONG CHINESE ADULTS WITH SEVERE MENTAL ILLNESS

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CERTIFICATE OF ORIGINALITY

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Fung Mang Tak

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ABSTRACT

The two-phased study aimed at exploring the relationship between self-stigma, readiness for change, and psychosocial treatment compliance and developing a self-stigma reduction program among individuals with schizophrenia. 105 adults with schizophrenia were recruited in Phase One. Participants' level of self-stigma, readiness for change, insight, general self-efficacy, treatment compliance, psychopathology, and global functioning were assessed. Regression analyses suggested that individuals with higher global functioning, better readiness for action, and lower level of self-stigma demonstrated better treatment participation. Female participants and those with less severity of psychiatric symptoms had better treatment attendance. Path analysis supported the direct and indirect (i.e., mediated by insight and stages of change) effects of self-stigma on reducing treatment compliance. Psychopathology was also found to have a direct effect on undermining compliance. In Phase Two, a 16-session integrated self-stigma reduction program was developed. Sixty-six self-stigmatized individuals with schizophrenia were recruited and randomly allocated to the self-stigma reduction program (N= 34; experimental protocol) or the newspaper reading group (N=32; comparison protocol). Measures on participants' level of self-stigma, readiness for change, insight, general self-efficacy, and treatment compliance were taken for six assessment intervals. The findings suggested that the self-stigma reduction program was effective in promoting the readiness for changing own problematic behaviors and reducing self-stigmatization although the effect was not long lasting. Further recommendations for promoting the effectiveness of the program are suggested.

PUBLICATIONS ARISING FROM THE THESIS

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2. Tsang, H. W. H., Fung, K. M. T., & Chung, R. C. K. (2010). Self-stigma and stages of change as predictors of treatment adherence of individuals with schizophrenia. *Psychiatry Research, 180*, 10-15.
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CHAPTER 1 INTRODUCTION

1.1. OVERVIEW OF STUDY

Treatment compliance plays a vital role along the course of psychiatric rehabilitation (Ludwig, Huber, Schmidt, Bender, & Greil, 1990; Tsang, Fung, & Corrigan, 2006). Unfortunately, poor compliance to psychosocial treatment is prevalent among the individuals with schizophrenia (Dencker & Liberman, 1995; Swanson et al., 1997), which increases their likelihood of relapse and re-hospitalization (Delaney, 1998). The previous study conducted by our research team (Fung, Tsang, & Corrigan, 2008) suggested that self-stigma is a significant predictor of psychosocial treatment compliance. However, the underlying mechanism as to how self-stigma undermines treatment compliance has remained enigmatic. The present study could be construed as the continuation of our previous study which has opened up a line of research to examine the underlying mechanism linking self-stigma and poor treatment compliance. We hypothesized that the self-stigmatized ideas among individuals with schizophrenia would impede their motivation and readiness for seeking appropriate treatment (Barkhof, Meijer, de Haan, de Sonneville, & Linszen, 2006; Miller & Rollnick, 2002). The impact on the stages of change (SOC) by the self-stigmatization process may act as a possible explanation for the occurrence of inappropriate health behaviors.

Better understanding of the relationship between self-stigmatization and stages of change helps the formulation of appropriate intervention programs to

counteract the negative effects of self-stigmatization. To date, only two psychoeducational (Link, Struening, Neese-Todd, Asmussen, & Phelan, 2002; Wieczynski, 2000) and two cognitive behavioral therapy programs (Knight, Wykes, Hayward, 2006; Macinnes & Lewis, 2008) have been developed to combat the negative consequences of self-stigma among individuals with mental illness. However, the clinical outcomes of these programs remain inconclusive due to a lack of consistent theoretical framework underpinning the questionable study design. We therefore contend that developing a theoretically sound self-stigma reduction program would help improve the rehabilitation and recovery process of individuals with schizophrenia.

1.2. PURPOSE OF STUDY

1. To examine the relationship between stages of change, self-stigma, insight, self-esteem, and psychosocial treatment compliance among Chinese adults with schizophrenia
2. To develop an intervention program for reducing self-stigma, enhancing readiness for change, and treatment compliance
3. To test the effectiveness of the proposed intervention program to reduce self-stigma, enhance readiness for change, and develop health/ compliance behaviors

1.3. SIGNIFICANCE OF STUDY

The findings of this study help us better understand what recovery process Chinese people with schizophrenia experience and what services do they need in order to move forward through different readiness stages in the process of coping with their mental illness, and provide explanation of the erosive mechanism of self-stigmatization in undermining their stages of change and health/ compliance behaviors towards prescribed psychiatric treatment. An intervention program for self-stigma reduction, stages of change promotion, and compliance behaviors enhancement has been developed in the present study. Development of this intervention program is the first of its kind in Hong Kong and China. If the effectiveness of this interventional program is verified, we may promote this program to enhance the treatment outcomes and quality of life of 15 million of individuals with severe mental illness in Hong Kong and mainland China.

CHAPTER 2 LITERTURE REVIEW

2.1. SCHIZOPHRENIA

2.1.1. OVERVIEW AND PREVALENCE

As individuals with different psychiatric diagnoses may react to stigmatization in a different manner (Corrigan & Watson, 2002; Tsang, Fung, & Corrigan, 2006), we focused on individuals with schizophrenia in the present PhD study. The main reason is that schizophrenia is regarded as the top ten causes of disability among the world (Murrary & Lopez, 1996). Jablensky (1997) estimated that one out of 100 individuals has a chance to develop schizophrenia during their lifetime. The National Institution of Mental Health (2010) revealed that more than two million adult Americans suffered from schizophrenia. In China, it was estimated that more than four million Chinese citizens have schizophrenia (Philips, Yang, Li, & Li, 2004). In Hong Kong, about 1.4 thousand citizens aged 15 above were reported to have schizophrenia (Census and Statistics Department, 2004). The aetiology of schizophrenia has a combination of genetic and environmental vulnerability factors (Arnold, Talbot, & Hahn, 2005). The development of this illness usually commences between late teenage years and early thirties (American Psychiatric Association, 1994).

2.1.2. DIAGNOSTIC CRITERIA AND TYPES

Although the clinical picture among individuals with schizophrenia varies widely, it is characterized by thought disorder, delusions, hallucinations, abnormal affect, and disturbances in motor behavior (World Health Organization, 1998). Moreover, individuals with schizophrenia often have substantial changes in personal behavior, and impaired role and social functioning (Mueser & MuGurk, 2004). According to the Diagnostic and Statistical Manual of Mental Disorders- Fourth Edition (DSM-IV; American Psychiatric Association, 1994), the diagnostic criteria for schizophrenia are as follows:

A. Characteristic symptoms
   - Two or more symptoms (i.e., delusions, hallucinations, disorganized speech, grossly disorganized/ catatonic behavior and negative symptoms) are presented during the one-month period.

B. Social and occupational dysfunction
   - One or more major areas in self-care, work and interpersonal relationship are markedly undermined in comparing to the onset.

C. Duration of disturbance
   - Disturbance continues for more than six months in which at least one month of symptoms matching the characteristic symptoms as stated in Criterion A.

D. Schizoaffective and mood disorder exclusion
   - Episode of major depression, mania and mixed-type is ruled-out during the active–phase symptoms.

E. Substance/ general medical condition exclusion

- The causation of symptoms is not induced by substance use or other general medical condition.

F. Relationship to a pervasive developmental disorder

- Diagnosis of schizophrenia could be made among people with history of autistic disorder or another pervasive developmental disorder if prominent delusion or hallucinations are demonstrated for more than 1 month.

Several subtypes (paranoid, disorganized, catatonic, undifferentiated, and residual types) of schizophrenia are noted (American Psychiatric Association, 1994). Their characteristics are stated as follows:

A. Paranoid type

- Presence of prominent delusion (typically persecutory or grandiose) and/ or auditory hallucination
- Not prominent in disorganized speech, flat/ inappropriate affect, and catatonic/ disorganized behaviors

B. Disorganized type

- Essential features include disorganized speech/ behavior, and flat/ inappropriate affect
- Delusion and hallucination may not present, or may present in fragmentary manner
- Psychomotor disturbance is not prominent

C. Catatonic type

- Marked psychomotor disturbances such as immobility, excessive motor activity, extreme negativism, and/or echolalia are shown
- The motor disturbance is purposeless
- Extreme negativisms is manifested by rigid posture

D. Undifferentiated type

- Individuals meet the criteria of having schizophrenia, but they are unable to be classified into paranoid, disorganized or catatonic subtypes

E. Residual type

- One or more episodes of schizophrenia are shown, but no prominent positive psychotic symptoms are demonstrated
- Negative symptoms such as flat affect or avolition is presented

2.1.3. BARRIERS FOR THEIR LIFE

Individuals with schizophrenia are heavily challenged by their disruptive symptoms and inadequate skills in pursing age-appropriated goals (Corrigan, 1998; 2000; Fung, Tsang, Corrigan, Lam, & Cheung, 2007). According to their characterized positive and negative symptoms, schizophrenia has been regarded as one of the most stigmatizing conditions (Angermeyer & Schulze, 2001). They often encounter difficulties in seeking employment, leasing apartment, accessing social opportunities, and receiving deserved help from others (Alisky & Iczkowski, 1990; Corrigan & Watson, 2002; Fung, Tsang, Corrigan, Lam, & Cheung, 2007; Holmes

& River, 1998; Page, 1983; Tsang et al., 2007). Furthermore, mental illness stigma also deepens the burdens towards their family members (Tsang, Tam, Chan, & Cheung, 2003b). Under the influence of prejudicial attitudes and discriminatory reactions from public, certain individuals with schizophrenia may develop a diminished sense of self via the process of self-stigmatization (Corrigan & Watson, 2002; Davidson, 2004; Fung, Tsang, Corrigan, Lam, & Cheung, 2007). Their goal pursuit, social integration, and recovery are seriously impeded by stigma (Corrigan & Watson, 2002; Fung, Tsang, Corrigan, Lam, & Cheung, 2007; Link, 1987; Pages, 1995; Schumacher, Corrigan, & Dejong, 2003).

2.2. MENTAL ILLNESS STIGMA

Stigma is defined as an attribute that discredits and devalues a person or a social group from the eyes of others (Goffman, 1963). Jones and colleagues (1984) elaborated this construct by suggesting that stigma is a label to a person that sets him/her apart from others (e.g. rejection and isolation), and links him/her to undesirable characteristics as dangerous, weak and incompetent. Furthermore, stigma is found to consist also of cognitive and behavioral components. In terms of the cognitive aspect, the undesirable characteristics among the marked person are generated from the label. Under the influence of cognitive process, behavioral outcomes such as secrecy or withdrawal are resulted. Stafford and Scott (1986) proposed that stigma is "*a characteristic of persons that is contrary to norm* (a shared belief that people should be behaved in the ways as expected) *of a social unit*" (p.81). Link and Phelan (2001) have provided a clear explanation on the

stigmatizing process. They suggest that stigma contains the components of labeling, stereotyping, separation, and status loss and discrimination. The four components are illustrated as follows:

A. Component 1: Labeling

- Identification of human differences is regarded as a social selection process to create groups. For instance, public has the tendency to categorize people according their skin color, sexual preference or diagnosis. Label is regarded as socially selected human difference for salience.

B. Component 2: Stereotyping

- Stigma is manifested when the labels are linked to a set of undesirable characteristics in constituting the stereotypes. The formation of stereotypes is often automatic. Stereotypes are useful to enhance the cognitive efficiency of individuals to facilitate decision making. The common stereotypes towards individuals with schizophrenia are dangerous, incompetent and morally weak (Corrigan & Watson, 2002; Fung, Tsang, Corrigan, Lam, & Cheung, 2007; Link & Phelan, 2001; Tsang et al., 2007).

C. Component 3: Separation

- The third stigma process is manifested when the labels signify a separation between "us" and "them" (Devine, Plant, & Harrison, 1999; Morone, 1997). For instance, someone may believe that individuals with schizophrenia ("them") are menace to the general

public (“us”) according to their deeply held negative stereotypes towards schizophrenia.

D. Component 4: Status loss and discrimination

- Individuals experience status loss and discrimination during the final process. They are being devalued and rejected according to their linkage to undesirable characteristics.

The social cognitive model proposed by Corrigan and Watson (2002) suggests that stigmatization occurs in the public and individual level, and it consists of stereotypes, prejudice, and discrimination components. Stereotypes are the knowledge structures regarding the salience of social group (Hilton & von Hippel, 1996). The negative attitudes and behaviors demonstrated towards specific social groups are regarded as prejudice and discrimination respectively (Corrigan & Watson, 2002). The examples for those constructs in the public and individual levels are illustrated in Table 1.

Table 1. Examples for stereotypes, prejudice and discrimination

	Public Stigma	Self-stigma
Stereotypes	Individuals with schizophrenia are dangerous.	Because I have a mental illness, I am dangerous
Prejudice	Scaring towards individuals with schizophrenia	Resulting in low self-esteem
Discrimination	Refusing to employ individuals with schizophrenia	Failing to keep the appointment at psychiatric hospital

2.2.1. PUBLIC STIGMA

Stigma is widely endorsed in the Western (Hamre, Dahl, & Malt, 1994; Link, 1987; Phelan, Link, Stueve, & Pescosolido, 2000) and Chinese societies (Tsang, Tam, Chan, & Cheung, 2003a; Yang & Pearson, 2002). Society tends to hold a deep-rooted negative belief towards individuals with schizophrenia (Corrigan & Watson, 2002; Tsang, Tam, Chan, & Cheung, 2003a). Numerous studies have suggested the undermining effects of stigma include social interactions, social networks, employment opportunities, self-esteem, depression, and quality of life (Corrigan & Watson, 2002; Link, 1987; Link, Struening, Rehav, Phelan, & Nuttbrock, 1997; Tsang, Tam, Chan, & Cheung, 2003a). The beliefs of dangerousness and incompetence are examples of common stereotypes (Corrigan & Watson, 2002). The formation and maintenance of stigmatizing attitudes towards individuals with schizophrenia are greatly influenced by mass media (Tsang, Tam, Chan, & Cheung, 2003a). The cinematic image of madness among individuals with schizophrenia are reinforced by the media, and it may remain unchallenged when the public has little contact and information regarding individuals with schizophrenia

(Tsang, Tam, Chan, & Cheung, 2003a). Furthermore, it is unfortunate to indicate that public tends to stigmatize individuals with schizophrenia even though they are in absence of any psychiatric symptoms (Fung, Tsang, Corrigan, Lam, & Cheung, 2007; Weinstein, 1982). The negative stereotypes would then trigger off the prejudicial and discriminatory reactions to individuals with schizophrenia. Their opportunities are significantly diminished by public stigma (Corrigan, 2004; Corrigan & Watson, 2002; Holmes & River, 1998; Tsang, Tam, Chan, & Cheung, 2003a).

The two national studies (Taylor & Dear, 1980; Brockington, Hall, Levings, & Murphy, 1993) conducted in the North America and the Britain explored the three commonly held stigmatizing attitudes (authoritarianism, benevolence, and fear and exclusion) towards individuals with schizophrenia. These stigmatizing attitudes are explained as follows (Holmes, Corrigan, Williams, Canar, & Kubiak, 1999):

A. Authoritarianism

- Individuals with schizophrenia are irresponsible. They are unable to make own life decision, and thus their life decision should be made by others.

B. Benevolence

- Individuals with schizophrenia are childlike. They are unable to take care of themselves.

C. Fear and exclusion

- Individuals with schizophrenia are to be feared of. They should be segregated from the society.

In Hong Kong, Tsang and colleagues (2003a) have conducted a survey to investigate the public attitudes towards people with severe mental illness. The findings suggested that severe stigmatizing attitudes were common. Up to 60% of respondents were against or hesitant about the establishment of psychiatric facilities in the community. If the government or other non-government organizations proposed to build up halfway house near their residential places, nearly 30% of respondent would be strongly opposed. Furthermore, around 20% of respondents would not provide a job interview opportunity to those who had history of having mental disorders. In general, the respondents often held a perception that individuals with mental illness were quick-tempered, unpredictable, introvert, and having low self-esteem.

The survey study conducted by Lee and colleagues (2006) also confirmed the prevalent stigmatizing attitudes among individuals with schizophrenia in Hong Kong. It was suggested that stigma did not simply come from public, but also originated from their family members, relatives, friends, and colleagues. The findings indicated that individuals with schizophrenia were more likely to take annual leave instead of sick leave for their psychiatric follow-up at clinics. Moreover, they were more frequent in missing their follow-up appointment and requesting the psychiatrists to

conceal their mental health condition in their attendance certificate. These circumstances have an implication that follow-up at psychiatric units is assumed as a stigmatizing condition among individuals with schizophrenia. The individuals would like to avoid the associated stigma resulting by the utilization of psychiatric resources and facilities. Dinos and colleagues (2004) indicated that anticipation of stigma may occur even though they do not experience prior actual stigmatizing condition. Thus, this would further facilitate the individuals with schizophrenia to adopt concealment as self-protective strategy in increasing the likelihood of poor treatment compliance.

In line with previous studies, Chiu and Chan (2007) indicated that more than half of the surveyed respondents believed that individuals with schizophrenia were "weird". Up to one-third of respondents accepted that individuals with severe mental illness were less competent and reliable. As a result, they should earn less than others with same work duties. One-fifth of respondents refused to offer a position for individual with severe mental illness. Nearly 30% of respondents accepted employers to dismiss their employees who had history of severe mental illness. These figures further consolidate the severely held stigmatizing attitudes and actions toward those with schizophrenia in Hong Kong.

The relationship between stigmatizing attitudes and discriminatory behaviors could be explained by Weiner's (1995) model of causal attribution. It is suggested that anger and diminished helping behavior are more likely to be elicited when

personal responsibility for a negative event is attributed. For instance, public would avoid helping the individuals who are expected to cause their crazy behaviors on their own. Conversely, feeling of pity and willingness to provide help would be formulated if the public tends to attribute that the sufferers are not justified to blame for the harmful condition.

Mental illness stigma is believed to be more prevalent in the Chinese culture than the western society (Fung, Tsang, Corrigan, Lam, & Cheung, 2007; Tsang et al., 2007). This phenomenon could be explained by the Confucianism and familism adopted in the Chinese society (Furnham & Chan, 2004; Lam et al., 2010; Tsang et al., 2007; Wong, 2000). Confucianism and familism are commonly adopted among individuals in Hong Kong and mainland China (Fung, Tsang, & Corrigan, 2008; Fung, Tsang, Corrigan, Lam, & Cheung, 2007; Lam et al., 2010). Confucianism is regarded as a social ethic, a political ideology, and a scholarly tradition (Tu, 1998). In terms of Confucian values, harmony is suggested to be an essential element for establishing and maintaining the peaceful life of people, family and states (Yao, 2000). Shaping individuals' life to achieve harmony is largely expected (Yao, 2000). It is commonly believed that the development of mental disorder among the individuals is mainly caused by the punishment for the sins of their ancestors (Lam et al., 2010; Philips, 2003). Moreover, the deviant behavior of schizophrenia is regarded as the absence of moral standard in violating the harmonious social relationship as expected by Confucianism (Tsang et al., 2007; Lam et al., 2010). Therefore, individuals with schizophrenia create enormous shame to the family, and

affect the reputation of the family in generating high level of stigma (Tsang et al., 2007), as having a family member with schizophrenia may imply an inferior origin of family (Tsang, Tam, Chan, & Cheung, 2003a). Thus, Chinese people tend not to disclose that they have a family member with schizophrenia in order to "save face" (Furnham & Chan, 2004). These culturally specific values explain why Hong Kong citizens in general hold a more negative attitude towards individuals with schizophrenia (Fung, Tsang, & Corrigan, 2008; Fung, Tsang, Corrigan, Lam, & Cheung, 2007; Furnham & Chan, 2004; Tsang et al., 2007). Furthermore, Philips and colleagues (2000) revealed that urbanized family members of individuals with schizophrenia tend to adopt internal attribution (e.g. symptoms of schizophrenia is mainly caused by personal problems) to explain the defect among individuals with schizophrenia, whereas those rural family members tend to adopted "external attribution" (e.g., symptoms of schizophrenia is mainly caused by mystical forces) to explain the mental disorders. Thus, it is realized that cultural factors have imposed an influences for the conceptualization and maintenance of mental illness stigma.

2.2.2. SELF-STIGMA

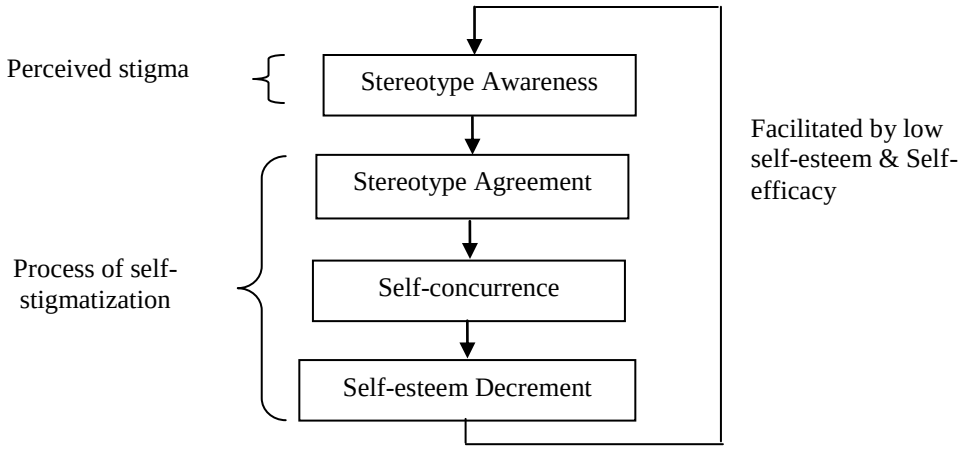
Self-stigma occurs when individuals with schizophrenia internalize negative stereotypes about mental illness in resulting self-prejudicial and self-discriminatory reactions that turn in against them (Corrigan, 1998; Corrigan & Watson, 2002; Fung, Tsang, Corrigan, Lam, & Cheung, 2007). Self-stigma is defined as a self-discredit of individuals by internalizing negative stereotypes prescribed to them and/or their social group (Corrigan & Watson, 2002; Corrigan, Watson, & Barr, 2006; Fung,

Tsang, Corrigan, Lam, & Cheung, 2007). The process of self-stigmatization may easily be understood in terms of a three-tier mechanism proposed by Corrigan et al. (2006) which consists of stereotype agreement, self-concurrence, and self-esteem decrement. Before initiating self-stigmatization, individuals with schizophrenia should firstly be aware of public stigma (perceived stigma). In the initial phase of self-stigmatization, individuals with schizophrenia agree with the perceived negative stereotype towards individuals with schizophrenia (e.g., believing that individuals with schizophrenia are dangerous and morally weak). They then further internalize this negative stereotype on their own (e.g., because I have schizophrenia, I am dangerous and morally weak), and their self-esteem and self-efficacy are eventually impeded via the internalization process.

The relationship between self-stigma, self-esteem and self-efficacy is not simply linear. It is believed that these constructs acted viciously together which block the recovery among individuals with schizophrenia (Corrigan, 2004; Fung, Tsang, Corrigan, Lam, & Cheung, 2007). Self-esteem is defined as a personal feeling of self-worth, self-regard, and self-acceptance (Rosenberg, 1979). Its level is greatly influenced by the degree of congruence of satisfaction between personal and ideal self-image (Siber & Tippett, 1965). Individuals who have low self-esteem are more likely to possess poor self-worth, and they tend to attribute negative circumstances to their own cause (Crocker, Alloy, & Kayne, 1998; Weiner, 1995). Self-efficacy is defined as the expectation on own ability to accomplish a given behavior (Bandura, 1977). Individuals who have low self-efficacy are more

vulnerable to believe that stigma-relevant stressors (the uncertainty experienced by individuals regarding their social identity) exceed their coping demand (Major & O'Brien, 2005). This would then undermine their willingness to make decision for behaviors (Bandura, 1977). The model of self-stigmatization is presented in Figure 1.

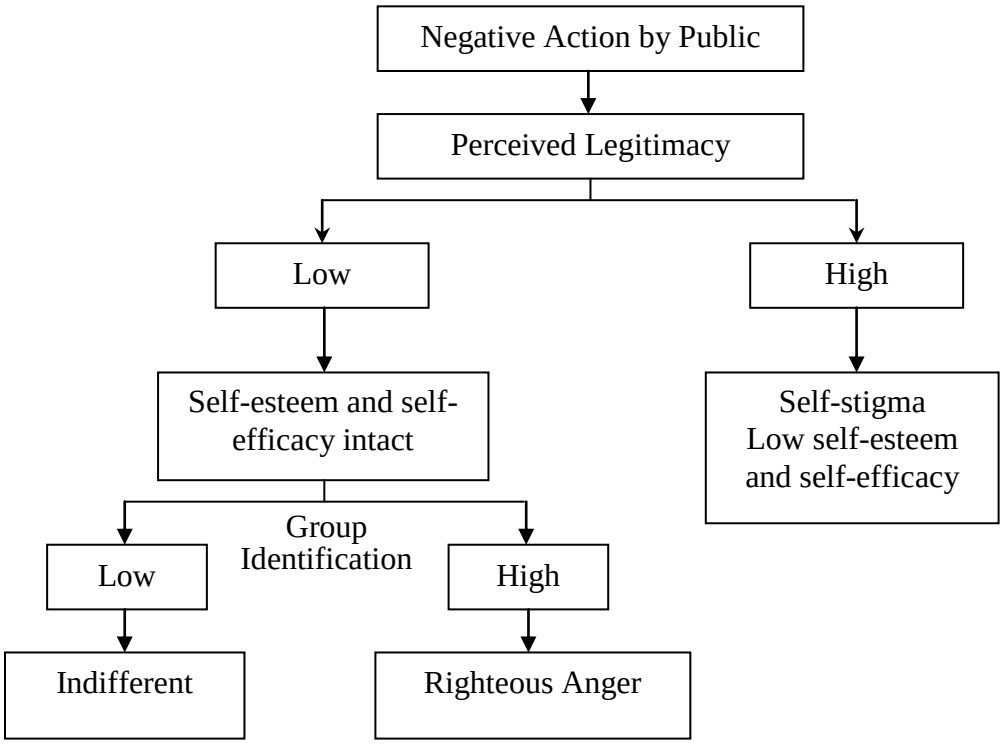
Figure 1. The mechanism of self-stigmatization



However, being self-stigmatized is only of the responses towards public stigma. Others may become righteously anger or indifferent towards the stigmatizing conditions (Corrigan & Watson, 2002; Watson, Corrigan, Larson, & Sells, 2007). In order to explain this phenomenon, Corrigan and Watson (2002) have formulated a social cognitive model to illustrate the personal response to stigma. The salient stigmatizing conditions (e.g. psychiatric symptoms) of the individuals with schizophrenia make sense of the negative specific reactions from public. Individuals who endorse the public negative conditions as legitimate are more likely to be self-stigmatized in manifesting low self-esteem and self-efficacy. For those who do not endorse the public negative conditions as legitimate, they would demonstrate intact

self-esteem and self-efficacy. The effects of legitimacy towards the stimulating events could be explained by the equity theory (Crocker and Major, 1994). If a stigmatizing expectation (e.g. individuals with schizophrenia is incompetent, and they are unable to work satisfactorily) is perceived as accurate for a negative outcome (e.g., failed in a job interviewing), perceived legitimacy of the negative outcome is then endorsed. Conversely, it is expected that if the individuals do not endorse the stigmatizing expectation (e.g., individuals with schizophrenia could do a good job in their employment), perceived legitimacy of the negative outcome is rejected. Under this category, individuals with high group identification tend to become righteously angry and demonstrate empowerment efforts; whereas those with low group identification are indifferent to the stigmatizing events. This model however does not incorporate such plausible contributing factors such as poor social efficacy, social cognition, and disease awareness which may have better explained the development of self-stigmatization. For instance, individuals with social-cognitive deficit would limit their accurate perception of external stigmatizing cues in altering their response to stigma (Corrigan & Watson, 2002). Figure 2 illustrates the situational model of personal response to stigma.

