LICENSED PROFESSIONAL COUNSELORS' ATTITUDES TOWARD PEOPLE WITH

SCHIZOPHRENIA: PREDICTORS OF INTEREST IN PROVIDING INTERVENTIONS

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For individuals with schizophrenia and their caregivers, psychosocial interventions have been shown to significantly improve recovery and reduce relapse rates. Although this population is underserved and stigmatized, counselors have been excluded from most research into attitudes toward and interventions for these families. Using a stratified random sample survey design, researchers explored the relationships between participating U.S. Licensed Professional Counselors' attitudes towards, recovery beliefs regarding, familiarity with, desire for social distance from, and interest in providing services to individuals with schizophrenia and their caregivers. Most of the 111 participants (11.1% response rate) identified themselves as female (83.8%) and Caucasian (86.5%). A few participants described themselves as Hispanic (6.3%) or Black or African-American (5.4%). Respondents ranged in age in years from 20's to 60's with the largest group in their 40's. Descriptive statistics indicated that the majority of LPC participants reported low to moderate stigmatizing attitudes, strong beliefs in recovery, and moderate to high interest in providing interventions for people with schizophrenia and their caregivers. Furthermore, almost half of participating LPCs reported already working with individuals with schizophrenia. Bivariate correlations and hierarchical regressions indicated that high interest in providing interventions for this population was significantly correlated (p < .01) with high frequency of already working with the population (large effect), low desire for social distance (medium effect), high desire to help socially (medium effect), and strong beliefs

in recovery (small effect). The results support including LPCs in all areas pertaining to

interventions, research, and recovery for people with schizophrenia and their caregivers.

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By

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Introduction

Mental health professionals' attitudes and behaviors impact therapeutic relationships, outcomes of treatment, and quality of life of the people they serve and their families (Moore & Kuipers, 1992). Because stigma presents a serious and significant barrier to prevention of and recovery from psychosis (Vibha, Saddichha, & Kumar, 2008), the World Psychiatric Association designated fighting stigma related to mental illness a top priority (World Psychiatric Association, 1998). Over the past 20 years, stigma and discrimination by the general public and mental health professionals toward individuals with serious mental illness (SMI) have been documented in multiple studies (Schulze, 2007; Wahl & Aroesty-Cohen, 2010). Stigma research, typically focused on schizophrenia as the recipient of the harshest perceptions (Eack & Newhill, 2008), has included samples of psychiatrists, psychologists, nurses, and social workers (Caldwell & Jorm, 2001; Wahl & Aroesty-Cohen, 2010) but has excluded licensed professional counselors (LPCs), except in two recent publications of a single study by Smith and Cashwell (2010, 2011). Yet, LPCs may be valuable resources as current and potential providers of critical evidence-based interventions for this underserved population of individuals with SMI and their caregivers.

At any given time across the world, approximately 5-7% of adults experience symptoms of serious mental illness (SMI), usually defined as mental illnesses such as schizophrenia, major depression, severe anxiety, or bipolar, dissociative, eating or personality disorders that are diagnosable psychiatric disorders lasting at least a year and producing impairment significant enough to be considered disabling (National Institute of Mental Health, 2008). Schizophrenia

alone is consistently reported in 1% of the world population with initial onset usually occurring

with a psychotic episode in young adults between the ages of 18 to 24 years old (National

Institute of Mental Health, 2008). Following the initial crisis and hospitalization, individuals are

usually discharged into the care of family members with little information regarding diagnoses,

prognoses, how to navigate a confusing mental health system, effective interventions, or

caregiver needs (Askey, Holmshaw, Gamble, & Gray, 2009).

However, researchers have compiled empirical data indicating that prognosis for

individuals experiencing psychotic disorders is improving (Kelly & Gamble, 2005) and that

recovery is more common than many people believed (McGuire, 2000). Cognitive-behavior

therapy (CBT), individual and family psychoeducation, group therapy, and interpersonal and

social rhythm therapy (IPSRT) have been shown to significantly improve patient recovery and

reduce relapse rates while also decreasing caregiver burden, anxiety, and depression

(Freudenreich, Holt, Cather, & Goff, 2007). Nevertheless, psychosocial interventions are scarce

in the United States, and caregivers report feeling forgotten, undervalued, and overwhelmed

with lack of knowledge, shame, social isolation, and stigma (Jones, 2009; Kuipers et al., 2010).

Lack of services and stigma for people diagnosed with schizophrenia and caregivers are

barriers to recovery and may be associated with each other (Vibha et al., 2008).   Stigma may be

defined as a mark of shame or disgrace that is manifested by bias, distrust, stereotyping, fear,

embarrassment, anger, and/or avoidance (U.S. Department of Health and Human Services,

1999). Stigma often leads to acts of discrimination in services offered. However, the success of

de-institutionalization of psychiatric care relies upon society's tolerance, understanding, and

non-discrimination (Vibha et al., 2008). LPCs are prepared in evidence-based interventions and may be able to close a gap in needed professional services to people with SMI and caregivers.

Attitudes

Overall, the majority of researchers worldwide have found that mental health professionals' attitudes toward people with SMI were more positive than the attitudes of the general public but that negative attitudes were present (Wahl & Aroesty-Cohen, 2010). Schulze (2007) reported two studies in which psychiatrists in the United Kingdom and Italy rejected the idea that people with schizophrenia were responsible for their condition, dangerous (Kingdon et al., 2004), or unpredictable (Magliano, Fiorillo, De Rosa, Malangone, & Maj, 2004).

However, other studies contained evidence that mental health professionals held negative stereotypes of people with SMI. Many mental health professionals indicated sharing the public's fear of and anger towards people with SMI, disbelief in possibility for recovery, and desire for social distance (Schulze, 2007). Lauber, Anthony, Ajdacic-Gross, and Rossler (2004) reported Swiss psychiatrists held more negative stereotypes than nurses, psychologists, and other unspecified therapists.

Recovery Beliefs and Social Distance

 In a review of studies, psychiatrists and psychiatric nurses indicated both positive and negative recovery beliefs.   For example, psychiatrists in the United Kingdom reported greater optimism than the general public that schizophrenia would improve with treatment, but were uncertain as to the depth of recovery as only 26% reporting a belief that people with schizophrenia could recover fully (Kingdon, Sharma, & Hart., 2004). A large group of Italian mental health professionals, including psychiatrists, psychologists, nurses, sociologists,

occupational therapists, social workers, and auxiliary personnel reported significantly more optimistic beliefs than family members regarding treatment outcome in schizophrenia, although 40% reported believing not much could be done for people with schizophrenia other than helping them live in a peaceful place (Magliano et al., 2004).

Researchers reported the most reliable measure of stigma seemed to be assessments by social distance scales (SDS). Social distance instruments ask participants to rate their willingness to interact with people with SMI or a specific mental illness, identified either by vignette or diagnosis, in a variety of social situations. Lauber et al. (2004) stated that Swiss psychiatrists, after reading a vignette describing a man with schizophrenia, did not differ from the general public in reluctance to recommend the man for a job, rent him a room, or have him marry their child. Nordt et al. (2006) utilized an SDS and found that Swiss psychiatrists, nurses, and psychologists reported less willingness to interact with people with schizophrenia than other therapists and the Swiss public. Grausgruber et al. (2007) wrote that barely half of Austrian psychiatric nurses, social workers, psychologists, physiotherapists, and occupational therapists participating in a study indicated a willingness to employ a person with schizophrenia. In the same study, participants indicated they were unwilling to accept a person with schizophrenia as a superior (70%) or in a position of caring for their children (81%). Even within Kingdon et al.'s (2004) study that reported predominantly positive attitudes, 20% of UK psychiatrists agreed or were undecided that they "would not want to live next door to someone who had been mentally ill."

Attitudes of LPCs

Although LPCs often provide treatment for people with SMI (Hinkle, 1999), only one study into attitudes of professional counselors toward people with SMI has been published as two journal articles (Smith & Cashwell, 2010, 2011). Smith and Cashwell (2010, 2011) examined stigma toward mental illness among 76 mental health and 54 non-mental health trainees and professionals and found that mental health professionals and trainees indicated more positive attitudes toward people with unspecified mental illness than did business professionals and trainees. However, no difference in attitude was detected due to professional level or type of training (psychologist, social worker, or counselor). Smith and Cashwell (2011) concluded that counselors and psychologists, both students and professionals, were comfortable with less social distance from individuals with mental illness than were social workers and non-mental health professionals.

Generalization of Smith and Cashwell's (2010, 2011) results about LPCs is limited by small sample size and lack of geographical diversity. Furthermore, the study solicited responses of attitude toward people with "mental illness" with no specification of diagnosis, severity, or symptoms. A study with larger sample size focused on LPCs' attitudes toward people with schizophrenia and utilizing updated instruments was needed. Thus, this study was designed to examine the relationship between LPCs' attitudes toward, recovery beliefs regarding, familiarity with, desire for social distance from, and interest in providing services to individuals with schizophrenia and their caregivers.

Methods

Participants

A stratified random sample of 1000 LPCs in the U.S. were mailed invitations to participate in an online survey. Of the 111 participants who responded, 83.8% were women and 16.2% were men. The majority of respondents identified themselves as White or Caucasian (86.5%) with other participants describing themselves as Hispanic (6.3%) or Black or African-American (5.4%) or preferring not to disclose (1.8%). Respondents ranged in age in years from 20's to 60's with the largest group in their 40's, most with master's degrees (84.7%) in counseling (80.2%) with other respondents indicating their educations to be in psychology (17.1%), social work (.9%), and other (1.8%). Participants indicated they worked primarily in private practice (42.3%) or non-profit agencies (26.1%) with smaller numbers in university (11.7%), psychiatric hospital (9.0%), and faith-based (5.4%) settings.

The sample reportedly had clients who were primarily adults (76.6%) but also children 12 years old and younger (4.5%) and adolescents between the ages of 13 to 17 years old (18.9%). Participants reported their frequency of working with people with schizophrenia as follows: never (18.0%), less than 6 times a year (34.2%), monthly (18.0%), weekly (13.5%), daily (16.2%).

Participants reported the level of interest in providing services to people with schizophrenia as follows: no interest (7.2%), prefer not to (9.0%), I might (28.8%), very likely, moderate interest (36.9%), high interest (18.0%). Participants also reported their level of interest in providing services to caregivers of people like Harry as follows: no interest (1.8%),

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prefer not to (3.6%), I might (20.7%), very likely, moderate interest (37.8%), high interest (36.0%).

<center>*Instruments*</center>

Attribution Questionnaire (AQ-21, Corrigan, Markowitz, Watson, Rowan, & Kubiak, 2003). The AQ-21 consists of 21 items scored using a 9-point Likert-type response scale (1 = *not at all*, 9 = *very much*) to assess key constructs of stereotyping defined by the social cognitive model of stigma. The assessment begins with a written vignette followed by questions. The vignette used in this study stated, "Harry is a 30 year-old single man with schizophrenia. He lives at home with his parents and works as a clerk at a large law firm. Sometimes Harry hears voices and becomes upset. He has been hospitalized six times because of his illness."

Six subscales comprise the AQ-21: Responsibility, Anger, Pity, Help, Fear, and Segregation/Coercion. Responsibility is the belief that people have control over and are responsible for their mental illness and related symptoms. Anger is a feeling of being irritated or annoyed because people are to blame for their mental illness. Pity is a feeling of sympathy or concern because people are overcome by their illness. Help is a feeling of wanting to provide social assistance to people with mental illness. Fear is a feeling of fright because people with mental illness are dangerous. Segregation/Coercion is a belief that people with schizophrenia need to be sent to institutions away from their communities and forced to participate in medication management or other treatments.

Corrigan (2003; Corrigan, Salzer, Ralph, Sangster, & Keck, 2004) reported Cronbach's alpha reliability of the six instrument subscales: Personal Responsibility (α = .70 - .73), Pity (α = .74 - .86), Anger (α = .84 - .89), Fear (α= .96), Helping (α= .76 - .88), and Coercion-Segregation (α

<center>7</center>

= .82 - .89). Factor structure and reliability of the AQ were validated in two confirmatory factor

analyses (Corrigan et al., 2003; Corrigan et al., 2004).

Social Distance Scale (SDS; Penn, Guynan, Daily, Spaulding, Garbin, & Sullivan, 1994).

SDS utilizes seven questions to ask participants their willingness to engage in relationships of

varying intimacy with a person previously hospitalized with symptoms of schizophrenia

(Corrigan et al., 2001; Link et al., 1987). Participants rate each question on a 4-point Likert scale

(1 = *definitely willing* to 4 = *definitely not willing*). Higher scores indicate greater desire for

social distance.

SDS scales tend to show good to excellent internal consistency with Cronbach's alphas

ranging from .75 to greater than .90 (Penn et al., 1994). Evidence of construct validity comes

from patterns of association that fit expectations of results if social distance scales measured

what they claim to measure. For instance, individuals who desire social distance from a person

described as having a mental illness are more likely to believe people with mental illnesses are

dangerous and to fear them (Link et al., 1999). The main limitations of social distance scales are

social desirability bias and the inability to infer behavior from reported intentions.

Recovery Beliefs Scale (RBS; Corrigan et al., 2004). Hope of recovery was assessed with

the Recovery Beliefs Scale (RBS) created by adapting 3 items from the Recovery Assessment

Scale (RAS, Corrigan et al., 2004) that had a reported Cronbach's alpha of .74. For this study, P.

W. Corrigan (personal communication, January 3, 2012) gave permission for adaption of a

subscale of the RAS measuring personal confidence and hope from first-person to third-person

and from 5-point Likert scale to 9-point Likert scale.

Level of Familiarity Scale (LOF; Corrigan et al., 2004). The LOF measures familiarity with people with mental illness. Research participants responded to 11 items that vary in terms of how familiar the participant is with mental illness and received a single familiarity score equal to the highest ranked item they chose. The 11 items represent situations that vary in intimacy with people with mental illness ranging from least intimate contact ("I have observed, in passing, a person I believe had a mental illness"), to medium intimacy ("I have worked with a person who had a mental illness"), to high intimacy ("I have a mental illness"). Three experts in psychiatric disability ranked the situations from 1 to 11 with 1 being the lowest level of intimacy of contact and 11 being the highest level of intimacy of contact. Inter-rater reliability was .83. Subsequently, the rank order was validated by 100 research participants (Holmes, Corrigan, Williams, Canar, & Kubiak, 1999).

Demographic questionnaire. Participants were asked to complete a demographic questionnaire specifically developed for this study. The questionnaire provided researchers with information regarding participants' age, gender, highest level of education completed, graduate academic program (counseling, psychology, social work, or other), work environment (private practice, inpatient psychiatric hospital, outpatient psychiatric hospital, non-profit agency, faith-based setting, or university/college), age of populations served (children, adolescents, or adults), frequency of working with clients with schizophrenia (daily, weekly, monthly, fewer than 6 a year, or never), and professional interest in offering interventions for people with schizophrenia and their caregivers.

Procedure

A stratified random sample of 1000 LPCs was selected from online membership records of four state licensing boards with each state representing one of the four regions of the U. S. as determined by the American Counseling Association. The number of invitations sent to each region was determined by the regions' proportion of the national LPC licensee membership: (a) Texas – Southern (42%); (b) Pennsylvania – North Atlantic (23%); (c) Missouri – Midwest (21%); and (d) Colorado – Western (14%).

A postcard was mailed via First Class U. S. mail to each participant's most recent address on file with their states' Board of Examiners with an invitation to participate in the survey by going to a commercial online site for electronic survey research. Participation was incentivized with a drawing for three $150 gift cards. A second reminder postcard was mailed approximately two weeks later, and a third reminder postcard was mailed approximately two weeks after the second postcard.   The duration of data collection was approximately seven weeks from the time the first postcard was mailed. Thus, the 111 participants represented an 11.1% response rate.

Results

The internal reliability estimates for each subscale were found: Responsibility (α = .42), Pity (α = .66), Anger (α = .78), Help (α = .69), Fear (α = .91), Segregation/Coercion (α = .61), RBS (α = .76), and SDS (α = .86). According to Field (2008), values of Cronbach's alpha substantially lower than .7 usually indicate an unreliable scale, but when dealing with psychological constructs, values below .7 can be expected because of the diversity of the constructs. Due to very low internal reliability, the Responsibility scale was removed from further analysis.

An exploration of descriptive statistics indicated the following results. Participating LPCs indicated on average moderately high, normally distributed scores on the subscales of Pity (M = 5.68, SD = 1.79) and Help (M = 6.00, SD = 1.61) but low, skewed, and kurtotic results for Anger (M = 1.60, SD = .887), Fear (M = 2.06, SD = 1.60), and Segregation/Coercion (M = 1.49, SD = .692). Participants reported high, fairly normally distributed scores on the RBS (M = 7.55, SD = 1.38) and the LOF (M = 7.79, SD = 1.48) and moderate, normally distributed scores for the SDS (M = 2.31, SD = .526).