Figure 2. A situational model of the personal response to stigma (Corrigan & Watson, 2002)



Individuals with schizophrenia often endorse a feeling of self-disregard and incompetence (Lysaker, Buck, Taylor, & Roe, 2008). Self-stigmatized individuals may fail to seek help to avoid possible sources of public discrimination (Cooper, Corrigan, & Watson, 2003). The findings of my MPhil study suggested that self-stigma imposes negative influence to undermine psychosocial treatment compliance among individuals with schizophrenia (Fung, Tsang, & Corrigan, 2008). Between July 2004 and February 2005, eighty-six adults with schizophrenia in Hong Kong were recruited for a cross-sectional observational study. Assessments on participants' level of self-stigma, psychosocial treatment compliance, self-esteem, insight, and general self-efficacy were conducted. Findings (Fung, Tsang, &

Corrigan, 2008) suggested that individuals with lower level of self-stigma were more likely to have better psychosocial treatment compliance. The inadequate coping strategies and feeling of hopelessness adopted by self-stigmatized individuals may be regarded as the possible obstacles causing poor compliance (Fung, Tsang, & Corrigan, 2008). For instance, self-stigmatized individuals may avoid the experience of public stigma by not seeking psychiatric services (Cooper, Corrigan, & Watson, 2003; Corrigan, 2004; Corrigan & Wassel, 2008; Fung, Tsang, & Corrigan, 2008; Wrigley, Jackson, Judd, & Komiti, 2005). Furthermore, they are prone to endorse a feeling of hopelessness and query the beneficial effects of psychiatric treatment in causing poor compliance (Corrigan & Watson, 2002; Corrigan, 2004; Fung, Tsang, Corrigan, Lam, & Cheung, 2007). Thus, their recovery would be ultimately impeded (Corrigan, Watson, & Barr, 2006; Ritsher & Phelan, 2004; Tsang & Chen, 2007).

As the underlying linkage between self-stigma and psychosocial treatment compliance has not been clearly demonstrated in the prior study (Fung, Tsang, & Corrigan, 2008), this study attempted to investigate the mechanism on how self-stigmatization undermined treatment compliance among individuals with schizophrenia. It may be possible that their self-stigmatized thoughts might reduce their motivation and thus readiness for seeking and adhering to psychiatric services prescribed by the mental health professionals, as motivation is a crucial determinant to changing problematic behaviors (Barkhof, Meijer, de Haan, de Sonneville, & Linszen, 2006; Miller & Rollnick, 2002) and improving treatment engagement (Mulder, Koopmans, & Hengeveld, 2005). Self-stigmatized individuals are more

likely to be affected by their social identity as suffering from schizophrenia. They are therefore not ready to engage in psychosocial interventions such as supported employment and social skills training as prescribed. We hypothesized that a lack of readiness for changing own mental health conditions, and poor insight towards psychiatric treatment were mediating factors which may cause poor psychosocial treatment compliance among self-stigmatized individuals. These assumptions are explained in the coming sessions.

2.3. STAGES OF CHANGE

The use of stages of change model is useful to illustrate individual readiness to engage in treatment over time (Prochaska, DiClemente, & Norcross, 1992). The Stages of Change Model (SOC) has been widely adopted to investigate the readiness for change towards behavioral problems (Chou, Chan, & Tsang, 2004). Studies have employed the SOC model to explain medication compliance among individuals with mental illness (Finnell & Osborne, 2006; Rusch & Corrigan, 2002). According to the stages of change model, individuals with schizophrenia demonstrate differential stages in their help seeking behaviors (Chou, Chan, & Tsang, 2004; Hilburger & Lam, 1999; Roger et al., 2001). Stages of change is the temporal dimension for change with four different levels (pre-contemplation, contemplation, action, and maintenance) among individuals with schizophrenia (Hilburger & Lam, 1999; Prochaska, DiClemente, & Norcross, 1992). It is suggested that self-efficacy is an essential element to motivate individuals to demonstrate better readiness for change (Chou, Chan, & Tsang, 2004; Miller & Rollnick, 2002). Individuals are not expected

to engage in a target behavior, unless they believe that they have the necessary abilities to perform this behavior (Prochaska & Prochaska, 1999). Those with strong self-efficacy are more likely to implement such health behaviors (Malotte et al., 2000). The four stages are illustrated as follows (Prochaska & Prochaska, 1999):

A. Precontemplation stage

- In this stage, people have no intention to change their problematic behavior. They do not have any awareness concerning their own problems. A lack of awareness may be due to ignorance of problems, or because of their defensiveness. People in the precontemplation stage do not believe that they are able to change accordingly based on their demoralized beliefs in their abilities to make change.

B. Contemplation stage

- In the contemplation stage, people are aware of their own problem, but they do not take any action for change. People in this stage tend to demonstrate higher level of self-efficacy than those in the precontemplation stage (DiClemente et al., 1991). People do not take action for change mainly due to their conception that the advantages and disadvantages of taking action for change are similar. They are very ambivalent about taking action for changing own problematic behaviors.

C. Action stage

- People in the action stage have committed their efforts for changing own problematic behaviors. Existential (self-liberation), humanistic (helping relationship), and behavioral (stimulus control, counter-conditioning, and reinforcement management) processes are reinforced for the progression to the action stage. In general, people are able to change their problematic behaviors with some criterion of success.

D. Maintenance Stage

- In this stage, people have paid for their prolonged efforts for consolidating their gains and avoiding re-occurrence of problem. It is a stable stage which commences after 6 months of taking concerted action for change.

Chou and colleagues (2004) suggested that certain individuals with severe mental illness experienced the process of ambivalent-conforming. Although they may not acknowledge for the need of treatment, they still demonstrate active engagement in prescribed psychiatric treatment. One of the possible reasons is that they may want to fulfill the expectation of their significant others by complying to the prescribed treatment. There is a linkage between change processes and actual treatment approaches (Prochaska & DiClemente, 1983). Different treatment strategies could be applied for the different stages of change (Prochaska & Prochaska, 1999). Cognitive approach is believed as an effective strategy for early

stages of change (precontemplation and contemplation stages), whereas behavioral approach should be implemented in the later stages of change (action and maintenance stages). In the early stage of change, individuals are more focused on "thinking" about behavioral change. In this context, the individuals are expected to move forward when the advantages of action taking outweigh the disadvantages. When the individuals move to the action or the maintenance stages, the cognitive-only strategies on "thought alteration" are regarded as comparatively less effective. Behavioral strategies such as counter-conditioning, reinforcement management, and stimulus control could be implemented to help the individual to attain their behavioral goals. For those who experienced ambivalent-conforming, a mixture of behavioral and cognitive approaches should be applied.

Self-stigmatized individuals are more likely to develop a sense of hopelessness which fixates them at the contemplation stage. Individuals at the contemplation stage feel ambivalent. They realize the need to deal with their own psychiatric-related problems (Miller & Rollnick, 2002). Nevertheless, they are not motivated enough to engage themselves in treatment which results in poor psychosocial treatment compliance. The application of the stages of change model in explaining the noncompliant behaviors among the self-stigmatized individuals with schizophrenia was tested in the present PhD study.

2.4. INSIGHT

The World Health Organization International Pilot Study on Schizophrenia revealed that up to 98% of individuals with schizophrenia demonstrated poor insight (Jablensky et al., 1992). Amador and colleagues (1994) reported that more than a half of individuals with schizophrenia were lack of awareness of their mental illness, whereas 22% and 32% of the individuals were markedly unaware of the achieved effects of the psychiatric medication, and the social consequences of having mental disorders respectively. These figures suggest that lack of insight was prevalent in the population with schizophrenia. From an aetiological view, lack of insight could be regarded as symptom, defence mechanism or neuropsychological deficit (Cuesta & Peralta, 1994).

According to the DSM-IV-TR (APA, 2000, p.304), it states that "*a majority of individuals with schizophrenia have poor insight regarding the fact that they have a psychotic illness. Evidence suggests that poor insight is a manifestation of the illness itself rather that a coping strategy*". Insight actually is operationally defined as a multidimensional framework that is composed of "awareness of having mental illness", "awareness of the symptoms resulting from the illness", "awareness of the need for treatment", and "attribution about the consequence of having illness" (Buckley et al., 2007). Amador and colleagues (1993) have detailed the characteristics and dimensions of insight as follows:

A. Insight has a numbers of dimensions

B. Awareness of symptoms is cultural specific

C. Rather than a dichotomous phenomenon, insight is regarded as a continuous construct

D. Awareness of symptoms may be modality-specific

E. Timeframe for assessing insight should be specific

Parallel to previous studies (Fenton, Blyler, & Heinssen, 1997; Lacro, Dunn, Dolder, Leckband, & Jeste, 2002; Tsang, Fung, & Corrigan, 2008), the findings of my MPhil suggested that insight was a significant predictor for treatment compliance (Fung, Tsang, & Corrigan, 2008). Illness recognition forms the foundation of having the urge to receive treatment (Cuffel, Alford, Fischer, & Owen, 1996). Individuals in general do not believe that they need to receive psychiatric interventions, unless they are aware of their psychiatric conditions that are required to tackle with (Fung, Tsang, & Corrigan, 2008; Rusch & Corrigan, 2002). This would in turn undermine his engagement in psychosocial treatment. On the contrary, individuals who are more aware of the negative social consequences of having mental disorders are more willing to enhance their psychotic symptoms by compliant with psychiatric intervention (Fung, Tsang, & Corrigan, 2008). Insight can regarded as an independent belief about the usefulness of psychiatric intervention (Linden & Godemann, 2007).

The effect of insight in mediating between self-stigma and psychosocial treatment was investigated in this study. It is generally agreed that if individuals with schizophrenia endorse that suffering from mental illness means not deserving to be

valued, this could lead to low motivation to pursue meaningful life roles (Lysaker, Roe, & Yanos, 2007). It was hypothesized that poor insight among self-stigmatized individuals on the other hand may undermine their readiness to handle their mental health problems which further prevents them from compliant with their treatment.

2.5. PSYCHOSOCIAL TREATMENT COMPLIANCE

Integration of empirically validated psychosocial treatment into the standard care for schizophrenia is necessary to manage the disabling residual symptoms and impeded role functioning (Bustillo, Lauriello, Horan, & Keith, 2001). Clark and Samnaliev (2005) defined psychosocial treatment as "*any form of mental health treatment that involves people helping people to improve psychological and social functioning according to an explicit set of treatment principles*". The knowledge base of psychosocial treatment has been enriched by recently accumulating empirical evidence (Mueser & Bond, 2000; Watson & Corrigan, 2001). Supported employment, family intervention, social skills training, and cognitive behavioral therapy are examples of evidence based psychosocial treatment (Bellack, 2004; Glynn, 2003; Mueser & Bond, 2000). Reviews on evidence-based psychosocial treatment (Bustillo, Laurello & Keith, 1999; Glynn, 2003; Mueser & Bond, 2000) reveal that family intervention is effective for relapse prevention, whereas supported employment is a promising strategy to enable individuals with schizophrenia to find and keep competitive employment. Moreover, social skills training and cognitive behavioral therapy are found to be effective for promoting social functioning and alleviating negative symptoms among individuals with schizophrenia respectively.

Individuals should have good treatment compliance in order to enjoy the beneficial effects of treatment (Ludwig, Huber, Schmidt, Bender, & Greil, 1990). Unfortunately, poor compliance to medication and psychosocial treatment is prevalent among individuals with schizophrenia, which increases their likelihood of relapse and re-hospitalization (McCann, Clark, & Lu, 2008; Swanson et al., 1997; Tay, 2007). Evidence from the study of Epidemiological Catchment Area reported that more than 70% of people with severe mental illness refused to engage in psychiatric treatment (Regier et al., 1993). Relapse is a costly event (Knapp, 2000) which led to an additional health expenditure of two billion in US (Weiden & Olfson, 1995). In addition, treatment non-compliance limits the delivery of clinical services (Watson & Corrigan, 2001) to enhance independent living, employment, and quality of life among individuals with schizophrenia (Antai-Otong, 2003; Bustillo, Lauriello, Horan, & Keith, 2001; Glynn, 2003).

Compliance is defined as the extent to which a person's behavior coincided with given medical advice (Sackett & Haynes, 1976). The health belief theory (Rosenstock, 1966) and the role theory (Parsons, 1972) could be used to explain compliant behaviors.

A. Health Belief Model (Rosenstock, 1966)

- This is suggested that compliant behavior is based on the perception that health is being threatened and the threat could be minimized through particular action. Decision making for comply

or not mainly relies on weighing between the advantages of action and the negative consequences. Susceptibility and seriousness of illness, effectiveness of treatment, and costs for changing health behavior are the fundamental factors that influence individuals' decision for treatment compliance (McCann, Clark, & Lu, 2008). This model does not account for other possible influencing factors such as patient, treatment, environment, and physician related domains (Fleischhacker, Oehl, & Hummer, 2003) which may mediate compliant behaviors. This would reduce the total amount of variance which may explain the compliant behaviors among individuals with schizophrenia.

B. Role Theory (Parsons, 1972)

- A sick role is adopted by individuals with schizophrenia. In this model, it is believed that patient is incapable to manage his health problems alone, and is constrained to seek help from physician in following physicians' recommendations for treatment. Treatment noncompliance is deemed to be irrational. It is the responsibility for the individuals. However, the role theory is entirely built on the medical perspective. It largely neglects the independent decision making of individuals to demonstrate compliant behavior (Fallon, 1984).

The findings of an exploratory factor analytical study conducted by Tsang, Fung and Corrigan (2006) revealed that psychosocial treatment compliance should be reflected by individuals' level of participation and attendance. Individuals who adhere to treatment regime should simultaneously demonstrate satisfactory treatment participation and attendance. "Attendance" is regarded as the frequency with which an individual has kept the appointments towards prescribed treatments, and their punctuality of attending treatments. "Participation" is defined as the engagement in psychosocial treatment such as following instructions, seeking for improvement, and cooperation during treatment sessions (Tsang, Fung, & Corrigan, 2006). Individuals would demonstrate compliant behaviors once they find that the negative consequences of action are outweighed by the advantages (Rosenstock, 1966). The association between self-stigma and psychosocial treatment noncompliance has been supported by Fung et al.'s (2008) study. For instance, individuals would keep their mental illness secret by abandoning seeking psychiatric treatment (Cooper, Corrigan, & Watson, 2003). The underlying linkage between self-stigma and psychosocial treatment compliance nevertheless has not been clearly demonstrated. The possible linkage between self-stigma, stages of change, insight, and psychosocial treatment compliance among individuals with schizophrenia were further examined using regression analysis and path analysis in the present PhD study. With the deeper understanding on the above mechanism, an intervention program for reducing self-stigma, enhancing readiness for change and treatment compliance was developed and tested.

CHAPTER THREE OVERALL DESIGN OF STUDY

The present study consisted of two phases. Phase one study aimed at investigating the relationship between self-stigma, stages of change, insight, self-efficacy, and psychosocial treatment compliance via regression and path analytical approaches. In phase two, an intervention program was developed and tested as to its effectiveness in reducing self-stigma, and enhancing readiness for change and psychosocial treatment compliance.

3.1. PHASE ONE: RELATIONSHIP EXPLORATION

3.1.1. METHODS

3.1.1.1. PARTICIPANTS

After institutional ethical approval was obtained, 105 adults with schizophrenia (response rate= 87.5%) were recruited from the participating psychiatric day hospitals (i.e., United Christian Hospital and Yung Fung Shue Psychiatric Centre) and community settings (i.e., Baptist Oi Kwan Social Services, Richmond Fellowship of Hong Kong, and Stewards Company) between March 2007 and January 2008. The response rate was calculated as "the total number of participants completed the questionnaires" dividing by "the total number of eligible participants referred to this study by the mental health professionals". Lack of interest and being unable to answer the questionnaires were the two main reasons of their withdrawals. Fifty four participants were female. The participants aged from 20 to 64 years old. On average, they were 41.83 years old (*SD*= 9.00). 72.38% were

single, 9.52% were married, and 18.10% were divorced or widowed. 88.57% received social security allowance and/ or disability allowance from the government. All of them received psychosocial treatment such as vocational rehabilitation programs, social skills training, cognitive behavioral therapy, and family intervention from the above psychiatric units. The psychosocial treatment offered by the psychiatric settings was primarily on daily basis which formed an integral part of the treatment provided by the psychiatric team for both hospital and community settings. The percentage of attendance to psychosocial treatment of the participants varied substantially. Some attended every day while some were often absent. All participants had received at least elementary education which was to make sure that they had adequate language ability to comprehend the questionnaires.

3.1.1.2. INSTRUMENTS

1. *The Chinese Self-stigma of Mental Illness Scale (CSSMIS; Fung, Tsang, Corrigan, Lam, & Cheung, 2007)* consists of four subscales to measure perceived stigma (stereotype awareness) and self-stigma (stereotype agreement, self-concurrence and self-esteem decrement). The subscales of self-stigma are developed based on the three-tier mechanism of self-stigmatization (Corrigan, Watson & Barr, 2006; Fung, Tsang, Corrigan, Lam, & Cheung, 2007). The introduction for "Stereotype Awareness" is "I think the public believes……", whereas the one for "Stereotype Agreement" is "I think……". The introductory clauses for "Self-concurrence" and "Self-esteem Decrement" are "Because I have a mental illness……" and "I currently respect myself less……"

respectively. Each subscale contains 2 positive (e.g. persons with mental illness are mostly geniuses) and 13 negative (e.g. persons with mental illness cannot be trusted) items. The items are rated from 9-point Likert scale ranging from "(1) strongly disagree" to "(9) strongly agree". Its psychometric properties (internal consistency: α= .82-.90; test-retest reliability: *ICC*= .71-.81) were good (Fung, Tsang, Corrigan, Lam, & Cheung, 2007).

2. *The Change Assessment Questionnaire for People with Severe and Persistent Mental Illness (CAQ-SPMI; Hilburger, 1995)* is a 32-item instrument measuring the continuation of readiness for change including "precontemplation" (e.g., As far as I am concerned, I don't have any mental health problems that need changing), "contemplation" (e.g., It might be worthwhile to change a few things about myself), "action" (e.g., I am doing something to deal with the mental health problems that have been bothering me), and "maintenance" (e.g., I may need a boost right now to help me maintain the changes I have already made). Each item is rated on a 5-point Likert scale anchoring from "(1) strongly disagree" to "(5) strongly agree". The indices were calculated by adding up the item scores within each subscale. The stages of change (SOC) continuous score is computed according to the algorithm of "mean score of contemplation subscale + mean score of action subscale + mean score of maintenance subscale – mean score of precontemplation subscale". Higher score presents better readiness for

changing own mental health problems. The CAQ-SPMI demonstrated satisfactory internal consistency (α= .79 – .89) (Chou, Chan, & Tsang, 2004).

3. *The Psychosocial Treatment Compliance Scale (PTCS; Tsang, Fung, & Corrigan, 2006)* consists of 17 items scoring on a 5-point Likert scale ranging from "(1) never" to "(5) always" through the daily clinical observation by the cases therapists for the past three months before the commencement of interview. The findings of exploratory factor analysis suggested that the PTCS has the "participation" (12 items) and "attendance" (5 items) subscales. "Attendance" refers to the actual presence as reflected by the frequency of appointment keeping and record of attendance. Sample items included "attended prescribed psychosocial treatment on time" and "continued to participate in all psychosocial treatment and avoid premature treatment termination". "Participation" assesses the dimension of cooperation and engagement in psychosocial treatment. Examples of items included "was willing to follow therapist instruction" and "was willing to review topics discussed in previous psychosocial treatment sessions". The "Participation" and "Attendance" subscales are highly correlated with r= .85 (p< .01) which implies that the non-attending individuals tend to have poor participation in psychosocial treatment at the same time. Compliant participants would obtain higher summated scores on the subscales of PTCS. The exploratory factor analysis revealed a two-factor solution of the PTCS accounting for 70.74% of the variance. The "Participation" and "Attendance" accounted for 40.08% and

30.66% of the total variance respectively. The convergent validity of the PTCS was established via its correlational investigation with other psychological measures such as self-esteem and attitudes towards medication. Good internal consistency (α= .87 – .96) and test-retest reliability (*ICC*= .86 - .90) were demonstrated for the subscales (Tsang, Fung, & Corrigan, 2006).

4. *The Brief Psychiatric Rating Scale (BPRS; Overall & Gorham, 1962)* is an 18-item scale which is used to measure psychotic symptoms such as conceptual disorganization, hallucinatory behavior, and unusual thought content of the participants. BPRS is a reliable, valid and sensitive tool (Ligon & Thyer, 2000) in measuring psychopathology among individuals with schizophrenia (Leucht et al., 2005). The items are rated from "(0) not present" to "(7) extremely severe". Higher total score represents more severe psychotic symptoms experienced by the participants.

5. *The Global Assessment of Functioning Scale (GAF; American Psychiatric Association, 2000).* It is a single-item questionnaire rated from 0 to 100. Individuals who have better psychological, social and occupational functioning obtain higher score in the GAF.

6. *The Scale to Assess Unawareness of Mental Disorders (SUMD; Amador et al., 1993).* Items measuring participants' current and past awareness of mental illness, awareness of the achieved effect of medication, and awareness of the

social consequences of having mental disorder were used. The items are scored on a 5-point Likert scale anchoring from "(1) aware" to "(5) not aware". Independent item scores were used in this study. Individuals who have better insight towards own mental illness would obtain lower scores on each item. It was suggested that these items demonstrated satisfactory inter-rater intra-class coefficient (*ICC*= .67-.89) (Fung, Tsang, & Corrigan, 2008).

7. *The Chinese General Self-efficacy Scale (CGSS; Chiu & Tsang, 2004)*. The 10-item CGSS is rated from "(1) Not at all true" to "(4) Exactly true". "It is easy for me to stick to my aims and accomplish my goal" is a sample of the items. Participants with better general self-efficacy obtained higher summated score. The CGSS demonstrated good internal consistency (α= 0.92 – 0.93) and test-retest reliability (*ICC*= 0.75-0.94) (Chiu &Tsang, 2004).

8. Demographic data of participants were collected by the Demographic Data Collection Form (Tsang, Fung, & Corrigan, 2006). Case occupational therapists completed this form based on the medical record of participants.

The therapist-rated questionnaires (PTCS, BPRS, GAF and the Demographic Data Collection Form) were written in English. A Chinese version was not required. In contrast, the CAQ-SPMI was translated into Chinese and validated by Chou et al. (2004), whereas the translation and validation of CSSMIS, SUMD, and CGSS were respectively conducted by Fung et al. (2007), Tsang et al. (2006), and Chiu and

Tsang (2004). All questionnaires were firstly translated into Chinese by a qualified translator. The Chinese questionnaires were then back-translated to English by another independent translator. The discrepancies of the two versions were reconciled by a group of mental health experts. Afterwards, the psychometric prosperities of those questionnaires were established. Those questionnaires are attached in Appendix 1.

3.1.1.3. DATA COLLECTION

Institutional ethics approvals were obtained from The Hong Kong Polytechnic University and the five participating psychiatric settings before the study commenced. The case therapists who helped in data collection were occupational therapists, social workers, or nurses. All of them had extensive experiences providing psychosocial treatment to the participants. Before data collection, the case therapists received a training session with case illustrations and discussion conducted by the PhD candidate. The aim was to ensure the correct completion of therapist-rated questionnaires. First, the case therapists identified eligible cases from the corresponding psychiatric units. Eligible cases (1) were aged between 18 and 65; (2) obtained a DSM-IV diagnosis of schizophrenia from certified psychiatrists; (3) engaged in the psychosocial treatment for the past three months before interview was conducted; (4) were elementarily educated; and (5) did not have developmental disabilities. The participating psychiatric units shortlisted all eligible participants, and selected them via convenience sampling for interview. Second, the case therapists provided the demographic information, and completed

the PTCS, BPRS and GAF after they had obtained individual written consents from participants. The consent form and information sheet are attached in Appendix 2. The information was gathered from cases therapists via participants' medical records, and their daily clinical observation. The judgment bias of rating the PTCS, GAF and BPRS by the case therapists was minimized through the provision of the training session and their blindness to the study design. Then experienced research assistants from The Hong Kong Polytechnic University completed CSSMIS, CAQ-SPMI, SUMD and CGSS through the direct interview with the participants. The research assistants went through the role play exercises and on-the-site training offered by the Chief Supervisor and the doctoral candidate to ensure the objectivity and fidelity of questionnaire completion.

3.1.2. PHASE IA: PREDICTIVE ANALYSIS

3.1.2.1. DATA ANALYSIS

SPSS version 14.0 was used for data analyses. Fung et al.'s (2007) and Tsang et al.'s (2006) studies revealed that individuals from the day hospitals and community settings received similar psychiatric rehabilitation services. As the data of individuals from day hospital and community settings were comparable, they were analyzed together. The test scores were summarized by descriptive statistics. Stepwise multiple regression was employed to explore the relationship between treatment compliance and the potential contributing factors such as self-stigma and stages of change. Treatment participation and attendance were treated as the dependent variables according to the main objective of this study. Bendel and Afifi

(1977) recommended that independent variables which have the relationship with the dependent variable at *p*-value < .20 should be selected and entered the regression model. Thus, the selected independent variables correlated with the "participation" and/or "attendance" of the PTCS with $p<.20$. Independent *t*-test was implemented in order to compare the level of psychopathology among the male and female participants.

The participants were categorized into the "compliant" or "non-compliant" groups based on their composite psychosocial treatment compliance score which refers to the summation of the z-score of the "Participation" and "Attendance" of the PTCS. Discriminant function analysis was conducted to test how well the test scores of CSSMIS, CAQ-SPMI, and GAF differentiated the membership of the "compliant" and "non-compliant" groups correctly.

3.1.2.2. RESULTS

3.1.2.2.1. CORRELATIONAL ANALYSIS

Table 2 presents the descriptive information of all test scores, and the Pearson coefficient between the CSSMNIS, CAQ-SPMI, CGSS, BPRS and GAF, and the "Participation" and "Attendance" subscales of the PTCS. The findings of correlational analyses suggested that less severe psychiatric symptoms, better global functioning, and better insight towards the beneficial effects of medication were significantly associated with better treatment participation and attendance among the participants. Higher self-concurrence, self-esteem decrement, and poor insight

towards own mental illness were significantly correlated with poor treatment participation. CAQ-SPMI results revealed that individuals who were in the pre-contemplation stage were more likely to have poor treatment participation. Individuals in the contemplation and action stage had better treatment participation. Those in maintenance stages were more likely to show better attendance.

Table 2. Mean score of the scales and their correlation with the "Participation" and "Attendance" of PTCS

Sub-scores	Mean	*S.D.*	Correlation with Participation	Correlation with Attendance
PTCS: Participation	37.48	7.17	N.A.	N.A.
PTCS: Attendance	18.57	3.08	N.A.	N.A.
CSSMIS: Stereotype Awareness	80.44	19.11	X	X
CSSMIS: Stereotype Agreement	71.67	19.23	-.139	.140
CSSMIS: Self-concurrence	64.94	20.48	-.315**	X
CSSMIS: Self-esteem Decrement	64.06	21.53	-.283**	X
CGSS	22.23	6.80	.148	X
CAQ-SPMI: Precontemplation	23.68	4.47	-.210*	-.130
CAQ-SPMI: Contemplation	30.45	4.20	.265**	.174
CAQ-SPMI: Action	30.59	4.68	.397**	.163
CAQ-SPMI: Maintenance	28.70	4.85	X	.196*
SUMD: Mental illness (Current)	2.48	1.72	X	X
SUMD: Mental illness (Past)	2.34	1.73	-.216*	X
SUMD: Medication (Current)	1.59	1.34	-.290**	-.195*
SUMD: Medication (Past)	1.59	1.34	-.290**	-.195*
SUMD: Social Consequence (Current)	2.10	1.62	X	X
SUMD: Social Consequence (Past)	2.12	1.64	X	X
BPRS	18.45	12.24	-.288**	-.300**
GAF	67.18	9.64	.471**	.273**

Key: X= $p>.20$, *$p< .05$; **$p<.01$

3.1.2.2.2. REGRESSION ANALYSIS

Twelve subscales on “Participation” and 9 subscales on “Attendance” reached the Bendel criterion with $p<.20$. The 21 subscales were then treated as independent variables for the regression analyses. As “Duration of having schizophrenia” and “gender” of participant reached the entering *p*-value as suggested by Bendel and Afifi (1977), they were treated as independent variables for the regression analysis for “Participation”. Similarly, “age” and “gender” of participants were treated as independent variables for “Attendance”. These demographic data were also included as independent variables for regression analyses.