Bivariate correlations were conducted utilizing Kendall's tau for data analysis due to the non-parametric qualities of some predictor variables and utilizing a more stringent alpha level (p < .01) to detect statistical significance due to the multiple bivariate correlations conducted. Follow-up analysis among demographic variables and criterion variables indicated that frequency of working with people like Harry (Freq; M = 2.76, SD = 1.34) was significantly positively correlated with the criterion variables of interest in providing counseling interventions to people like Harry (IIH; M = 3.50, SD = 1.11) and caregivers (IIC; M = 4.03, SD = .94). Therefore, Freq is included in Table 1 and was included in subsequent regression models as a predictor variable.

The strongest findings from the correlations were that as participants indicated increased frequency of working with people like Harry, they also indicated increased beliefs in recovery and interest in providing interventions for people like Harry and caregivers. Also, as participants reported increasing desire for social distance, they also reported decreasing desire to help and to provide interventions for people with schizophrenia and caregivers. Finally, the more participants reported fear of people with schizophrenia, the more they reported anger,

desire for segregation and/or coercion, and desire for social distance, and the less they

reported wanting to help people with schizophrenia. Results are found in Table 1.

Table 1

Correlation Matrix (Kendall's Tau) for the Level of Familiarity (LOF), Attribution Questionnaire-21 (AQ-21), Recovery Belief Scale (RBS), Social Distance Scale (SDS), Frequency in Working With (Freq), Interest in Providing Interventions for People like Harry (IIH), and Interest in Providing Interventions for Caregivers (IIC)

	Pity	Anger	Help	Fear	Seg	RBS	SDS	LOF	Freq	IIH	IIC
Pity	___										
Anger	.11	___									
Help	-.09	-.22**	___								
Fear	.25**	.45**	-.34**	___							
Seg	.24**	.24**	-.28**	.47**	___						
RBS	-.01	-.14	.26**	-.17	-.18	___					
SDS	.25**	.12	-.51**	.32**	.32**	.18**	___				
LOF	-.10	.04	.04	.04	-.01	.26**	-.19	___			
Freq	- .08	- .16	.25**	-.26**	-.22**	.27**	-.17	.18	___		
IIH	-.09	-.27**	.37**	-.28**	-.14	.19**	-.34**	.11	.52**	___	
IIC	.01	-.18	.21**	-.15**	-.13	.14	-.18	.04	.31**	.53**	___

Note. * *Correlation is significant at the *p* < .01 level (2-tailed).

Hierarchical regressions were conducted to predict LPCs' interest in providing

interventions for people with schizophrenia and their caregivers. For each criterion (IIH and

IIC), the first model was comprised of three predictors (Help, SDS, and RBS), and a second

model included the additional predictor Freq.   Results appear in Table 2.

Table 2

Hierarchical Regression Analysis and the Degree to which the Social Distance (SDS), Attitude of Helpfulness (Help), Recovery Beliefs (RBS), and Frequency of Working (Freq) Predicted Interest in Providing Interventions for People with Schizophrenia (IIH) and Their Caregivers (IIC)

	IIH					IIC				
	R^2	adjR^2	*Model* ΔR^2	β	sr^2	R^2	adjR^2	*Model* ΔR^2	β	sr^2
Model 1	.26	.24	.26***			.08	.05	.08*		
Social Distance (SDS)				-.20	.02				-.10	.46
Helpfulness (Help)				.30	.05**				.20	.01
Recovery Beliefs (RBS)				.10	.01				.02	.00
Model 2	.46	.44	.20***			.16	.12	.08***		
Frequency of Work (FW)				.49	.20***				.30	.08**
Social Distance (SDS)				-.21	.02*				-.10	.00
Helpfulness (Help)				.17	.01				.11	.01
Recovery Beliefs (RBS)				-.00	.00				.05	.00

Note. IIH: F_1 (3, 107) = 12.35***; F_2 (4, 106) = 22.42***
  IIC: F_1 (3, 107) = 3.01***; F_2 (4, 106) = 9.71***
  p < .05. **p* < .01. ***p* < .001.

As participants indicated more social helpfulness and belief in recovery and less desire for social distance, they indicated more interest in providing counseling interventions for people like Harry and their caregivers. Adding frequency of working with people like Harry almost doubled the amount of variance accounted for by the first model and created a new model that predicted almost half (46%) of the variance in participants' interest in providing interventions for people with schizophrenia and 16% of the variance in participants' interest in providing interventions for caregivers.

In summary, among this sample, a large number of statistically significant correlations existed among the nine predictor variables and two criterion variables. Specifically, as frequency of working with people like Harry reportedly increased, desire to offer social help reportedly increased, fear reportedly decreased, and desire for social distance reportedly decreased, and participants indicated more interest in providing counseling interventions for people with schizophrenia. Participants' interest in providing counseling interventions for caregivers was reportedly influenced by the same factors in the same way except for fear. Participants indicated that fear of people with schizophrenia did not influence their interest in offering counseling services to the caregivers. Increasing frequency of working with people with schizophrenia was reportedly the strongest predictor of interest in providing interventions for people with schizophrenia and their caregivers.

Discussion

The important findings in this study include that the majority of LPC participants reported low to moderate stigmatizing attitudes, strong beliefs in recovery, and moderate to high interest in providing interventions for people with schizophrenia and their caregivers. Furthermore, almost half of participating LPCs reported already working with individuals with schizophrenia, and frequency of work was significantly correlated with positive attitudes, beliefs in recovery, and interest in providing interventions for this population and their caregivers.

A high percentage of respondents were white females at least 40 years old with masters' degrees in counseling. The disproportionate number of white females in the sample seems to be a reflection of LPC demographics. Two sources suggest that the study sample was

reasonably representative of the LPC population. One counselor educator with 25 years of

experience stated that the preponderance of females in the sample reflected a preponderance

of females in counselor preparation programs (Janice Holden, personal communication, May

21, 2012). Also, a rapid estimate of male names included in the first 3500 individuals listed on

the Texas LPC roster revealed a composition of approximately 20% male that is comparable to

the study sample (16%).

Follow-up analysis of the demographic characteristics of participating LPCs revealed no

significant relationships between socio-demographic characteristics and attitudes. Although

this finding does not support Smith and Cashwell's findings that women and better educated

people had more positive attitudes, it is consistent with Angermeyer and Dietrich's (2005)

review of population-based attitude research in psychiatry from 1990-2004 and Nordt et al.'s

(2006) study of mental health workers in Switzerland.

Participants reported less fear, anger, and desire for segregation/coercion towards

people with schizophrenia than the general public (Angermeyer & Dietrich, 2005), police

officers (Watson et al., 2004), and community college students in the Midwestern U.S. (Corrigan

et al., 2003) yet expressed similar levels of pity and desire to help. Even though the majority of

participants reported low fear, the approximately 15% of participants who reported mild to

strong fear of people like Harry indicated the likelihood that prejudice and discrimination may

exist among some LPCs. An LPC who fears people with schizophrenia might discriminate by

avoiding or refusing to provide interventions to those persons or their families.

Participating LPCs reported a desire for a moderate amount of social distance from

people with schizophrenia. Their responses are summarized in Table 3. Although participants

indicated they were willing to work on the same job with, rent a room to, be neighbors with, or

recommend for a job someone like Harry, they also indicated feeling unwilling for someone like

Harry to take care of their children for a couple of hours or to marry one of their children.

Table 3

Social Distance Scale (SDS) Responses by Item

Items	Percent				Stats	
How would you feel about…?	Definitely Unwilling (1)	Probably Not (2)	Probably (3)	Definitely Willing (4)	Mean	SD
1…renting a room to someone like Harry	3.6	26.1	51.4	18.9	2.10	.76
2…working on the same job with someone like Harry	0	7.2	39.6	53.2	1.54	.63
3…having someone like Harry as a neighbor	0	5.4	45.9	48.6	1.57	.56
4…having someone like Harry taking care of your children for a couple of hours	37.8	50.5	9.0	2.7	3.23	.73
5…having one of your children marry someone like Harry	19.8	52.3	26.1	1.8	2.90	.73
6…introducing someone like Harry to a young woman with whom you are friends	14.4	46.8	33.3	5.4	2.70	.78
7…recommending someone like Harry for a job working for a friend of yours	2.7	21.6	54.1	21.6	2.05	.74

Compared to other studies, LPC participants indicated less need for social distance than

psychiatrists, psychologists, nurses, and the general public in Switzerland and the same as

"other therapists" with daily contact with patients, such as social workers, vocational workers,

and physiologists (Nordt et al., 2006). This finding seems to echo the result in this study that

frequent contact is related to lower desire for social distance. Furthermore, participating LPCs

indicated half the level of discomfort as indicated by the general public in Germany regarding

working on the same job with someone with schizophrenia (Gaebel et al., 2002).

Another important finding was that LPCs in this sample possessed a strong belief in the

potential of recovery from schizophrenia. A large percentage (77%) of participants agreed

strongly or moderately that "people with schizophrenia may experience partial or full recovery

with appropriate professional care." At the low end, 10% of LPCs strongly or moderately

disagreed that recovery from schizophrenia was possible, similar to the 11% of Italian

psychiatrists who were convinced that there was "little to do for patients with schizophrenia

other than helping them live in a quiet environment" (Magliano et al., 2004, p. 324).

Also, participating LPCs more familiar with people with schizophrenia reported stronger

beliefs in the possibility of recovery. The association of frequency of work with positive

attitudes and interest in providing interventions corresponds with Eack and Newhill's (2008)

findings that social work students' knowledge about and contact with persons with

schizophrenia were strongly related to positive attitudes toward this population. However,

reverse causation cannot be ruled out. It is possible that LPCs interested in providing

interventions for people with schizophrenia are more familiar with someone with schizophrenia

and thus more likely to seek out information regarding prognosis and to develop more positive

attitudes. Desire to provide interventions may influence recovery beliefs, not vice versa.

The results support confidence in LPCs as current and potential providers of evidence-

based interventions for people with schizophrenia and their caregivers at a time when a critical

shortage of such professionals exists (Frank, 2005; Schulze, 2007). Although LPCs' low stigma and moderate to high recovery beliefs indicate a solid foundation for effectively working with people with schizophrenia, lack of recognition as providers for this population may be the greatest barrier for LPCs to effectively fill the gap in services.

The American Psychology Association President, Melba Vasquez, stated recently that psychologists' perceptions of recovery need to change and that recovery concepts and principles need to be incorporated into education and training for doctoral students and current providers (Clay, 2012). Recently, five national mental health organizations received grants from the Substance Abuse and Mental Health Services Administration (SAMHSA) to participate in an initiative to create online resources on recovery principles and practices and to develop recovery-oriented curriculum for mental health professionals (Clay, 2012). The list of mental health organizations collaborating on this project includes psychiatrists (APA), psychiatric nurses (APNA), psychologists (APA), social workers (CSWE), and peer specialists (NAPS). Counselors were not included.

Counselors (ACA) were not included in the SAMHSA initiative despite the fact that LPCs clearly are already providing interventions for people with serious mental illness founded on a strong recovery-focused paradigm promoting wellness. Mary Jansen, a member of the Recovery Advisory Committee that guides APA's Recovery to Practice initiative, stated that the profession of psychology must embrace the training of psychologists in recovery oriented interventions or be left behind (Clay, 2012).   Already deeply rooted in wellness and recovery oriented beliefs and practices, LPCs might make important contributions toward developing recovery oriented curriculum and training, with or without help from SAMSHA.

Preparation to work with the SMI population requires both knowledge and interpersonal contact with members of the stigmatized group to influence attitudes (Corrigan et al., 2001, 2002, 2010; Holmes et al., 1999; Eack & Newhill, 2008). Programs preparing clinical mental health counselors and providing continuing education for existing LPCs need to include information on prognosis, the potential for recovery, effective treatments, the impact on families, and the needs of caregivers, and they need to challenge inaccurate stereotypes and replace them with factual information (Corrigan, 2010; Wahl et al., 2010).

Practical suggestions to increase familiarity and contact with people with schizophrenia might include Smith and Cashwell's (2010) recommendation for practicum counseling students to be involved with clients with serious mental illnesses. Perhaps counseling students could be required to volunteer or obtain a certain percentage of practicum or internship hours at community agencies, homeless shelters, the National Alliance on Mental Illness, or hospitals to meet people with schizophrenia and work with them over a period of time (Eack & Newhill, 2008). Individuals in recovery from schizophrenia, bipolar disorder, or first episode psychosis might be located through Peer Specialist programs and asked to speak to students in various courses regarding their experiences and recovery processes. The same could be done with family members and caretakers of people with schizophrenia.

Ultimately, reduction in stigma and increases in available interventions for people with serious mental illness may depend on framing mental illness as a social justice issue rather than just a medical concern (Corrigan, 2004). Stigma often hinders people from seeking mental health services because they fear social disapproval and diminished self-esteem from being labeled mentally ill. When mental health professionals speak of mentally ill clients in terms

such as "weird" or "not able to improve," they reveal their own prejudice and hinder recovery. When mental health professionals refuse to provide interventions for caregivers of people with schizophrenia because they "do not want the children of those people in my waiting room," they discriminate.   Perhaps research is needed to better understand stigma in terms of social justice in order to create more effective anti-stigma programs, even within mental health training programs.

This research contains some important limitations beginning with the relatively small sample of LPCs. Although a strong research design was utilized, the response rate was only 11.1%. LPCs who decided to respond might be those who had more interest in serious mental illness. Those LPCs who were not interested in serious mental illness might have been less likely to take the survey, thus skewing the results toward positive scores.

Because LPCs are already providing interventions for this population and report strong interest in providing care to this population and their caregivers, LPCs need to seek collaborative research and clinical efforts with other mental health professionals.   Professional counselors working with psychiatrists, psychologists, psychiatric nurses, and social workers may be able to improve availability and quality of care for people with schizophrenia and other SMI.

Future researchers need to explore the effectiveness of preparing counseling students to work with people with SMI and of interventions for decreasing stigma and increasing beliefs and desire. Past research focused mainly on schizophrenia and depression. Research is needed for other disorders such as bipolar disorder. Because different disorders have very different levels of stigma associated with them, research of people with general mental illness does not

seem to be very helpful at this time. Also, longitudinal studies are needed to explore and clarify

causes of attitudes and recovery beliefs over time.

Although very difficult to measure, research into how reported beliefs and attitudes

towards people with schizophrenia are related to actual behavior may be very important.

Although participants are reporting certain attitudes and intentions, action may not follow.

Furthermore, research is immediately needed concerning effective methods of gaining broader

access as providers of interventions for this underserved population and their families.

Conclusion

In conclusion, this research found that the majority of LPCs in this sample reported

positive attitudes towards, contact with, and strong beliefs in the possibility of recovery

regarding individuals with schizophrenia, yet still desired moderate social distance.   Some

participants reported stigmatizing attitudes that need to be addressed in training, workshops,

and personal reflection to prevent harm to clients. High frequency of working with people with

schizophrenia, strong recovery beliefs, high desire to offer social help, and low desire for social

distance were the variables most likely to indicate LPCs' interest in providing interventions for

individuals with schizophrenia and their caregivers. The findings of this study suggest LPCs are

well prepared in disposition, recovery beliefs, and interest to provide needed care for a

population that is much underserved. Results of this study emphasize the importance of

including LPCs as valuable contributors in all areas pertaining to treatment and recovery from

SMI, including professional interventions, curriculum development and instruction, and

research.

References

Angermeyer, M., & Dietrich, S. (2005). Public beliefs about and attitudes toward people with

mental illness: A review of population studies. *Acta Psychiatrica Scandinavica, 111,* 163-

179. doi:10.1111/j.1600-0447.2005.00699.x

Caldwell, T., & Jorm, A. (2001). Mental health nurses' beliefs about likely outcomes for people

with schizophrenia or depression: A comparison with the public and other healthcare

professionals. *Australian and New Zealand Journal of Mental Health Nursing, 10,* 42-54.

Clay, R. (2012, January). Yes, recovery is possible: APA is participating in a new federally funded

initiative designed to spread the word that people can – and do – recover from mental

illnesses. *Monitor on Psychology, 43,* 1. Retrieved from http://www.apa.org/monitor/

Corrigan, P., River, L., Lundin, R., Penn, D., Uphoff-Wasowski, K., …Campion, J. (2001). Three

strategies for changing attributions about severe mental illness. *Schizophrenia Bulletin,*

27, 187-195.

Corrigan, P., Salzer, M., Ralph, R., Sangster, Y., & Keck, L. (2004). Examining the factor structure

of the Recovery Assessment Scale. *Schizophrenia Bulletin, 30,* 1035-1042.

Corrigan, P., & Shapiro, J. (2010). Measuring the impact of programs that challenge the public

stigma of mental illness. *Clinical Psychology Review, 30*, 907-922.

doi:10.1016/j.cpr.2010.06.004

Corrigan, P., Markowitz, G., Watson, A., Rowan, D., & Kubiak, M. (2003). An attribution model

of public discrimination towards persons with mental illness. *Journal of Health and*

Social Behavior, 44, 162 – 179.

Eack, S., & Newhill, C. (2008). An investigation of the relations between student knowledge,

personal contact, and attitudes toward individuals with schizophrenia. *Journal of Social

Work Education, 44* (3), 77-95.

Field, A. (2008). *Discovering Statistics Using SPSS*. London, England: Sage Publications.

Frank, E. (2005). *Treating bipolar disorder: A clinician's guide to interpersonal and social rhythm

therapy.* New York, NY: Guilford Press.

Freudenreich, O., Holt, D., Cather, C., & Goff, D. (2007). The evaluation of management of

patients with first-episode Schizophrenia: A selective, clinical review of diagnosis,

treatment, and prognosis. *Harvard Review Psychiatry, 15*(5), 189-211. doi:

10.1080/10673220701679804

Gaebel, W., Bauman, A., Witte, A., & Zaeske, H. (2002). Public attitudes towards people with

mental illness in six German cities: Results of a public survey under special consideration

of schizophrenia. *European Archives of Psychiatry and Clinical Neuroscience, 252,* 278-

287. Doi: 10.1007/s00406-002-0393-2

Grausgruber, A., Meise, U., Katschnig, H., Schony, W., & Fleishhacker, W. (2007). Patterns of

social distance towards people suffering from schizophrenia in Austria: A comparison

between the general public, relatives, and mental health staff. *Acta Psychiatrica

Scandinavia, 115,* 310-319.

Holmes, E., Corrigan, P., Williams, P., Canar, J., & Kubiak, M. (1999). Changing public attitudes

about schizophrenia. *Schizophrenia Bulletin, 25*, 447-456.

Kelly, M., & Gamble, C. (2005). Exploring the concept of recovery in schizophrenia.

Journal of Psychiatric and Mental Health Nursing, 12, 245–251.

Kingdon, D., Sharma, T., & Hart, D (2004). What attitudes do psychiatrists hold towards people

    with mental illness? *Psychiatric Bulletin, 28*, 401-406.

Kuipers, E. (2010). Time for a separate psychosis caregiver service? *Journal of Mental*

    Health, 19(5), 401-404.

Lauber C., Anthony, M., Ajdacic-Gross, V., & Rossler, W. (2004). What about psychiatrists'

    attitudes to mentally ill people? *European Psychiatry, 19*, 423-427.

Magliano, L., Fiorillo, A., De Rosa, C., Malangone, C., & Maj, M. (2004b). Beliefs about

    schizophrenia in Italy: A comparative nationwide survey of the general public, mental

    health professionals, and patients' relatives. *Canadian Journal of Psychiatry, 49*, 322-

    330.

McGuire, P. (2000). New hope for people with schizophrenia. *Monitor on Psychology, 31*, 1-11.

Moore, E. & Kuipers, L. (1992). Behavioural correlates of expressed emotion in staff-

    patient interactions. *Social Psychiatry and Psychiatric Epidemiology, 27,* 298-303.

National Institute of Mental Health (2008). *Prevalence of serious mental illness among U. S.*

    adults by age, sex, and race. Retrieved May 2011 from http://www.nimh.nih.gov/

    statistics/SMI_AASR.shtml.

Nordt, C., Rossler, W., & Lauber, C. (2006). Attitudes of mental health professionals

    toward people with schizophrenia and major depression. *Schizophrenia Bulletin, 32*(4),

    709-714.

Penn, D., Guynan, K., Daily, T., Spaulding, W., Garbin, C., & Sullivan, M. (1994). Dispelling the

    stigma of schizophrenia: What sort of information is best? *Schizophrenia Bulletin, 20*(3),

    567-578.

Schulze, B. (2007). Stigma and mental health professionals: A review of the literature.

International Review of Psychiatry, 19, 137-155.

Smith, A. L., & Cashwell, C. S. (2010). Stigma and mental illness: Investigating attitudes of

mental health and non-mental health professionals and trainees. *Journal of Humanistic*

Counseling, Education, and Development, 49, 189-202.

Smith, A. L., & Cashwell, C. S. (2011). Social distance and mental illness: Attitudes among mental

health and non-mental health professionals and trainees. *The Professional Counselor:*

Research and Practice, 1(1), 13-20.

U. S. Department of Health and Human Services (1999). *Executive Summary*. Retrieved May 1,

2011 from www.surgeongeneral.gov-mental health: A report of the surgeon general.

Vibha, P., & Saddichha, S., & Kumar, R. (2008). Attitudes of ward attendants towards mental

illness: Comparisons and predictors. *International Journal of Social Psychiatry, 54*(5),

469-478. DOI:10.1177/0020764008092190

Wahl, O., & Aroesty-Cohen, E. (2010). Attitudes of mental health professionals about mental

illness: A review of the recent literature. *Journal of Community Psychology, 38* (1), 49-

62.

Watson, A., & Corrigan, P. (2005). Challenging public stigma: A targeted approach. In P. W.

Corrigan (Ed.), *On the stigma of mental illness* (pp. 281-295). Washington, DC: American

Psychological Association.

APPENDIX A

EXTENDED LITERATURE REVIEW

Introduction to Serious Mental Illness

At any given time across the world, approximately 5-7% of adults experience symptoms of serious mental illness (SMI), usually defined as mental illnesses such as schizophrenia, major depression, severe anxiety, or bipolar, dissociative, eating or personality disorders that are diagnosable psychiatric disorders lasting at least a year and producing impairment significant enough to be considered disabling (Kessler et al., 2001; Mowbray et al., 2006; National Institute of Mental Health, 2008). Schizophrenia alone is consistently reported in 1% of the world population with initial onset usually occurring with a psychotic episode in young adults between the ages of 18 to 24 years old (National Institute of Mental Health, 2008). Bipolar disorder, reported in approximately 2% of the global population, also frequently begins at a similar age and in a similar manner due to psychotic symptoms during manic episodes (National Institute of Mental Health, 2008). The first episode of psychosis (FEP) often traumatizes young adults and their families, bringing great distress and overwhelming fear (Reed, 2008). Following the initial crisis and hospitalization, individuals are usually discharged into the care of their parents with little information regarding diagnoses, prognoses, how to navigate a confusing mental health system, effective interventions, or caregiver needs (Askey, Holmshaw, Gamble, & Gray, 2009).

Compounding the problem, the trauma of psychosis in late adolescence or early adulthood occurs at a critical time for identity formation and development of intimacy and may lead to major disruptions of cognitive schemas of self and others (Henry, Edwards, Jackson, Hulbert, & McGorry, 2002). The trauma of psychotic episodes creates distress and fear while simultaneously removing social support due to stigma and misperceptions surrounding mental

illness (Macdonald, Sauer, Howie, & Albiston, 2005). Resulting social isolation, shame, and loss

of hope contribute to the high suicide rate among individuals with psychosis due to SMI

(Muesser & Gingerich, 2006; Newman, 2004; Torrey, 2006).

Similarly, parents of individuals suffering an initial episode of psychosis also report

symptoms of trauma. Recent studies focused on schizophrenia indicate approximately one-

third of caregivers of individuals with schizophrenia meet criteria for post-traumatic stress

disorder (PTSD) caused by learning that their children have a chronic, life-threatening illness

(Barton & Jackson, 2008; Kuipers, Onwumere, & Bebbington, 2010). Jones, Wynne, and

Watson (1986) stated there was little doubt that FEP could overload coping resources of the

individual and the family; thus, FEP typically instigates a major crisis in the family unit.

However, researchers have compiled empirical data regarding new interventions

indicating that prognosis for individuals experiencing psychotic disorders, including

schizophrenia, is improving (Kelly & Gamble, 2005) and that recovery is more common than

many people believed (Frese & Davis, 1997; Torrey, 2006). McGuire (2000) stated that

recovery should not be ruled out as a possibility for anyone and needs to be acknowledged as a

reality for many such individuals. Hope is documented to be an important facilitating factor in

recovery from psychosis because it provides courage to change, trust, and persevere for both

those struggling with psychosis and their caregivers (Jones, 2009; Perry, Taylor, & Shaw, 2007).

Caregivers' attitudes strongly impact recovery from psychosis attributed to

schizophrenia. The first three years following FEP are critical and formative in influencing the

long-term trajectory of recovery (Freudenreich, Holt, Cather, & Goff, 2007; Gray, Robinson,

Seddon, & Roberts, 2010). Effective caregivers largely decide, initiate, and maintain contact

between the recovering individuals and their mental health services (Sin, Moone, & Newell, 2007) while communicating attitudes of hope, warmth, and encouragement (O'Brien et al., 2008).   Worldwide, multiple researchers have reported interventions for caregivers, such as family therapy, multifamily psychoeducational groups, individual behavioral therapy, and online resources that improved patient recovery and reduced relapse rates while also decreasing caregiver burden, anxiety, and depression (Addington, McCleery, & Addington, 2005; Cassidy, Hill, & O'Callaghan, 2001; Kuipers, 2010; Lowenstein, Butler, & Ashcroft, 2010).   Yet, services for caregivers are scarce in the United States, and caregivers report feeling forgotten, undervalued, and overwhelmed with lack of knowledge and with shame, social isolation, and stigma (Jones, 2009; Kuipers et al., 2010).

Although lack of services for both people diagnosed with a SMI and caregivers is one hindrance to recovery, stigma may be an even greater barrier (Vibha, Saddichha, & Kumar, 2008).   Negative attitudes, such as stigma, among mental health professionals toward those with SMI have been consistently linked with negative outcomes among both recovering individuals and caregivers (Moore & Kuipers, 1992; Snyder, Wallace, Moe, Ventura, & Liberman, 1996). Stigma may be defined as a mark of shame or disgrace that is manifested by bias, distrust, stereotyping, fear, embarrassment, anger, and/or avoidance (U.S. Department of Health and Human Services, 1999). Stigma often leads to acts of discrimination in services offered. However, the success of de-institutionalization of psychiatric care relies upon society's tolerance, understanding, and non-discrimination (Vibha et al., 2008). Therefore, research is needed to identify attitudes toward individuals with SMI and to develop effective methods for establishing helpful and positive attitudes. Such research is especially important among those

mental health providers who are responsible for providing care and encouragement for people with SMI.

Because stigma presents a serious and significant barrier to prevention of and recovery from psychosis, the World Psychiatric Association designated fighting stigma related to mental illness a top priority (World Psychiatric Association, 1998). In the past decade, several researchers around the world studied attitudes and knowledge of various populations towards individuals with SMI (Caldwell & Jorm, 2001; Moldavan, 2007; Vibha et al., 2008). Research on stigma associated with SMI has been primarily focused on stigma toward people with schizophrenia because this population tends to receive the harshest stigmatization (Eack & Newhill, 2008; Nordt, Rossler, & Lauber, 2006; Ponizovski, Shvars, Sasson, & Grinshpoon, 2008). In many countries around the world, researchers have compared beliefs and attitudes of mental health professionals with beliefs of the general public regarding people with schizophrenia. The researchers reported an assortment of pessimistic and optimistic beliefs about prognosis for people with schizophrenia (Caldwell & Jorm, 2001). Researchers reported finding negative attitudes toward collaboratively working with these individuals and their families with an emphasis on recovery and hope for meaningful lives (Eack & Newhill, 2008; Sin et al, 2007). In the past 10 years, numerous qualitative and quantitative studies conducted among samples of social workers, nurses, psychiatrists, psychologists, and teachers revealed measurable stigma toward individuals with schizophrenia (Askey et al., 2010; Kuipers, 2010; Moldavan, 2007).

However, professional counselors have rarely been mentioned in any study of attitude and stigma toward people with any SMI. A very broad search of literature across many mental

health professions revealed only two published articles that included measures of counselors' attitudes toward people with SMI (Smith & Cashwell, 2010, 2011) and no articles about LPCs attitudes toward people with schizophrenia. Smith and Cashwell (2010) investigated attitudes of a variety of mental health professionals (psychologists, counselors, and social workers) and non-mental health professionals and trainees toward people with SMI.   However, in the study by Smith and Cashwell (2010), sample sizes were small for each category of mental health worker and only 23 counselors of unknown licensure were included in the study.

Statement of the Problem

To date, no published study has focused specifically on licensed professional counselors (LPCs) to examine relationships among their attitudes toward, recovery beliefs regarding, familiarity with, desired social distance from, and interest in offering services to individuals with schizophrenia or their caregivers. The exclusion of LPCs from such studies minimizes LPCs' current and potential involvement in offering effective services for people with schizophrenia or any other SMI and their caregivers. Although LPCs seem well-equipped to assist in filling the current gap in available services, especially for caregivers of those recovering from onset of schizophrenia, numerous international and national studies overlooked LPCs as providers of such mental health services. Currently, no study exists of LPCs' involvement, interest, or attitudes toward individuals recovering from schizophrenia and their caregivers.

Purpose of the Study

The purpose of this study is to examine the relationship between LPCs' attitudes toward, recovery beliefs regarding, familiarity with, desire for social distance from, and interest in providing services to individuals with schizophrenia and their caregivers.

Literature Review

The following section is a review of professional literature regarding how the course and outcomes of SMI may be hampered by stigma from the general public and mental health professionals. Over the past 20 years, stigma and discrimination by the general public toward individuals with SMI have been well-documented in multiple studies; however, research of attitudes and behaviors of mental health professionals is limited and contradictory (Wahl & Aroesty-Cohen, 2010). Furthermore, stigma research of mental health professionals has included numerous samples of psychiatrists, psychologists, nurses, and social workers (Caldwell & Jorm, 2001; Schulze, 2007; Wahl & Aroesty-Cohen, 2010) but has excluded professional counselors, except in two recent publications of a single study with a small sample size (Smith & Cashwell, 2010, 2011). As mental health care professionals able to provide needed and effective psychosocial interventions for individuals with SMI and their caregivers, LPCs need to be included in mental health stigma research. Specifically, this section reviews the challenges faced by people recovering from the onset of psychosis associated with the SMI of schizophrenia and their families, the conceptualization of stigma and its effect on recovery, the importance of hope for recovery, evidence-based treatments that aid recovery, and empirical studies of attitudes of the general public and mental health professionals.

Serious Mental Illness

Epidemiological studies estimated 5-7 % of adults in the United States experience SMI at any given time (Kessler et al., 2001; National Institute of Mental Health, 2008). Across the world, people of all races, ethnicities, cultural backgrounds, ages, and socioeconomic backgrounds are affected by SMI cognitively, emotionally, and behaviorally. Although there is

no single accepted definition, the typical description of SMI merges clinical definitions of disease severity with psychiatric disability. The National Institute of Mental Health (NIMH, 2008) defined SMI as mental, behavioral, or emotional disorders (excluding developmental and substance use disorders) diagnosable within the past year by meeting the criteria within the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV-TR, American Psychiatric Association, 2000) and resulting in serious impairment of functioning with substantial limitations of at least one major life activity. The diagnoses typically referred to as SMI include major depression, bipolar disorder, schizophrenia and other psychotic disorders, severe anxiety disorders, and eating disorders (Mowbray et al., 2006). For schizophrenia alone, researchers reported direct and indirect costs for the United States in 2000 to have been approximately 40 billion dollars (Torrey, 2001). In Canada, annual expenses for direct and indirect treatment and social support for people with schizophrenia has averaged 4.3 billion dollars. Despite this outpouring of money, many people diagnosed with schizophrenia and other SMIs have not received evidence-based services appropriate for their treatment and recovery (Kelly & Gamble, 2005).

One obstacle to mental health services for people with any SMI is the stigma of mental illness and resulting discriminatory behavior (Schulze, 2007). The 1999 U.S. Surgeon General's report stated that mental health could not be separated from general health and that stigma must be better understood and eliminated to improve mental health care (Executive Summary, U.S. Department of Health and Human Services, 1999). Following the Surgeon General's report, researchers responded with numerous international initiatives to combat mental illness stigmatization of people with SMI (Wahl & Aroesty-Cohen, 2010). Worldwide, researchers

narrowed their focus to stigma toward people with psychotic disorders, specifically

schizophrenia, because of evidence of harsher judgments by the public toward this particular

subset of SMIs (Pescosolido, Monahan, Link, Stueve, & Kikuzawa, 1999), of greater problems

with effective mental health treatment (Fenton, Blyler, & Heinssen, 1997), and of greater

stigma by mental health professionals (Cohen & Struening, 1962).

Psychosis is most commonly associated with serious mental illnesses such as

schizophrenia, mania, and major depression and is manifested by symptoms such as delusions,

hallucinations, odd behaviors, and confused thinking (Reed, 2008; Torrey, 2001).

Approximately 2% of the adult population in all countries will experience psychosis not

attributed to substance abuse during their lifetimes (Kuipers, 2010). Across all world cultures,

the first episode of psychosis (FEP) usually occurs in young adults between the ages of 18 to 24

years old (NIMH, 2005).   Substance abuse and a wide variety of non-psychiatric medical

disorders can cause psychosis and must be eliminated prior to making a diagnosis of any

psychiatric disorder (Freudenreich et al., 2007). Once medical and substance abuse causes for

psychosis are eliminated, clinicians begin the process of looking at patients' history of

symptoms to determine if FEP is due to affective disorders such as bipolar or depression, other

non-psychotic disorders such as obsessive-compulsive or dissociative disorders, or

schizophrenia spectrum disorder such as schizophrenia, schizophreniform psychosis, or

schizoaffective disorder, other non-affective psychosis, or brief psychotic disorders

(Freudenreich et al., 2007).