Results of the stepwise multiple regression analyses showed that higher global functioning ($\beta= .410$, $p< .001$), better readiness for action ($\beta= .310$, $p< .001$), and lower self-esteem decrement ($\beta= -.225$, $p< .01$) were significant predictors for better treatment participation. The three independent variables accounted for 36.6% variance in predicting treatment participation. The level of global functioning provided the strongest contribution in the prediction (see Table 3).

Table 3. The regression model for "Participation"

Parameter	β	*t*-value	*p*-value	% of variance accounted
"Participation"				
GAF	.410	5.169	.000	56.36%
CAQ-SPMI: Action	.310	3.852	.000	30.91%
CSSMIS: Self-esteem Decrement	-.225	-2.821	.006	12.73%
Adjusted r^2= .366				

As to treatment attendance, the results showed that individuals with lesser severity of psychiatric symptoms (β= -.260, p< .01), and female participants (β= .204, p< .05) were more likely to have better attendance. The overall model explained 11.3% of total variance for predicting treatment attendance (see Table 4). *T*-test suggested that the female participants were less symptomatic than the male participants (t= 2.038, df= 86.604, p<.05).

Table 4. The regression model for "Attendance"

Parameter	β	*t*-value	*p*-value	% of variance accounted
"Attendance"				
BPRS Score	-.260	-2.756	.007	69.92%
Gender	.204	2.170	.032	30.08%
Adjusted r^2= .113				

3.1.2.2.3. DISCRIMINANT FUNCTION ANALYSIS

Sixty participants with positive psychosocial treatment compliance *z*-score were categorized as "compliant participants", and the remainders (*N*= 45) were regarded as the "non- compliant participants". Findings of discriminant function analysis showed that the combined score of CSSMIS, CAQ-SPMI and GAF correctly classified 76.2% participants into compliant or non-compliant group membership (chi-square= 28.467, *df*= 8, *p*< .001). The test score of global functioning (λ= .858, *p*<.001, canonical coefficient= .706), "Precontemplation" (λ= .936, *p*<.01, canonical coefficient= -.322) and "Action" (λ= .929, *p*<.01, canonical coefficient= .266) of the CAQ-SPMI, and the self-concurrence (λ= .963, *p*<.05, canonical coefficient= -.774) of the CSSMIS were suggested to be the independent and significant differentiators.

3.1.2.3. DISCUSSION

Consistent with our earlier findings (Fung, Tsang, & Corrigan, 2008), self-stigma was found to be a significant predictor for psychosocial treatment compliance among individuals with schizophrenia. The current study tried to explore the relationship between treatment compliance, and self-stigma, the SOC model, symptomatology, and global functioning. Although the percentage of variance accounted by the regression models is not high, the results reveal significant contribution of self-stigma, readiness for action, and global functioning towards predicting psychosocial treatment participation. Meanwhile, group membership between the compliant/ non-compliant participants can significantly be differentiated.

Treatment compliant behaviors actually are determined by a variety of factors such as complexity of treatment, therapeutic alliance, treatment side-effects, and cognitive functioning of individuals (Fleischhacker, Oehl, & Hummer, 2003). It is therefore not surprising that self-stigma does not yield a very high variance attributable to the regression models in this study. A more comprehensive regression model in studying compliance should be developed in future studies. Our findings provided support to earlier findings. First, self-stigmatized individuals adopt secrecy and withdrawal coping strategies (Corrigan, 2004; Perlick, 2001) which would limit their social interaction and collaboration with others (Vauth, Kleim, Wirtz, & Corrigan, 2007). Second, self-stigmatization undermine their self-esteem (Corrigan, 2004; Corrigan & Watson, 2002; Fung, Tsang, Corrigan, Lam, & Cheung, 2007), and lead them to endorse feeling of hopelessness and query the beneficial effects of psychiatric treatments. All of these cause poor treatment participation (Fung, Tsang, Corrigan, Lam, & Cheung, 2007; Rosenfield, 1997; Watson & Corrigan, 2001). For those who have internalized stigma, seeking treatment may lower their self-concept, as the individuals may believe that receiving treatment means being inadequate and weak (Corrigan, 1998; Holmes & River, 1998). Individuals in the contemplation stage often focus on the negative aspects of the receiving treatment (Miller & Rollnick, 2002). To pique them for better treatment participation, it is important to let them realize the potential benefits of change, and to instill hope of their future (Miller & Rollnick, 2002; Ng & Tsang, 2002).

The perceived desire and benefit for changing problematic behaviors should motivate individuals to take action for change (Barkhof et al., 2006). The negative impact of self-stigmatization may be regarded as a barrier inhibiting their readiness for changing their problematic behaviors. The relationship between self-stigmatization, readiness for change, and psychosocial compliance has been unraveled in our Phase IB study**.** Precontemplation and action are significant differentiators among the compliant and the noncompliant participants. However, their canonical coefficients in contributing to the differentiation are relatively low. A possible explanation is that some individuals in the precontemplation stage may still be participate in psychosocial treatment to satisfy the expectation of their family members and significant others (Chou, Cha, & Tsang, 2004). This is also possible that individuals who are ready to engage in treatment may not have demonstrated appropriate compliant behaviors as expected by the case therapists. Further studies should be implemented in order to reveal the linkage between stages of change and treatment compliant behaviors.

The global functioning of participants was found to be the most significant predictor of treatment participation. This paralleled the previous findings by Rossi et al. (2002), Coodin et al. (2004) and Compton et al., (2005) that individuals who have better general functioning are less likely to suffer from treatment compliance problems. On the contrary, individuals who have lower global functioning tend to have poorer motivation for life pursuits (Bradshaw & Brekke, 1999; Mulder, Koopmans, & Hengeveld, 2005). A possible explanation is that their impaired social

and occupational functioning may limit their ability to follow instructions and communicate with others (Dickinson, Bellack, & Gold, 2007) which in turn worsen their treatment participation (Tsang, Fung, & Corrigan, 2006). Furthermore, individuals who have better global functioning are more likely to have better engagement and success in psychological, social and occupational circumstances (American Psychiatric Association, 2000). Their positive life experiences in employment and interpersonal relationship will improve their self-esteem and fight against their self- stigma (Vauth, Kleim, Wirtz, & Corrigan, 2007). This would reduce their risks of being social isolated and improve their help-seeking behaviors. One may argue that the measures on global functioning and treatment compliance may have certain overlapping and are not totally independent with each other, which may potentially confound the results of regression analysis. However, key distinctions are found between these two constructs. Treatment compliance represents individuals' participation and attendance during prescribed psychosocial treatment. Apart from participants' engagement in psychosocial treatment, global functioning however also reflects participants' level of functioning to deal with their activities of daily living, occupation, leisure activities, family, and friends. Thus, the reference points for rating the GAF and the PTCS are essentially different. Poor treatment compliant behaviors may sometimes be found in well functioning individuals according to their lack of interests towards certain psychosocial treatment. In addition, previous studies have adopted GAF as the predictor for psychiatrist-reported treatment compliance (e.g., Compton, Rudisch, Weiss, West, &

Kaslow, 2005) and medication compliance (e.g., Kampman et al., 2002). However, further investigations should be implemented to address this concern.

Our results showed that females and individuals with less prominent and severe psychiatric symptoms had better attendance to prescribed psychosocial treatment. Individuals with schizophrenia are often affected by their psychiatric symptoms (Finlay, Dinos, & Lyons, 2001). Their negative symptoms such as anhendonia and avolition would reduce their intrinsic drive to change their problematic behaviors (Barkhof et al., 2006). Loss in cognitive and executive functioning would also affect their compliance in training groups (McKee, Hull, & Smith, 1997) as they may be more confusing or their self-appraisal of need for the training groups may be less. Besides, individuals who suffer from more severe psychiatric symptoms may make it more difficult to formulate positive beliefs about oneself (Lysaker, Roe, & Yanos, 2007). Their negative conceptions towards self would worsen their problem of self-stigmatization (Lysaker, Buck, Hammoud, Taylor, & Roe, 2006), and undermine their motivation for receiving treatment. It is found in our sample that female participants were less symptomatic than the male participants. The difference in psychopathology among the two groups may explain why the female participants demonstrated better compliant behaviors than the male participants.

Our prior study (Fung, Tsang, & Corrigan, 2008) suggests that general self-efficacy is not a significant predictor of psychosocial treatment compliance. Similar

finding was gleaned in the present study. Other studies however found that self-efficacy is significantly associated with self-stigma (Corrigan, Watson, & Barr, 2006; Fung, Tsang, Corrigan, Lam, & Cheung, 2007) and stages of change (Chou, Chan, & Tsang, 2004). The insignificant results we obtained in the present study may be due to the generic nature of the self-efficacy measure we employed. Some researchers (Chou, Chan, & Tsang, 2004; Leganer, Kraft, & Roysamb, 2000) suggest that the relationship between self-efficacy and health seeking behaviors may be more easily unraveled by the use of task-specific self-efficacy scales. At this point, the feeling of hopelessness caused by self-stigmatization could be only verified by the self-esteem decrement of individuals found in this study instead of their undermined self-efficacy.

It has taken us by surprise to find that insight was not a significant predictor for treatment attendance and participation. Literature suggests that insight is an important factor determining treatment compliance as illness recognition is regarded as the basis for perceived needs for treatment (Buckley et al., 2007; Fung, Tsang, & Corrigan, 2008). In this study, insight was found to be only significantly associated with the subscales of the PTCS in bivariate analyses. The reason may be that psychiatric symptoms, functioning, self-stigma, and readiness for action may have overshadowed the effects of insight on compliance. Readiness for action is highly correlated with insight (Chou, Chan, & Tsang, 2004; Miller & Rollnick, 2002) that these two constructs shared a large portion of common variance. According to Tabachnick and Fidell (2001), it is possible for a variable (e.g., insight) to appear not

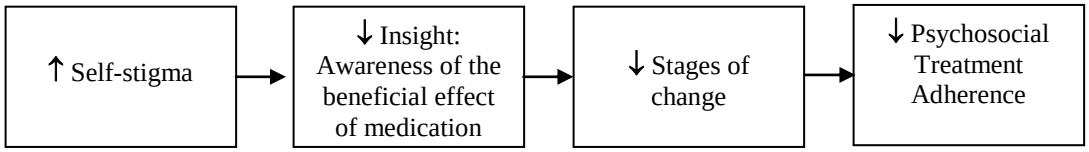
significant in the regression model when it is highly associated with the dependent variables (e.g., treatment compliance).

To summarize, the current study has added to the knowledge concerning self-stigmatized behaviors among individuals with schizophrenia which helps explain the possible relationship between high level of self-stigma, poor readiness for change, and poor psychosocial treatment compliance. The relationship of the above constructs was further investigated using path analytical approach.

3.1.3. PHASE IB: PATH ANALYSIS

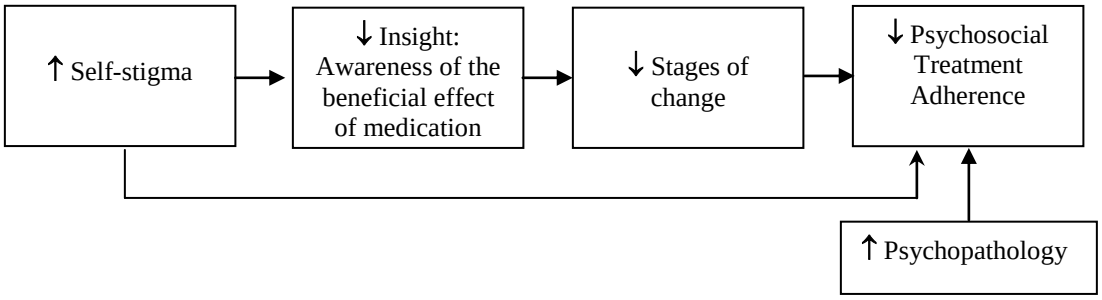
A path analytical approach was adopted to explore the possible relationship between self-stigmatization and psychosocial treatment compliance. We hypothesized that poor insight towards psychiatric treatment, and a lack of readiness for changing own mental health conditions were mediating factors which may cause poor psychosocial treatment compliance among self-stigmatized individuals. The hypothetical path between self-stigma, insight, readiness for change, and psychosocial treatment compliance (Model 1) is illustrated in Figure 3.

Figure 3. Hypothetical Model 1



We also examined in this study the direct effect of self-stigmatization and level of psychiatric symptoms on treatment noncompliance. The direct paths of stigma and psychopathology on compliance were then added which becomes Model 2 (see Figure 4).

Figure 4. Hypothetical Model 2



In addition, the study aimed to explore the mechanism how self-stigma may undermine psychosocial treatment compliance among individuals with schizophrenia. The specific hypotheses are as follows:

1. Self-stigmatization would exert a direct and indirect negative impact on psychosocial treatment compliance among individuals with schizophrenia
2. Insight and stages of change would be the mediating factors between self-stigmatization and treatment noncompliance
3. Psychopathology would lead to treatment non-compliance

3.1.3.1. DATA ANALYSIS

AMOS 7.0 was used for data analysis. As psychosocial treatment compliance is well represented by "attendance" and "participation" (Tsang, Fung, & Corrigan, 2006), we created a composite psychosocial treatment compliance scores by summating the z-scores of "attendance" and "participation" subscales. The correlation matrix between self-stigma, insight, stages of change, psychopathology and psychosocial treatment compliance was formulated. Path analysis was used to test the hypothetical models between self-stigma and psychosocial treatment compliance with the mediating variables. Relative chi-square (χ^2/df), comparative fit index (CFI), and root mean square error of approximation (RMSEA) were used to test the goodness-of-fit of the proposed models. The *p*-value for comparing the goodness-of-fit between Model 1 and 2 (Stegiger, Shapiro, & Browne, 1985) was computed by:

$$p\text{-value= chidist } [(|\chi^2_{i} - \chi^2_{ii}|), (|df_{i} - df_{ii}|)]$$

3.1.3.2. RESULTS

3.1.3.2.1. CORRELATIONAL ANALYSIS

The findings suggested that only the "self-decrement" subscale of CSSMIS was significantly associated with the insight towards the achieved effect of psychiatric medication (r= .234; p=.061). As the three remaining subscales were not significantly correlated with this insight item (r= -.050 to .194; p= .061-.611), only test scores of "self-decrement" were included for path analysis. The findings revealed that individuals who had better insight demonstrated better readiness for

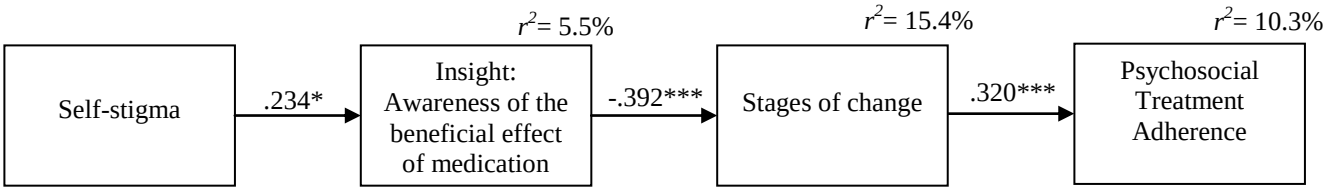
changing own mental health problems (r=-.392; p<.001). Furthermore, the findings elucidated that individuals with better readiness for changing own mental health problems (r=-.320; p<.005) and lesser psychiatric symptoms (r=-.329; p<.005) were more likely to have better psychosocial treatment compliance.

3.1.3.2.2. PATH ANALYSIS

3.1.3.2.2.1. INDIRECT EFFECT OF SELF-STIGMA IN UNDERMINING COMPLIANCE (MODEL 1)

Goodness-of-fit statistics (chi-square= 6.166, *df*= 3, *p*= .104; *CFI*=.909 (saturated model), 1.000 (default model); *RMSEA*= .101) suggested that the observed data did not fit well with this model (Tabachnick & Fidell, 2001). The path model suggested that insight was the mediating factor between self-stigma and stages of change; stages of change in turn acted as the mediator between insight and psychosocial treatment compliance. Self-stigma explained 5.50% of variance of insight, and self-stigma plus insight explained 15.40% of variance of stages of change. The model explained 10.30% of the total variance of psychosocial treatment compliance. Figure 5 shows the findings of path analysis for this model.

Figure 5. The findings of path analysis for Model 1

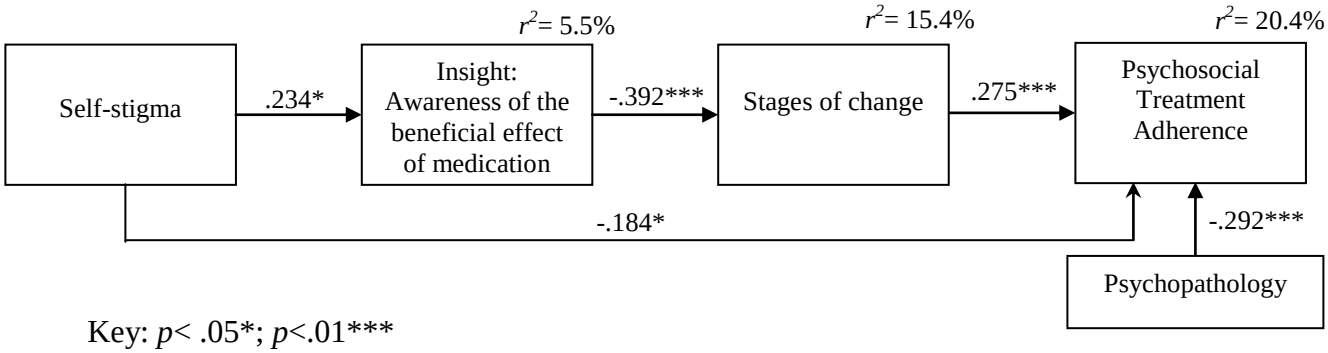


Key: p< .05*; p<.01***

3.1.3.2.2.2. DIRECT AND INDIRECT EFFECT OF SELF-STIGMA AND PSYCHOPATHOLOGY IN UNDERMINING COMPLIANCE (MODEL 2)

Goodness-of-fit statistics (chi-square= 5.135, *df*= 5, *p*= .400; *CFI*=.977 (saturated model), 1.000 (default model); *RMSEA*= .016) suggested that the observed data fitted well with the proposed path model which suggested that insight and stages of change were the mediating factors between self-stigma and psychosocial treatment compliance. Self-stigma was found to have exerted both direct and indirect effects on reducing psychosocial treatment compliance. Self-stigma explained 5.50% of variance of insight, and self-stigma plus insight explained 15.40% of variance of stages of change. Including the direct effect of psychiatric symptoms in undermining treatment compliance, the model explained 20.40% of the total variance of psychosocial treatment compliance. Figure 6 shows the findings of path analysis for Model 2.

Figure 6. The findings of path analysis for Model 2



Key: *p*< .05*; *p*<.01***

3.1.3.2.2.3. COMPARISON OF GOODNESS-OF-FIT BETWEEN MODEL 1 AND 2

The goodness-of-fit between Model 1 and 2 was compared by the *p*-value (.003), which implied that the model fit of Model 2 was significantly better than Model 1. The findings supported our hypothesis that self-stigmatization exerted both direct and indirect effects on reducing psychosocial treatment compliance. Moreover, psychopathology had a direct impact on the compliant behaviors to treatment.

3.1.3.3. DISCUSSION

Our findings are in tune with prior studies that self-stigmatization is a significant factor undermining treatment compliance (Fenton, Blyler, & Heinssen, 1997; Fung, Tsang, & Corrigan, 2008; Fung, Tsang, Corrigan, Lam, & Cheung, 2007; Sirey et al., 2001). The present study has unveiled both direct and indirect mechanisms underlying the link between self-stigma and poor psychosocial treatment compliance.

The direct effect is that self-stigmatized individuals are less willing to seek psychiatric services due to the anticipation of stigma (Cooper, Corrigan, & Watson, 2003; Corrigan, 2004; Corrigan, & Wassel, 2008; Fung, Tsang, & Corrigan, 2008; Wrigley, Jackson, Judd, & Komiti, 2005). As the public tends to label those who have received mental health care as “crazy” and “weak” (Link & Phelan, 2001), self-stigmatized individuals may want to avoid the experience of social prejudice and discrimination by not engaging in psychiatric treatment (Cooper, Corrigan, &

Watson, 2003). This is particularly important in Chinese societies including Hong Kong where the culture is more collectivistic and Confucian (Lam et al., 2010). Public believes that individuals with schizophrenia have problems in their moral standards that explained their violation of the expected harmonious social relationship in Chinese society (Tsang et al., 2007). Due to the assignment of moral defect by the public, the reputation of the family would be devastated (Tsang et al., 2007; Yang, Kleinman, Link, Phelan, &, Good, 2007). This culturally specific values help to explain why Chinese societies endorse more severe mental illness stigma than the western world.

In addition, self-stigma exerts an indirect effect on treatment compliance. Our findings illustrate that self-stigmatized individuals have poor insight towards the beneficial effects of psychiatric treatment. Their poor insight limits their motivation to manage own mental health problems which then leads to their treatment noncompliance (Bayer & Peay, 1997). It is especially true when individuals focus on such negative aspects of psychiatric treatment as side effects and social stigma (Miller & Rollnick, 2002). Self-stigmatized individuals are more likely to remain stagnant at the contemplation stage and do not take any action for change. Our prior study (Tsang, Fung, & Corrigan, 2006) has actually revealed the link between attitudes towards the achieved effects of psychiatric medication and psychosocial treatment compliance. The present path analysis has deepened our understanding towards the mechanism how self-stigma undermines individuals' insight towards psychiatric medication, and how poor insight inhibits readiness for changing own

mental health problem. Both pathways block their compliant behaviors towards receiving psychiatric services.

Our findings suggest that individuals with higher level of psychopathology demonstrate poorer psychosocial treatment compliance. It may be due to their disorganized thoughts and impaired decision making ability which diminish their ability to recognize the need for and effectiveness of treatment (DiClemente, Nidecker, & Bellack, 2008). Furthermore, individuals with more severe psychiatric symptoms are more likely to formulate negative belief about themselves (Lysaker, Roe, & Yanos, 2007; Lysaker, Whitney, & Davis, 2006). This would in turn reduce their drive to manage own mental health problems (Barkhof et al., 2006) and thus causes poor treatment compliance.

Although the percentage of variance accounted by the model is not high, the present study reveals a plausible mechanism to explain how self-stigmatization undermines psychosocial treatment compliance among individuals with schizophrenia. Treatment compliance is governed by a host of factors including patient-related (e.g., cognitive impairment, comorbidity, etc.), environment-related (e.g. social support, location of treatment provision), treatment-related (e.g. side-effects, complexity of treatment), and physician-related (e.g. therapeutic alliance, provision of treatment information) domains (Fleischhacker, Oehl, & Hummer, 2003). In order to explain higher percentage of variance for psychosocial treatment

compliance, further studies should consider other pathways that may pertain to treatment compliant behaviors.

3.1.4. IMPLICATIONS FOR THE FINDINGS OF PHASE ONE STUDY

The findings of Phase One study have added to the knowledge concerning self-stigmatized behaviors among individuals with schizophrenia which help explain the possible relationship between high level of self-stigma, poor readiness for change, and poor psychosocial treatment compliance. The present study thus offers preliminary empirical information which may guide the development of a self-stigma reduction program. For instance, we may adopt motivational interviewing (Miller & Rollnick, 2002) to help individuals improve their readiness for change, move them forward to the action stage, and engage them in treatment regimens. The use of motivational interviewing enables individuals to identify the possible costs and benefits of having health seeking behaviors, and to develop discrepancy between their present problematic behaviors and personal goals (Barkhorf et al., 2006; Miller & Rollick, 2002; Rusch & Corrigan, 2002). These benefits converge to improving their desire for change. The details concerning the development of self-stigma reduction program have been outlined in Phase two study.

3.1.5. LIMITATIONS FOR THE PHASE ONE STUDY

There are several limitations for this study. First, this study has adopted the cross sectional design that did not allow examination of causality among variables. The interactions between the variables interpreted by this study may be in fact explained reversely. For instance, individuals with poor treatment compliance may tend to have poor recovery and are more likely to relapse (Delaney, 1998). Their declined functioning and severe psychiatric conditions may then further facilitate the stigmatization process (Corrigan, 2000; 2004). A longitudinal study is thus required to explore the causal relationship of self-stigma and psychosocial treatment compliance. Second, only a small number of participants were recruited from restricted number of psychiatric settings by means of convenience sampling. Although we had involved some of the key psychiatric service providers in Hong Kong, this restriction would still pose threat on generalizability of the results to other people receiving psychiatric hospital and community based services. Third, this study did not recruit "fully non-compliant" individuals due to administrative constraints, and this would lead to selection bias. The clinical data of refusers were failed to be presented, as we were not consented to obtain their demographic information. Again, the generalization of our research findings to the population would be limited. Thus, larger samples via random sampling should be recruited in future studies in order to enhance the generalizability of the results to the population. Fourth, the diagnosis of participants was not verified by the use the Structural Clinical Interview for the Diagnostic and Statistical Manual of Mental Disorders IV. It is possible that we might have recruited some participants who did not suffer from

schizophrenia as misdiagnosis might sometimes happen (Bhugra & Flick, 2005). Fifth, judgment bias may have taken place when the cases therapists identified the eligible participants, and provided rating to both the dependent (PTCS) and the independent (GAF and BPRS) measures. In order to eliminate such bias, it should be better to invite other independent psychiatrists/ clinical psychologists to score the GAF and BPRS in future studies, and to include independent investigators to work on subject recruitment. Sixth, it is suggested that certain dependent (PTCS) and independent (GAF) variables are not totally independent in confounding the outcomes of regression analysis. Caution should be taken in future studies to avoid probably overlapping of constructs. The seventh limitation is on the use self-reported measure in assessing self-stigma. Some participants may not want to disclose their feelings of being self-stigmatized. They may not have answered the questionnaire honestly which would threaten the validity of the results. Furthermore, participants may demonstrate varied level of compliant behaviors towards different psychosocial treatments. For instance, certain participants enjoyed and thus participated fully in vocational rehabilitation program, but refused to join cognitive behavioral therapy. Thus, it would be better to include information regarding what psychosocial treatment was actually provided to the participants and investigate participants' differential compliant behaviors towards specific psychosocial treatment. Finally, the entry of variables is solely based on statistical criterion as suggested by Bendel and Afifi (1977). This may ignore the theoretical importance of selected variables (Tabachnick & Fidell, 2001). Other confounding variables such as therapeutic

alliance and other environmental facilitating factors should be taken into account for the further studies on treatment compliance.

3.2. PHASE TWO: RANDOMIZED CONTROLLED TRIAL

3.2.1. INTRODUCTON

The Phase One study has adopted the regression and path analytical approaches to investigate the mechanism on how self-stigma may undermine psychosocial treatment compliance among individuals with schizophrenia. The findings suggested that individuals with lower level of self-stigma and better readiness for changing own problematic behaviors were more likely to have better psychosocial treatment compliance. The inadequate coping strategies and feeling of hopelessness adopted by self-stigmatized individuals may be regarded as the possible obstacles causing poor compliance (Tsang, Fung, & Chung, in press). For instance, self-stigmatized individuals may avoid the experience of public stigma by not seeking psychiatric services (Cooper, Corrigan, & Watson, 2003; Corrigan, 2004; Corrigan, & Wassel, 2008; Fung, Tsang, & Corrigan, 2008; Wrigley, Jackson, Judd, & Komiti, 2005). Furthermore, they are prone to endorse a feeling of hopelessness and query the beneficial effects of psychiatric treatment in causing poor compliance (Corrigan, 2004; Corrigan & Watson, 2002; Fung, Tsang, Corrigan, Lam, & Cheung, 2007). The findings of the path analysis moreover supported the direct and indirect (mediated by insight and readiness for change) effects of self-stigma on reducing compliance. The results further indicated that self-stigmatized individuals tend to have poor insight towards the beneficial effects of treatment. This would in turn fixate them at the contemplation stage not pursuing appropriate compliant behaviors (Bayer & Peay, 1997; Fung, Tsang, & Chan, 2010; Miller & Rollnick, 2002).

With a deeper understanding on the mechanism explaining how self-stigmatization undermines psychosocial treatment compliance, an intervention program which targets at reducing self-stigma, enhancing readiness for change, and promoting psychosocial treatment compliance was formulated. The effectiveness of the self-stigma reduction program was tested and reported in the Phase Two study.

3.2.2. OBJECTIVES

1. To develop an intervention program to reduce self-stigma and enhance readiness for change
2. To investigate the effectiveness of this program in reducing self-stigma, enhancing readiness for change, and promoting compliance behaviors among individuals with schizophrenia

3.2.3. DEVELOPMENT OF TREATMENT PROTOCOL

According to the results of our own findings and literature review, several treatment strategies were proposed to achieve the goal.

A. Psychoeducation

- It is a strategy that teaches individuals with schizophrenia concerning their illness, interventions, available resources and coping with the disorders (Chan, Yip, Tso, Cheng, & Tam, 2009). Individuals with schizophrenia could acquire realistic information about their mental illness via psychoeducation. Provision of empirical information is found to be a useful means to challenge their self-stigma (Holmes & River, 1998; Watson & Corrigan, 2001).

B. Cognitive behavioral therapy

- Cognitive behavioral therapy (CBT) is defined as "*an active, problem-oriented treatment task that seeks to identify and change maladaptive beliefs, attitudes, and behaviors that contribute to emotional distress*" (Reinsecke, Ryan, & Dubois, 1998). It is believed that self-stigma consists of a collection of irrational ideas on self-concept and abilities. Cognitive behavioral therapy is thus an effective modality to reconstruct and normalize the self-stigmatized beliefs of individuals with schizophrenia, and to promote their positive self-esteem (Corrigan & Calabrese, 2005; Holmes & Rivers, 1998; Kingdon & Turkington, 1991; Knight, Wykes, & Hayward, 2006; Watson & Corrigan, 2001). Normalizing is an effectiveness technique to de-stigmatize the

symptoms of individuals with schizophrenia, and lay them open to rational argument (Kingdon & Turkington, 1991; Watson & Corrigan, 2001). Inferences, evaluations and dysfunctional assumptions are the three main cognitions include for the cognitive behavioral therapy (Holmes & Rivers, 1998).

C. Motivational Interviewing

- As many individuals are fixated at the precontemplation or contemplation stage, motivational interviewing is likely to help them move forward towards the action stage to change their problematic behaviors by improving their readiness for change and engaging in treatment regiments (Tsang, Fung, & Chung, in press). Motivational interviewing is regarded as "*a directive, client-centered counseling style for eliciting behaviors change by helping clients to explore and resolve ambivalence*" (Miller & Rollnick, 2002). It is built according to the stages of change model (Miller & Rollnick, 2002; Rusch & Corrigan, 2002). According to Miller and Rollnick (2002), the four basic principles of motivational interviewing are expressing empathy (establishing acceptance between mental health professionals and individuals with schizophrenia), developing discrepancy (understanding the difference between present behaviors and goal for attainment), rolling with resistance (as a source of useful information in understanding the individuals), and supporting self-efficacy (guiding for the conduction of target behaviors). This strategy should promote

individuals' positive sense and motivation in engaging health seeking behaviors (Miller & Rollnick, 2002; Rusch & Corrigan, 2002).

D. Social Skills training

- Individuals with schizophrenia often have inadequate social skills which prevent them from effectively handling difficult social situations (Kopwlowicz, Liberman, & Zarate, 2006; Tsang, 2001). Adopting social skills training should enhance the specific skills among individuals with schizophrenia in identifying and mending problems in daily life and social relationship (Lauriello, Bustillo, & Keith, 1999). Furthermore, the effectiveness of social skill training on improving symptoms management and illness knowledge among people with schizophrenia has been empirically verified (Bustillo, Lauriello, Horan, & Keith, 2001; Heinssen, Liberman, & Kopelowicz, 2002; Tsang, 2003). Warm-up activities, behaviorally based instruction, demonstration, corrective feedback, and homework assignments are the key elements of social skills training (Tsang, 2003; Wallace et al., 1980). Enhancement of their assertiveness skills and social problem solving skills in particular facilitate individuals' coping with stigmatized social conditions with which they may encounter. This would partly alleviate the negative effects of the stigmatizing conditions.

E. Goal Attainment Program

- Hope installation and development of realistic life goals are found to be the crucial motivators for behavioral change (Miller & Rollnick, 2002; Ng & Tsang, 2002). We therefore think that implementation of the Goal Attainment Program (Ng & Tsang, 2002) should promote the self-esteem and psychosocial treatment compliance of individuals with mental illness. The Goal Attainment Program (Ng & Tsang, 2002) consists of the four key stages including affirming personal worth (identifying personal strength), imaging the future (expressing and installing hope), establishing a sense of control (building up via tailored activities to individuals' needs), and setting goal (setting and prioritizing own future goals). The study conducted by Ng and Tsang (2002) revealed that this program has the potential to enhance treatment compliance among individuals with schizophrenia for their rehabilitation program.

The proposed self-stigma reduction program contains 16 sessions which have integrated the five treatment strategies mentioned above (Table 5). The 16-session program consists of 12 group sessions and four individual follow-up sessions. The program has been pilot run and tested by an experienced occupational therapist and a research associate at the psychiatric wards of Kowloon Hospital. Positive feedback was received from the mental health professionals and the service users. After the pilot test, certain culturally relevant scenes (e.g., "A person leaves his seat when I sit

next to him") were added in the manual to facilitate the discussion on common stigmatizing situations. Additionally, the PowerPoint slides were fabricated to enhance the dissemination process. The worksheets adopted in the treatment were translated into Chinese in order to ensure that the participants were able to comprehend and understand the contents of each session. The treatment manual and the Chinese workbook are attached in Appendices 3 and 4.

Table 5. The contents of Self-stigma Reduction Program

Modalities	Sessions and Contents
Psychoeducation	1. Beginning the Journey towards Recovery
	2. Confronting the Myths of Schizophrenia
Cognitive behavioral therapy/ Motivational interviewing	3. Impact of Social Stigma on Recovery
	4. Self-stigma as Barriers to Recovery
	5. Combating Self-stigma I: Affirming Personal Worth
	6. Combating Self-stigma II: Disputing by Evidence
	7. Combating Self-stigma III: The Art of Acceptance
Social skills training	8. Social Skills Training I: Being Assertive
	9. Social Skills Training II: Dealing with Stigmatizing Social Situation
Goal attainment program	10. Goal Attainment I: Goal Setting
	11. Goal Attainment II: Action Planning
Round-up	12. Round-up of Group Session
Individual follow-up	13. – 16. Monitor of Progress

3.2.4. DETAILS OF TREATMENT SESSIONS

Group Session 1: Beginning the Journey towards Recovery

Objectives

1. To build up group alliance
2. To brief the purposes and structures of the program
3. To introduce the concept of recovery
4. To provide information and facts as to prognosis and rehabilitation of schizophrenia

Session Contents

The initial part of the sessions is aimed at briefing the contents of overall program and setting the ground rules. Two psychoeducational topics including "concept of recovery" and "prognosis and rehabilitation" are disseminated in this session.

A. Concept of recovery

- This is aimed at helping the participants to understand recovery based on commonly accepted concepts. The concept of recovery from consumers', familial, mental health professionals' perspective is fully explained during the session.

B. Prognosis and rehabilitation

- Self-stigmatized individuals often feel hopeless about their mental illness conditions (Corrigan, 2004; Corrigan & Watson, 2002; Fung, Tsang, Corrigan, Lam, & Cheung, 2007). This is to let the self-stigma individuals

know that certain people with schizophrenia are able to have good prognosis. Moreover, information regarding various rehabilitation services to enhance the recovery of individuals with schizophrenia is disseminated. The above information is useful to challenge the hopeless feeling about having mental illness.

Group Session 2: Confronting the Myths of Schizophrenia

Objectives

1. To introduce the concept of social stigma and self-stigma
2. To confront relevant myths concerning schizophrenia
3. To instill hope via sharing from prosumers/ recovered consumers
4. To encourage meaningful life pursuit among participants

Session Contents

A psychoeducation on mental illness stigma is disseminated in the session. This helps the participants understand and realize mental illness stigma by defining public stigma and self-stigma, providing common examples of stigmatizing conditions, and illustrating the negative impacts of mental illness stigma. Furthermore, a card game "Myths or Facts" is conducted to facilitate the discussion towards the myths [e.g., "The mentally ill are dangerous, one step away from a manically killing spree" (Watson & Corrigan, 2001)]. The myths concerning schizophrenia are being challenged.

A video show on prosumers/ recovered consumers is then followed by. It is believed that prosumers/ recovered consumers serve as a good model of successful life pursuers (White, 2000). This video show aims at affirming the message that people with schizophrenia can have own personal strengths and meaningful life pursuit. This is useful to challenge their hopeless and useless ideations.

Group Session 3: Impact of Social Stigma on Recovery

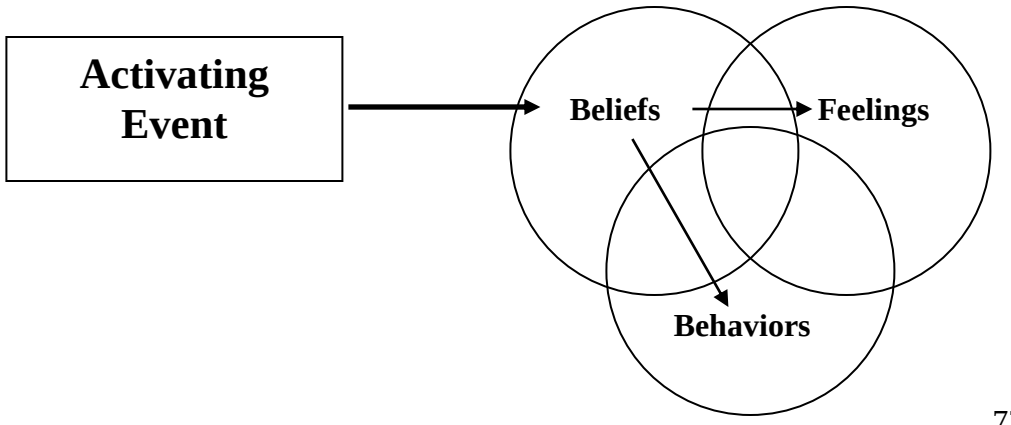
Objectives

1. To explore the personal experiences of social stigma
2. To help participants realize how social stigma affects their thoughts, emotions and behaviors

Session Contents

Individuals' interpretation towards a specific situation affects their feelings and behaviors (Leady, 2003). Beliefs, feelings and behaviors influence each other via an interactive cycle (Neenan & Dryden, 2004; see Figure 7). This interactive system promotes individuals' understanding towards their problems (Greenberger & Padesky, 1995). Examples on stigmatizing conditions and responses are adopted for the illustration. The participants then use this paradigm to illustrate their recent experience and response of being stigmatized. The negative impacts of social stigma on individuals are emphasized to help participants to have better understand the negative effects of stigma and motivate them to confront stigma.

Figure 7. Interaction between beliefs, feelings and behaviors



Group Session 4: Self-stigma as barriers to recovery

Objectives

1. To help participants identify irrational thoughts pertaining to self-stigma
2. To emphasize the impact of self-stigma on their recovery
3. To emphasize the need for treatment

Session contents

A motivational interviewing technique is implemented in this part. Through this exercise by weighing of self-stigmatized ideas/ behaviors, it helps the participants to be aware of the discrepancy between their present self-stigmatized behaviors and their personal goals. This element is important to facilitate change among the individuals. Individuals are motivated to change their own problematic behaviors when the perceived costs of actions are outweighed by the benefits (Miller & Rollnick, 2002).

The participants are required to choose one of their self-stigmatized ideas (e.g. I am useless)/ behaviors (e.g. I avoid social interaction with others) as reference, and write down the advantages and disadvantages of having that self-stigmatized ideas/ behaviors. Discussion on the advantages and disadvantages of the self-stigmatized ideas/ behaviors was promoted to facilitate participants' understanding of the impacts of the self-stigmatized ideas/ behaviors. If the disadvantages of self-stigmatized ideas/ behaviors are outweighed by the advantages, the execution of self-stigmatized ideas/ behaviors directly is confronted. However, if the reversed

scenario is found, the disadvantages of the self-stigmatized ideas/ behaviors are focused, and the fact that other alternatives may be useful to reduce the disadvantages is emphasized. This technique is also applied to facilitate participants' positive conception towards having better psychosocial treatment compliance.

Group Session 5: Combating Self-stigma I: Affirming Personal Worth

Objectives

1. To challenge their self-stigmatized thoughts and behaviors
2. To affirm personal worth and strength
3. To reassure their positive role experiences instead of adopting the role of being schizophrenic

Session Contents

Identification of personal strengths and assets is important to enhancing the self-perception and self-esteem among the individuals with schizophrenia (Ng & Tsang, 2002). This is common that individuals with schizophrenia tend to hold a strong stereotype towards their schizophrenic identity, and disregard their successful experiences in other personal role fulfillment. Shih (2004) suggests that promotion of positive group identity is essential to challenging the legitimacy of stigma, and to facilitating personal well-being. Thus, it is useful to help participants to explore their personal strengths and assets from their fulfillment in different roles. The role checklist (Oakley, Kielhofner, Barris, & Reichler, 1986) is adopted to let the participants revisit their previous and present life roles. Hogg et al. (1998) and Pittinsky et al. (1999) suggest that this is important to strategically emphasize identities that are valued. Promotion of self-esteem and personal well-being among the participants could counteract the cycle of self-stigmatization (Corrigan & Watson, 2002; Fung, Tsang, Corrigan, Lam, & Cheung, 2007). Moreover,

individuals' psychiatric experiences are able to be normalized during the discussion (Kingdon & Turkington, 1991).

Group Session 6: Combating Self-stigma II: Disputing by Evidence

Objectives

1. To challenge their self-stigmatized thoughts and behaviors
2. To learn the way to collect evidence for self-evaluation

Session Content

The self-stigmatized beliefs of individuals with schizophrenia could be challenged by evidences (River & Holmes, 1998). Leahy (2003) suggests that this is necessary to examine the evidence "for" and "against" for comparison. In this part, the participants select one of their self-stigmatized beliefs as reference, and write down the evidence that supports and objects the belief. The participants are then strategically guided to invalidate the evidence for the self-stigmatized beliefs, and to validate the evidence against the negative beliefs. This helps to dispute participants' self-stigmatized beliefs by challenging via evidences.

Group Session 7: Combating Self-stigma III: The Art of Acceptance

Objectives

1. To explore the advantages of accepting unchangeable social conditions
2. To learn and practice the ways of acceptance

Session Contents

Individuals with schizophrenia experience difficulty with certain uncontrolled and/ or unchangeable conditions (Corrigan, 2004; Fung, Tsang, Corrigan, Lam, & Cheung, 2007). For instance, some of them may think that they cannot do well in employment because of their psychiatric conditions. This is no doubt that their psychiatric condition will affect their vocational functioning. Instead of blaming himself/herself of being mentally ill, the individuals should learn how to accept this fact and try to pursue what they can do in this scenario. Other possible examples include poor interpersonal relationship, declining cognitive functioning and poor daily life adjustment after the development of mental illness. The participants should identify one of their uncontrolled conditions, and write down the pros and cons of accepting the uncontrolled condition. This would let the participants have the conception that acceptance towards the uncontrolled and/ or unchangeable conditions may also be beneficial (Beck, 1995).

Furthermore, formulating individualized coping strategies is done during the session. This aims at helping the participants to develop individualized strategies to cope with their stigma-related emotional distress. Dickerson (2000) suggests that

attention switching and self-statement are useful to reduce individuals' emotional distress. The participants are encouraged to propose the effective strategies. The participants are then encouraged to select the strategies which are believed to be effective for their daily practice (Beck, 1995).

Group Session 8: Social Skills Training I: Being Assertive

Objectives

1. To encourage social participation and engagement
2. To explain the significance of being assertive in interpersonal communication
3. To strengthen their assertive skills in relevant social situations

Session Contents

The rundown of this social skills training session follows the procedure suggested by Tsang (1996) and Wallace et al. (1980) including "warm-up", "instruction and demonstration", "role play" and "feedback". Assertiveness skills refer to the ability to express one's feelings and wants, and resist efforts that one does not want to do (Bellack, Mueser, Gingerich, & Agresta, 2004). This skill is important to enable individuals with schizophrenia to express their feeling appropriately and comfortably. The use of assertiveness skills in tackling the stigmatizing conditions is emphasized and taught during the session.

Group Session 9: Social Skills Training II: Dealing with Stigmatizing Social Situation

Objectives

1. To review social problem-solving skills
2. To help participants to apply social problem-solving skills in dealing with the stigmatizing social situations

Session Contents

In this session, the social problem solving skills to tackle with stigmatizing condition is taught. Social problem solving skills are highly complex (Kern et al. 2005), and they are the essential components for social skills training (Tsang, 2001). Bellack et al. (1994) and Mueser et al. (1998) suggested that identification of problem, generation of solution and enactment of solution effectively are the three foundations for social problem solving skills training (see Figure 8). The training has adopted the procedures as suggested by Kern and colleagues (2005), Tsang (1996) and Wallace et al. (1980).

A. Training of receiving skills

- A stigmatized social scenario is prescribed, and the participants are being asked to identify the goals and the obstacles in the specific social situation. The participants are encouraged to discuss their previous encountered stigmatized social conditions, and try to identify the key goals and obstacles.

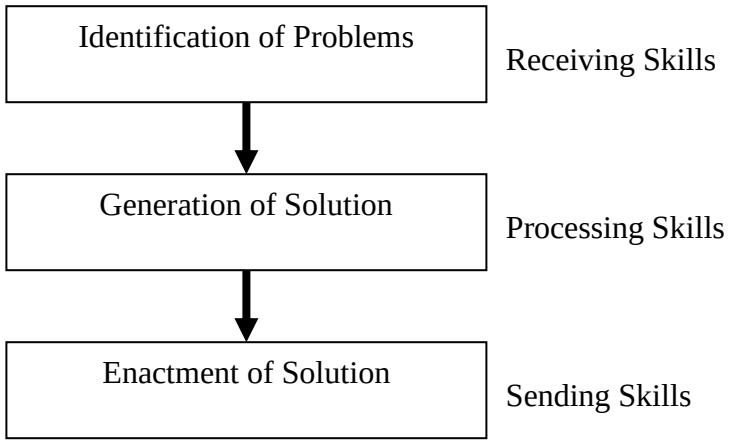
B. Training of processing skills

- This aims at helping the participants to generate possible solutions to cope with the difficult social situations. Kern et al. (2005) suggested that clarifying communication, perspective talking, and seeking help from authority are the sound methods to resolve the social problems. The participants are required to generate solutions towards their previously faced stigmatized social conditions by using the above suggested strategies.

C. Training of sending skills

- The participants are required to demonstrate their social problem solving skills via role play

Figure 8. Flow of social problem solving skills training.



Group Session 10: Goal Attainment I: Goal Setting

Objectives

1. To help participants identify own realistic short-term and long-term goals
2. To help participants formulate a non-threatening time frame for achieving their short-term goals with an emphasis on improving treatment compliance
3. To motivate participants to have better health seeking behaviors
4. To develop their positive belief about future

Session Contents

Goal setting is an essential component for rehabilitation (Siegert & Taylor, 2004). The main theme of this session is to help the participants set realistic short-term and long-term goals. Padesky and Greenberger (1995) recommended using guided questions to promote the process of goal setting. The participants are firstly required to list their short-term and long-term goals through the discussion. They are then needed to assign a score to each goal according to their importance. The score assignment is useful to help the participants prioritize their specific goals. The participants are encouraged to set a non-threatening timeframe for the goals accomplishment. In view of the importance of treatment compliance to the recovery and the wellness of individuals with schizophrenia, the therapist should motivate the participants to include treatment compliance as one of their decided personal goals.

Harris, Williams, and Bradshaw (2002) have suggested that this is useful to break down tasks or goals in its component parts. The goals should be more easily

achieved by breaking down in small, stepwise and logical sequences. The component parts are defined in the behavioral terms.

After listing the personal goals, participants are required to select their most important short-term goal as reference for goal exploration. Amburg (1997) and Davis et al. (1995) suggested that imagination is a good way to help the individuals with severe mental illness focus on their future and explore their personal goals. During the imagination exercise, the participants are assisted to think of the difficulties they might face, and help them understand that the difficulties can be overcome (Farran, Herth, & Popvich, 1995). The participants may develop positive feelings about their future through this imagination exercise. Moreover, the participants are encouraged to imagine how they would feel, look, behave and sound after they have achieved their goal (Davis, Eshelman, & McKay, 1995). The participants should concretize the positive sense of goal achievement from this exercise.

Group Session 11: Goal Attainment II: Action Planning

Objectives

1. To help participants develop a step by step action plan in behavioral terms to attain short-term goals
2. To help participants formulate success criteria and evaluation strategies

Session Contents

The participants are taught how to generate a step by step action plan in behavioral terms. This is in line with the goal setting exercise in the previous goal attainment session. The component part of the decided goal is found to be easier to achieve. The participants should be rewarded after they have completed the component parts (Harris, Williams, & Bradshaw, 2002), to further motivate them for personal goals pursuit. The participants are guided to identify and list all the possible ways for their goal attainment. The pros and cons of the particular methods are discussed in order to let the participants know the feasibility of the proposed strategies. The success criteria for completing each component part are then specified in order to monitor the progress of goal attainment done by the participants. Certain reinforcing strategies may be implemented to motivate the participants for their personal goal attainment. Setting up of behavioral contract may be used to enable the participants to comply with the action plan.

Group Session 12: Round Up

Objectives

1. To summary the concepts and strategies learned in the previous sessions
2. To establish individualized coping strategies among participants

Session Contents

A relaxed environment is created at the end of the self-stigma reduction group sessions. The purposes of this program, and summarize what have been taught in the program are re-emphasized. Queries regarding the concepts and the strategies taught in this self-stigma reduction program are discussed. This aims at consolidating the learned skills of the participants.

Individual Sessions 13-16: Follow-up

Objectives

1. To monitor participants' progress in goal attainment
2. To assess participants' level of self-stigma
3. To review their implementation of self-stigma coping strategies
4. To provide support in encouraging their health seeking behaviors

Session Contents

Four follow-up sessions will be offered to the participants. Each session lasts for 10 to 15 minutes. A quick review concerning participants' progress in goal attainment and their level of self-stigma and treatment compliance is provided. Necessary support to the participants in combating their encountered problems is provided by giving advices or by the facilitation of using self-stigma coping strategies.

3.2.5. METHOD

3.2.5.1. PARTICIPANTS

The inclusion criteria were basically identical to the Phase One study. The participants were required to be diagnosed by certified psychiatrists as DSM-IV schizophrenia. They were aged between 18 and 65, elementarily educated, and engaged in the psychosocial treatment for the past three months before the commencement of study. Moreover, eligible participants obtained at least the mean scores in either one of the self-stigma subscales to make sure that they suffered from self-stigmatization. Sixty-six individuals with schizophrenia who reached the inclusion criteria were randomly recruited from Baptist Oi Kwan Social Services, Richmond Fellowship of Hong Kong, Stewards Company, and the New Life Psychiatric Rehabilitation Association between October 2008 and December 2009. Their average duration of illness was 8.89 years (*SD*= 10.86). Thirty-four of them were allocated to the self-stigma reduction program (experimental protocol), whereas the remaining 32 participants were assigned to the newspaper reading group (comparison protocol). The group for each participant was randomly assigned with the help of SPSS. The demographic information of the experimental and comparison groups is summarized in Table 6. No difference in demographic data was found among the two groups.

Table 6. Demographic characteristics of RCT participants

	Experimental (*N*= 34)	Comparison (*N*= 32)	X^2	*df*	*p*-value
Gender					
Male	18 (52.9%)	19 (59.4%)	.77	1	.559
Female	16 (47.1%)	13 (40.6%)			
Education					
Primary	8 (23.5%)	13 (40.6%)	2.440	2	.295
Secondary	22 (64.7%)	17 (53.1%)			
Tertiary	4 (11.8%)	2 (6.3%)			
Diagnosis					
Schizophrenia	34 (100.0%)	32 (100.0%)	N.A.	N.A.	N.A.
Marital Status					
Single	23 (67.6%)	26 (81.3%)	4.810	3	.186
Married	5 (14.7%)	4 (12.5%)			
Divorced	6 (17.6%)	1 (3.1%)			
Widowed	0 (0.0%)	1 (3.1%)			
Living Condition					
Family	10 (29.4%)	14 (43.8%)	2.362	3	.501
Alone	9 (26.5%)	6 (18.8%)			
Friends	1 (2.9%)	0 (0.0%)			
Hostel	14 (41.2%)	12 (37.5%)			
Income					
Family	2 (5.9%)	5 (15.6%)	2.860	3	.414
NDA/HDA	7 (20.6%)	6 (18.8%)			
CSSA	25 (73.5%)	20 (62.5%)			
Others	0 (0.0%)	1 (3.1%)			
	Mean (*S.D.*)	*Mean* (*S.D.*)	*t*-value	*df*	*p*-value
Age	43.91 (10.38)	46.91 (8.92)	-1.253	64	.215
GAF	66.53 (8.87)	66.59 (9.42)	-.029	64	.977
BPRS	21.76 (14.02)	26.88 (12.47)	-1.561	64	.123

3.2.5.2. INTERVENTIONS

The experimental group participants received the self-stigma reduction program. The group sessions were held twice a week with each session lasting for 1 hour, whereas the 15-minute individual follow-up sessions (4 times) were held monthly. In order to neutralize the effect of therapist's attention, participants in the comparison group received newspaper reading group which was of the same intensity of treatment as the experimental group. The four individual follow-up sessions on newspaper discussion were also provided on a monthly basis. The PhD candidate and an occupational therapist were responsible to implement the interventions at the corresponding study sites. Both the PhD candidate and occupational therapist were experienced in conducting psychotherapy and group therapy towards individuals with schizophrenia. In order to ensure that the implementation of treatment protocols was up-to-standard, the Principal Investigator provided role play training to the responsible staff members prior to the implementation. This was to make sure that they had mastered necessary skills to carry out the interventions.

3.2.5.3. INSTRUMENTS

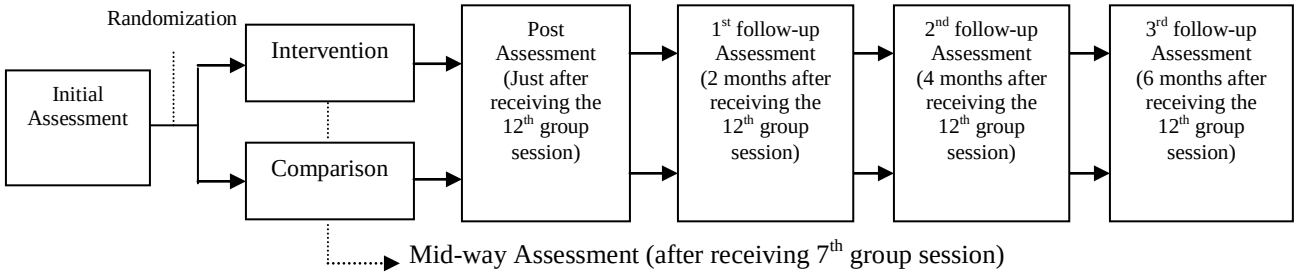
The following instruments were used in the Phase two study:

1. The Chinese Self-stigma of Mental Illness Scale (CSSMIS; Fung, Tsang, Corrigan, Lam, & Cheung, 2007)
2. The Change Assessment Questionnaire for People with Severe and Persistent Mental Illness (CAQ-SPMI; Hilburger, 1995)
3. Psychosocial Treatment Compliance Scale (PTCS; Tsang, Fung, & Corrigan, 2006)
4. The Brief Psychiatric Rating Scale (BPRS; Overall & Gorham, 1962)
5. The Global Assessment of Functioning Scale (GAF; American Psychiatric Association, 2000)
6. The three current and past insight items of the Scale to Assess Unawareness of Mental Disorders (SUMD; Amador et al., 1993)
7. The Chinese General Self-efficacy Scale (CGSS; Chiu & Tsang, 2002)

3.2.5.4. DATA COLLECTION

Assessments were conducted at the following intervals: 1) before the commencement of intervention; 2) after the 7th group session; 3) after the 12th group session; 4) two months after the 12th group session; 5) four months after the 12th group session; and 6) six months after the 12th group session. The case therapists provided the demographic data, and completed the GAF and BPRS before the commencement of treatment program. They also rated the PTCS at the six assessment intervals. The CSSMIS, CAQ-SPMI, SUMD and CGSS were completed by experienced research assistants via face-to-face interview with the participants. The raters were blind as to the treatment assignment of the participants. The procedures of data collection are illustrated in Figure 9.