Effect of Stigma on Recovery

Despite the identification of several empirically supported interventions for treatment

of specific SMIs, including schizophrenia, many people never receive effective interventions or fail to follow prescribed protocols (Corrigan, 2004). Corrigan (2004) reported that many people with SMI avoid acquiring mental health care in an attempt to avoid being labeled mentally ill due to the potential harm from stigmatization. Markowitz (2005) stated that stigma connected with participating in mental health services influenced the course of the illness by lowering self-esteem, limiting interpersonal contacts, and reducing opportunities for employment. Combined, these factors increased stress, which may have led to greater severity of symptoms and relapse.

The failure of persons with SMI to acquire recommended services has been influenced by several factors, one of which is avoidance of being labeled and stigmatized (Corrigan, 2004). Researchers of various large, reliable studies stated that 40% of people with SMI never began treatment, and fewer than 10% of individuals with psychiatric disabilities received vocational rehabilitation, case management, or outpatient treatment (Kessler et al., 2001). Lehman et al., (1998) conducted a large survey and reported that 90% of individuals with schizophrenia in the United States received medication, but less than half of the participants reported participating in appropriate psychotherapies, less than 25% were involved in family therapy, and only about 10% received case management.

Research has indicated that people able to conceal stigmatizing traits often decide to avoid stigma by denying their group status and avoiding any institutions that might mark them as mentally ill. Seeking to avoid labels seems to be one of the most common ways stigma has hindered people from seeking care and maintaining treatment (Corrigan, 2004). Desire to avoid stigma has been a contributing factor of failure to use prescription medications as directed,

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further complicating effective treatment for SMI. Cramer and Rosenbeck (1998) reviewed 34

studies regarding compliance with psychiatric medication and found 40% of persons receiving

antipsychotics failed to fully comply with medication guidelines, which was estimated to have

tripled re-hospitalizations and increased cost an estimated $800 million worldwide (Weiden &

Olfson, 1995).

Link and colleagues (1987, 1989, and 1999) conducted a series of studies using a

devaluation-discrimination scale to measure the extent of expected rejection, that is, beliefs

that people participating in treatment for SMI will experience rejection by friends, teachers,

employees, and dating partners. From these studies, Link and colleagues reported that most

people with SMI and members of the general public believed that people labeled mentally ill

will experience some degree of devaluation and discrimination.   These expectations of

rejection led to demoralization, shame, and negative effects on income, employment, and

social support networks. Furthermore, people with SMI attempted to cope with the stigma by

embracing secrecy and social withdrawal, which further lowers self-esteem and self-efficacy

(Markowitz, 2005).

Family shame also significantly affected treatment avoidance (Corrigan, 2004).

Researchers reported that people with psychiatric diagnoses were more likely to avoid services

if they believed family members would feel disgraced and were more likely to seek services if

family members expressed positive attitudes regarding treatment (Corrigan, 2004). Barton and

Jackson (2008) reported caregivers' vulnerability to social pressures of stigma and self-blame

were associated with poorer experiences of caregiving and quality of life for the caregiver and

increased symptoms for the psychosis sufferer.

Lastly, researchers have consistently reported attitudes of mental health workers toward individuals with schizophrenia were related to treatment outcomes (Moore & Kuipers, 1992; Snyder et al., 1996). Health care providers' attitudes towards psychosis played a key role in access to services and client recovery. Provider attitudes seemed to mediate the relationship between therapeutic alliance and outcomes (Fenton et al., 1997; Sartorius, 2002). Furthermore, negative attitudes of mental health professionals toward individuals with schizophrenia have been shown to hinder successful implementation of various pharmacological and psychosocial interventions while increasing self-stigma, depression, and discouragement (Eack & Newhill, 2010; Moore & Kuipers, 1992; Snyder et al., 1996).

Conceptualizing Stigma

The stigma of mental illness is a complex phenomenon that has heavily impacted the lives of individuals affected by SMI and constructed obstacles to life chances and access to mental health services (Schulze, 2007). Ultimately, family, friends, service providers, and society as a whole have been negatively influenced by stigma as stress is heightened, appropriate help-seeking is delayed, or helpful treatments are terminated (Corrigan, 2005; Schulze, 2007, Wahl & Aroesty-Cohen, 2010). Governments and mental health professionals across the world have agreed that stigma of mental illness must be reduced to improve the lives of children and adults suffering discrimination and prejudice (Corrigan, 2010; Schulze, 2007). Because of the seriousness of the problem, governments of Australia, Canada, the United Kingdom, and most of the 50 states in the United States have begun to support stigma change programs. For over a decade, researching and eliminating stigma has been a central goal in national and international health policy.

Researchers developed three paradigms to attempt to explain the strong influence of stigma: (a) sociocultural perspectives whereby stigmas justify existing social injustices, (b) motivational biases whereby stigmas meet psychological needs, and (c) social cognitive theories whereby processing human knowledge structures produces stigma (Corrigan, 1998). Several prominent researchers over the past 20 years utilized social cognitive paradigms for studying mental health stigma due to broad theoretical foundation with rigorous and empirically tested research methodology and interventions for both understanding and changing stigma at the societal level (Corrigan, 2004; Judd & Park, 1993).

Social Cognitive Model of Stigma

Corrigan (2004) utilized a social cognitive model of mental illness stigma to explain how the relationship between signals such as labels, symptoms, skill deficits, and appearance and discriminatory behaviors such as employment, housing, affiliation, and treatment, are mediated by cognitive stereotypes such as authoritarianism, benevolence, social restriction, and dangerousness. Corrigan (2004) framed the stigma process as four social-cognitive processes: (a) signals, (b) stereotypes, (c) prejudice, and (c) discrimination. For example, a young man with SMI might signal people nearby about his mental illness by talking to himself as he sits on a bench. This signal may illicit a cognitive stereotype about mentally ill people being dangerous. A prejudiced person will choose to believe the stereotype, to react emotionally with fear or anger, and to choose discriminatory behaviors such as avoiding, calling the police, or refusing to lease an apartment to the man who appears to have SMI. Similarly, a mental health provider who fears people with schizophrenia may choose to discriminate by avoiding or refusing to offer services to the same man or his family.

Definition of Stigma

Stigma may be defined as a mark of shame or disgrace that is manifested by bias, distrust, stereotyping, fear, embarrassment, anger, and/or avoidance (U.S. Department of Health and Human Services, 1999). Stigma indicates a devalued status with adverse cognitive and behavioral consequences (Markowitz, 2005). Link et al. (2001) defined stigma as a process in which individuals with social differences receive a label that leads to stereotypes resulting in discrimination, loss of socioeconomic status, and fewer life opportunities. Stigma has occurred when an individual takes on a new degraded identity that negatively affects the nature of social interactions. Mental illness has been a strongly discrediting attribute widely misunderstood by the public and linked to many damaging stereotypes, including dangerousness, weakness, and incompetence (Markowitz, 2005).

Signals

Although the public cannot identify with certainty people who are mentally ill by appearance alone, mental illness is often inferred from four signals: (a) labels, (b) psychiatric symptoms, (c) social-skills deficits, and (d) physical appearance (Corrigan, 2004). However, it is possible to mistakenly categorize someone as mentally ill based on these cues and for people to conceal their status as mentally ill by avoiding these cues. For instance, researchers found that people labeled "mentally ill" by the public had less income and greater likelihood of being underemployed compared to an equally impaired group of people who were not labeled (Link et al., 1987). Link et al. (1987) conducted a study in which label and aberrant behavior were manipulated. Link et al. (1987) found that the general public stigmatized people labeled mentally ill even in the absence of strange behavior. Link et al. (1987) concluded that being

labeled mentally ill is associated with negative reactions from society that exacerbate symptoms and hinder recovery.

Behavior due to psychiatric symptoms has led to stigma. The general public is often frightened by symptoms of schizophrenia such as inappropriate affect, bizarre behavior, speech irregularities, and talking to self. Link et al. (1987) concluded that psychiatric symptoms produced greater stigmatizing reactions than labels alone. Poor social skills due to psychiatric illness, such as poor eye contact, body language, and inappropriate topics for conversation, cued others to mental illness and led to stigmatizing attitudes (Corrigan, 2004).

Personal appearance is the fourth area that has drawn attention to potential mental illness and led to stigma. In particular, poor clothing choice and personal hygiene often led to assumptions of mental illness and responses from the public based on stereotypes (Corrigan, 2004). However, not everyone with poor hygiene or dressed poorly has been mentally ill.

Stereotyping

Stereotyping has occurred when a labeled difference has been linked to undesirable characteristics in the minds of observers or the labeled person (Link et al., 2004). For instance, a person hospitalized for mental illness may have been placed by others in a category of people who are dangerous. Stereotypes are perceived as learned knowledge structures about some marked social group (Corrigan, 2004) and efficient ways of putting people into categories by collectively agreed on notions about groups of persons (Link et al., 1987). For instance, persons with SMI have been commonly stereotyped as dangerous, irresponsible, incompetent, unlikely to recover, and responsible for their continued struggle with mental illness (Corrigan, 2004; Taylor & Dear, 1981; Wahl, 1999; Watson & Corrigan, 2005).

Although stereotypes have been general common knowledge, people have chosen whether to believe them or not. When people agreed with negative stereotypes, prejudice was born and generated negative emotional reactions. Prejudice has tended to be associated with feelings of anger, irritation, anxiety, pity, and fear in the one being stigmatized. These feelings have often been detected by people being stigmatized and perceived as a statement about how they are seen as a person (Link et al., 2004). The person who is stigmatized may have felt embarrassment, shame, fear, alienation, or anger. Shame has been central to the destructive power of stigma. Some social psychologists have contended that emotional expression and past behavior toward individuals in a group may also have prepared the foundation for prejudice (Zanna & Rempel, 1988).

Labeling and stereotyping has been found to lead to the feelings and cognitions of prejudice that prompt the behavior of discrimination. Some people have constructed rationales for devaluing, rejecting, and excluding those whom they have labeled, set apart, and linked to undesirable characteristics (Corrigan, 2004). Individual discrimination has occurred when an employer passes over a job application or an apartment manager places a lease application in the trash of a person with mental illness. Structural or cultural discrimination has occurred when institutional practices place stigmatized groups at a disadvantage. For instance, research on schizophrenia has received less funding, and treatment facilities have been in poorer settings, compared to those for other illnesses (Corrigan, 2004). Discrimination has been observed as negative action against the out-group, such as avoiding or not associating with them. However, exclusive positive action for the in-group also has been discriminatory,

such as funding medical research for cancer but not funding mental health research for bipolar

disorder or schizophrenia.

The conceptualization of stigma by Link et al. (2001) included the idea that stigma

cannot exist without cultural, economic, or political power to bestow it with serious

discriminatory consequences. Less powerful groups such as psychiatric patients attempting to

label, stereotype, and cognitively separate themselves from more powerful groups such as

psychiatrists, politicians, and landlords would be unlikely to create harmful consequences. Nor

has stigma toward lawyers or politicians seemed to have created much visible harm to the

people in those groups (Link et al., 2004).

Four Types of Stigma

After conceptualizing stigma in terms of stereotypes, prejudice, and discrimination,

Corrigan (2004) stated that stigma may be divided into four distinct types: (a) public stigma, (b)

self-stigma, (c) institutional policies, and (d) social structures. He found that each type of

stigma overlapped with the other types and impacted people with mental illness, family

members, mental health providers, and the general public.

Public Stigma

Public stigma has been the reaction of the public in the forms of stereotypes, prejudice,

and discrimination toward individuals with SMI which removed or blocked access to life

opportunities essential for reaching life goals (Corrigan, 2004). Employment and housing, two

areas identified as important for self-esteem, health, and life fulfillment, have been frequent

sources of great frustration for people suffering from SMI (Corrigan, 2004). Stigma also

influenced the prevalence of people with SMI involved with the criminal justice system. People

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with SMI have been more likely than others to be arrested and to spend more time in jail (Corrigan, 2004). Public stigma also strongly impacted the general health care system as people labeled mentally ill received few health care services than those without mental health issues (Druss & Rosenheck, 1998). Furthermore, people with SMI have less access insurance benefits than people without mental illness (Druss & Rosenheck, 1998).

Care-seeking and treatment adherence has varied inversely with stigmatizing attitudes (Corrigan, 2004). Corrigan (2004) summarized multiple studies reporting that adults and adolescents who endorsed stigma of mental illness were less likely to obtain care when needed and that perceptions about treatment success mediated the relationship between stigma and seeking care.

Self-Stigma

People with mental illness often have accepted the stereotypical images surrounding them in their society and experienced low self-esteem, self-efficacy, and hope for the future (Corrigan, 2004). This kind of self-stigma often resulted in a sense of being less valued by society (Link et al., 2001). Wahl (1999) reported qualitative and quantitative data from many studies revealed reduced self-esteem of people with mental illness and their families to be a significant problem. Similar to public stigma, self-stigma also included prejudice. When people with SMI agreed with mental illness stereotypes, they became prejudiced about themselves. Feeling worthless and hopeless, they may have believed they were weak and unable to care for themselves (Corrigan & Kleinlein, 2005). Self-prejudice may have led to self-discrimination as they chose not to pursue work or independent living opportunities (Corrigan & Kleinlein, 2005).

However, many people with SMI have not agreed with negative stereotypes and often either ignored the effects of public prejudice or reacted in anger (Corrigan & Kleinlein, 2005). Similar to public stigmas toward African-Americans and women, many people stigmatized because of mental illness have not reported a decline in self-esteem (Hayward & Bright, 1997). Corrigan and Kleinlein (2005) reviewed research on empowerment and stated that persons with intact self-esteem not hindered by community stigma either felt indifference or indignation about stigma. In response to unjust stereotypes regarding people with SMI, individuals who highly identified with the mental illness group expressed righteous anger, but those who did not identify with the mental illness group showed indifference.

Many people have not wanted to be labeled mentally ill because they feared the prejudice and discrimination that accompanies the label, internally and externally. Thus, many people with SMI did not pursue mental health services if they or their family members experienced negative reactions or prejudice toward mental illness or services (Corrigan & Kleinlein, 2005). Supporting the concept of self-stigma as a barrier to recovery, Sirey, Burce, Alexopoulos, Perlick, Friedman, and Myers (2001) reported minimal perception of stigma as a predictor of treatment adherence.

Stigma that affects family members of people with SMI has been called courtesy or associative stigma (Gray et al., 2010). At times, caregivers have avoided contact with neighbors, friends, and relatives due to embarrassment, shame, and fear of stigma. Gray et al. (2010) reported that many caregivers feel embarrassed and stigmatized by having a husband or child with mental illness and attempt to keep the problem a secret. This silence has removed needed dialogue between caregivers and others that might help identify appropriate and

effective services, resources, and support (Gray et al., 2010). Gray et al. (2010) reported many

caregivers withdraw in silence because they believe other people will blame them for mental

illness in the family.

Institutional Policies

At the society level, institutional policies based on the prejudice of people in leadership

have become translated into laws and regulations that discriminate against people with mental

illness (Corrigan & Kleinlein, 2005). Concepts of institutional stigma related to racism and

sexism have been well-developed, but comprehensive research documenting this type of

stigma toward people with mental illness has not been published. However, Corrigan and

Kleinlein (2005) described state laws that restrict the rights of people with mental illness in the

areas of jury service, voting, holding public office, marriage, and parenting. Frequently, it is

simply the label of having a mental illness, rather than evidence of current psychiatric disability,

that determines restrictions.

Social Structures

Social structures constructed due to economic and political injustices have been another

source of stigma. Just as there are disparities of insurance rates across communities of

different races, there has not been equal insurance coverage for general medical conditions

and mental health conditions (Corrigan & Kleinlein, 2005). Corrigan and Kleinlein (2005) stated

that the unproven assumption has been that greater benefits for mental health would be cost

prohibitive, would bankrupt small businesses by raising health care costs, and would limit

benefits for physical health. Another example of discriminative social structures was found in

the lower rate of federal funding for mental health research compared to other areas of health

research (Link et al., 2001).

Challenges of Diagnosing and Treating Psychotic Disorders

Impact of Psychosis on the Individual

Stigma is one of several hindrances to timely diagnosis and treatment of young adults

with early stage psychosis (Corrigan, 2004). The acute stages of FEP usually occur in

adolescence, the stage of life when individuals are leaving family and moving toward

independence, forming identities, and exploring roles in society (Reed, 2008). Psychosis during

adolescence disrupts this developmental process and escalates feelings of uncertainty,

hopelessness, confusion, and fear (Reed, 2008). At the same time young adults are traumatized

by FEP and in great need of social support, friends and family often withdraw in anger or

misunderstanding due to the afflicted individual's odd behaviors and/or aggressiveness or the

stigma of mental illness (Macdonald et al., 2005; Reed, 2008). In many instances, young adults

recovering from a psychotic episode withdraw from their friends and hide inside their homes

due to embarrassment, fear of being judged, and loss of motivation (Reed, 2008). Reed (2008)

stated that this social isolation leads to loneliness, increased stigmatization, social dysfunction,

and depression. Ironically, those individuals with greater insight and awareness into the

seriousness of their illness – and, thus, ultimately greater coping potential – are at risk of

deeper depression during the early emergence and diagnosis phases of SMI (Iqbal, Birchwood,

Hemsley, Jackson, & Morris, 2004).