Figure 9. The procedures of data collection for RCT study



3.2.5.5. DATA ANALYSIS

Independent *t*-test was used to compare the dosage of intervention received by the experimental and comparison groups. Chi-square was used to compare the attrition rate between the two groups. The baseline scores of BPRS, GAF, CSSMIS, CAQ-SPMI, CGSS, SUMD and PTCS between the experimental and comparison groups were compared by independent *t*-test. The corresponding baseline score was treated as covariate for analysis once significant difference was identified. Repeated measures ANOVA/ ANCOVA with Bonferroni post hoc analysis was used to determine if significant differences existed between baseline and different stages. The missing data in this study was controlled by the principle of intention-to-treat analysis (Montori & Guyatt, 2001).

3.2.5.6. RESULTS

The attrition rates for the experimental and comparison groups were 0% and 6.25% respectively. The findings of Chi-square analysis revealed that the attrition rate did not differ significantly between the two groups (X^2 =2.191, *df*=1, *p*=.139).

The findings suggested that participants of the experimental groups in average had received 9.58 (*SD*= 2.79) group sessions and 3.15 (*SD*= .96) individual follow-up sessions, whereas the comparison participants have received 8.69 (*SD*= 3.59) group sessions plus 3.03 (*SD*= 1.40) individual follow-up sessions. No significant difference was found on the engagement of group sessions [*t*(58.49)=

1.134; p=.261] and individual follow-up sessions [t(64)= .394; p=.695] among the two groups.

Independent t-test showed that significant differences between the experimental and comparison groups existed in the baseline scores of stereotype agreement [t(64)= 2.407; p=.019], self-concurrence [t(64)= 3.267; p=.002] and self-esteem decrement [t(64)= 2.717; p=.008] of the CSSMIS and the participation subscale [t(64)= 2.130; p=.037] of the PTCS. The repeated measures ANCOVA was then used to study the change in scores of the above constructs across time between the two groups.

Group x time interaction among the two groups showed overall significance in the self-esteem decrement subscale of CSSMIS [F (2, 60) = 2.634; p = .032] and the stages of change continuous score of CAQ-SPMI [F (2,60) = 2.577; p = .035]. The findings of *post-hoc* comparison suggested that significant lower self-esteem decrement was found for the experimental group participants at mid (F = 4.901; p< .050) and post (F = 7.443; p< .010 with Bonferroni Adjustment) assessments. The experimental group participants also possessed significantly better readiness for changing own problematic behaviors at mid assessment (F = 9.032; p< .010 with Bonferroni Adjustment). In comparison with the CAQ-SPMI baseline score, there was a drop in the mid-score of the comparison group (mean score change= -.54). A slight increment was however noted in the experimental group (mean score change= .27). This explained the significant findings as to the readiness for change

scale at mid assessment between the two groups. Although significant improvement was not found for the remaining self-stigma subscales, a trend of improvement was noted for the stereotype agreement and self-concurrence subscales. Figures 10 to 13 present the change in scores for the three self-stigma subscales of CSSMIS, and the CAQ-SPMI. Unfortunately, no overall significance in group x time interaction was found for the PTCS, SUMD and CGSS. Table 7 presents the overall findings of the repeated measures ANOVA/ ANCOVA for all measurements.

Table 7. The overall findings of the repeated measures ANOVA/ ANCOVA

	Pre-Ax				Mid-Ax				Post-Ax			
	Experimental		Comparison		Experimental		Comparison		Experimental		Comparison	
	M	*S.D.*	*M*	*S.D.*	*M*	*S.D.*	*M*	*S.D.*	*M*	*S.D.*	*M*	*S.D.*
CSSMIS												
Stereotype Awareness	86.00	14.80	79.78	13.95	74.71	18.13	74.25	14.42	74.82	20.61	74.75	14.22
Stereotype Agreement*	88.76	14.75	79.81	15.46	72.03	19.05	72.81	14.56	70.82	18.91	72.72	18.68
Self-concurrence*	86.26	15.32	72.63	18.53	65.56	20.95	68.50	15.52	61.47	20.22	69.34	18.05
Self-esteem Decrement*	82.82	16.22	71.56	17.45	65.37	20.12	66.59	20.51	61.38	20.43	67.97	18.83
CAQ-SPMI												
SOC continuous score	8.51	1.57	8.40	1.32	8.78	1.42	7.86	1.25	8.42	1.37	8.15	.96
PTCS												
Attendance	18.12	3.23	17.56	3.11	17.51	3.01	16.78	3.23	18.21	3.25	17.09	3.42
Participation*	38.80	5.58	35.77	5.98	39.14	5.09	36.03	5.56	41.51	5.91	37.99	5.63
SUMD												
Mental illness (Current)	2.76	1.91	3.47	1.76	2.94	1.83	3.14	1.82	3.15	1.94	3.69	1.73
Mental illness (Past)	2.50	1.85	3.34	1.70	2.85	1.83	3.03	1.88	3.03	1.95	3.69	1.80
Medication (Current)	1.56	1.33	2.06	1.68	1.14	.69	2.07	1.58	1.35	1.04	1.91	1.51
Medication (Past)	1.53	1.26	2.03	1.67	1.33	1.00	1.80	1.40	1.41	1.08	1.84	1.42
Social Consequence (Current)	2.00	1.74	2.09	1.78	1.64	1.49	1.93	1.41	1.62	1.48	2.06	1.68
Social Consequence (Past)	2.03	1.68	2.03	1.71	1.64	1.49	1.90	1.38	1.62	1.48	2.06	1.68
CGSS												
Total score	21.56	6.45	23.44	5.89	22.44	5.76	23.03	6.98	21.79	6.45	25.81	6.22

*Repeated measures ANCOVA adopted

	1st FU-Ax				2nd FU-Ax				3rd FU-Ax				Repeated Measures ANOVA/ ANCOVA	
	Experimental		Comparison		Experimental		Comparison		Experimental		Comparison			
	M	*S.D.*	*M*	*S.D.*	*M*	*S.D.*	*M*	*S.D.*	*M*	*S.D.*	*M*	*S.D.*	*F*-value	*p*-value
CSSMIS														
Stereotype Awareness	71.41	20.30	72.41	16.34	69.97	18.01	71.16	14.75	73.47	18.64	72.75	11.94	.831 (5, 60)	.533
Stereotype Agreement*	69.47	19.96	70.41	14.89	67.64	16.64	69.44	15.78	70.26	19.66	69.13	14.60	.814 (5, 60)	.545
Self-concurrence*	59.97	19.45	67.38	13.00	58.26	18.48	63.16	17.36	61.29	21.02	63.69	15.93	1.845 (5, 60)	.118
Self-esteem Decrement*	58.21	18.30	66.88	14.46	60.06	17.42	62.81	18.41	65.06	21.85	63.53	17.17	2.634 (5, 60)	.032
CAQ-SPMI														
SOC continuous score	8.72	1.51	8.15	1.14	8.33	1.55	7.95	1.05	8.50	1.51	8.12	.83	2.577 (2, 60)	.035
PTCS														
Attendance	18.03	3.11	17.53	3.16	17.97	2.88	17.41	2.88	17.97	3.33	17.84	2.96	.820 (5,60)	.540
Participation*	41.56	5.65	38.37	6.76	40.76	5.64	37.97	6.69	40.09	6.80	38.19	7.45	1.165 (5,60)	.337
SUMD														
Mental illness (Current)	3.18	1.87	3.69	1.67	3.18	1.73	4.00	1.61	3.29	1.78	3.88	1.68	.321 (5,60)	.898
Mental illness (Past)	3.00	1.91	3.53	1.72	3.12	1.70	3.88	1.60	3.24	1.76	3.81	1.67	.370 (5,60)	.867
Medication (Current)	1.29	.87	1.81	1.45	2.00	1.41	2.38	1.74	1.59	1.35	2.31	1.73	.656 (5,60)	.658
Medication (Past)	1.29	.87	1.91	1.51	1.71	1.19	2.44	1.72	1.47	1.11	2.19	1.75	.130 (5,60)	.985
Social Consequence (Current)	1.94	1.58	2.38	1.64	2.47	1.76	2.88	1.76	2.71	1.78	2.69	1.69	.419 (5,60)	.834
Social Consequence (Past)	2.00	1.58	2.38	1.64	2.35	1.65	2.88	1.76	2.59	1.76	2.69	1.69	.481 (5,60)	.789
CGSS														
Total score	23.21	5.80	23.38	5.24	21.85	5.31	24.28	6.80	21.85	5.54	24.97	6.51	1.908 (5,60)	.106

*Repeated measures ANCOVA adopted

Figure 10. Group x time interactions for Stereotype Agreement

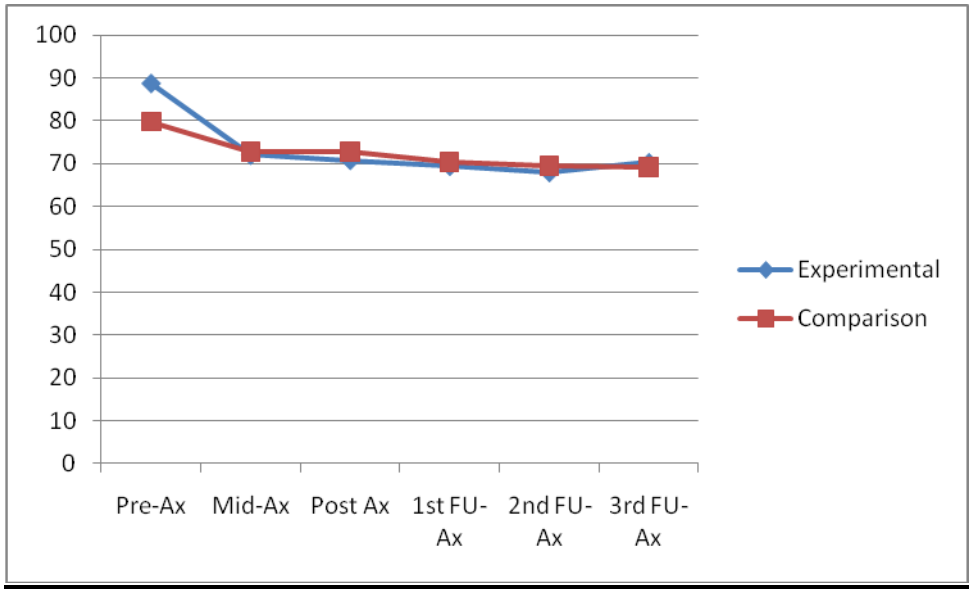


Figure 11. Group x time interactions for Self-concurrence

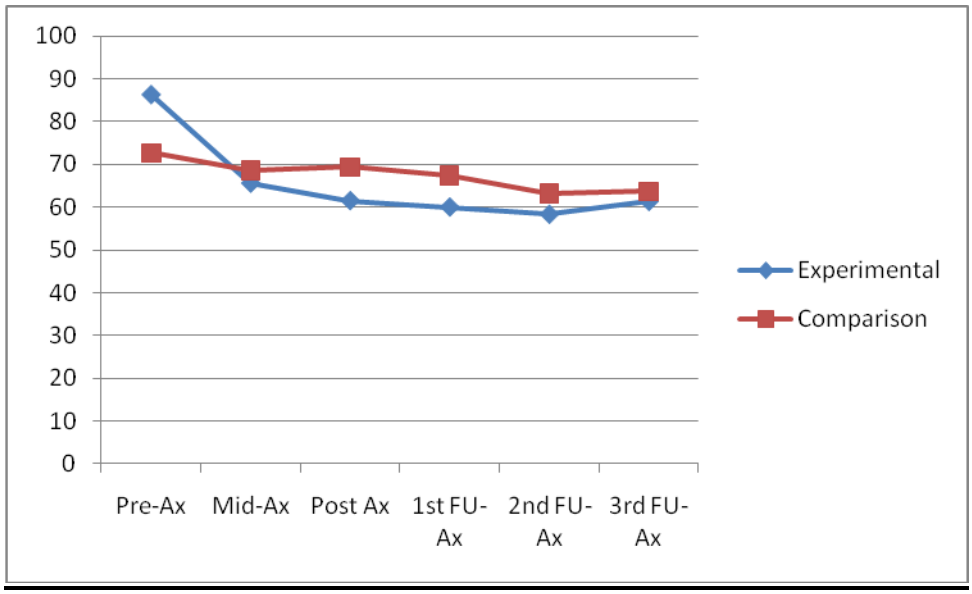


Figure 12. Group x time interactions for Self-esteem Decrement

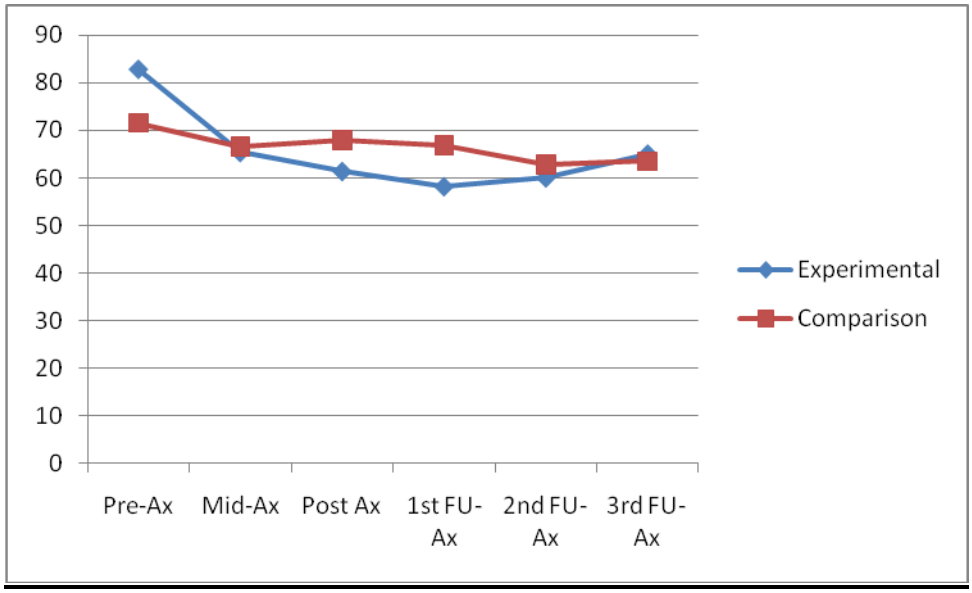
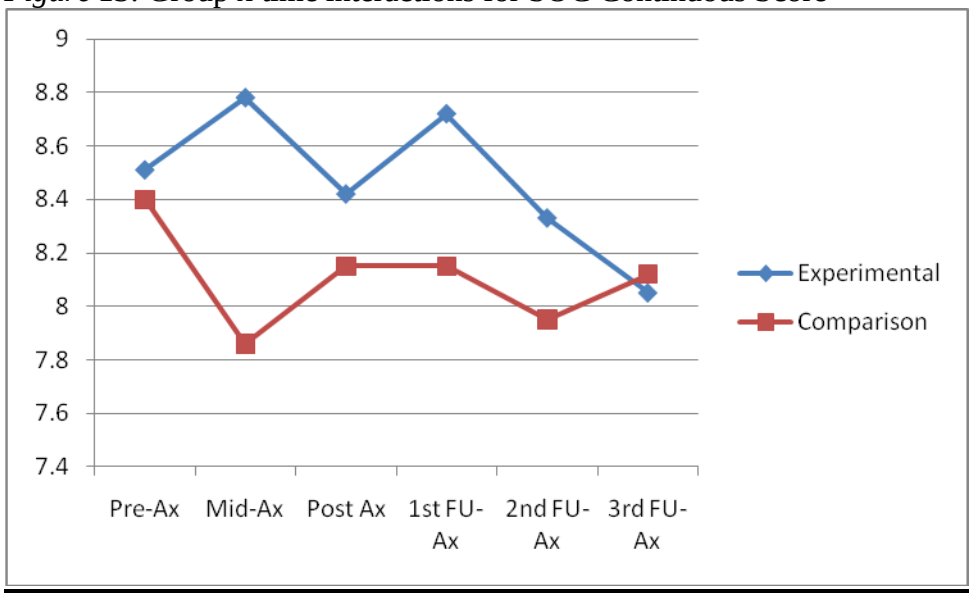


Figure 13. Group x time interactions for SOC Continuous Score



3.2.5.7. DISCUSSION

The findings of the present randomized controlled trial suggested that the self-stigma reduction program reduced self-esteem decrement and facilitated the readiness for changing own problematic behaviors among individuals with schizophrenia. However, its therapeutic effects were not long lasting, and it failed to enhance the psychosocial treatment compliance among the service users.

As stated, the self-esteem of the self-stigmatized individuals has been enhanced after they have engaged in the self-stigma reduction program. It is suggested that group therapy is a promising strategy to provide support towards self-stigmatized individuals to combat their sense of isolation and exclusion (Knight, Wykes, & Hayward, 2006). Moreover, the different treatment approaches adopted in the program have contributed to alleviate self-stigmatization of individuals as follows: 1) Psychoeducation disseminated empirical evidence which challenged the self-stigmatized beliefs of individuals to establish positive self-concept (Holmes & River, 1998; Watson & Corrigan, 2002); 2) Cognitive behavioral therapy addressed the negative self-evaluation of individuals through the normalization strategy of cognitive behavioral therapy (Kingdon & Turkington, 1991; Knight, Wykes, Hayward, 2006). According to the equity theory proposed by Crocker and Major (1994), self-stigmatized individuals perceive negative stigmatizing outcomes as legitimacy. Thus, individuals could be empowered once the above linkage is broken via cognitive behavioral therapy (Watson & Corrigan, 2001); 3) Social skills training enhanced assertiveness skills and social problem solving skills which facilitated their

self-competency dealing with stigmatized social situations (Kopelowicz, Liberman, & Zarate, 2006; Tsang, 2001); 4) Goal Attainment Program enhanced their self-esteem and self-perception by helping them explore and appreciate own personal worth, assets and meaningful life goals (Ng & Tsang, 2002).

The readiness for changing own problematic behaviors was enhanced after the participants have completed the first half of the experimental protocol (psychoeducation, cognitive behavioral therapy and motivational interviewing). As stated in the result section, caution is needed to interpret the findings. The drop of mid-score for the comparison group partly contributed to the significant findings. Furthermore, there may also be an implication that motivational interviewing might have contributed to the enhancement of the participants' readiness for change (Miller & Rollnick, 2002; Rusch & Corrigan, 2002). This modality helped self-stigmatized individuals realize how their stigmatizing beliefs and behaviors hindered their meaning life pursuit, and discover the advantages and disadvantages of adopting present behaviors (Holmes & Rivers, 1998; Miller & Rollnick, 2002; Rusch & Corrigan, 2002). Once the individuals believed that the benefits for implementing certain health behaviors outweigh the costs, they became more motivated to have better readiness for changing own problematic behaviors (Miller & Rollnick, 2002; Rusch & Corrigan, 2002). It is however surprising to note that therapeutic effects on readiness of change were found to be insignificant once the session of motivational interviewing was ceased. One of the possible explanations is that the treatment intensity and duration of the study were insufficient to generate

significant effects on maintaining the readiness for change among the individuals (Macinnes & Lewis, 2008). Further studies should therefore strengthen the treatment sessions concerning motivational interviewing.

Because of the inadequate readiness for change among the participants to receive the experimental protocol, their enhancement towards psychosocial treatment compliance was limited (Fung, Tsang, & Chan, 2010). However, one may argue that their level of treatment compliance should be improved as their level of self-stigma has been reduced during the program. Treatment compliant behaviors actually are determined by a variety of factors such as complexity of treatment, therapeutic alliance, treatment side-effects, and cognitive functioning of individuals (Fleischhacker, Oehl, & Hummer, 2003; Tsang, Fung, & Corrigan, 2006). It is therefore possible that the compliant behaviors of our participants may have been hindered by other significant confounding factors. In order to facilitate their treatment compliance behaviors to a prominent level, we need to consider other key contributing factors in planning the intervention in the future.

We also failed to obtain significant findings concerning domains in insight and self-efficacy. The insignificant findings for insight may be due to the restricted treatment content disseminated in this aspect. We have placed our main focus on tackling self-stigma related difficulties instead of insight building. In terms of self-efficacy, the insignificant findings may be due to the adoption of generic nature in measuring self-efficacy (Tsang, Fung, & Chung, in press). As recommended by

Chou et al. (2004) and Leganer et al. (2000), we should adopt the task –specific self-efficacy scale in the future studies to monitor the changes in self-efficacy.

3.2.5.8. IMPLICATION OF THE FINDING OF PHASE TWO STUDY

Although most of the treatment effects measured in this study were insignificant, our findings have clinical implications to help individuals with mental illness cope with their self-stigmatization, and move them forward through different readiness stages. The formulation of self-stigma reduction program is the first of its kind in Hong Kong and China. The well structured program and the current RCT provided preliminary support to the effectiveness of the integrative approach in reducing self-stigma and promoting readiness for change. Unfortunately, the treatment effect of this program was found to be not long lasting. Several lessons have been learnt from the implementation of randomized controlled trial. First, the contents of the self-stigma reduction program are shown to be relevant to the participants' daily experiences. This would pique their interest and facilitate their engagement in the program. Second, the demographic characteristics of participants should be taken into account when crafting the treatment protocol. For instance, individuals who have secured employment are more likely to experience work-related stigmatizing conditions. In this circumstance, we should emphasize their skills to cope with work-related stigma. In order to enhance their generalization of learnt skills, it should be useful for them to practice their learnt skills in the real setting. Ways to intensify the treatment sessions should also be identified to strengthen the long-term effectiveness of the self-stigma reduction program. Third, a

supportive environment in liaising with participants' corresponding service units should be fostered (Macinnes & Lewis, 2008). The assets of other possible treatment modalities in enhancing the treatment effectiveness of our program should be incorporated into the integrative approach of self-stigma reduction. For instance, helping individuals with schizophrenia develop a sense of agency is useful before they could accept their illness and reject mental illness stigma. Sense of agency is regarded as "*feeling that we are in control of our own actions and of their effects on the external world*" (Sebanz and Prinz, 2006). Individuals with schizophrenia who endorse greater sense of agency are more likely to have better understanding on their strengths and limitations, to concur that they could meaningfully affect their future, and to reject mental illness stereotypes (Lysaker, Buck, Taylor, & Roe, 2008). Individuals who struggle themselves as able to persistently succeed in the future tend to have greater needs to combat negative stereotypes (Lysaker, Buck, Taylor, & Roe, 2008). This is consistent with emerging models on how psychotherapy may enhance a sense of agency among individuals with schizophrenia, and facilitate their healthier decision making (Roe, 2001; Lysaker et al., 2005). The sense of being an active agent may further empower those individuals for the process of de-stigmatization.

3.2.5.9. LIMITATIONS FOR PHASE TWO STUDY

Several limitations were encountered in the present study. First, the generalization of our findings to the group of "fully noncompliant" individuals was undermined, as we had difficulty in recruiting those participants. Second, the diagnosis of participants was not verified by using the structural clinical interview.

Third, we realized that certain generic measures (e.g., self-efficacy) were not sensitive enough in detecting changes across the time of intervention. In further studies, more sensitive assessment tools should be employed. Finally, we failed to account for the possible confounding factors (e.g. therapeutic alliance, cognitive factor, treatment intensity, etc.) that may threaten the validity of our findings.

CHAPTER FOUR CONCLUSION

The findings provided empirical explanation concerning the possible pathways (direct and indirect) of how self-stigmatization undermines the readiness for changing problematic behaviors, and the compliant behaviors among individuals with schizophrenia. For the direct effects of self-stigmatization on treatment noncompliance, stigmatized individuals may want to avoid the experience of social stigma by not participating in prescribed psychosocial treatment. As to the indirect effects of self-stigmatization, self-stigmatized individuals possess poor insight towards the needs for treatment which may undermine their readiness to engage in psychiatric services. The results of this study improved our understanding on the recovery process that Chinese people with schizophrenia experienced and the types of services they need in order to triumph forward through different readiness stages in the process of their coping with their psychotic disorder. In further studies, we should investigate how Chinese cultural values (e.g., Confucianism and familial ideation, etc.) influence the model of self-stigma, stages of change, and treatment compliance among individuals with schizophrenia or other psychiatric conditions. This information should facilitate the formulation of appropriate treatment protocol.

The development of self-stigma reduction program provides novel contribution for the recovery movement among Chinese individuals with schizophrenia. The current study has provided preliminary support to its effectiveness for de-stigmatizing and enhancing individuals' readiness for changing own problematic behaviors. However, the effectiveness of the program does not

generalize to promoting treatment compliance among individuals with schizophrenia. As stated, treatment compliant behaviors are hindered by various confounding factors such as treatment alliance, complexity of treatment, and treatment side-effects. In order to facilitate the treatment compliance among individuals with schizophrenia, several approaches should be applied. For instance, we could adopt client-centered approach for planning and disseminating psychosocial treatment. This is also useful to adopt the therapeutic alliance and reinforcement system to facilitate treatment compliance among individuals with schizophrenia. Further research to improve the treatment effectiveness of the self-stigma reduction program should be implemented. In addition, similar approaches may be used for other self-stigmatizing groups (e.g., those with mood disorders) to reduce their level of self-stigma and improve their psychosocial treatment compliance. Nevertheless, appropriate modifications are required. Through the promotion of our self-stigma reduction program, we believe that the treatment outcomes and quality of life of individuals with severe mental illness may be further improved.

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Appendix 1: Questionnaires

Psychosocial Treatment Compliance Scale (PTCS ; Tsang , Fung & Corrigan, 2006)

Instructions

The degree of psychosocial treatment compliance for people with mental illness is examined by the mental health care professionals, such as occupational therapists, social workers and nurses, etc. The term "therapists" stated below refers to all these professionals. Scoring on level of compliance is based on clients' overall performances in various psychosocial treatments, including family intervention, social skills training, vocational rehabilitation and cognitive behavioural therapy, etc., for the past THREE **months**.

Rating

Please circle the corresponding scores to reflect client's compliance in psychosocial treatment.

	Item	Never	Infrequently	Sometimes	Frequently	Always
1	Attended prescribed psychosocial treatment	1	2	3	4	5
2	Attended prescribed psychosocial treatment on time	1	2	3	4	5
3	Was self-motivated in joining the psychosocial treatment program	1	2	3	4	5
4	Was willing to follow therapists' instructions	1	2	3	4	5
5	Was willing to follow family's/ friends' advice in attending psychosocial treatment	1	2	3	4	5
6	Actively participated in prescribed psychosocial treatment	1	2	3	4	5
7	Was attentive in attending	1	2	3	4	5

	psychosocial treatment					
8	Was willing to communicate with therapists. E.g. Initiative in asking or answering questions	1	2	3	4	5
9	Was willing to communicate with other participants	1	2	3	4	5
10	Was willing to provide help to other participants when needed	1	2	3	4	5
11	Was able to remember the contents/ skills taught in psychosocial treatment	1	2	3	4	5
12	Was willing to complete homework assignment	1	2	3	4	5
13	Was willing to review topics discussed in previous psychosocial treatment sessions	1	2	3	4	5
14	Was willing to try new psychosocial treatment prescribed	1	2	3	4	5
15	Continued to participate in all psychosocial treatment and avoided premature treatment termination.	1	2	3	4	5
16	Was willing to seek advice to improve performance	1	2	3	4	5

17	Was able to control emotion when facing uncertainty in psychosocial treatment	1	2	3	4	5

Reference:
Tsang, H. W. H., Fung, K. M. T., & Corrigan, P.W. (2006). The Psychosocial Treatment Compliance Scale (PTCS) for People with Psychotic Disorders. *Australian and New Zealand Journal of Psychiatry, 40*, 561-569.

Brief Psychiatric Rating Scale (Overall & Gorham, 1962)

Patient_____ Rater_____

0=not present 1=very mild 2=mild 3=moderate 4=mod. severe 5=severe 6=extremely severe

1	somatic concern – preoccupation with physical health, fear of physical illness, hypochondriacs	☐
2	anxiety – worry, fear, overconcern for present and future	☐
3	emotional withdrawal – lack of spontaneous interaction, isolation, deficiency in relating to others	☐
4	conceptual disorganization – thought processes confused, disconnected, disorganized, disrupted	☐
5	guilt feelings – self-blame, shame, remorse for past behaviour	☐
6	tension – physical and motor manifestations or nervousness, overactivation, tension	☐
7	mannerisms and posturing – peculiar, bizarre, unnatural motor behaviour (except tic)	☐
8	grandiosity – exaggerated self-opinion, arrogance, conviction of unusual power or abilities	☐
9	depressed mood – sorrow, sadness, despondency, pessimism	☐
10	hostility – animosity, contempt, belligerence, disdain for others	☐
11	suspiciousness – mistrust, belief others harbor malicious or discriminatory intent	☐
12	hallucinatory behaviour – perceptions without normal external stimulus correspondence	☐
13	motor retardation – slowed, weakened movements or speech, reduced body tone	☐
14	uncooperativeness – resistance, guardedness, rejection of authority	☐
15	unusual thought content – unusual, odd, strange, bizarre thought content	☐
16	blunted affect – reduced emotional tone, agitation, increased reactivity	☐
17	excitement – heightened emotional tone, agitation, increased reactivity	☐
18	disorientation – confusion or lack of proper association for person, place, or time	☐
	Total score	☐

Reference:

Overall, J. E., & Gorham, D. R. (1962). The brief psychiatric rating scale. *Psychological Report, 10*, 799-812.

Global Assessment of Functioning (GAF) Scale

(American Psychiatric Association, 2000)

Consider psychological, social and occupational functioning on a hypothetical continuum of mental health-illness. Do not include impairment in functioning due to physical (or environmental) limitations.

Code: _____ (Note: Use intermediate codes when appropriate eg 45, 68, 72.)

91–100	Superior functioning in a wide range of activities. Lifes problems never seem to get out of hand, is sought out by others because of his or her many positive qualities. No symptoms
81-90	Absent or minimal symptoms (eg mild anxiety before an exam), good functioning in all areas, interested and involved in a wide range of activities, socially effective, generally satisfied with life, no more than everyday problems or concerns (eg an occasional argument with family members)
71-80	If symptoms are present, they are transient and expectable reactions to psychosocial stressors (eg difficulty concentrating after family argument); no more than slight impairment in social, occupational, or school functioning (eg temporarily falling behind in school work)
61-70	Some mild symptoms (eg depressed mood and mild insomnia) OR some difficulty in social, occupational, or school functioning (eg occasional truancy, or theft within the household), but generally functioning pretty well, has some meaningful interpersonal relationships.
51-60	Moderate symptoms (eg flat effect and circumstantial speech, occasional panic attacks) OR moderate difficulty in social, occupational, or school functioning (eg few friends, conflicts with peers or co-workers).
41-50	Serious symptoms (eg suicidal ideation, severe obsessional rituals, frequent shoplifting) OR any serious impairment in social, occupational or school functioning (eg no friends, unable to keep a job).
31-40	Some impairment in reality testing or communication (eg speech is at all times illogical, obscure or irrelevant) OR major impairment in several areas, such as work or school, family relations, judgement, thinking or mood (eg depressed man avoids friends, neglects family and is unable to work; child frequently beats up younger children, is defiant at home and is failing at school.
21-30	Behaviour is considerable influenced by delusions or hallucinations OR serious impairment in communication or judgement (eg sometimes incoherent, acts grossly inappropriately, suicidal preoccupation) OR inability to function in almost all areas (eg stays in bed all day, no job, home, or friends).
11-20	Some danger of hurting self or others (eg suicide attempts without clear expectation of death, frequently violent, manic excitement) OR occasionally fails to maintain minimal personal hygiene (eg smears faeces) OR gross impairment in communication (eg largely incoherent or mute).
1-10	Persistent danger of severely hurting self or others (eg recurrent violence) OR persistent inability to maintain minimal personal hygiene OR serious suicidal act with clear expectation of death.
0	Inadequate information.

Reference:

American Psychiatric Association. (2000). *Diagnostic and Statistical Manual of Mental Disorders: DSM-IV-rev.* Washington, DC: American Psychiatric Association.

精神病自我標籤效應的量度
Self-Stigma of Mental Illness Scale (SSMIS)

向參加者讀出以下段落：
社會人士對精神病持多種態度。我們希望知道，你對整個社會(或大部份人士)這些態度有甚麼意見。請用下面的 9 分量表來回答以下的問題。

非常不同意　　無意見　　非常同意

1　2　3　4　5　6　7　8　9

第一部份
(向參加者逐一展示第一部份問題的咭片，每張咭片的頂部都有同意—不同意量表。每次讀出一條問題，並在分紙上記錄參加者的評分。若參加者的評分連續三個相同，說：“請記著，你可用 1 至 9 分內的任何分數作答。”**)**

我覺得一般人認為…

1 _____ 大部分精神病是會傳染的。
2 _____ 大部分精神病患者不可信。
3 _____ 大部分精神病患者較常人富藝術天分。
4 _____ 大部分精神病患者惹人討厭。
5 _____ 大部分精神病患者不能找到正常的工作或做得長久。
6 _____ 大部分精神病患者是見識淺薄和幼稚。
7 _____ 大部分精神病患者不整潔及不修邊幅。
8 _____ 大部分精神病患者道德意識薄弱。
9 _____ 大部分精神病患者要為自己的問題感到自責。
10 _____ 大部分精神病患者的智商低於常人。
11 _____ 大部分精神病患者的行為飄忽。
12 _____ 大部分精神病患者不會痊癒或情況好轉。
13 _____ 大部分精神病患者是會構成危險的。
14 _____ 大部分精神病患者不能照顧自己。
15 _____ 大部分精神病患者是天才。

第二部份

向參加者讀出：

這一部份我們想知道你**現時**對這些態度有甚麼意見。你同意以下的項目嗎？

我認為…

1 _____ 大部分精神病患者要為自己的問題感到自責。

2 _____ 大部分精神病患者的行為飄忽。

3 _____ 大部分精神病患者不會痊癒或情況好轉。

4 _____ 大部分精神病患者不能找到正常工作或做得長久。

5 _____ 大部分精神病患者不整潔及不修邊幅。

6 _____ 大部分精神病患者是會構成危險的。

7 _____ 大部分精神病是會傳染的。

8 _____ 大部分精神病患者不可信。

9 _____ 大部分精神病患者的智商低於常人。

10 _____ 大部分精神病患者道德意識薄弱。

11 _____ 大部分精神病患者不能照顧自己。

12 _____ 大部分精神病患者惹人討厭。

13 _____ 大部分精神病患者較常人富藝術天分。

14 _____ 大部分精神病患者都是天才。

15 _____ 大部分精神病患者是見識淺薄和幼稚。

第三部分

向參加者讀出：

接著，我們想知道以下的態度，有沒有任何一項適用在你身上。

因為我有精神病…

1 _____ 我的智商低於常人。

2 _____ 我較常人富藝術天分。

3 _____ 我不可信。

4 _____ 我見識淺薄和幼稚。

5 _____ 我不能找到正常工作或做得長久。

6 _____ 我不整潔及不修邊幅。

7 _____ 我經常很有天分。

8 _____ 我身上有些毛病是會傳染的。

9 _____ 我不能照顧自己。

10 _____ 我不會痊癒或情況好轉。

11 _____ 我道德意識薄弱。

12 _____ 我要為自己的問題感到自責。

13 _____ 我行為飄忽。

14 _____ 我會構成危險的。

15 _____ 我惹人討厭。

第四部份

向參加者讀出：

最後，我們想知道這些態度**現時**如何影響你的自信或自尊。

我**現時**沒有甚麼自尊:

1 _____ 因為我不能照顧自己。

2 _____ 因為我不能找到正常工作或做得長久。

3 _____ 因為我見識淺薄和幼稚。

4 _____ 因為我經常很有天分。

5 _____ 因為我會構成危險的。

6 _____ 因為我不可信。

7 _____ 因為我身上有些毛病是會傳染的。

8 _____ 因為我要為自己的問題感到自責。

9 _____ 因為我較常人富藝術天分。

10 _____ 因為我不會痊癒或情況好轉。

11 _____ 因為我惹人討厭。

12 _____ 因為我行為飄忽。

13 _____ 因為我不整潔及不修邊幅。

14 _____ 因為我道德意識薄弱。

15 _____ 因為我的智商低於常人。

Reference:

Fung, K. M. T., Tsang, H. W. H., Corrigan, P. W., Lam, C. S., & Cheung, W.M. (2007). Measuring self-stigma of mental illness in China and its implications for recovery. *International Journal of Social Psychiatry, 53*, 408-418

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The Change Assessment Questionnaire for People with Severe and Persistent Mental Illness (Hilburger, 1995)

我們想知道你(妳)對下列各種敘述的***同意程度***。

請在❒ 內打勾 ☑，每一題只能選一個答案。請不要遺漏任何一題。

	非常不同意	*不同意*	*沒意見*	*同意*	*非常同意*
1. 我認為，我沒有任何精神健康方面的問題需要改善。	❒	❒	❒	❒	❒
2. 我想，我可能已經做好改善自我的準備。	❒	❒	❒	❒	❒
3. 我已經開始處理我精神健康方面的問題。	❒	❒	❒	❒	❒
4. 試著改變自己可能是值得的。	❒	❒	❒	❒	❒
5. 我不需要接受任何治療，因為問題不是出在我身上。	❒	❒	❒	❒	❒
6. 雖然我的精神健康已經改善許多，但我擔心會再發病。所以我繼續來這裡接受幫助。	❒	❒	❒	❒	❒
7. 我終於做了一些事來改善我的精神健康。	❒	❒	❒	❒	❒
8. 我一直在想，或許我該改變自己。	❒	❒	❒	❒	❒
9. 雖然我已經有效地改善我的精神健康，但我不確定我能靠自己的力量維持下去。	❒	❒	❒	❒	❒
10. 有時候，我覺得我的精神健康很難改善，但我還是很努力地嘗試。	❒	❒	❒	❒	❒
11. 在這裡接受治療實在是浪費時間，因為我根本沒有任何問題。	❒	❒	❒	❒	❒
12. 我希望這個地方可以幫助我更瞭解自己。	❒	❒	❒	❒	❒
13. 我想我或許有點問題，但實在不需要改變什麼。	❒	❒	❒	❒	❒
14. 我正努力地去改變自己。	❒	❒	❒	❒	❒
15. 我有精神健康方面的問題，我應該試著去改善它。	❒	❒	❒	❒	❒
16. 雖然我的精神健康已經穩定，但我沒辦法靠自己維持，所以我來這裡預防再發病。	❒	❒	❒	❒	❒
17. 就算不是每次都可以成功地改變自己，起碼我正在努力改善我的精神健康。	❒	❒	❒	❒	❒
18. 我以為總有一天，我會擺脫精神健康方面的困擾，但我卻發現有時候我仍需面對它。	❒	❒	❒	❒	❒

19. 真希望我對如何改善我的精神健康有更多的瞭解。	❒	❒	❒	❒	❒
20. 我已經開始處理我的精神健康問題，但我需要幫助。	❒	❒	❒	❒	❒
21. 這個地方可能可以幫助我。	❒	❒	❒	❒	❒
22. 我需要鼓勵和支持，來幫我維持我已經做的改變。	❒	❒	❒	❒	❒
23. 或許我是問題的一部份，但我真的不這麼認為。	❒	❒	❒	❒	❒
24. 針對我精神健康方面的問題，我希望這裡有人能給我一些好的建議。	❒	❒	❒	❒	❒
25. 任何人都可以用嘴巴說 “改變自我”，但我是那個真正去做、去實踐的人。	❒	❒	❒	❒	❒
26. 所有關於精神健康的討論都很無聊。為什麼人們不能就忘記他們的煩惱及困擾呢?	❒	❒	❒	❒	❒
27. 我來這裡是為了預防我再病發。	❒	❒	❒	❒	❒
28. 原本我以為我的精神病已經康復，但它可能又復發了。	❒	❒	❒	❒	❒
29. 我有煩惱，但別人也有。何必要花時間去想它呢?	❒	❒	❒	❒	❒
30. 目前，我正積極地改善我的精神健康。	❒	❒	❒	❒	❒
31. 目前，我只想全心應付我的精神健康問題。	❒	❒	❒	❒	❒
32. 雖然我盡全力改善我的精神健康，那方面的問題仍困擾著我。	❒	❒	❒	❒	❒

Reference:

Hilburger, J. (1995). Stages of change in readiness for rehabilitation services among people with severe and persistent mental illness (Doctoral dissertation, Illinois Institute of Technology, 1995). *Dissertation Abstracts International*, 56, 2886.

精神失常察覺評估標準

Scale to Assess Unawareness of Mental Disorder (SUMD; Amador et al., 1993)

指引：

"C"一欄評估訪問期間記錄到**最近七日**精神異常的最高的察覺程度。

"P"一欄評估訪問**過去三個月**出現的徵狀及現時對這些徵狀的察覺程度。換言之，當問到以往某些事時，對象會否表示自己當時出現妄想、思想障礙、不合群、精神病等。

視乎調查目的，可用較長或較短的時段去評估現時或過去的察覺程度及成因。

1. 精神失常的察覺：

整體而言，對象是否認為自己有精神失常、精神病問題、情緒問題等？

C	P	
0	0	不能評估
1	1	**察覺**：對象明確相信自己患有精神病
2	2	
3	3	**部分察覺**：對象不大肯定自己是否患有精神病，但接受自己可能有病的說法。
4	4	
5	5	**不察覺**：對象相信自己沒有患精神病。

2. 藥物效用的察覺：

對象怎樣看藥物的效用？對象認不認為服藥後減低了徵狀的嚴重程度或病發機會(如適用者)？

C	P	
0	0	不能評估
1	1	**察覺**：對象明確相信服藥後減低了徵狀的嚴重程度或病發機會。
2	2	
3	3	**部分察覺**：對象不大肯定服藥後是否減低了徵狀的嚴重程度或病發機會，但接受這說法。
4	4	
5	5	**不察覺**：對象不認為服藥後減低了徵狀的嚴重程度或病發機會。

3. 精神失常對社會後果的察覺：

對象怎樣看自己曾經入院、強迫住院、被捕、被驅趕、被解僱、或曾受傷等的原因？

C	P	
0	0	不能評估
1	1	**察覺：**對象明確相信這些社會後果與自己精神失常有關。
2	2	
3	3	**部分察覺：**對象不大肯定這些社會後果是否與自己精神失常有關。
4	4	
5	5	**不察覺：**對象相信這些社會後果與自己精神失常無關。

自我效能感量表
Chinese General Self-efficacy Scale (Chiu & Tsang, 2004)

1	如果我盡力去做的話，我總是能夠解決難題的。 I can always manage to solve difficult problems if I try hard enough.	☐
2	即使別人反對我，我仍有辦法取得我所要的。 If someone opposes me, I can find the means and ways to get what I want.	☐
3	對我來說，堅持理想和達成目標是輕而易舉的。 It is easy for me to stick to my aims and accomplish my goals.	☐
4	我自信能有效地應付任何突如其來的事情。 I am confident that I could deal efficiently with unexpected events.	☐
5	以我的才智，我定能應付意料之外的情況。 Thanks to my resourcefulness, I know how to handle unforeseen situations	☐
6	如果我付出必要的努力，我一定能解決大多數的難題。 I can solve most problems if I invest the necessary effort.	☐
7	我能冷靜地面對難題，因為我可信賴自己處理問題的能力。 I can remain calm when facing difficulties because I can rely on my coping abilities.	☐
8	面對一個難題時，我通常能找到幾個解決方法。 When I am confronted with a problem, I can usually find several solutions.	☐
9	有麻煩的時候，我通常能想到一些應付的方法。 If I am in trouble, I can usually think of a solution.	☐
10	無論甚麼事在我身上發生，我都能夠應付自如。 I can usually handle whatever comes my way.	☐

Response Format;
1 = 完全不正確 (Not at all true) 2 = 尚算正確 (Hardly true) 3 = 多數正確 (Moderately true)
4 = 完全正確 (Exactly true)

Reference:

Chiu, F. P. F., & Tsang, H. W. H. (2004). Validation of the Chinese General Self-Efficacy Scale among individuals with schizophrenia in Hong Kong. *International Journal of Rehabilitation Research, 27(2),* 159-161.

Appendix 2: Consent Form and Information Sheet

The Hong Kong Polytechnic University
Department of Rehabilitation Sciences

Research Project Informed Consent Form

Project title: Stages of Change, Self-stigma, and Treatment Compliance Among Chinese Adults with Severe Mental Illness

Investigators: 1.Dr. Hector Tsang, Associate Professor of the Department of Rehabilitation Sciences at The Hong Kong Polytechnic University

Project information:

The aim of this study is to examine the impact of self-stigma in undermining readiness for change and health behaviors of Chinese people with severe mental illness, and to develop a self-stigma reduction and health behavior enhancement program. You will involve in completing several questionnaires once for 60 minutes. Eligible participants will be then invited to participate in a procedure of assessments and interventional program.

The assessment and intervention should not result in any undue discomfort. All information related to you will remain confidential, and will be identifiable by codes known only to the researcher.

Thank you for your interest in participating in this study.

THE HONG KONG
POLYTECHNIC UNIVERSITY
香港理工大學

Consent:

I, _____, have been explained the details of this study. I voluntarily consent to participate in this study. I understand that I can withdraw from this study at any time without giving reasons, and my withdrawal will not lead to any punishment or prejudice against me. I am aware of any potential risk in joining this study. I also understand that my personal information will not be disclosed to people who are not related to this study and my name or photograph will not appear on any publications resulted from this study.

I can contact the chief investigator, Dr Hector Tsang at telephone 27666750 for any questions about this study. If I have complaints related to the investigator(s), I can contact Mrs Michelle Leung, secretary of Departmental Research Committee, at 27665397. I know I will be given a signed copy of this consent form.

Signature (subject): _____ Date: _____

Signature (witness): _____ Date: _____

THE HONG KONG
POLYTECHNIC UNIVERSITY
香港理工大學

香港理工大學康復治療科學系科研同意書

科研題目：中國精神病患者的改變階段，自我標籤效應與遵從治療
科研人員：1. 香港理工大學康復治療科學系副教授曾永康博士

科研內容：

這項研究的目的是為了調查中國精神病患者的自我標籤效應對其意願的改變與健康行為的損害，並且設計一個治療小組，透過小組參與來減少精神病患者的自我標籤效應，從而提升其健康行為。閣下需要接受大約六十分鐘的問卷調查。合適的參與者將會被邀請參與一系列的治療小組及跟進評估。

這項評估及治療小組不會引起任何不適的感覺。凡有關閣下的資料均會保密，一切資料的編碼只有研究人員知道 。

謝謝閣下有興趣參與這項研究。

THE HONG KONG
POLYTECHNIC UNIVERSITY
香港理工大學

同意書：

本人_____已瞭解此次研究的具體情況。本人願意參加此次研究，本人有權在任何時候、無任何原因放棄參與此次研究，而此舉不會導致我受到任何懲罰或不公平對待。本人明白參加此研究課題的潛在危險性以及本人的資料將不會洩露給與此研究無關的人員，我的名字或相片不會出現在任何出版物上。

本人可以用電話 27666750 來聯繫此次研究課題負責人，曾永康博士。若本人對此研究人員有任何投訴，可以聯繫梁女士（部門科研委員會秘書），電話：27665397。本人亦明白，參與此研究課題需要本人簽署一份同意書。

簽名（參與者）：_____ 日期：_____

簽名（證人）：_____ 日期：_____

Appendix 3: Manual for the Self-stigma Reduction Program

Self-stigma Reduction Program

Practitioners' Manual

Hector W.H. Tsang, PhD
Professor
Department of Rehabilitation Sciences
The Hong Kong Polytechnic University

Kelvin M.T. Fung, MPhil
Doctor of Philosophy Candidate
Department of Rehabilitation Sciences
The Hong Kong Polytechnic University

Self-stigma Reduction Program

****

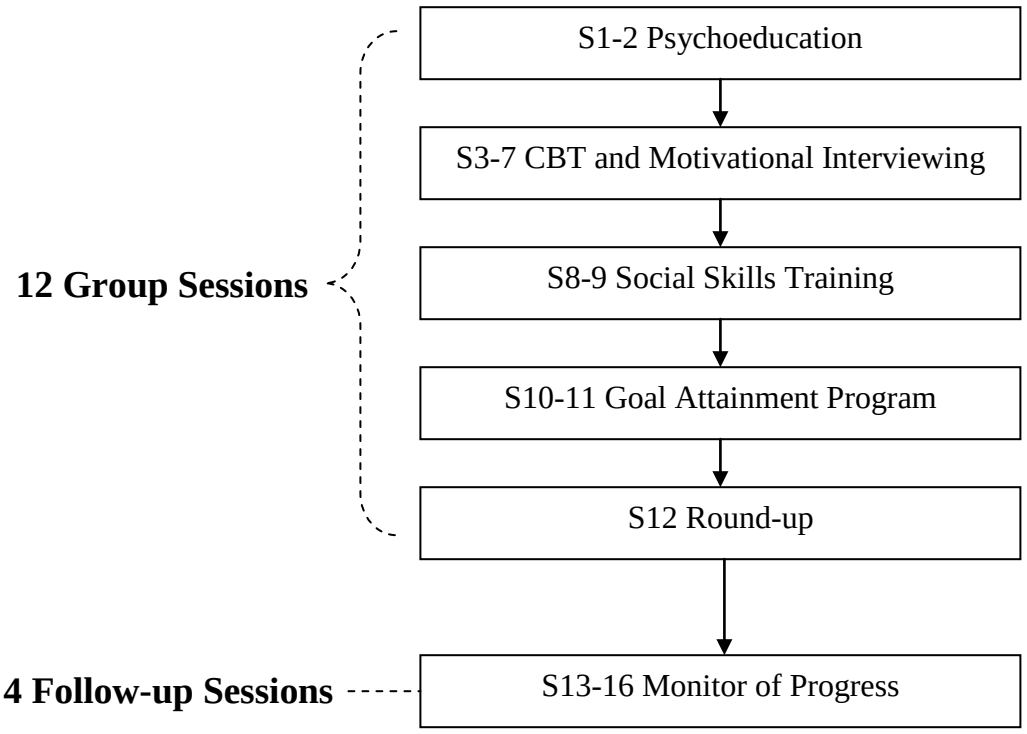
Theoretical Framework

Self-stigmatization is found to a significant barrier in undermining the psychosocial treatment compliance among individuals with schizophrenia (Fung, Tsang & Corrigan, 2008; Tsang, Fung, & Corrigan, 2006). Low motivation and readiness for change, severe psychopathology and poor global functioning would also influence the level of psychosocial treatment compliance among the individuals. Given these facts, we suggest that effective interventions should be formulated to help people with schizophrenia reduce and minimize their self-stigmatizing ideas which in turn will enhance their readiness for change and treatment compliance. We propose that a number of treatment strategies will help achieve the goal. First, we contend that individuals with schizophrenia could acquire realistic information about their mental illness via psychoeducation that we use relevant facts to challenge their self-stigma (Watson & Corrigan, 2001; Holmes & River, 1998). Second, we think that self-stigma consists of a collection of irrational ideas on self concept and abilities. Cognitive behavioral therapy is thought to be an effective modality to reconstruct and normalize the self-stigmatized beliefs of individuals with schizophrenia, and to promote their positive self-esteem (Holmes & Rivers, 1998; Kingdon & Turkington, 1991; Knight, Wykes, & Hayward, 2006). Third, individuals with schizophrenia often have inadequate social skills to handle difficult and stigmatizing social situations (Kopelowicz, Liberman, & Zarate, 2006; Tsang, 2001). Enhancement of their assertiveness skills and social problem solving skills will facilitate their tackling with these social conditions. Fourth, as they will usually be fixated at the pre-contemplation or contemplation stage, motivational interviewing may be used to help individuals move forward toward the action stage to change their problematic behaviors by improving their readiness for change and engaging in treatment regiments. This strategy should promote individuals' positive sense and motivation in engaging health seeking behaviors (Miller & Rollnick, 2002; Rusch & Corrigan, 2002). Finally, hope installation and having realistic life goal are also found to be the crucial motivators for behavioral change (Miller & Rollnick, 2002;

Ng & Tsang, 2002). We thus think that implementation of the Goal Attainment Program (Ng & Tsang, 2002) should promote the psychosocial treatment compliance of individuals.

Thus, an integrative approach including psychoeductaion (Link, Struening, Neese-Todd, Asmussen, & Phelan, 2002; Watson & Corrigan, 2001; Wieczynski, 2000), cognitive behavioral therapy (Kingdon & Turkington, 1991; Knight, Wykes, & Hayward, 2006; Watson & Corrigan, 2001), motivational interviewing (Kemp, Peter, Grantley, Brian, & Anthony, 1996; Miller & Rollnick, 2002; Rush & Corrigan, 2002), social skills training (Kopelowicz, Liberman, & Zarate, 2006; Tsang, 2001) and goal attainment program (Ng & Tsang, 2002) is to be adopted. Figure 1 shows the model of our self-stigma reduction program.

Figure 1. The model of self-stigma reduction program



Recruitment Criteria of Participants

This program is designed to overcome the negative effects of self-stigmatization among adults with schizophrenia, schizoaffective disorders or psychosis. Eligible participants should present at least one of the following clinical conditions:

1. Shameful feeling and/or self-blaming about their mental illness
2. Feeling of hopelessness about their future
3. Low self-esteem
4. Low self-efficacy
5. Poor compliance to psychosocial treatment

In order to maximize the treatment effects, this program is designed for those who are

1. able to follow instruction
2. at least primarily educated
3. free from developmental disabilities
4. free from hearing and visual impairment

Aims of the Self-stigma Reduction Program

1. To help participants aware of self-stigma and how it exerts impact on recovery of mental illness
2. To reduce level of self-stigma among participants
3. To enhance their self-esteem and self-efficacy
4. To improve their compliance to psychosocial interventions

Treatment Protocol

- The program consists of 12 group sessions plus 4 individual follow-up sessions
    - The one-hour group sessions will be held twice a week
    - Four 20-minutes individual follow-up sessions will then be scheduled once per month
- 6 to 8 participants will be included in each group
- One therapist will be involved in each session as the group leader
- In order to promote empowerment among participants, some of them will be invited to work as the group facilitator
    - The selection is based on a voluntary basis which will be done in Group Session I
    - Selected participants will be assigned the role of group facilitator in selected sessions
    - One group facilitator will be responsible in each group session

Qualifications of the Therapist

1. Should have a basic degree in the fields of occupational therapy, psychology, social work, nurse, or other related mental health disciplines
2. Have prior experiences working with people with schizophrenia
3. Have gone through on-the-site training of the Self-stigma Reduction Program
4. Have reached the requirements of the fidelity test

Role of the Therapist

1. Provides therapy
2. Assures fidelity of therapy provision
3. Sets and executes ground rules with participants
4. Monitors and evaluates participants' progress and participation
5. Provides feedback to participants for improvement

Role of Group Facilitator

The group coordinator assists the therapist to

1. Disseminate course materials (e.g. notes and handouts)
2. Introduce session rundown and content
3. ensure groupmates' compliance to ground rules

Group Therapy Session I
Beginning the Journey towards Recovery

****

Objectives

5. To build up group alliance
6. To brief the purposes and structures of the program
7. To introduce the concept of recovery
8. To provide information and facts as to prognosis and rehabilitation of schizophrenia

Materials

1. Whiteboard and marker
2. Laptop computer with projector

Session Organization

1. Welcome message and warm-up exercise for getting to know each other
2. Introduction of program
3. Setting up ground rules
4. Psyhoeducation I: Concept of recovery
5. Psychoeducation II: Prognosis and rehabilitation
6. Homework assignment

Procedures

1. Welcome message and warm-up exercise for getting to know each other

The therapist firstly introduces him/ her to the participants. He/she then gives a brief introduction on the overall aims and themes of the self-stigma reduction program.