Frequently, individuals with SMI do not disclose sporadic delusions, disorganized

thoughts, or hallucinations due to fear of stigma and/or to embarrassment, denial, or lack of

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awareness (Mowbray et al., 2006; Reed, 2008). Furthermore, family members and friends

frequently do not recognize emerging symptoms due to lack of knowledge, fear of SMI stigma

for both the individual and family, and attribution of problems to normal difficulties of

adolescence (Jones, 2009; Kuipers, 2010). Symptoms of psychosis are often categorized as

positive or negative with positive symptoms referring to thoughts and perceptions added to

individuals, such as delusions and hallucinations, and negative symptoms referring to attributes

lost by individuals, such as loss of energy, emotion, motivation, memory, and ability to focus

attention (Mowbray et al., 2006).

The initial treatment for acute FEP often begins with hospitalization to keep the client

safe from violence or suicide, to facilitate a complete exam for biological abnormalities and

drug complications, and to begin antipsychotic medication to relieve positive symptoms

(Freudenreich et al., 2007; Torrey, 2001). Hospitalization for FEP may range from days to

months but generally averages about three weeks, depending on the client's response to

medication (Muesser & Gingerich, 2006). Adding to many families' confusion, mental health

professionals may not quickly provide definitive diagnoses due to the need to observe

symptoms over several months to establish various diagnostic criteria (Askey et al., 2009).

Released from the hospital after psychotic symptoms and suicidal ideation are

significantly reduced, individuals recovering from psychosis struggle to regain their strength,

recover from trauma of psychosis and hospitalization, adjust to side-effects of medication,

regain confidence, and re-establish relationships often strained by prior psychotic behavior

(Reed, 2008). Individuals recovering from psychosis may meet with psychiatrists in outpatient

care over several months in a trial-and-error search for dosages of medications that will control

psychotic symptoms with minimal side-effects (Muesser & Gingerich, 2006). Although

researchers have discovered a combination of psychosocial, family, and pharmaceutical

interventions produce the best outcomes in early psychosis (Wykes, Steel, Everitt, & Tarrier,

2008), pharmaceuticals are often the only treatment available once the patient leaves the

hospital. Also problematic is the high relapse rate (80%) among those who discontinue

medication within one year of initial treatment (Torrey, 2001).

Early interventions protect an individual from harming self or others and provide the

best chance for positive outcomes (Freudenreich et al., 2007; Reed, 2008). Most researchers

have agreed that early diagnosis and treatment of FEP leads to improved long-term prognosis,

prevention of continued trauma and deterioration of cognitive abilities, relief from anxiety for

the whole family system, and decreased likelihood of relapse (Bauml et al., 2006; Francey et al.,

2010; Frank, 2005; Lehman et al., 2004; Mueser & Gingerich, 2006; Reed, 2008; Torrey, 2006).

Left untreated, FEP places sufferers at high risk of suicide, increased illegal drug use, and other

dangerous behaviors (Freidenreich et al., 2007). Typically occurring during the early years

following FEP, suicide is the leading cause of death among young adults with schizophrenia and

bipolar disorder, with 10-17% taking their own lives (Muesser & Gingerich, 2006; Newman,

2004; Torrey, 2001).

Impact of Psychosis on Family

Prior to 1950, people with schizophrenia were frequently detained in government

maintained institutions. About 25 years ago, development of anti-psychotic medications and

concern regarding the health and care of individuals with psychotic disorders led to

deinstitutionalization and an emphasis on community care (Askey et al., 2009). Because FEP

usually strikes in late adolescence and early adulthood, the majority of young people

experiencing a psychotic disorder have returned home to be cared for by parents or spouses

following the crisis (Freudenreich et al., 2007; Sin et al., 2007; Torrey, 2001).

Although untrained and lacking knowledge and support, family caregivers have provided

the dominant interventions during the first three years following FEP, the years that are critical

and formative in influencing the long-term trajectory of psychosis (Birchwood, Todd, & Jackson,

1998; Sin et al., 2007). Researchers of evidence-based family interventions confirmed that

caregivers assisted in recovery of individuals suffering from psychosis (Pharaoh, Mari,

Rathbone, & Wong, 2006) and that family therapy significantly reduced relapse rates (Jones,

2009; Kuipers, 1999, 2010). However, schizophrenia and other psychotic disorders often

impose a high toll on family members financially and emotionally. The journey as caregiver

often begins with a frantic search for help while sorting through the confusing mental

healthcare system and simultaneously experiencing tremendous fear and distress as a parent

(Tucker, Barker, & Gregoire, 1998). Caregivers often reported high levels of anxiety, insomnia,

stress, social dysfunction, and depression as they take on many new tasks and financial

responsibilities (Kuipers, Onwumere, & Bebbington, 2010; Wong et al., 2008)

Kuipers (1999, 2010) reported that caregivers found themselves isolated with few

resources and little assistance in facing traumatic and confusing problems. Many researchers

documented that caregivers struggle with feeling forgotten and undervalued by medical

professionals which exacerbates their despair, fear, grief, helplessness, shame, and isolation

(Jones, 2009; Kuipers, 2010; Kuipers, Onwumere, & Bebbington, 2010). Caregivers facing the

onset of SMI in their loved ones need information, relationship building skills, hope, and

emotional support (Steinkuller & Rheineck, 2009). Although researchers have identified

effective interventions for caregivers such as psychoeducation, cognitive-behavioral therapy,

and family-focused therapy, Insel (2009) reported the interventions are rarely implemented

due to a fragmented mental health system. "Caregivers are nobody's job," stated Kuipers

(2010, p. 402).

Recovery from Schizophrenia

Using outcome models of recovery, researchers have challenged many traditional

notions of psychiatry. One stereotype of schizophrenia has been the belief that no one ever

recovers; however, results from several longitudinal studies indicated recovery to be more

common than many people believe (Frese, 1997; Kelly & Gamble, 2005; Mowbray et al., 2006;

Torrey, 2001). Researchers utilizing longitudinal research supported the assertion that

recovery from SMI is definitely possible. Researchers in Vermont and Switzerland followed

several hundred adults with schizophrenia over a 30-year period of time and reported that 50-

66% of participants no longer required hospitalization, worked in some capacity, and lived

comfortably with family or friends (Harding, 1988; Kelly & Gamble, 2005). Based on old

textbooks that taught a pessimistic view of recovery from schizophrenia, the majority of these

people would have been expected to end up hospitalized or homebound (Kelly & Gamble,

2005). However, for many people, recovery from schizophrenia has been shown to be an

attainable outcome. Some people with schizophrenia have recovered 2-5 years following

diagnosis, but others have recovered even after 30-40 years with symptoms (Anthony, 1993;

Deegan, 1988; Harding, 1988; Kelly & Gamble, 2005).

Over the past 10-15 years, the concept of recovery from psychotic disorders gained momentum as an important clinical concept and force in government policy across the globe (Kelly & Gamble, 2005). Approximately 50 years ago, the prognosis for someone with schizophrenia was lifelong degeneration toward loss of self with no hope of escape from a downward spiral (Harding, 1988). Recovery was thought to be impossible and the therapeutic goal was merely stabilization (Corrigan, 2000; Deegan, 1988). Within the past 25 years, medications improved and individuals with most types of SMI were deinstitutionalized into a variety of community care services. More researchers began to write of recovery from all SMIs as a process of healing from all the effects of the mental illness, social stigma, and interventions (Anthony, 1993; Corrigan, 1998; Deegan, 1988). Harding (1988) wrote of research that showed over 50% of people with SMI did not require hospitalization, were employed, and enjoyed a social network of friends and family. Freudenreich et al. (2007) reported that approximately 20% of people diagnosed with schizophrenia following FEP had no relapse within the first 5 years, and those who did relapse usually did not require re-hospitalization.

A perspective of recovery supports maximizing potential for growth in the individual by integrating medical, psychological, and social interventions (Kelly & Gamble, 2005). The possibility of recovery has motivated early interventions and offered new hope to individuals with psychosis and their families. In the past, many students diagnosed with SMI withdrew from college studies because of their symptoms and shame, fear, and guilt produced by stigma (Mowbray et al., 2006). However, in the 1990s, the new sense of hope generated by improved medications and psychosocial services joined with the recovery paradigm motivated many people with SMI to pursue their goals, including participating in higher education (Mowbray et

al., 2006).   Overcoming self-stigma, an increasing number of people with SMI have led

satisfying lives with substantial achievements and options (Deegan, 1988; Mowbray et al.,

2006).

Recovery means different things to different people.   Based on the assumption that

mental illness is a physical disease, researchers following the medical model of mental illness

defined recovery as a return to a former state of health in which the person is cured (Kelly &

Gamble, 2005). Other researchers described recovery as an acceptance of limitations from

which flow unique possibilities and approaches to challenges (Deegan, 1992). Viewed from this

latter perspective, recovery from schizophrenia is not the disappearance of all symptoms but

involves building a sense of self and social identity while living with a psychiatric disability

(Anthony, 1993). Recovery also involves overcoming the results of mental illness stigma as seen

in rejection by some friends and family and in difficulties gaining employment and housing

(Anthony, 1993).

A growing number of recovered individuals have written accounts of their journeys to

recovery and what factors they believed important for their recovery (Jamison, 1996; Kelly &

Gamble, 2005). Examples of individuals in recovery from schizophrenia are Patricia Deegan

(1992) and Fred Frese (1997). Deegan and Frese both received doctoral degrees in psychology,

taught and researched at major universities, and actively advocated for the recovery movement

(Kelly & Gamble, 2005). Frese et al. (1997) wrote that recovery is often a long, slow process

requiring hope to sustain it through difficult times. Kay Redfield Jamison (1996), a professor of

psychiatry at Johns Hopkins School of Medicine, wrote a candid memoir of her experiences in

learning to live with bipolar disorder and how her struggle to recover yielded for her a deepened appreciation for life.

Hope has been documented as an important factor in recovery from psychosis (Deegan, 1988). Although the role of hope is increasingly mentioned in research concerning recovery from mental illness, few studies have specifically addressed the role of hope in the early stages of psychosis (Perry et al., 2007). Irvin Yalom (2005) wrote that psychiatric inpatients often indicate that the instillation of hope by mental health professionals and caregivers was an important therapeutic factor following the utter demoralization of being admitted to a hospital. Progress is not possible unless individuals acquire hope and display courage to attempt treatment. Yalom (2005) stated that being in the presence of those who went through similar despair and discovered a way out provides the greatest antidote to despondency.

Perry et al. (2007) wrote that many people with psychosis do recover to lead meaningful lives, including successful employment. Encouraging a hope of recovery may help counteract the common feelings of hopelessness following a diagnosis of SMI. Hopelessness is a strong predictor of suicide, particularly problematic during the early stages of psychosis (Perry et al., 2007). Depression and hopelessness have also been linked to a higher rate of early relapse. Professional mental health providers' sense of hope promotes recovery in people with psychiatric difficulties because hope influences hope in others who then begin to function with an internal resource of hope as a source of motivation for change (Anthony, 1993; Song & Shih, 2009).

Song and Shih (2009) researched factors, process, and outcomes of recovery in a qualitative study of individuals recovering from SMI in Taiwan and found that recovery was

built upon three cornerstones: (a) symptom remission; (b) mental strengths of self-reliance, hardiness, and resilience; and (c) family support. Song and Shih (2009) found that people in recovery from SMI credited psychiatric professionals as important facilitators of recovery when the professionals infused hope for life and faith in self during rehabilitation. Professional mental health care workers' attitudes seemed to positively influence recovery outcomes when focused on potential strengths to increase functional outcomes. Stanhope (2002) compared recovery rates in the U.S. and India and reported better outcomes for people with SMI in India. Stanhope (2002) attributed the higher recovery rates in India to the Indian cultural emphasis on family involvement, interdependence, and belief in fate.

Empirically Supported Interventions

During the past 15 years, mental health professionals worldwide have been focused on early identification and treatment of people with psychosis in order to prevent biological and psychosocial deterioration (Francey et al., 2010). The best outcomes for patients were linked to shortening the duration of untreated psychosis (DUP) to prevent biological and psychosocial deterioration. Typically, "untreated" is equated with no treatment with neuroleptic medication. Internationally, most early psychosis programs recommended comprehensive psychosocial care in tandem with antipsychotic medications for treatment of schizophrenia (Francey et al., 2010). Psychosocial treatments, such as cognitive-behavior therapy (CBT), individual and family psychoeducation, group therapy, and interpersonal and social rhythm therapy (IPSRT), have been shown to decrease symptoms and hasten recovery from SMI.

Over the past 15 years, focused attention on searching for a pharmaceutical cure for psychotic disorders led to development of several promising new medications with fewer side-

effects than the older antipsychotics. However, medication alone was reported to be inadequate for a large proportion of people with SMI who reported recurring depressive or manic symptoms even after a year on medications (Steinkuller & Rheineck, 2009). Providing the full range of current, research-based, effective family and psychosocial interventions was equally important for enhancing outcomes for individuals and their families (Freudenreich et al., 2007; Insel, 2010). In the last decade, as researchers showed medications alone were not as effective as combinations of psychosocial interventions with medications, psychotherapies were recognized as important in moving people with SMI from mere symptom relief to full and sustained recovery (Frank, 2005; Lepage, 2005). A common theme in professional literature across all fields of study in all continents is the need for effective psychotherapies to be more readily available for individuals recovering from any SMI (Askey et al., 2009; Kuipers, 2010; Nehra et al., 2005; Perry et al., 2007; Sin et al., 2007). Bauml et al. (2006) described the goal of all therapeutic interventions to be the empowerment of the afflicted and their families.

Although effective psychosocial interventions have been developed, treatment manuals and trained therapists have been rare outside academic medical centers (Frank, 2005). Even with mental disorders comprising a major proportion of disability in the world, budgets for mental health programs have been limited and receive low priority in government funding and public support (Schulze, 2007). For example, researchers in Germany, Austria, and Switzerland, reported psychoeducational group interventions reduced re-hospitalization and improved psychopathological status and established that the treatments belonged to standard therapy programs in all phases of treatment for people with schizophrenia (Bauml et al., 2006). However, even in these countries, psychoeducational groups were provided for only 21% of

people with schizophrenia and 2% of their relatives (Bauml et al., 2006). In the United States, fragmentation of care has led to unnecessary and costly disability, homelessness, dropping out of school, and imprisonment (U.S. Department of Health and Human Resources, 2003).

The President's New Freedom Commission on Mental Health in 2003 reported the need for a fundamental transformation of mental health care in the United States. The commission reported that the current system of care in the United States focused on managing the disabilities associated with mental illness rather than promoting recovery. This limited approach to care has resulted in fragmentation, gaps, and uneven quality of care. Mental health professionals have been frequently frustrated with these systemic problems that create barriers for people with SMI and their families to access needed services (U.S. Department of Health & Human Services, 2003). Contrary to evidence-based guidelines of practice, approximately 40% of people with schizophrenia living in community settings in the United States reported that they have not received any mental health interventions in the preceding 6-12 months, even when experiencing significant symptoms (Mojtabai, Fochtmann, Chang, Kotov, Craig, & Bromet, 2009). The large degree of unmet need appeared even more egregious when the lack of psychosocial interventions was separated from pharmacotherapy. Mojtabai et al. (2009) reported reduced access to psychosocial treatments under managed care despite the evidence of their potential to address problem areas unresponsive to medication, such as poor social skills and negative symptoms.

Pharmacotherapy

Pharmacotherapy is the first-line treatment for episodes of psychosis in order to reduce the neurofunctional filter deficit within the limbic system and prevent structural brain

abnormalities (Bauml et al., 2006; Francey et al., 2010; Frank, 2005). Freudenreich et al. (2007) reviewed numerous studies regarding the efficacy of several antipsychotic medications and reported clear evidence of efficacy for relief from positive psychotic symptoms. Most symptoms of psychosis seemed to involve problems with neurotransmitters of the brain. Anti-psychotics restored some balance to this chemical messenger system (Lepage, 2005).   The common use of antipsychotics worldwide has significantly reduced the most severe and deteriorating cases of schizophrenia, such as catatonia. Some researchers utilizing randomized controlled trials reported antipsychotic medication may protect neurons and prevent the loss of grey matter and hippocampal volume (Francey et al., 2010).

However, although antipsychotic medications are reported to be effective in the treatment of acute psychosis, non-compliance with medication is one of the major reasons cited for relapse in patients with schizophrenia (Rettenbacher, Burns, Kemmler, & Fleischhacker, 2004). Approximately 50% of individuals recovering from FEP discontinued use of medication within the first year of recovery (Rettenbacher et al., 2004). Francey et al. (2010) stated that unpleasant and serious side-effects from antipsychotic medications were common reasons given by individuals with schizophrenia for medication non-compliance. Well-documented side-effects of antipsychotics included increased risks for changes in the brain, weight gain, altered glucose metabolism, and tardive dyskinesia. Furthermore, the benefit of medication seemed to be limited to prevention of relapse rather than comprehensive treatment of schizophrenia or any other SMI (Freudenreich et al., 2007).