As the participants are required to stay together in the program for the next few weeks, this is to let them get to know each other. A warm-up exercise is conducted to serve this purpose. The participants are invited to introduce themselves by telling their name and three other pieces of information about themselves to other group members. The therapist may demonstrate this exercise to the participants first.

2. Introduction of program

After the warm-up exercise, the therapist gives a detailed introduction about the purposes and structures of this program. The following information will be presented:

1. Purpose and themes of the program
2. Structure of the program
    - Group sessions
    - Follow-up sessions
3. Schedule and venue

3. Setting up the ground rules

Establishment of ground rules for the group is essential to facilitating the learning process of participants (Free, 1999). Its formulation is based on the discussion and consensus made among the therapist and participants. The therapist should empower the participants by hearing their recommendations. According to Lewinsohn, Antonuccio, Steinmetz, and Teri (1984), the rules should include the following elements:

1. Be supportive to each other
2. Provide equal time for discussion
3. Confidentiality of information
4. Avoid argument

4. Psychoeducation I: Concept of recovery

Although the concepts of recovery is highly personalized (White, Boyle, & Loveland, 2002), this is necessary to help the participants understand recovery based on commonly accepted concepts. A PowerPoint slide show will be used to deliver the following message:

1. Recovery is a multidimensional concept
2. Concept of recovery derived from current literature
3. Concept of recovery from local experiences
    i. Mental health professionals' perspective
    ii. Consumers' and familial perspective

5. Psychoeducation II: Prognosis and rehabilitation

Self-stigmatized individuals often feel hopeless about their mental illness conditions (Corrigan, 2004; Corrigan & Watson, 2002; Fung, Tsang, Corrigan, Lam, & Cheung, 2007). This is to let them know that certain people with schizophrenia have good prognosis. Moreover, the therapist lets the participants know that various rehabilitation services are available to them to enhance their recovery. The information is useful to challenge their hopeless feeling about having mental illness.

PowerPoint slide show is used as the media of information dissemination. The contents include:

1. Prognosis of people with schizophrenia
2. Successful individuals who have recovered from schizophrenia
3. Pharmacological and rehabilitation services to enhance recovery

6. Homework assignment

Participants should complete the following question as homework assignment:

1. Do you think that you can be recovered? Why?

   _____

   _____

   _____

Then, the participants are expected to collect the comments from two of their significant others (e.g. family members, mental health professionals, friends or co-workers).

2. How your significant others think about your likelihood of being recovered? What are their explanations?

   1. Name: _____ Response: _____

   _____

   2. Name: _____ Response: _____

   _____

Group Therapy Session II
Confronting the Myths of Schizophrenia

****

Objectives

5. To introduce the concept of social stigma and self-stigma
6. To confront relevant myths concerning schizophrenia
7. To instill hope via sharing from prosumers/ recovered consumers
8. To encourage meaningful life pursuit among participants

Materials

1. A video concerning the interview of prosumers/ recovered consumers
2. Playing cards for the "Myths and Facts"
3. Laptop computer with DVD player
4. projector

Session Organization

1. Introduction of this session
2. Review of homework assignment
3. Psychoeducation: Mental illness stigma
4. Video show on prosumers/ recovered consumers
5. Homework assignment

Session Procedures

1. Introduction of this session

The therapist introduces the objectives, theme and rundown of this session.

2. Review of homework assignment

The therapist reviews the homework assignment done by the participants. Some of the participants may not do the homework assignment. The therapist may allow a short period of time (e.g., about 5 minutes) and let the participants work for their unfinished assignment. Then, the therapist facilitates discussion and sharing on the meaning of recovery from the participants' and their significant others' perspectives. This exercise provides an opportunity to the participants to express their uncertainties about their recovery journey.

3. Psychoeducation III: Mental illness stigma

This helps the participants understand and realize mental illness stigma. The therapist introduces the concept of public stigma and self-stigma by using a PowerPoint slide show. The PowerPoint contains the following information:

1. Definition of prejudice and discrimination
2. Definition of public stigma and self-stigma
3. Common examples of public stigma
4. Common examples of self-stigmatized conditions
5. Negative impacts of mental illness stigma

The therapist promotes discussion among the participants towards mental illness stigma. The therapist challenges the myths concerning schizophrenia by implementing a card game "Myths or Facts". The eight common myths towards people with schizophrenia are adopted from Watson and Corrigan (2001):

1. Once crazy, always crazy. People don't get over it
2. All persons with mental illness are alike
3. Severe mental illnesses are rare, just like lepers

4. The mentally ill are dangerous, one step away from a manically killing spree
5. The mentally ill can never survive outside the hospital
6. The mentally ill will never benefit from psychotherapy
7. The mentally ill are unable to do anything but the lowest level jobs
8. Bad parents and poor upbringing cause severe mental illness

Four common myths have been rewritten as the positive items. For instance, "The mentally ill can never survive outside the hospital" has been rewritten as "The people with mental illness can survive in the community". Four "Myths" cards and four "Facts" cards are then included. The procedures of the card game are as follows:

1. The participants randomly pick up the card
2. The participants need to express their view point on the item with elaborations
3. The therapist invites other participants to give comments, and write down those comments on the whiteboard
4. The therapist gives evidence to challenge the myths/ to support the facts

The items and explanations for the card game are adopted from Corrigan & Lundin (2001); Harding & Zahniser (1994); and Watson & Corrigan (2001):

Negative Items	
Items	**Explanations**
1. Once crazy, always crazy. People don't get over it	- This is not true. Long-term follow up research suggests that one third of individuals lead a normal life without re-admitting to psychiatric hospital upon discharge. By the support from family and mental health professionals, another 1/3 of the individuals are able to fulfill most of their personal life goals.
2. All person with mental illness are alike	- This is not true. People with mental illness should have multiple roles (e.g., friend or hobbyist, etc.). They do not only belong to the group of mental. illness
3. Severe mental illnesses are rare, just like lepers	- This is not true. Having schizophrenia is not a rare condition in which this psychiatric illness affects 1% of world population.
4.The mentally ill are dangerous, one step away from a manically killing spree	- This is not true. It is suggested that the majority of offenders do not suffer from mental illness. This misconception is formed according to the magnification of events by mass media.

Positive Items	
Items	**Explanations**
1. The people with mental illness can survive in the community	- This is true. People with mental illness are able to have a meaningful life pursuit in the community via the engagement in appropriate treatment and rehabilitation programs.
2. The people with mental illness can benefit from psychotherapy/ occupational therapy	- This is true. Psychotherapy is useful to enhance role functioning, promote independent living and raise subjective life satisfaction among the individuals with mental illness.
3. Working for the lowest level jobs is only one of the choices for people with mental illness	- This is true. Some individuals with schizophrenia succeed in the highest level job. John Forbes Nash, a Nobel Prize winner, and Daniel Fisher, a famous psychiatrist, are the good examples.
4. Severe mental illness is not caused by bad parents and poor upbringing	- This is true. The causation of schizophrenia is mainly from a biological origin. This is not caused by bad parents and poor upbringing

4. Video show on prosumers/ recovered consumers

Prosumers/ recovered consumers serve as a good model of successful life pursuers (White, 2000). This video show aims at affirming the message that people with schizophrenia can have own personal strengths and meaningful life pursuit. This is useful to challenge their hopeless and useless ideations. The therapist gives a brief introduction on the content of the video show. The participants are encouraged to express their comments and feelings during the sharing group after watching the video. The contents of the video show include the following domains:

1. Experienced difficulties and stigma during the journey of recovery
2. How to overcome the difficulties and stigma
3. Importance of positive self-concepts
4. Message about having schizophrenia is not necessarily a failure
5. People with schizophrenia can have meaningful life

5. Homework assignment

It is no doubt that mental illness stigma should undermine the recovery of people with schizophrenia. The participants are required to write down the stigmatized conditions that they have recently encountered. The information is useful to facilitate discussion about the negative impacts of social stigma on next group session.

1. Please write down the stigmatized conditions that you have recently encountered (e.g., treated unfairly, received negative comments from others, distanced from others in public place, etc.)

   _____

   _____

   _____

2. Please write down the impact of this event on you (e.g., felt sad or anxious, showed withdrawal behaviors, etc.)

   _____

   _____

   _____

Group Therapy Session III
Impact of Social Stigma on Recovery

****

Objectives

3. To explore the personal experiences of social stigma
4. To help participants realize how social stigma affects their thoughts, emotions and behaviors

Materials

1. Whiteboard and marker
2. Laptop computer with projector
3. Worksheet (ABC Form)

Session Organization

1. Introduction of this session
2. Review of homework assignment
3. Discussion on thoughts, feelings and behaviors
4. ABC exercise
5. Homework assignment

Procedures

1. Introduction of session

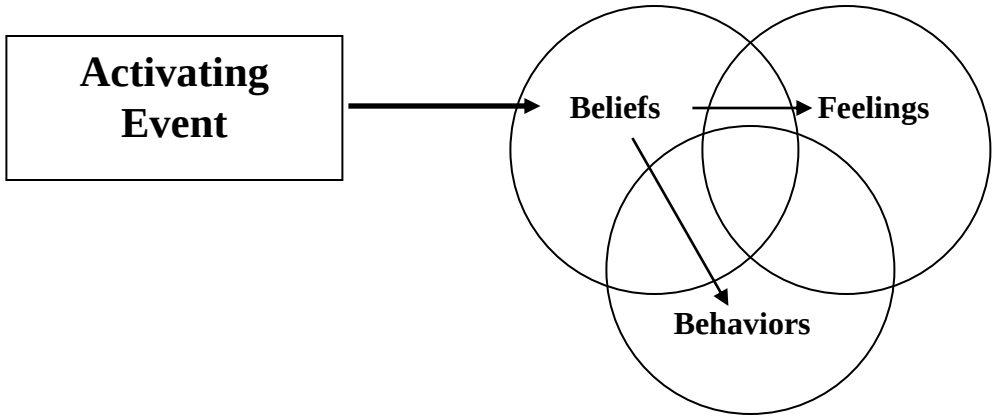
The therapist introduces the objectives, theme and rundown of this session.

2. Review of homework assignment

Participants share their recent experiences on stigmatization and personal impacts. The therapist leads discussion on negative impacts of social stigma on individuals. Stories of participants act as the examples to illustrate how public stigma affects the thoughts, feelings and behaviors among the participants.

3. Discussion on beliefs, feelings and behaviors

Individuals' interpretation towards a specific situation affects their feelings and behaviors (Leady, 2003). Beliefs, feelings and behaviors influence each other via an interactive cycle (Neenan & Dryden, 2004). This interactive system promotes individuals' understanding towards their problems (Greenberger & Padesky, 1995). The therapist uses the following diagram to facilitate the illustration:



The therapist uses the following examples to illustrate the model:

Example 1:

When someone looks at me in the street (Activating event), I will believe that he/ she is trying to comment on my poor appearance (Belief). I will be very tense and unhappy (Consequence: Feeling). Thus, I do not go out of my home (Consequence: Behavior) in order to avoid the unwanted situations.

Example 2:

A person leaves his seat when I sit next to him (Activating event). I realize that he knows that I am having mental illness and wants to keep a distance from me (Belief). I feel shameful (Consequence: Feeling), and try not to use public transportation (Consequence: Behavior).

4. ABC exercise

After the above illustration, the participants complete the ABC form below by using their recent experience of being stigmatized.

The ABC Form (Examples)

Activating stigmatized conditions	**Beliefs**	**Consequence: Feelings**	**Consequence: Behaviors**
A person leaves his seat when I sit next to him	He knows that I am having mental illness	Shameful	Avoid using public transportation
	He hates people with mental illness	Sad	Avoid interpersonal contact
	He wants to keep a distance from me		

After the participants have completed the ABC form, they are encouraged to share their experiences. During this process, the therapist identifies if the participants have correctly completed the form. The therapist emphasizes the negative impacts of social stigma on individuals to help participants better understand the negative effects of stigma and motivate them to confront stigma.

The negative impacts of social stigma (Examples)
1. Undermine one's self-esteem
2. Undermine one's employment opportunities
3. Undermine one's quality of life
4. Undermine one's community-based treatment opportunities
5. Add burden to one's family

5. Homework assignment

Social stigma undermines self-concept and personal characteristics of individuals. This homework assignment helps participants perform a personal reflection on self. The information will be used for the discussion in session 4.

1. Please write down 3 positive items and 3 negative items to illustrate yourself (Examples)

Positive items	Negative items
1. I am capable of taking care of myself independently	1. I am useless
2. I like helping others in need	2. I am below average in intelligence
3. I have a good talent in preparing a delicious meal	3. I am unable to get a regular job

Group Therapy Session IV
Self-stigma as Barriers to Recovery

****

Objectives

4. To help participants identify irrational thoughts pertaining to self-stigma
5. To emphasize the impact of self-stigma on their recovery
6. To emphasize the need for treatment

Materials

1. Whiteboard and marker
2. Laptop computer with projector
3. Worksheets (Weighing of Self-stigmatized Ideas/ Behaviors Checklist)

Session Organization

1. Introduction of this session
2. Review of homework assignment
3. Exercise: Weighing of self-stigmatized ideas/ behaviors
4. Homework assignment

Procedures

1. Introduction of session

The therapist introduces the objective, theme and rundown of this session.

2. Review of homework assignment

Participants share their positive and negative statements as written down on their homework assignment sheet in Session 3. The therapist guides the participants to explain the reasons why they use those statements to illustrate themselves. This exercise facilitates understanding of own self-concepts. The therapist identifies commonly held self-stigmatized ideas or behaviors based on sharing of the participants which act as the examples for discussing the advantages and the disadvantages of the self-stigmatized ideas/ behaviors among participants. The thirteen common self-stigmatizing ideas (Corrigan, Watson, & Barr, 2006; Fung, Tsang, Corrigan, Lam, & Cheung, 2007) which can be used as examples for discussion are shown as follows:

Because I have a mental illness

1. I am below average in intelligence
2. I cannot be trusted
3. I am innocent and childlike
4. I am unable to get or keep a regular job
5. I am dirty and unkempt
6. I have something that is contagious
7. I am unable to take care of myself
8. I will not recover or get better
9. I am morally weak
10. I am blamed for my problems
11. I am unpredictable
12. I am dangerous
13. I am disgusting

3. Exercise: Weighing of self-stigmatized ideas/ behaviors

A motivational interviewing technique will be implemented in this part. Through this exercise, the therapist helps the participants to be aware of the discrepancy between their present self-stigmatized behaviors and their personal goals. This element is important to facilitate change among the individuals. Individuals are motivated to change when the perceived costs of actions are outweighed by the benefits (Miller & Rollnick, 2002).

The participants are required to choose one of their self-stigmatized ideas (e.g. I am useless)/ behaviors (e.g. I avoid social interaction with others) as reference, and write down the advantages and disadvantages of having that self-stigmatized ideas/ behaviors. They are then assisted to fill in the form entitled "Weighing of Self-stigmatized Ideas/ Behaviors Checklist". The therapist then leads participants to discuss on the advantages and disadvantages of the self-stigmatized ideas/ behaviors to facilitate understanding of the impacts of the self-stigmatized ideas/ behaviors.

The therapist instructs the participants to assign a score to each advantage and disadvantage item from 0 -100. A higher score represents a more significant item. The participants then sum up the scores for the advantage and disadvantage items separately. The therapist discusses the discrepancy of scores with the participants.

If the disadvantages of self-stigmatized ideas/ behaviors are outweighed by the advantages, the therapist confronts the execution of self-stigmatized ideas/ behaviors directly. However, if the reversed scenario is found, the therapist focuses on the disadvantages of the self-stigmatized ideas/ behaviors, and emphasizes the fact that other alternatives may be useful to reduce the disadvantages. A brief introduction about the upcoming sessions on how to combat self-stigma should be included.

Weighing of Self-stigmatized Ideas/ Behaviors Checklist (Examples)

Self-stigmatized Idea/ Behavior: I do not want to make friend with others because I have a mental illness			
Advantages	Rating (0-100)	Disadvantages	Rating (0-100)
?? Be able to avoid discrimination		Feel very lonely	
?? Minimize the chance of disclosing own mental illness		Develop a sense of pessimism	
		Lack of social support from others	
		Still cannot reduce the chance of being stigmatized	

4. Homework assignment

Research evidence suggests that self-stigmatized individuals tend to have poor treatment which undermines their recovery (Fung, Tsang, & Corrigan, 2008). Participants are expected to use the method as stated in part 3 to explore the advantages of treatment compliance.

1. Please complete the following worksheet: (Examples)

Compliance to Psychiatric Treatment			
Advantages	Rating (0-100)	Disadvantages	Rating (0-100)
Reduce psychotic symptoms severity		May induce side effects	
Improve illness management		May be time consuming to follow the treatment regimen	
Reduce the chance of relapse			
Foster recovery			
Promote independent living			

Group Therapy Session V
Combating Self-stigma I: Affirming Personal Worth

****

Objectives

4. To challenge their self-stigmatized thoughts and behaviors
5. To affirm personal worth and strength
6. To reassure their positive role experiences instead of adopting the role of being schizophrenic

Materials

1. Whiteboard and marker
2. Laptop computer with projector
3. Worksheet (Modified Role Checklist)

Session Organization

2. Introduction of this session
3. Review of homework assignment
4. Exercise: Exploration of personal strengths
5. Homework assignment

Procedures

1. Introduction of session

The therapist introduces the objectives, theme and rundown of this session.

2. Review of homework assignment

The therapist encourages the participants to share their viewpoints toward the advantages and disadvantages of psychiatric treatment compliance. The therapist should emphasize the beneficial effects of treatment compliance in promoting the personal functioning and recovery among individuals with schizophrenia. Participants' misconceptions towards treatment compliance are challenged during the discussion.

3. Exercise: Exploration of personal strengths

Identification of personal strengths and assets is important to enhancing the self-perception and self-esteem among the individuals with schizophrenia (Ng & Tsang, 2002). This is common that individuals with schizophrenia tend to hold a strong stereotype towards their schizophrenic identity, and disregard their successful experiences in other personal role fulfillment. Shih (2004) suggests that promotion of positive group identity is essential to challenging the legitimacy of stigma, and to facilitating personal well-being.

The exercise aims at helping the participants explore their personal strengths and assets from their fulfillment in different roles. The role checklist (Oakley, Kielhofner, Barris, & Reichler, 1986) is adopted to let the participants revisit their previous and present life roles. The therapist facilitates the participants to flash back their positive experiences and achievements in other life roles (e.g. helping others as volunteer or good in certain sports). Hogg et al. (1998) and Pittinsky et al. (1999) suggest that this is important to strategically emphasize identities that are valued. Promotion of self-esteem and personal well-being among the participants could counteract the cycle of self-stigmatization. Moreover, the therapist should also

normalize individuals' psychiatric experience during the discussion (Kingdon & Turkington, 1994).

Modified Role Checklist (Adopted from Oakley et al., 1986)

Role	Past	Present
Student Attending school on a part-time or full-time basis		
Worker Part-time or full-time paid employment		
Volunteer Donating services, at least once a week, to a hospital, school, community, political campaign, and so forth		
Caregiver Responsibility, at least once a week, for the care of someone such as child, spouse, relative, or friend		
Home maintainer Responsibility, at least once a week, for the upkeep of the home such as housecleaning or yard work		
Friend Spending time or doing something, at least once a week, with a friend		
Religious participant Involvement, at least once a week, in groups or activities affiliated with one's religion (excluding worship)		
Hobbyist/ Amateur Involvement, at least once a week, in a hobby or armature activity such as sewing, playing a musical instrument, woodworking, sports, the theater, or participation in a club or team		
Participant in organization Involvement, at least once a week, in organizations		
Other: _____ A role not list which you have performed, are presently performing, and/or plan to perform. Write the role on the line above and check the appropriate column(s)		

4. Homework assignment

This homework assignment aims at helping the participants affirm their personal worth and strengths via the discussion with their significant others.

1. Please collect three pieces of information concerning your personal strengths from your significant others (e.g. family members, friends or mental health professionals, etc.).

_____

_____

_____

Group Therapy Session VI
Combating Self-stigma II: Disputing by Evidence

****

Objectives

1. To challenge their self-stigmatized thoughts and behaviors
2. To learn the way to collect evidence for self-evaluation

Materials

1. Whiteboard and marker
2. Laptop computer with projector
3. Worksheets (Evidence Checklist and Stop Self-stigma Worksheet)

Session Organization

1. Introduction of this session
2. Review of homework assignment
3. Exercise : Challenge of self-stigmatized thoughts via evidence
4. Homework assignment

Procedures

1. Introduction of session

The therapist introduces the objective, theme and rundown of this session.

2. Review of homework assignment

The therapist helps participants to gain better understanding on their personal strengths based on the information collected from their significant others. The therapist shows appreciation and reassures participants' personal strengths and assets during the sharing session. This is helpful to promote participants' sense of self-worth and self-regard.

3. Exercise : Challenge of self-stigmatized thoughts via evidences

The self-stigmatized beliefs of individuals with schizophrenia could be challenged by evidences (River & Holmes, 1998). Leahy (2003) suggests that this is necessary to examine the evidence "for" and "against" for comparison. In this exercise, the participants select one of their self-stigmatized beliefs as reference, and write down the evidence that supports and objects the belief in the Evidence Checklist. The therapist strategically guides the participants to invalidate the evidence for the self-stigmatized beliefs, and validate the evidence against the negative beliefs. This exercise lets the participants dispute their self-stigmatized beliefs.

The Evidence Checklist (Examples)

Self-stigmatized belief: I am useless because I have a mental illness	
Evidence for	Evidence against
I am unemployed	But I am able to do a good job in the vocational rehabilitation program
I need to have regular medical follow-up	But I am able to take care of myself with the support of psychiatric rehabilitation program
I do not have special skills	But I am willing to learn new things
	I have own personal strengths (e.g., housekeeping, cooking, woodwork or computer skills, etc.)

4. Homework assignment

The participants are required to complete the Stop Self-stigma Worksheet (Watson & Corrigan, 2001) as homework assignment. The therapist explains the contents of this worksheet by using the attached examples. This is an exercise for the participants to challenge their negative ideas by evidence, and to guide them to restate their attitudes in a non-hurtful manner.

The Stop Self-stigma Worksheet (Watson & Corrigan, 2001)

1. State the hurtful beliefs

Example "*I MUST BE a weak person BECAUSE I have a mental illness.*"

I MUST BE _____ BECAUSE_____.

2. Define the True-False Assumptions.

Example "*Strong people don't have mental illnesses.*"

_____

_____

3. Challenge the assumptions by checking with whom?

Example "*My older sister. She is smart and always tells me the truth*".

_____

_____

4. Collect evidence that challenges the assumptions.

Example "*My sister said dealing with psychiatric problems is a sure sign of strength, not weakness.*"

_____

_____

5. Restate the attitude so it does not injure me. This is a counter.

Example "*I'm not weak or bad because of my mental illness. In fact, I'm a hero for hanging on.*"

_____

_____

Group Therapy Session VII
Combating Self-stigma III: The Art of Acceptance

****

Objectives

3. To explore the advantages of accepting unchangeable social conditions
4. To learn and practice the ways of acceptance

Materials

1. Whiteboard and marker
2. Laptop computer with projector
3. Worksheet (Acceptance Worksheet and Coping Strategies Checklist)

Session Organization

1. Introduction of this session
2. Review of homework assignment
3. Exercise: Practicing acceptance
4. Formulating individualized coping strategies
5. Homework assignment

Procedures

1. Introduction of session

The therapist introduces the objectives, theme and rundown of this session

2. Review of homework assignment

The therapist reviews the contents of Stop Self-stigma Worksheet with the participants. The participants are encouraged to tell their hurtful beliefs and the way of challenging those hurtful beliefs. Watson and Corrigan (2001) suggest that this exercise promotes the self-esteem and facilitates a sense of personal power among the self-stigmatized individuals.

3. Exercise: Practicing acceptance

Individuals with schizophrenia experience difficulty with certain uncontrolled and/ or unchangeable conditions. For instance, some of them may think that they cannot do well in employment because of their psychiatric conditions. This is no doubt that their psychiatric condition will affect their vocational functioning. Instead of blaming himself/herself of being mentally ill, the individuals should learn how to accept this fact and try to pursue what they can do in this scenario. Other possible examples include poor interpersonal relationship, declining cognitive functioning and poor daily life adjustment after the development of mental illness. The participants should identify one of their uncontrolled conditions, and use the "Acceptance Worksheet" to write down the pros and cons of accepting the uncontrolled condition. This would let the participants have the conception that acceptance towards the uncontrolled and/ or unchangeable conditions may also be beneficial.

Acceptance Worksheet (Examples)

Uncontrolled condition: Declined vocational functioning after the development of mental illness	
Pros of acceptance	Cons of NOT acceptance
Acceptance does not mean "giving-up". One may engage in appropriate vocational program to gain necessary vocational skills	High stress level
Reduce personal stress	Not motivated in joining vocational program
Better understand own abilities in formulating employment plan	

4. **Formulating individualized coping strategies**

The participants have learned several strategies (e.g. providing evidence and acceptance) to combat self-stigma. This session aims at helping the participants develop individualized strategies to cope with their stigma-related emotional distress. Dickerson (2000) suggests that attention switching and self-statement are useful to reduce individuals' emotional distress. The therapist should encourage the participants to propose the effective strategies, and write them all on the whiteboard. The participants then select the strategies which are believed to be effective for their daily practice.

Coping Strategies Checklist (Examples)

Strategies	**Contents**	**Effectiveness (0-100)**
Self-statement 1	No regard if I have strived for the best	
Self-statement 2	I need to ensure my abilities	
Attention switching 1	Leave for a while	
Attention switching 2	Re-direct my mind to something that makes me peaceful	
Other:		

5. Homework assignment

The participants are encouraged to try out the selected coping strategies in their daily practice. They need to score the effectiveness of each selected strategies from 0 – 100. A higher score represents a more effective strategy. The participants are free to explore other possible strategies to tackle with their emotional distress.

Coping Strategies Checklist

Strategies	**Contents**	**Effectiveness (0-100)**
Self-statement 1		
Self-statement 2		
Attention switching 1		
Attention switching 2		
Other:		

Group Therapy Session VIII
Social Skills Training I: Being Assertive

****

Objectives

4. To encourage social participation and engagement
5. To explain the significance of being assertive in interpersonal communication
6. To strengthen their assertive skills in relevant social situations

Materials

1. Digital video recorder
2. Television set with DVD player
3. Videos on good and bad models
4. Whiteboard and marker

Session Organization

1. Introduction
2. Review of homework assignment
3. Warm-up activities
4. Instruction and demonstration
5. Role-play
6. Feedback
7. Homework assignments

Procedures

1. Introduction of session

The therapist introduces the objective, theme and rundown of this session.

2. Review of homework assignment

The participants are expected to implement their individualized coping strategies to combat self-stigma in the last session. The therapist facilitates discussion on the effectiveness of the strategies, and motivates the participants to adopt those strategies in their daily practice.