Individual or Family Psychoeducation

Family psychoeductional programs facilitated by mental health care professionals have been confirmed to be effective psychosocial treatments for schizophrenia and bipolar disorder (Freudenreich et al., 2007; Lefley, 2010). A review of family education research indicated that psychoeducational family therapies, whether with a single family or multi-family groups, reduced relapse, rehospitalizations, anxiety, distress, and duration of hospital stays while also improving symptoms, functioning, communication, negotiation, and problem-solving for people with psychosis and their family members (Bauml et al., 2006; Gray, Robinson, Seddon, & Roberts, 2008; Lefley, 2010; Lowenstein et al., 2010; Onwumere & Kuipers, 2009; Riley et al., 2010; Sin et al., 2007; Torrey, 2001). Suggested strategies and guidelines for interventions for families with a member with FEP included focusing on knowledge of SMI, relationship problems in the family, unresolved loss and despair in key relatives, and problems coping with psychosis-related behavior at home (Sin et al., 2007).

Components of family interventions included information, communication-skills training, behavioral change strategies, and relapse prevention planning (Steinkuller & Rheineck, 2009). However, Dixon et al. (2001) estimated that less than 10% of families in the U.S. with a member recovering from SMI received any psychoeducation from any source. Rotondi et al. (2010) stated that although family psychoeducational therapies are well-established as evidence-based practices for care of persons with schizophrenia and supported by research in over 30 experimental trials worldwide, family psychoeducational interventions were utilized by only a small proportion of people recovering from schizophrenia. Corrigan and Kleinlein (2005) stated that one reason families do not participate in psychoeducational therapies is fear of stigma.

Group Therapy

Frank (2005) reported that structured group therapy utilizing psycho-educational, cognitive-behavioral, and interpersonal strategies decreased symptoms and overcame social and occupational limitations for patients treated for bipolar disorder through the U.S. Veterans Administration. Effective groups provided information regarding SMI, treatment, and early warning signs of relapse followed by a more open-ended time during which clients identified a social, leisure, or occupational goal disrupted by SMI.

A significant contributing factor to individuals' recovery from FEP was support received from stable and consistent caregivers. In multiple studies across Canada, the United Kingdom, Denmark, and Australia, group therapy for caregivers was shown to be effective in reducing caregiver burden, improving relationships, and supporting progress toward recovery (National Institute for Health and Clinical Excellence, 2009; Onwumere & Kuipers, 2009; Sin et al., 2007; Torrey, 2001). Effective group therapies that benefitted both individuals with schizophrenia and their families incorporated communication skills training and problem-solving approaches with attention to feelings of loss and grief within multi-family groups for caregivers (Lowenstein et al., 2010; Sin et al., 2007). In one recent example of effective group therapy, Riley et al. (2010) evaluated an eight-week psychoeducational group for caregivers of relatives with FEP in the United States and reported positive results. Following the intervention, caregivers reported reduced isolation and guilt and improved confidence, understanding of psychosis, skills for caring, and relationships with their relative with mental illness (Riley et al., 2010). Lowenstein (2010) reported a 12-session cognitively oriented group for caregivers reduced caregivers' depression and anxiety.

Cognitive Behavior Therapy

The individual therapy most developed and researched for SMI is CBT (Frank, 2005). Numerous researchers conducted randomized, controlled trials of various CBT therapies with people suffering from schizophrenia, bipolar disorder, and major depression and reported reduced relapse rates and improved psychosocial functioning (Frank, 2005; Freudenreich et al., 2007; Grant, Huh, Perivoliotis, Stolar, & Beck, 2011). Overall, the goals of CBT for individuals with SMI have been to normalize and reduce the stigma associated with SMI, restructure dysfunctional beliefs about self and symptoms, enhance clients' strengths and sense of mastery and pleasure, and increase medication adherence (Frank, 2005). Common elements of the effective CBT programs were identifying and managing prodromal symptoms; discussing long-term issues such as grief, shame, and stigma; and providing psycho-education (Frank, 2005).

Examples of promising research resulting in improvement in psychosocial functioning included a 10-session CBT program focused on suicide prevention for individuals with FEP. Researchers evaluating the program reported significant effect of CBT on hopefulness and quality of life, but not on suicide attempts (Freudenreich et al., 2007). Miller and Mason (2005) reported cognitive therapy helped people with SMI correct distorted thinking regarding schizophrenia as it affected their sense of shame and guilt, self-stigma, and knowledge of recovery. Grant et al. (2011) conducted a random trial of an 18-month recovery-oriented CBT therapy for low-functioning patients with schizophrenia in the United States and reported clinically significant improvement in functional outcome, motivation, and positive symptoms. Throughout Australia, a cognitively oriented psychotherapy, authored by Henry, Edwards,

Jackson, Hulbert, and McGorry (2002), has been used extensively in community clinics to assist

individuals in recovery from FEP.

Interpersonal and Social Rhythm Therapy

Interpersonal and social rhythm therapy (IPSRT) has provided a forum in which people

with bipolar disorder may explore feelings regarding medication, stressful life events, and

disruptions in social rhythms while also grieving the loss of their healthy selves and the changes

that came to their lives (Frank, 2005). The focus of IPSRT has been on decreasing interpersonal

stress and stabilizing social and circadian rhythms. Frank (2005) reported that research

established the efficacy of IPSRT to protect against new episodes and found it to be most

effective if initiated during stages of acute depression or recovery from manic episodes.

 Miklowitz et al. (2007) conducted a study randomly assigning 152 depressed people to

nine months of IPSRT, CBT, or family-focused therapy and concluded that all three psychosocial

therapies significantly improved participants' relationships and life satisfaction but had little

effect on work/role functioning or recreation satisfaction. Harding and McCrory (2009) stated

that persons with SMI needed access to a wide variety of options at different times in the

recovery process with collaborative relationships among psychotherapeutic and psychiatric

rehabilitation resources.

Stigmatizing Attitudes

Attitudes of the General Public

Angermeyer and Dietrich (2005) reviewed population-based attitude research in

psychiatry regarding mental illness from 1990 to 2004, including 33 national studies in 14

different countries.   Twenty-three studies were conducted in various nations of Europe, six in

America, two in Asia, and two in Oceania. Additionally, 29 local and regional studies, mostly

from Europe, were also reviewed.   Most of the surveys were random samples of the general

population using personal interviewing or telephone interviews. Only five surveys utilized

national mail systems. Angermeyer and Dietrich (2005) concluded that misconceptions about

SMI were still prevalent among the general public with variations in stigma depending on type

of mental disorder and differences in culture.   Most of the research was focused on

schizophrenia and depression and failed to distinguish the relationship between attitudes and

actual behavior (Angermeyer & Dietrich, 2005).

In nearly all studies, the general public reported beliefs about the causes of mental

disorders different from results of current research in the field. The public attributed causes to

psychosocial stress rather than a mixture of stress and biological factors (Angermyer & Dietrich,

2005). The public also reported overwhelming support for psychotherapy or counseling while

holding strong negative views about pharmacological treatments. In the United States, the

majority of respondents accepted the effectiveness of psychotropic medications for treating

schizophrenia, but most stated they would be unwilling to take antipsychotic medication if they

had schizophrenia (Angermyer & Dietrich, 2005).

Angermeyer and Dietrich (2005) reported the most prevalent stigma attached to people

with mental disorders was that of being unpredictable. People with schizophrenia were seen as

violent and dangerous. The majority of the public felt sorry for those with mental illnesses and

wanted to help but also felt uneasiness, uncertainty, and fear toward those with schizophrenia.

The majority of the public expressed a desire to distance themselves from people with mental

illness. Rejection was strongest toward people with drug abuse and alcoholism, followed by

schizophrenia, and much weaker for people with depression or anxiety (Angermeyer & Dietrich, 2005).

Socio-demographic characteristics of the public seemed to not be correlated with stigma. For example, most researchers reported no correlations between gender, age, education, and attitudes toward people with SMI, although results from various studies showed some contradictions (Angermeyer & Dietrich, 2005). However, women and persons with higher educational levels tended to distance themselves less from people with mental illness. In most cases, people who reported familiarity with mental illness also reported more positive attitudes toward people with mental illness (Angermeyer & Dietrich, 2005).

Research into two components of the stigma process, stereotype and discrimination, revealed that the ideas of unpredictability and dangerousness were strongly related to the desire for social distance from people with schizophrenia (Angermeyer & Dietrich, 2005). Structural discrimination was highly associated with beliefs that people with mental illness were to blame for their own illness. Researchers from studies in Germany and the United States reported that the public preferred financial resources for health care and medical research to be allocated first to somatic illness like cancer or heart disease and last to depression, schizophrenia, and alcoholism (Nordt et al., 2002; Corrigan, 2004).

Only a few longitudinal or cross-sectional surveys were found to be analyzed for time trends in attitudes of the public. In the United States, Phelan, Link, Stueve, and Pescosolido (2000) compared data from 1996 with data from a study in 1950 by Star and reported that people with mental illness were more frequently considered dangerous in 1996 than in 1950. However, researchers comparing data from two studies in Germany in 1990 and 2001 reported

no change in the general public's desire for social distance towards people with major

depression (Angermeyer & Dietrich, 2005).

Comparisons between regions or ethnic groups within and between countries showed

noticeable differences in some areas. A survey in the United States revealed that people in the

southern region of the country attributed the cause of mental disorders to bad character or life

stress more often than those in other regions, although the preference for social distance was

the same throughout the country (Angermeyer & Dietrich, 2005). People with mental illness

were reported to be significantly more dangerous by Asian and Hispanic respondents than by

white respondents. White Americans tended to report more positive attitudes than Black

Americans regarding professional mental health services. There existed some evidence that

non-Western ethnic group members were less knowledgeable about mental illness and

frequently believed the afflicted individual was the cause of the illness (Angermeyer & Dietrich,

2005).

In a recent cross-sectional national survey of the general public of Greece concerning

knowledge and attitudes toward people with schizophrenia, Economou, Richardson,

Gramandani, Stalikas, and Stefanis (2009) reported knowledge to be poor and stigmatizing

attitudes to be prevalent, especially among the rural and semi-urban residents of lower

educational levels. Many Greeks reported stigmatized perceptions of people with

schizophrenia as of lower intelligence, dangerous, a public nuisance, and unable to hold a

regular job (Economou et al., 2009). Similar to most other studies, with descriptions of

increasingly intimate relationships, the general public of Greece reported desire for greater

social distance from people with schizophrenia.

Kurumatani et al. (2004) conducted a survey of 129 Japanese and 150 Taiwanese

elementary school teachers and reported findings similar to Western studies with small

percentages of participants able to correctly identify a mental illness described in a vignette,

with emphasis of psychosocial factors as a cause of schizophrenia, and with rejection of

psychotropic medication. Japanese respondents reported significantly stronger stigma than the

Taiwanese, which may be associated with Japan having the highest institutionalization rate of

people with schizophrenia in the world (Kurumatani et al., 2004).

<p align="center">Attitudes of Mental Health Professionals</p>

Only recently have the attitudes of mental health professionals toward mental illness

become the focus of research. Mental health professionals' attitudes may directly influence

therapeutic relationships, outcomes of treatment, and quality of life of people with SMI and

their families. People with SMI and their families directly interact with mental health

professionals during times of crisis and depend upon them for assistance, information,

understanding, and hope. Although mental health professionals' attitudes are poorly

documented, in their roles as experts on psychiatric disabilities, advocates, and educators,

mental health professionals significantly impact the general public, legislatures, and future

mental health providers with their attitudes and behaviors (Gray et al., 2002; Sartorius, 2002).

Two reviews regarding empirical assessments of mental health professionals' attitudes

toward people with SMI were conducted recently, one by Schulze (2007) and another by Wahl

and Aroesty-Cohen (2010).   Schulze (2007) identified only nine surveys of mental health

professionals' attitudes toward people with SMI during the previous 15 years compared to 65

studies of attitudes of the general public during the same time period (Angermeyer & Dietrich,

2006). The nine studies of attitudes reviewed by Schulze included psychiatrists, general

physicians, psychologists, nurses, and social workers.

Wahl and Aroesty-Cohen (2010) reported on empirical studies published during 2004-

2009 that focused on attitudes of psychiatrists, psychologists, and psychiatric nurses. Wahl and

Aroesty-Cohen (2010) combined 11 new studies with eight already reviewed by Schulz for a

total of 19 studies. Authors of both reviews interpreted the small number of available studies

as an indication of reluctance by mental health professionals to critically examine their own

professions' potential contributions to stigma and discrimination. Not included in these major

reviews, Eack and Newhill (2008) researched attitudes of social work students toward people

with schizophrenia, and Smith and Cashwell (2010, 2011) were the first to specifically research

professional counselors' attitudes toward people with SMI. Results of these studies are

summarized below.

Recovery Beliefs

Schulze (2007) reported psychiatrists and psychiatric nurses indicated both positive and

negative recovery beliefs. Psychiatrists in the United Kingdom (N = 2,813), responding to

mailed questionnaires, reported greater optimism than the general public that schizophrenia

would improve with treatment. However, these same psychiatrists reported uncertainty as to

the depth of recovery as only 26% reporting a belief that people with schizophrenia could

recover fully (Kingdon, Sharma, & Hart., 2004). A large group of Italian mental health

professionals (N = 465), including psychiatrists, psychologists, nurses, sociologists, occupational

therapists, social workers, and auxiliary personnel, reported significantly more optimistic beliefs

than family members regarding treatment outcome in schizophrenia, although 40% reported

believing not much could be done for people with schizophrenia other than helping them live in a peaceful place. Only 2% of the mental health professionals surveyed in Italy believed complete recovery was possible (Magliano, Fiorillo, De Rosa, Malangone, & Maj, 2004b). A national survey of Australian psychiatrists, GPs, psychologists, and mental health nurses (*N* = 2737) revealed existence of negative beliefs about treatment outcomes in all groups (Caldwell & Jorm, 2001). In their comparison of professionals, Caldwell and Jorm (2001) wrote that nurses were the most optimistic, followed by psychologists, general physicians, and psychiatrists. Pessimism about outcome also existed among Austrian mental health professionals (*N* = 89; Rettenbacher et al., 2004).

Wahl and Aroesty-Cohen (2010) reported similar mixed results in their review of studies of mental health professionals' attitudes.   Magliano et al., (2004) reported both Italian psychiatrists and nurses were more optimistic about recovery from schizophrenia than patients' relatives and the general public. The vast majority of Italian nurses and psychiatrists strongly believed in people with schizophrenia being able to "work as other people" (p. 53). Grausgruber, Meise, Katschnig, Schony, and Fleishhacker (2007) analyzed a wide variety of Austrian mental health workers' responses (N = 460) to mailed questionnaires and found these workers to be twice more optimistic about treatment outcome of schizophrenia than the lay population, although 31% reported doubts about the success of treatment. In another study, acute care nurses in the United Kingdom responded with pessimism about recovery from schizophrenia, but also reported general positive attitudes about the population (Munro & Baker, 2007).

Stereotypes

Schulze (2007) found two studies in which psychiatrists in the United Kingdom and Italy tended to reject individual responsibility for illness, dangerousness (Kingdon et al., 2004), and unpredictability (Magliano et al., 2004) as attributes of people with schizophrenia. However, other studies contained evidence that mental health professionals held negative stereotypes of people with SMI. Lauber, Anthony, Ajdacic-Gross, and Rossler (2004) reported Swiss psychiatrists held more negative stereotypes than nurses, psychologists, and other unspecified therapists.

Wahl and Areosty-Cohen (2010) described numerous studies that showed mental health professionals' overall attitudes towards people with SMI were more positive than those of the general population. Psychiatric nurses in Singapore, the United Kingdom, and Japan reported general high levels of positive attitudes that were significantly higher than those of the general public. Grausgruber et al. (2007) stated that mental health workers reported greater acceptance than the general public of people with schizophrenia as possible employees, family members, and superiors. Peris, Teachman, and Nosek (2008) compared several groups of mental health professionals (*n* = 682) and the general public (*n* = 112) in the United States regarding how easily they associated positive or negative descriptors with people with SMI and found that the mental health professionals were more positive than the general public on good-bad and helpless-competent items, but were equal to general public on a blameworthy-innocent item. Peris et al. (2008) reported that graduate students had more positive associations toward people with SMI and that clinical psychologists were more positive than counselors or social workers. Des Courtis et al. (2008) reported mental health professionals in

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Brazil indicated more positive attitudes than those in Switzerland regarding community treatment.

However, several studies revealed mental health professionals holding negative stereotypes of people with SMI. Lauber et al. (2004) reported Swiss psychiatrists indicated more negative attitudes than psychologists, nurses, and other therapists in ratings of people with SMI as dangerous, less skilled, and socially disturbing. In the United States, Servais and Saunders (2007) mailed questionnaires to 1,000 randomly selected clinical psychologists to compare attitudes toward people with moderate depression, borderline features, and schizophrenia. Respondents (*N* = 306) rated people with schizophrenia as most dissimilar to the rater and as most ineffective. However, people with borderline features received the highest ratings as dangerous and undesirable.