3. Warm up exercise

The rundown of this social skills training session follows the procedure suggested by Tsang (1996) and Wallace et al. (1980). Assertiveness skills refer to the ability to express one's feelings and wants, and resist efforts that one does not want to do (Bellack, Mueser, Gingerich, & Agresta (2004). This skill is important to enable individuals with schizophrenia to express their feeling appropriately and comfortably.

Before teaching the assertiveness skills, the therapist should conduct a warm up discussion to let the participants express their difficulties in interacting and communicating with their family members, friends or public, and writes down their expressed difficulties on the whiteboard. The therapist then emphasizes the importance of using assertiveness skills in expressing feeling, refusing inappropriate requests, and asking for helps etc.

4. Instruction and demonstration

The therapist shows the video to demonstrate bad example in response to inappropriate request. The scenario is described as follows:

A young lady with mental illness has got a job as a clerk. She is required to continue her medication for illness management. Her friend however advises her to

stop taking medication because of her apparent stable mental condition. Her friend also claims that the young lady may divulge own mental illness in resulting unnecessary discrimination. Although the young lady does not totally agree with her friend's suggestion, she tries to stop taking medication in fulfilling her friend's advice.

Questions for discussion:

1. What is the drawback of not taking medication?
2. If you do not want to disclose your mental illness at the initial stage, what can you do?
3. What is the appropriate way to deal with this situation?

A good model in demonstrating appropriate assertiveness skills is shown in the other video:

The young lady refuses to follow her friend's inappropriate advice by elucidating the importance of receiving psychiatric medication in appropriate manner (refusing inappropriate requests). Nevertheless, the young lady is afraid of her colleagues realizing her mental illness at this stage, and so she tries to seek the advice from the therapist to know how to deal with this situation (asking for help).

The participants at this time should highlight the good points in the video show. This exercise is useful to facilitate the skills training for the participants, and help them contrast the bad and the good model.

4. Role Play

After the demonstration, the participants are invited to engage in the role play exercise. The participants are required to demonstrate the assertiveness skills with video-recorded. This role play exercise allows the participants to practice their assertiveness skills.

5. Feedback

After the completion of the role play exercise, the therapist should play back the video to the participants so that they may watch and evaluate their own performance. The therapist should encourage the participants to comment what the role player has done appropriately, and what should be improved. The role player is also needed to have self-reflection in commenting his/ her performance. The therapist should show appreciation what the role player has demonstrated, and provide objective feedback to promote role player's improvement.

6. Homework assignment

The participants are expected to demonstrate the learned assertiveness skills in their real life situation. They should declare how they apply the assertiveness skills, and identify what difficulties they have faced for the implementation.

1. Please clearly describe the difficult social situation.

_____

_____

_____

2. How can you demonstrate your assertiveness skills?

_____

_____

_____

3. Any difficulties are encountered in that particular social situation when you behave assertively?

_____

_____

_____

Group Therapy Session IX

Social Skills Training II: Dealing with Stigmatizing Social Situation

****

Objectives

3. To review social problem-solving skills
4. To help participants to apply social problem-solving skills in dealing with the stigmatizing social situations

Materials

1. Digital video recorder
2. Television set
3. Video on demonstrating assertiveness skills
4. Whiteboard and marker
5. Social Problem Solving Skills Training Worksheet

Session Organization

1. Introduction
2. Review of homework assignment
3. Instruction
4. Training of receiving skills
5. Training of processing skills
6. Training of sending skills
7. Feedback
8. Homework assignments

Procedures

1. Introduction of session

The therapist introduces the objective, theme and rundown of this session.

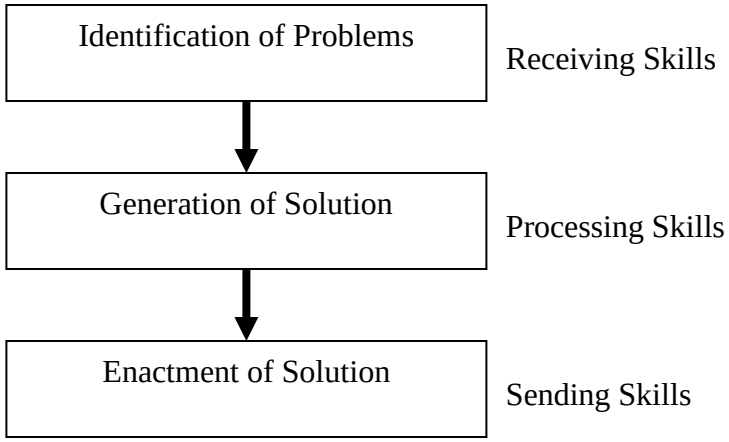
2. Review of homework assignment

The therapist encourages the participants to discuss how they have applied their assertiveness skills in the difficult social situations. The therapist should appreciate the effort that the participants have paid in demonstrating their learned skills, and provide feedback to let the participants know how to tackle with the encountered problems.

3. Instruction

In this session, the therapist teaches the social problem solving skills to the participants. Social problem solving skills are highly complex (Kern, Green, Mitchell, Kopelowicz, Mintz, & Liberman, 2005), and they are the essential components for social skills training (Tsang, 2001). Bellack et al. (1994) and Mueser et al. (1998) suggested that identification of problem, generation of solution and enactment of solution effectively are the three foundations for social problem solving skills training. The training has adopted the procedures as suggested by Kern and colleagues (2005), Tsang (1996) and Wallace et al. (1980).

Flow of Social Problem Solving Skills Training:



4. Training of receiving skills

The therapist firstly describes a stigmatized social scenario (e.g., a salesperson refuses to serve me in a boutique) to the participants, and then ask them to identify the goals (i.e., to buy a cloth) and the obstacles (i.e., the non-helpful salesperson) in that specific social situation. The participants are encouraged to discuss their previous encountered stigmatized social conditions, and try to identify the key goals and obstacles.

5. Training of processing skills

This exercise aims at helping the participants generate possible solutions to cope with the difficult social situations. Kern et al. (2005) suggested that clarifying communication, perspective talking, and seeking help from authority are the sound methods to resolve the social problems. Kern et al. (2005) have defined three strategies as follows:

i. Clarification communication: "*Repeating or more clearly stating the initial request*"
ii. Perspective talking: "*Saying something to convey an understanding of the other person's perspective or trying to get the other person to understand one's own perspective*"
iii. Seeking help form authority: "*getting outside help in those situations when unable to resolve the conflict easily by oneself*"

The participants are required to generate solutions towards their previously faced stigmatized social conditions by using the above suggested strategies. The therapist should write down all possible solutions on the whiteboard. The therapist and the participants then discuss the workability of the solutions.

6. Training of sending skills

After the discussion, the therapist shows a video to illustrate the effective sending skills by using “the unhelpful salesperson” as the example. The scenario is shown as follows:

The young lady wants to try a new cloth in the boutique. She asked the salesperson for help, but it is unfortunate that the salesperson ignored her request. The young lady then repeats her request to this salesperson (clarification communication). The salesperson informs the young lady that she is busy at this moment (in fact she is not). The young lady tries to purse the salesperson to bring her the new cloth because she has waited for a long time, and let the salesperson understand her own perspective (perspective taking). However, this does not work and then the young lady tries to seek help from the senior staff (seeking help from authority), and finally she is able to try the new cloth.

During this video show, the participants are expected to remember the key verbal and non-verbal components during the demonstration. Then, participants are required to role play with the situation using the similar methodology as stated in Session VIII.

7. Feedback

After the role play exercises, the therapist provides feedback to the participants in order to reinforce the social problem solving skills of the participants.

8. Homework assignment

The participants are required to implement their learned social problem skills in their daily practice, and complete the following form. The therapist may use “the unhelpful salesperson” as the example.

Social Problem Solving Skills Training Worksheet

Encountered social problems (including goals and obstacles):	
Possible solutions:	
Ultimate enacted solution:	

Group Therapy Session X
Goal Attainment I: Goal Setting

****

Objectives

5. To help participants identify own realistic short-term and long-term goals
6. To help participants formulate a non-threatening time frame for achieving their short-term goals with an emphasis on improving treatment compliance
7. To motivate participants to have better health seeking behaviors
8. To develop their positive belief about future

Materials

1. Whiteboard and marker
2. Laptop computer with projector
3. Listing of Personal Short-term and Long-term Goals
4. Goal Exploration Checklist

Session Organization

1. Introduction
2. Review of homework assignment
3. Goal exploration
4. Homework assignment

Procedures

1. Introduction of session

The therapist introduces the objective, theme and rundown of this session.

2. Review of homework assignment

The participants share how they have applied their social problem solving skills in their daily practice. This is to enhance their receiving, processing and sending skills through discussion with the therapist.

3. Goal exploration

Goal setting is an essential component for rehabilitation (Siegert & Taylor, 2004). The main theme of this session is to help the participants set realistic short-term and long-term goals. Padesky and Greenberger (1995) recommended using guided questions to promote the process of goal setting. The participants are firstly required to list their short-term and long-term goals through the discussion with the therapist. They are then needed to assign a score to each goal according to their importance. The score assignment is useful to help the participants prioritize their specific goals. The therapist also encourages the participants to set a non-threatening timeframe for the goals accomplishment. In view of the importance of treatment compliance to the recovery and the wellness of individuals with schizophrenia, the therapist should motivate the participants to include treatment compliance as one of their decided personal goals.

Harris, Williams, and Bradshaw (2002) have suggested that this is useful to break down tasks or goals in its component parts. The goals should be more easily achieved by breaking down in small, stepwise and logical sequences. However, the therapist and the participants should bear in mind to define the component parts in the behavioral terms. For instance, this is too vague to set a goal like “I hope I can have better treatment compliance than before”. In this circumstance, it should be written as “I hope that I could attend the training from the vocational unit on time at

least 4 times a week". The therapist should document the specific goals and timeframe for record (Ng & Tsang, 2002).

Listing of Personal Short-term and Long-term Goals (Examples)

Short-term goal	Importance (0-100)	Long-term goal	Importance (0-100)
1. To work as volunteer in charity organization		1. To quit smoking	
2. To have a healthier diet		2. To find a job	
3. To be punctual in joining the treatment		3. To have better relationship with family	
4. To take medication on time		4. To take care of myself independently	
5.		5.	
6.		6.	

After listing the personal goals, participants are required to select their most important short-term goal as reference for the upcoming goal exploration exercise. Amburg (1997) and Davis et al. (1995) suggested that imagination is a good way to help the individuals with severe mental illness focus on their future and explore their personal goals. During the imagination exercise, the therapists should assist the participants to think of the difficulties they might face, and help them understand

that the difficulties can be overcome (Farran, Herth, & Popvich, 1995). The participants may develop positive feelings about their future through this imagination exercise. Moreover, the participants are encouraged to imagine how they would feel, look, behave and sound after they have achieved their goal (Davis, Eshelman, & McKay, 1995). The participants should concretize the positive sense of goal achievement from this exercise. The participants are required to write down the information in the Goal Exploration Worksheet.

The Goal Exploration Worksheet (Examples)

<table>
<tr><td colspan="2">Challenged future goal: To find a job as a clerk</td></tr>
<tr><td>Identified Problems:</td><td>Ways to Overcome:</td></tr>
<tr><td>Do not know how to use computers</td><td>Receive training/ join courses in learning computer skills</td></tr>
<tr><td>Do not know how to prepare a resume for job application</td><td>Borrow books for resume preparation/ seek help from employment specialists</td></tr>
<tr><td>Lack interview skills</td><td>Participate in work-related social skills training program</td></tr>
<tr><td colspan="2">Feelings of having achieved the goal:
With a strong sense of joy and satisfaction
Self-assurance of own ability</td></tr>
</table>

4. Homework assignment

The participants should have a deeper thought about their future and their goals by using the Goal Exploration Checklist.

Challenged future goal:	
Identified Problems:	Ways to Overcome:
Feelings of having achieved the goal:	

Group Session XI
Goal Attainment II: Action Planning

****

Objectives

3. To help participants develop a step by step action plan in behavioral terms to attain short-term goals
4. To help participants formulate success criteria and evaluation strategies

Materials

1. Whiteboard and marker
2. Laptop computer with projector
3. Action Planning Worksheet

Session Organization

1. Review of homework assignment
2. Action plan for goal attainment

Procedures

1. Review of homework assignment

The therapist discusses the ways of how the participants attain their planned short-term goal, and provides feedback on the action plan.

2. Action plan for goal attainment

Through the review of the homework assignment, the therapist should have the ideas about the strengths and weakness of the participants in formulating the action plan for goal accomplishment. The therapist teaches the participants ways of generating a step by step action plan in behavioral terms. This is in line with the goal setting exercise in the previous goal attainment session. The component part of the decided goal is found to be easier to achieve. The participants should be rewarded after they have completed the component parts (Harris, Williams, & Bradshaw, 2002), to further motivate them for personal goals pursuit. The participants are guided to identify and list all the possible ways for their goal attainment by using the Action Planning Worksheet. The therapist should discuss the pros and cons of the particular methods in order to let the participants know the feasibility of the proposed strategies. The therapist then specifies the success criteria for completing each component part in order to monitor the progress of goal attainment done by the participants.

Action Planning Worksheet (Examples)

<table>
<tr><td colspan="2">Challenged future goal: Helping others with mental illness</td></tr>
<tr><td colspan="2">Ways to achieve:</td></tr>
<tr><td rowspan="2">1. Join mental health advocacy groups/ volunteer services</td><td>Pros: Is a good place to meet individuals with mental illness, and provide support</td></tr>
<tr><td>Cons: N.A.</td></tr>
<tr><td rowspan="2">2. Make donation to mental health charity organization</td><td>Pros: be able to support the mental health services by the charity organization, but the amount of donation should be within your affordable range</td></tr>
<tr><td>Cons: May not be workable if you have own financial difficulties</td></tr>
<tr><td rowspan="2">3.</td><td>Pros:</td></tr>
<tr><td>Cons:</td></tr>
<tr><td rowspan="2">4.</td><td>Pros:</td></tr>
<tr><td>Cons:</td></tr>
</table>

The therapist may implement certain reinforcing strategies to motivate the participants for their personal goal attainment. Setting up of behavioral contract may be used to enable the participants to comply with the action plan.

5. Homework assignment

The participants should use the Action Planning Worksheet to explore the possible solutions for their other important future goal.

<table>
<tr><td colspan="2">Challenged future goal:</td></tr>
<tr><td colspan="2">Ways to achieve:</td></tr>
<tr><td rowspan="2">1.</td><td>Pros:</td></tr>
<tr><td>Cons:</td></tr>
<tr><td rowspan="2">2.</td><td>Pros:</td></tr>
<tr><td>Cons:</td></tr>
<tr><td rowspan="2">3.</td><td>Pros:</td></tr>
<tr><td>Cons:</td></tr>
<tr><td rowspan="2">4.</td><td>Pros:</td></tr>
<tr><td>Cons:</td></tr>
</table>

Group Therapy Session XII
Round-up of Group Session

****

Objectives

3. To summary the concepts and strategies learned in the previous sessions
4. To establish individualized coping strategies among participants

Materials

1. Light drinks and refreshment
2. Whiteboard and marker

Session Organization

1. Review of homework assignment
2. Program summary
3. Review of learned coping skills
4. Feedback
5. Briefing of upcoming follow-up sessions

Procedures

1. Review of Homework assignment

The therapist discusses and provides feedback on the ways of how the participants overcome their challenged future goals.

2. Program summary

A relaxed environment is created at the end of the self-stigma reduction group sessions. Some light drinks and snacks are served to the participants. The therapist should re-emphasize the purposes of this program, and summarize what have been taught in the program. The contents include:

1. Facts about schizophrenia
2. Ways to combat self-stigma
    - Affirming personal worth
    - Disputing by evidence
    - Art of acceptance
3. Social skills
    - Assertiveness
    - Social problem solving skills
4. Goal setting and action planning

3. Review of learned coping skills

The therapist is welcome to answer the queries regarding the concepts and the strategies taught in this self-stigma reduction program. The therapy may help the participants revisit some of the principle self-stigma reduction and/or self-enhancement strategies. This aims at consolidating the learned skills of the participants.

4. Feedback

The therapist provides overall feedback to the participants. The therapist should highlight the common problems and misconceptions that the participants have had and raise their awareness towards their learned skills

4. Briefing of upcoming follow-up sessions

Four follow-up sessions will be offered to the participants after the completion of the group therapy sessions. The therapist should describe the purposes and the schedule of the follow-up sessions.

Follow-up Sessions
Self-stigma Reduction Program

****

Objectives

5. To monitor participants' progress in goal attainment
6. To assess participants' level of self-stigma
7. To review their implementation of self-stigma coping strategies
8. To provide support in encouraging their health seeking behaviors

Contents

Four follow-up sessions will be offered to the participants. Each session lasts for 10 to 15 minutes. The therapist provides a quick review concerning participants' progress in goal attainment and their level of self-stigma and treatment compliance. The therapist provides necessary support to the participants in combating their encountered problems by giving advices or by the facilitation of using self-stigma coping strategies.

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Appendix 4: Workbook for the Self-stigma Reduction Program

反自我歧視小組

參加者作業簿

曾永康教授
香港理工大學
康復治療科學系教授

馮孟得碩士
香港理工大學
康復治療科學系博士研究生

小組治療第一節
踏上康復之路

****

課堂重點

1. 大多數精神病患者透過適當的治療可以大大減低復發的機會
2. 康復不等於不用服藥，康復可以是……
    - 症狀得以控制
    - 在社區工作或學習、或參與喜愛的消遣活動
    - 有正常的社交生活
    - 可以獨立生活及有能力解決日常生活問題
    - 擁有生活滿足感及自尊心

家課

參加者請完成以下的家課問題：

3. 你認為自己可以康復嗎？為什麼？

_____

_____

_____

然後，參加者需要收集另外兩位重要人士的意見(如家人、精神健康專業人士、朋友或同事)。

4. 其他重要人士認為你的康復機會有多大？他們的解釋如何？

1. 姓名：_____ 回應：_____

_____

2. 姓名：_____ 回應：_____

_____

小組治療第二節
解開精神分裂症的謎團

****

課堂重點

1. 精神病偏見與歧視存在於社會及個人層面
2. 社會及自我歧視會影響精神病患者的康復、工作、社交、接受治療遵從性及自信心
3. 精神病患者常常對自己有負面的思想(例如我情況不會好轉、我惹人討厭)・戰勝自我歧視能有效地提高患者的康復機會

家課

毫無疑問，精神病歧視會減低精神分裂症的康復成效。參加者需要寫下最近遇到被歧視的情況，這些資料將有助下次小組討論有關社會歧視的負面影響。

3. 請寫下最近遇到被歧視的情況 (例如受到不公平的待遇，被人惡意批評，或是在公眾場所被人疏遠)

_____

_____

_____

4. 請寫下這事件對你的影響 (例如感到傷心或焦慮，或表露退隱行為)

_____

_____

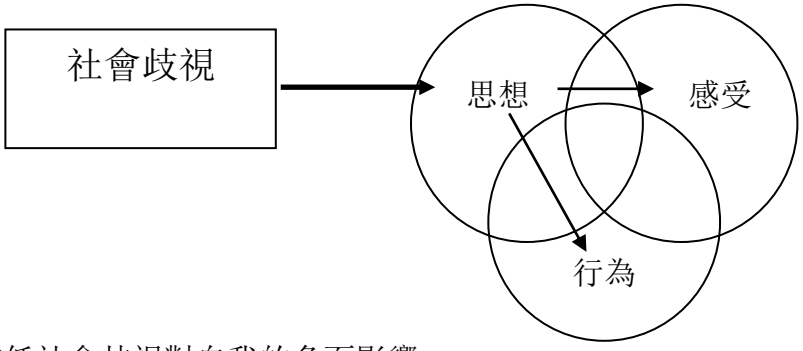
_____

小組治療第三節
社會歧視對康復的影響

****

課堂重點

1. 理解社會歧視引起的負面影響
    - 負面思想
    - 負面感受
    - 負面行為



2. 需要減低社會歧視對自我的負面影響

課堂練習

1. ABC 練習: 參加者須根據他們最近被歧視的經驗填寫下面的 ABC 表格。

ABC 表格

引發歧視的情況	思想	感受	行為

2. 社會歧視的負面影響

社會歧視的負面影響
1.
2.
3.
4.
5.

家課

社會歧視削弱患者的自我概念及個人特質，這家課協助參加者進行自我反省，這些資料將用於第四節小組的討論。

2. 請寫下三項形容你自己的正面及負面項目。

正面項目	反面項目
1.	1.
2.	2.
3.	3.

小組治療第四節
自我歧視對康復的障礙

****

課堂重點

1. 常有的自我歧視的思想和行為:
    - 我情況不會好轉
    - 我惹人討厭
    - 我不能找到正常工作
    - 我不能照顧自己
2. 透過比較自我歧視思想的利與弊，體會自我歧視的壞處

課堂練習

自我歧視的觀念/ 行為的評估清單

自我歧視的思想/ 行為:			
好處	評分 (0-100)	壞處	評分 (0-100)

家課

研究顯示有自我歧視的患者傾向較不遵從治療，從而減低他們康復的成效。參加者需要用第三部分介紹的方法探討遵從治療的好處。

2. 請填寫以下的工作表：

遵從精神病治療			
好處	評分 (0-100)	壞處	評分 (0-100)

小組治療第五節
克服自我歧視(一): 肯定個人價值

****

課堂重點

1. 精神病患者不是一無事處
2. 可以在不同的生活角色中找出個人長處及潛能，肯定自我價值

課堂練習

探索個人長處 (修訂的角色清單)

角色	過去	現在
學生 兼讀制或全日制在學		
僱工 兼職或全職工作		
義工 每星期最少一次於醫院、學校或政治活動等擔任義工		
照顧者 每星期最少一次負責照顧他人，如小孩、伴侶或親友		
家居管理者 每星期最少一次負責打掃家居或庭園		
朋友 每星期最少一次約見朋友或與朋友活動		
參與宗教活動者 每星期最少一次參與信仰小組或活動 (崇拜除外)		
業餘愛好者 每星期最少一次參與個人嗜好或業餘愛好的活動，例如縫紉、樂器、木工、運動、戲劇或參加會社或團隊		
參加團體 每星期最少一次參與團體活動		
其他：_____ 任何上述沒有列出而你曾經參與、現正參與或計劃參與的活動。請在空格填寫及在適當空格加上✓號		

家課

這家課通過與其他重要人士的討論，協助參加者肯定個人價值及能力。

1. 請從其他重要人士 (如家人、朋友或精神健康專業人士)身上收集三項有關你個人長處的資料。

_____

_____

_____

小組治療第六節
克服自我歧視(二): 運用證據作出反擊

****

課堂重點

1. 負面思想常常由自我的主觀觀念及感受所引起
2. 運用例證可以收集客觀的資料去挑戰自我歧視，從而提升自我的正面理解及自信心

課堂練習

利用證據挑戰自我歧視觀念 (證據清單)

自我歧視觀念:	
支持證據	反對證據

家課

參加者需在家課完成停止自我歧視工作紙。這個練習有助參加者利用證據反擊負面的思想，並引導他們重組自己不帶傷害性的態度。

停止自我歧視工作紙

2. 陳述自己帶傷害性的想法

例如：*“我必定是個弱者，因為我患有精神病。”*

我必定是 _____ 因為_____。

2. 解釋對/錯假設

例如：*“強者不會有精神病。”*

_____

_____

3.反擊假設：從那裡得知？

例如：*“從我姊姊那裡，她很聰明，並常常告訴我事實。”*

_____

_____

4. 收集證據反擊假設

例如：*“我姊姊說面對精神病不是軟弱，而是堅強的表現，”*

_____

_____

5. 重組不傷害自己的態度，與之前態度相反

例如：*“我沒有因為精神病而變壞或變軟弱，而我堅持下去是勇氣的表現。”*

_____

_____

小組治療第七節
克服自我歧視(三): 接納的藝術

****

課堂重點

1. 精神病患者可能會遇到一些不能控制或改變的困難情況，學會接納可以減低事情對患者的影響
2. 接納不等於放棄，可以是積極地面對問題
3. 每個人有不同控制自我負面情緒的良方。訂立合適的自我聲明及轉移焦點方法能有效地控制負面情緒

課堂練習

1. 接納的練習 (接納工作紙)

不能控制的情況：	
接納的好處	拒絕接納的壞處

2. 對應策略清單

策略	內容	效用 (0-100)
自我聲明 1		
自我聲明 2		
轉移焦點 1		
轉移焦點 2		
其他：		

家課

這次家課鼓勵參加者在日常生活中嘗試他們選擇的對應策略。參加者需要為每項選擇的策略以 0 至 100 分評分，越高分代表越有效的策略。參加者可自行尋求其他解決他們情緒低落的可行策略。

對應策略清單

策略	內容	效用 (0-100)
自我聲明 1		
自我聲明 2		
轉移焦點 1		
轉移焦點 2		
其他：		

小組治療第八節
社交技巧訓練(一): 自我表達

****

課堂重點

1. 運用合適的語言及非語言社交技巧去
    - 表達自我的感覺及訴求
    - 拒絕不當的要求
    - 尋求協助

家課

參加者需要在現實生活中表現自我表達的技巧，他們應說明自己如何運用自我表達的技巧，及確認他們遇到甚麼困難情況運用技巧。

4. 請詳細描述在社交場合遇到的困難：

_____

_____

_____

5. 你如何運用學會的自我表達技巧？

_____

_____

_____

6. 你在運用自我表達的時有沒有遇到甚麼困難？

_____

_____

_____

小組治療第九節
社交技巧訓練(二): 處理被歧視的社交場合

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課堂重點

1. 學會運用社會問題解決技巧處理社會歧視
    - 鑑定問題 (找出個人目標及問題所在)
    - 找出解決辦法 (澄清、陳述觀點及尋求權力協助)
    - 運用合適的語言及非語言社交技巧去執行解決辦法

家課

參加者需要在日常生活中運用學會的社交技巧，並填寫下面的表格。

解決社交問題技巧工作紙

面對社交問題 (包括目標及障礙)：	
可行的解決辦法：	
最終決定的解決辦法:	

小組治療第十節
達到目標(一)：訂立目標

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課堂重點

1. 定立明確的個人目標，提升個人的積極性及正面觀念
2. 訂立目標的重要原素:
    - 目標對個人的重要性
    - 目標的可行性
    - 以行為概念去闡述
    - 定下可接受的時間範圍

課堂練習

1. 列出個人的短期和長期目標

短期目標	重要性 (0-100)	長期目標	重要性 (0-100)
1.		1.	
2.		2.	
3.		3.	
4.		4.	
5.		5.	
6.		6.	

2. 探索目標工作紙

備受考驗的將來目標： 	
確定的問題：	解決的方法：
達到目標的感受： 	

家課

參加者需要利用探索目標工作紙更深入思考他們的將來及目標。

備受考驗的將來目標：	
確定的問題：	解決的方法：
達到目標的感受：	

小組治療第十一節
訂立目標(二)：計劃行動

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課堂重點

1. 設立逐步的計劃去達成個人目標

課堂練習

計劃行動工作紙

<table>
<tr><td colspan="2">備受考驗的將來目標：</td></tr>
<tr><td colspan="2">達到目標的方法：</td></tr>
<tr><td rowspan="2">1.</td><td>好處:</td></tr>
<tr><td>壞處:</td></tr>
<tr><td rowspan="2">2.</td><td>好處:</td></tr>
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家課

參加者可使用計劃行動工作紙去探究達到其他重要個人目標的可行辦法。

<table>
<tr><td colspan="2">備受考驗的將來目標：</td></tr>
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小組治療第十二節
總結

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課堂重點

1. 重申課堂目的及總結課堂所提供的資料
    - 面對精神病應有的正面態度，及了解自己的誤解
    - 透過適當的治療，精神病患者也可以康復及擁有快樂人生
    - 歧視會嚴重影響精神病患者的康復和生活，患者要積極地面對歧視的問題
    - 運用肯定個人價值，提出例證及接納的方法去克服自我歧視
    - 提升自我表達及社會問題解決技巧處理社會歧視
    - 訂立及計劃執行個人目標