Social Distance

Researchers reported the most obvious negative attitudes indicated by mental health workers were revealed in measurements of desire for social distance, even when other measures within the same studies indicated positive attitudes. Social distance instruments ask participants to rate their willingness to interact with people with SMI or a specific mental illness, identified either by vignette or diagnosis, in a variety of social situations. Lauber et al. (2004) stated that Swiss psychiatrists, after reading a vignette describing a man with schizophrenia, did not differ from the general public in reluctance to recommend the man for a job, rent him a room, or have him marry their child. Nordt et al. (2006) utilized a SDS and found that Swiss psychiatrists, nurses, and psychologists reported less willingness to interact with people with schizophrenia than other therapists and the Swiss public. Ishige and Hayashi

(2005) reported public health nurses in Japan preferred less distance socially than other groups, but psychiatric nurses indicated strong rejection of social contact.   Grausgruber et al. (2007) wrote that barely half of Austrian psychiatric nurses, social workers, psychologists, physiotherapists, and occupational therapists participating in a study indicated a willingness to employ a person with schizophrenia. In the same study, participants indicated they were unwilling to accept a person with schizophrenia as a superior (70%) or in a position of caring for their children (81%). Even within Kingdon et al.'s (2004) study that reported predominantly positive attitudes, 20% of UK psychiatrists agreed or were undecided that they "would not want to live next door to someone who had been mentally ill".

Overall, the majority of researchers worldwide reported that mental health professionals' attitudes toward people with SMI were more positive than the attitudes of the general public. However, some negative attitudes were present among mental health professionals (Wahl & Aroesty-Cohen, 2010). Many mental health professionals shared the public's belief that people with SMI were dangerous, had little chance for recovery, and should not marry or have children. Social distance measures revealed negative attitudes even when other assessments revealed positive attitudes. The presence of negative attitudes among mental health professionals might impact patient care by perpetuating stigma, harming therapeutic relationships, stifling hope, and preventing initiation of helpful interventions (Wahl & Aroesty-Cohen, 2010).   However, the number of studies is relatively small and attitudes of mental health professionals toward those they treat needs more extensive study to understand the possible contribution of these professionals to stigma, discrimination, and gaps in service.

Although LPCs often provide treatment for people with SMI (Hinkle, 1999), only one study into attitudes of professional counselors toward people with SMI has been published, separated into two different journal articles (Smith & Cashwell, 2010, 2011). Smith and Cashwell (2010, 2011) examined stigma toward mental illness among four groups: (a) graduate students in the non-mental health field of business administration (*n* = 20); (b) graduate students in mental health fields of counseling (*n* = 17), social work (*n* = 20), and psychology (*n* = 21); (c) professional mental health providers self-identified as counselors (*n* = 24), as social workers (*n* = 20), and as psychologists (*n* = 32); and d) professionals in business administration (*n* = 34).

Smith and Cashwell (2010, 2011) used the Community Attitudes Toward the Mentally Ill (CAMI; Taylor & Dear, 1981) to assess attitudes toward adults with unspecified mental illness, the Marlowe-Crowne Social Desirability Scale (MCSDS; Crowne & Marlowe, 1960) to detect individuals' need for approval and likelihood of answering in socially acceptable ways, a modified version of the Social Distance Scale (SDS; Gureje, Lasebikan, Ephraim-Oluwanuga, Olley, & Kola., 2005), and a demographic questionnaire. Invitations and responses were conducted by email through a professional survey.

Smith and Cashwell (2010, 2011) reported mental health professionals and trainees indicated more positive attitudes toward people with unspecified mental illness than the business professionals and trainees indicated. However, no difference in general attitude was detected due to professional level such as student or professional or orientation such as psychologist, social worker, or counselor. Professionals in mental health more strongly

attributed mental illnesses to interpersonal experiences with parents and family than did those in business.

Measures of social distance seek to assess participants' willingness to interact with people with SMI in different types of relationships (Link et al., 2004). Smith and Cashwell (2011) utilized a social distance scale with six questions to assess willingness to interact with a person with "mental illness" in various social situations. Each item was rated on a four-point scale anchored by 1 "definitely unwilling" and 4 "definitely willing. Smith and Cashwell (2011) reported only the mean for each group studied and did not report scores for specific questions. Thus, stigma at different levels of intimacy cannot be determined or compared with other studies and the mean score can only be compared to studies of general mental illness, not SMI or any specific disorder. Smith and Cashwell (2011) concluded that counselors and psychologists, both students and professionals, were comfortable with greater social proximity to individuals with mental illness than were social workers and non-mental health professionals. The researchers suggested that, among people interested in the helping professions, a relatively lesser tendency to stigmatize people with mental illness may already characterize them prior to professional training rather than be a result of that training.

Generalization of Smith and Cashwell's (2010, 2011) results about LPCs is limited by small sample size, lack of diversity in sample population, and the absence of a clear definition of "professional counselors". Furthermore, the CAMI assessment solicited responses of attitude toward people with "mental illness" with no specification of diagnosis, severity, or symptoms. A study with larger sample size focused on LPCs' attitudes toward people with clearly defined SMI or a particular diagnosis, such as schizophrenia, utilizing updated instruments is needed.

Significance of Study

Over the past decade, despite LPCs' current and potential provision of competent and perhaps relatively more affordable and accessible mental health services to the population of individuals with SMI and their caretakers, LPCs have been omitted from nearly all research exploring mental health professionals' attitudes toward that population. Descriptive quantitative and qualitative studies have explored attitudes toward people with schizophrenia of the general public, psychiatrists, psychologists, nurses, teachers, and social workers, but not LPCs. An investigation into LPCs' attitudes toward people with SMI, specifically by exploring the most serious mental illness of schizophrenia, will include and engage LPCs in current international research to identify and reduce stigma associated with mental illness. Recognition of LPCs as current and potential providers of evidence-based treatments for people with serious mental illness may lead to increased opportunities for services by LPCs for this under-served population. Insight into LPCs' level of stigma toward people with serious mental illness may also assist counselor educators in more effectively preparing counselors in training and LPCs in continuing education to work with people with SMI and their caregivers.

APPENDIX B

DETAILED METHODOLOGY

Methods and Procedures

This section focuses on the methods and procedures used to analyze the relationships among licensed professional counselors' (LPCs') familiarity with, attitudes toward, recovery beliefs about, desire for social distance from, and interest in providing interventions for people with schizophrenia and their caregivers. Included in this section are the research questions, survey research design, operational definitions, instrumentation, participant selection, and specific procedures utilized to collect and analyze data.

Research Questions

The purpose of this study was to examine the relationship between LPCs' familiarity with, attitudes toward, hope of recovery for, desire for social distance from, and interest in providing interventions for people with schizophrenia and caregivers. Research questions foundational to this study are listed below.

1. To what degree did LPCs report:

    a. familiarity with people with schizophrenia,

    b. stigmatizing attitudes toward people with schizophrenia,

    c. hope of recovery for people with schizophrenia,

    d. desire for social distance from people with schizophrenia

    e. interest in providing interventions for people with schizophrenia, and,

    f. interest in providing interventions for caregivers of people with schizophrenia?

2. What correlations exist between LPCs' familiarity with, attitudes toward, hope in recovery of, desire for social distance from, and interest in providing interventions for people with schizophrenia and their caregivers?

3. To what degree did LPCs' familiarity with, attitudes toward, hope in recovery of, and desire for social distance from people with schizophrenia predict their interest in providing interventions for those people?

4. To what degree did LPCs' familiarity with, attitudes toward, hope in recovery of, and desire for social distance from people with schizophrenia predict their interest in providing interventions for caregivers of people with schizophrenia?

Definition of Terms

Attitude for this study referred to "a relatively enduring organization of interrelated beliefs that describes, evaluates, and advocates action with respect to an object or situation, with each belief having cognitive, affective, and behavioral components" (Rokeach, 1968, p. 132). In this study, attitude was operationally defined as LPCs' responses on the Attribution Questionnaire regarding common stereotypes of people with schizophrenia.

Bipolar Disorder is a type of mood disorder characterized by recurrent episodes of highs (mania) and lows (depression) in mood. These episodes involve extreme changes in mood, energy, and behavior. Manic symptoms include extreme irritable or elevated mood, a very inflated sense of self-importance, risk behaviors, distractibility, increased energy, and a decreased need for sleep (APA, 2000). Depressive symptoms include "changes in appetite or weight, sleep, and activity; decreased energy; feelings of worthlessness or guilt; difficulty

thinking, concentrating, or making decisions; or recurrent thoughts of death or suicidal

ideation, plans, or attempts" (APA, 2000, p.349).

Caregivers (Carers) are people, usually family members, who work with no pay to

provide high levels of support for relatives, friends, or neighbors with illness or disability

(Onwumere & Kuipers, 2009).

Counseling is defined as a professional relationship that empowers diverse individuals,

families, and groups to accomplish mental health, wellness, education and career goals (Locke,

2011).

Desire for social distance is defined as a person's willingness to interact with people with

SMI in a variety of social situations (Link et al., 1987). Social distance has been used as an

indicator of stigma in many studies throughout the world. In this study, desire for social

distance is operationally defined as LPCs' responses on the Social Distance Scale (SDS, Gaebel,

Bauman, Witte, & Zaeske, 2002; Link et al., 1987).

Discrimination is a behavior directed toward a group based on prejudice resulting in

disadvantages and status loss for members of the group (Corrigan, 2003).

Familiarity is defined as a person's level of contact through life experiences with mental

illness and people with mental illness (Corrigan, 2010). In this study, familiarity with SMI is

operationally defined by LPCs' responses to the Level of Familiarity Scale (LOF, Corrigan, 2010;

Corrigan, Green, Lundin, Kubiak, & Penn, 2001)

First-Episode Psychosis (FEP) is a condition in which people suffer for the first time from

symptoms such as delusions, hallucinations, erratic behaviors, and disordered thoughts. During

FEP, people may exhibit some or all of these symptoms, may appear agitated or depressed, and may be aware of what is happening or have no insight at all (Reed, 2008).

*Hope of recover*y is defined as the belief that people with SMI may improve with treatment to pursue their goals and lead meaningful lives. In this study, hope of recovery is operationally defined by LPCs' responses to the Recovery Beliefs Assessment (RBA), an adaption of one factor from the Recovery Assessment Scale (RAS, Corrigan et al., 2004).

Interest in providing interventions for people with schizophrenia is defined as the degree of interest by a mental health professional to provide interventions for clients with schizophrenia. In this study, interest in providing interventions for people with schizophrenia is operationally defined by LPCs' responses to one question on the demographic questionnaire regarding their level of interest on a scale of one to five, one being no interest and five being high interest.

Interest in providing interventions for caregivers of people with schizophrenia is defined as the degree of interest by a mental health professional to provide interventions for caregivers of people with schizophrenia. In this study, interest in providing interventions for caregivers with schizophrenia is operationally defined by LPCs' responses to one question on the demographic questionnaire regarding their level of interest on a scale of one to five, one being no interest and five being high interest.

Licensed Professional Counselor (LPC) is a licensure for mental health professionals recognized in all 50 states of the United States, as well as the District of Columbia, Guam, and Puerto Rico. LPCs are master's level mental health service providers trained to work with individuals, families, and groups in treating mental, behavioral, and emotional problems and

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disorders. LPCs are employed in community mental health clinics, organizations, military and

veteran services, and private practices. LPC qualifications for state licensure include a master's

or doctoral degree in counseling from a national or regionally-accredited institution of higher

education, completion of a minimum of 3,000 hours of post-master's supervised clinical

experience, passage of the National Counselor Examination or a similar state-recognized exam,

and adherence to a strict Code of Ethics and recognized standards of practice, as regulated by

the state's counselor licensure board (ACA, 2011).

Mania is characterized by an extreme irritable or elevated mood, a very inflated sense

of self-importance, risk behaviors, distractibility, increased energy, and a decreased need for

sleep (APA, 2000).

Mental health is defined by the World Health Organization (2011) as "a state of well-

being in which the individual realizes his or her own potential, can cope with the normal

stresses of life, can work productively and fruitfully, and is able to make a contribution to his or

her community" (p. 1).

Mental illness refers collectively to all diagnosable mental disorders as designated in the

current edition of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-IV-TR; APA,

2011).

Prejudice is an attitude an individual forms when one believes and internalizes

stereotypes about a certain group of people (Corrigan & Shapiro, 2010).

Psychosis is a condition in which people experience some combination of hearing voices

other people do not hear or seeing or sensing things other people do not see or sense

(hallucinations), holding unusual beliefs (delusions) or beliefs about the malevolent intention of

others that seem unwarranted (paranoia), and exhibiting strange behaviors and/or confusing thoughts – with or without awareness of what is happening (Reed, 2008; Thornhill, Clare, & May, 2004).

Recovery means different things to different people within the mental health field. Founded in the medical model, recovery is defined as a return to a former state of health (Kelly & Gamble, 2004). However, based on the empowerment/recovery movement of the past 15 years, recovery is defined to be a process of change through which individuals work to improve their own health and wellbeing; to live a satisfying, hopeful, and contributing life; and to strive to achieve their full potential, even with possible limitations caused by illness (Anthony, 1993; Deegan, 1988; U.S. Department of Health and Human Services, 2003). This study uses the empowerment/recovery movement's definition of recovery.

Schizophrenia is a severe and disabling mental disorder characterized by degrees of loss in cognitive functioning, perceptions, and emotional responsiveness. Positive symptoms are experiences added to the lives of people with schizophrenia such as delusions, confused thinking, and hallucinations. More specifically, positive symptoms of people with schizophrenia may include believing that other people are trying to harm them, are communicating with them through cryptic messages, or are able to know their thoughts. Negative symptoms are experiences lost or decreased in people with schizophrenia, such as reduced motivation to achieve goals, decreased desire to socialize with friends, and blunted affect and emotion. Symptoms of schizophrenia hinder maintaining jobs, friendships, and daily functioning. Due to the complexity of the disorder and undetermined cause, schizophrenia is becoming increasingly viewed as a collection of different developmental disorders that early interventions may

alleviate. Evidence-based treatments include both medications and psychosocial interventions. More than 2 million Americans a year experience schizophrenia with the average age of onset being 18-24 years old (U.S. Department of Health and Human Services, 2003).

Self-efficacy is defined as the expectation that one can successfully perform a behavior in a specific situation (Bandura, 1977).

Self-esteem is typically operationalized as views about personal worth (Corrigan, 1998).

Serious mental illness (SMI) is defined as mental illnesses such as schizophrenia or bipolar, major depressive, severe anxiety, dissociative, eating, or personality disorders that are diagnosable psychiatric disorders lasting at least a year and that produce impairment significant enough to be considered disabling (Mowbray et al., 2006, p. 3; U.S. Department of Health and Human Services, 2003).

Stereotypes are culturally defined, general beliefs about characteristics, attributes, and behaviors of people who are members of certain social groups (Corrigan & Shapiro, 2010).

Stigma is a complex and multi-layered phenomenon including the constructs of stereotypes, prejudice, and discrimination that result in a mark of shame or disgrace manifested by bias, distrust, stereotyping, fear, embarrassment, anger, and/or avoidance (U.S. Department of Health and Human Services, 2003). Mental illness stigma consists of two dimensions: self-stigma and public stigma (Corrigan & Shapiro, 2010).

Population and Participants

The population of interest for this survey research was licensed professional counselors (LPCs) in the United States. Determination of sample size for survey research involves calculations including total number of predictor factors, type of statistical test, alpha level,

power level, and effect size. However, a common default rule for calculating the number of participants needed in studies using multiple regression statistical analysis is to merely multiple the number of items by 10. The common default rule equates the total predictors with the total number of items in all instruments. Therefore, using the common default rule, the 32 item total in this study indicated a minimum sample size of 320 participants.

However, upon examination of the particular psychometrics of the proposed instruments, UNT CIRA indicated a recommended sample size based not on the total items but on total factors or constructs. The following data were used: (a) total number of predictors = 9, (b) type of statistical test included simultaneous multiple regressions, (c) alpha = .05, (d) level of power = .95, and (e) effect size (R^2) = .10. Utilizing these data within the computer program G*Power 3 yielded a recommended sample size of 166.

Anticipated response rate for well-developed surveys during the first mailing is 30% (Heppner & Heppner, 2004). Heppner and Heppner (2004) reported that follow-up reminder letters/emails boost responses by approximately 10% with each reminder. Based on this information, a single mailing to a sample population of 555 LPCs, or a mailing to 332 LPCs with two follow-up reminders, might have been sufficient to obtain 166 participants. If only 20% respond to the first mailing, then a sample population of 830 was recommended for a single mailing or a population of 415 with 2 follow-up reminders to obtain 166 participants. To further increase response rate in hope of obtaining adequate power to detect small effect sizes with a high degree of confidence, a large incentive for participation was offered. Each participant who completed a survey was offered the option to enter a drawing in which three winners would be selected to each receive a $150 Visa Gift card.

In an attempt to gain sufficient sample size, a generous stratified random sample of 1000 LPCs was selected from state licensure records. According to the American Counseling Association (ACA), approximately 73,500 LPCs had active licenses in 2011 and were divided among four regions: (a) 31,234 LPCs in the Southern region, (b) 17,199 LPCs in the North Atlantic region, (c) 15,261 LPCs in the Midwestern region, and (d) 10,501 LPCs in the Western region. I selected a stratified random sample of 1000 LPCs from online membership records of four state licensing boards with each state representing one of the four regions of the U. S. as determined by ACA: (a) Texas – Southern; (b) Colorado – Western; (c) Missouri – Midwest; and (d) Pennsylvania – North Atlantic.   A stratified random sample of LPCs within each region was selected to receive: (a) an invitation to participate in a brief survey of 10 – 15 minutes, (b) the URL for the online questionnaire, (c) information regarding an incentive for participating, and (d) the researcher's UNT email address should any recipient have questions before participating. The number of invitations sent to each region was determined by the regions' proportion of the national LPC licensee membership. LPCs within the Southern region comprise 42% of the national LPC membership, thus 42% of the 1000 invitations (420) were sent to a stratified random sample of Texas' LPCs. The North Atlantic region contains 23% of the LPCs in the U.S., thus 23% of 1000 (230) invitations were sent to a stratified random sample of Pennsylvania's LPCs. The Midwestern region contains 21% of the LPCs in the U. S., thus 21% of 1000 (210) invitations were sent to a stratified random sample of Missouri LPCs. The Western region contains 14% of the LPCs in the U.S., thus 14% of 1000 (140) invitations to participate in the study were sent to a stratified random sample of LPCs in Colorado. Stratified random samples were obtained from LPC rosters by compiling the names in Excel format, removing any

entries with incomplete data, sorting by zip codes, and selecting every 33rd entry for Texas,

every 18th entry for Pennsylvania and Missouri, and every 32nd entry from Colorado.

A postcard was mailed via First Class U. S. mail to each participant's most recent address

on file with their states' Board of Examiners. A second reminder postcard was mailed

approximately two weeks after the first postcard to the sample pool of potential participants. A

third reminder postcard was mailed approximately two weeks after the second postcard to the

same sample pool of potential participants.

Instruments

Attribution Questionnaire (AQ – 21)

The Attribution Questionnaire (AQ-21) was developed by Corrigan et al. (2003) to assess

key constructs of stereotyping defined by his social cognitive model. The AQ-21 consists of 21

items scored using a 9-point Likert-type response scale (1 = *not at all*, 9 = *very much*). Common

in social psychology approaches to research, the assessment begins with a written vignette

followed by questions. Researchers reported that more variance is noted when participants

rate an individual described in a vignette than when rating a labeled disorder (Corrigan &

Shapiro, 2010).

The six subscale constructs for the AQ-21 are:

1. Responsibility: people have control over and are responsible their mental illness and

   related symptoms. (3 items)

2. Anger: irritated or annoyed because the people are to blame for their mental illness. (3

   items)

3. Pity: sympathy because people are overcome by their illness. (3 items)

4. Help: the provision of assistance to people with mental illness. (4 items)

5. Fear: fright because people with mental illness are dangerous.   (4 items)

6. Segregation/Coercion: send people with mental illness to institutions away from their community and force them to participate in medication management or other treatments. (4 items)

From psychometric analyses of the AQ, Corrigan (2003; Corrigan et al., 2004; Corrigan et al., 2002) reported Cronbach's alpha reliability of the six instrument subscales: personal responsibility (alpha = .70 - .73), pity (alpha = .74 - .86), anger (alpha = .84 - .89), fear (alpha = .96), helping (alpha = .76 - .88), and coercion-segregation (alpha = .82 - .89). Factor structure and reliability of the AQ were validated in two confirmatory factor analyses (Corrigan et al., 2002; Corrigan et al., 2003; Corrigan et al., 2004).

Weiner, Perry, and Magnusson (1988) established evidence for construct validity of the AQ when participants endorsed less liking, pity, and assistance and more anger toward mental-behavioral stigmas than they endorsed toward physical-based stigmas. Corrigan (2003) reported more evidence for construct validity by showing correlation among relevant concepts in an anticipated manner, such as perceived controllability being related to avoidance, withholding help, and endorsement of support for coercive treatment.

Corrigan's (2003) AQ-21 measures key constructs defined by social cognitive models of stigma. Corrigan's measures correlated with relevant concepts as anticipated, such as perceived controllability related to avoidance, withholding help, and promoting coercive treatment (Corrigan, 2003). Corrigan et al. (2002) reported participants who did not blame people with mental illness for their condition were more likely to behave in helpful ways for

people with mental illness. Corrigan et al. (2004) reported contact with a person with mental

illness led to changes in perceptions of personal responsibility and dangerousness. Results

from these studies indicated that subscales measured by Corrigan's AQ-21 relate to each other

and to previous contact with people with mental illness, a highly related construct (Link et al.,

2004). Test-retest and confirmatory factor analysis have demonstrated the reliability and

validity of the AQ-21 (Corrigan et al., 2002).

Social Distance Scale (SDS)

Desire for social distance from people with schizophrenia will be assessed with a Social

Distance Scale developed by Penn et al. (1994). This SDS utilizes seven questions to ask

participants their willingness to engage in relationships of varying intimacy with a person

previously hospitalized with symptoms of schizophrenia (Corrigan et al., 2001; Link et al., 1987).

Each question is rated by participants on a 4-point Likert scale (1 = *definitely willing* to 4 =

definitely not willing). By totaling the sum of all items and dividing by 7, a mean for social

distance is found. Higher scores indicate greater desire for social distance.

SDS scales tend to show good to excellent internal consistency with Cronbach's alphas

ranging from .75 to greater than .90 (Penn et al., 1994). Evidence of construct validity comes

from patterns of association that fit expectations of results if social distance scales measured

what they claim to measure. For instance, individuals who desire social distance from a person

described as having a mental illness are more likely to believe people with mental illnesses are

dangerous and to fear them (Link et al., 1999). The main limitations of social distance scales are

social desirability bias and the inability to infer behavior from reported intentions.

Recovery Beliefs Scale (RBS)

Hope of recovery was assessed with the Recovery Beliefs Scale (RBS) created by adapting 3 items from the Recovery Assessment Scale (RAS, Corrigan et al., 2004). Hope of recovery is considered a possible moderator that may counteract stigma. The RBS is an adaption of the personal confidence and hope factor from the RAS that had a Cronbach's alpha of .74 (Corrigan et al., 2004). For this study, P. W. Corrigan (personal communication, January 3, 2012) gave permission for adaption of three items from the RAS to measure the single factor of personal confidence and hope. The adaption changed the selected items from first-person to third-person and from 5-point Likert scale to 9-point Likert scale. Further supporting the modification, researchers have reported a strong correlation between hope in recovery by people with SMI and by surrounding family and professionals (Kelly & Gamble, 2004; Song & Shih, 2009).

Level of Familiarity Scale (LOF)

The Level of Familiarity Scale (LOF, Corrigan et al.,) measures familiarity with people with mental illness. Research participants responded to eleven items that vary in terms of how familiar the person is with mental illness and a single familiarity score was generated. The eleven items were situations that vary in intimacy with people with mental illness ranging from least intimate contact ("I have observed, in passing, a person I believe had a mental illness"), to medium intimacy ("I have worked with a person who had a mental illness"), to high intimacy ("I have a mental illness"). Three experts in psychiatric disability ranked the situations from 1 to 11 with 1 being the lowest level of intimacy of contact and 11 being the highest level of intimacy of contact. Possible LOF scores range from 0 to 11, with lower scores indicating less

familiarity and higher scores indicating greater familiarity. Inter-rater reliability was .83.

Subsequently, the rank order was validated by 100 research participants (Holmes, Corrigan,

Williams, Canar, & Kubiak, 1999).

Research participants were asked to check all of the situations in the 11-item LOF that

they had experienced in their lifetimes. Participants received LOF scores equal to the highest

ranked item they chose. For example, a participant who selected the following three items on

the LOF: (a) "I have watched a documentary on television about severe mental illness" (rank

order score = 4), (b) "My job involves providing services/treatment for persons with severe

mental illness" (rank order = 7), and (c) "I have a relative who has a severe mental illness" (rank

order score = 9),will receive a score of 9 because that is the most intimate of the situations

selected.

Demographic Questionnaire

The demographic questionnaire was developed for this study. It included questions

regarding participants' age, gender, highest level of education completed, graduate academic

program (counseling, psychology, social work, or other), work environment (private practice,

inpatient psychiatric hospital, outpatient psychiatric hospital, non-profit agency, faith-based

setting, or university/college), age of populations served (children, adolescents, or adults),

frequency of working with clients with schizophrenia (daily, weekly, monthly, fewer than 6 a

year, or never), and professional interest in offering interventions for people with schizophrenia

and their caregivers.

Procedures

Administration and Duration of Data Collection

The 1000 potential participants were mailed postcards that included an invitation to participate in the survey and a link to the Qualtrics survey site. The postcards included information that the survey would take approximately 10-15 minutes to complete and that every participant completing the survey could choose to enter a drawing from which three winners would be selected to each win $150 Visa gift cards as incentives for participation in the study. A second postcard was sent two weeks later as a reminder, and a third postcard was sent two weeks after the second. The duration of the survey was approximately seven weeks from the time the first postcard was mailed.

When the potential participants followed the link to the survey site, they were greeted with a brief welcome message letting participants know that if they completed the entire survey, they would have the option to enter a drawing for a $150 Visa gift card (three winners), and ending with a "Continue" button that took them to a page with an Informed Consent Notice. The Informed Consent Notice ended with an option to click on "Yes, I give my consent" that took them to the survey, or "No, I do not give my consent" that took them to a termination page thanking them for their time and consideration.

Order of Administration of Measures

Data collection instruments were presented in the following order: Attribution Questionnaire (AQ-21), Social Distance Scale (SDS), Recovery Beliefs Scale (RBS), Level of Familiarity (LOF), and demographic questionnaire. This particular order was selected because as LPCs began the survey, they might have been more likely to respond honestly and openly

about their attitudes toward people with schizophrenia prior to bringing into consciousness beliefs about recovery for, familiarity with, and interest in providing services for people with schizophrenia. Similarly, introducing personal feelings toward this population might have encouraged less bias when responding to questions regarding interest in offering services

Upon completion of the survey, participants were offered an opportunity to enter a drawing from which three winners would each receive $150 Visa gift cards. Each participant was instructed to click on a link to a different Qualtrics site and enter a mailing address where they wished to receive the Visa gift card if they were selected as one of the three winners. Respondents did not contact the researcher through the research survey itself, so there was no way to link a respondent's identity to any survey responses.

Statistical Analysis

At the end of data collection, data was downloaded from Qualtrics to SPSS 20.0 for data analysis. The data was reviewed prior to analysis to inspect for missing, inaccurate, and outlying data.   Because the survey format contained forced data selection, all submitted surveys were complete. The data consisted of nine predictor factors: AQ-21 (six factors), SDS (one factor), RBS (one factor), and LOF (one factor); and two criteria variables: IIS (one factor) and IIC (one factor).

Research Question One

Descriptive statistics, including mean, standard deviation, minimum score, and maximum score were computed for each factor and compared to previous studies to determine general similarities or differences. Next, skewness and kurtosis for each factor was analyzed for abnormalities (ie. absolute values greater than two). Reasonableness of the data was assessed

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by calculating Cronbach's alpha to check reliability for each predictor factor and comparing

results with those from previous studies.

Research Question 2

Kendal's tau, τ, correlation coefficients were calculated to determine the statistical

significance, magnitude, and direction of the association between eight independent variables

and two dependent variables: AQ-21 (five factors), SDS (one factor), RBS (one factor), LOF (one

factor), IIS (one factor), and IIC (one factor). One planned independent variable, Responsibility,

was removed from the analyses due to an unacceptable internal consistency score ($\alpha = .42$).

Kendal's correlation was used, rather than Pearson's coefficients, due to presence of non-

normally distributed data and a relatively small data set (Fields, 2005). Some variables

contained a large number of tied ranks that created skewed and leptokurtic results. A matrix

was constructed to summarize the correlations, means, and standard deviations of each factor.

Because multiple bivariate correlations were conducted, a more stringent alpha level of .01 was

used to test for statistical significance ($p < .01$).

Research Questions 3 and 4

Two separate simultaneous hierarchical regressions were used to examine the unique

contributions of predictor variables on each of the two criterion variables, thus identifying if the

model and any individual predictors were statistically significant for predicting the dependent

variables (Heppner & Heppner, 2004).

Prior to conducting this analysis, several assumptions were assessed. Examination of

correlation coefficients between all dependent variables (see Table 2) revealed no values

greater than .80 and confirmed absence of multicollinearity (Field, 2009). Multicollinearity

increases the probability of finding a good predictor of the outcome to be non-significant (a Type II error).

Next, I attempted to correct problems in my data due to non-normal distributions of three of my variables: Anger, Fear, and Segregation/Coercion. No important outliers were found to be the cause of the skewed distributions. The kurtosis and skewedness seemed to be strictly a result of multiple LPCs responding in the exact same way to several items. Transformations using square roost, logarithms base 10, and reciprocals corrected normalcy for the problematic predictors but caused the previously normal data to become skewed and kurtotic. However, all predictors need to be transformed in the same way in order to compare differences between them (Field, 2005).

If transformations created more problems than they solved, Field (2005) recommended using a test that did not rely on the assumptions of normally-distributed data or omitting the non-normal predictors from the regression analysis. In order to test the overall fit of my regression model and the individual predictors within the model, Field (2005) suggested a minimum sample size of 109 for 5 predictors. Because the recommended maximum number of predictors for my sample size (n = 111) was now five and two of the variables showing strongest correlations with my dependent variables were normally distributed (Help and SDS), I decided to perform the multiple regression analysis using only the variables that met the conditions of normalcy and linearity: Help, SDS, RBS, and LOF.

When the results from the regression analysis were produced, the associated p value for the overall F was examined to determine if the overall regression model was statistically significant (if $p < .05$). However, statistical significance does not necessarily indicate that the

effect size (R^2) is large enough for interpreting meaningful results. Therefore, the adjusted

effect size (adjusted R^2) was calculated to obtain a measure of strength between criterion and

predictors that is less biased by sample size. Additionally, structure coefficients and

multiplicative (Beta) weights were utilized to provide meaningful interpretation of the effect

from predictor factors (Pedhazur, 1997). In the absence of established effect size norms for my

research population, I used suggested minimum cutoffs: r = .1 for small effect, .3 for medium

effect, and .5 for large effect (Heppner & Heppner, 2004).

<div align="center">Limitations of the Study</div>

A small response rate was anticipated to be a primary limitation of this study. Another

limitation of the study originated from the nature of voluntary responses of participants to a

request for participation. LPCs who had no interest in schizophrenia or serious mental illness

might have been the least motivated to reply to the survey, thus skewing results toward higher

percentages of positive attitudes, knowledge, and interest. Replying in a socially desirable

manner to the questions also might have skewed results toward positive attitudes and biased

reports of interest in working with individuals with schizophrenia and their caregivers.

However, Smith and Cashwell (2011) used the Marlowe-Crowne Social Desirability Scale

(MCSDS) in their study of mental health professionals' attitudes and found that participants

responded with reasonable honesty and no evidence that social desirability had any substantive

role in participant response.

Caution must also be demonstrated surrounding the issue of causality. Strong

correlation between variables does not imply causality. For instance, if recovery beliefs were

associated with positive attitudes about working with people with schizophrenia, the natural

inclination might have been to propose that recovery beliefs influence LPCs' interest in working with this population. However, it is possible that interest in offering interventions to people with schizophrenia caused LPCs to increase their beliefs in recovery for people with schizophrenia. Longitudinal studies are needed to explore the causal direction of the construct relationships. Also, longitudinal studies are needed to determine potential mediators of the relationship between attitudes toward, recovery beliefs about, level of familiarity with, and interest in offering interventions for people with schizophrenia and their caregivers.

Furthermore, predictors found to be statistically significant might not be empirically significant because prediction of interest in offering services may not translate into taking action to provide services. The reported intent may not translate into observable behavior. Other limiting factors and barriers may exist that prevent LPCs from acting on their interest.

Conclusion

In this section, I discussed research questions, participants and recruitment procedures, instruments, procedures for the study, data analysis, and limitation of the study. The goal of this research methodology is to gain useful information with which to answer the specified research questions.

APPENDIX C

COMPLETE/UNABRIDGED RESULTS

Introduction

In the previous section, the methodology of the research survey was described,

including the selection of a national stratified random sample of LPCs, instrumentation, and

administration of the survey. In this section, a description of the results of the data analyses is

presented, including descriptive statistics of the participating LPCs, correlations among the

various attitudes and interests in offering services, and identification through hierarchical

regressions of attitudes that may predict LPCs' interest in offering services to people with

schizophrenia and their caregivers.

Participants

In this section, descriptive statistics for the respondent population of LPCs are reported.

Specifically addressed are participants' response rates, both total and by state, as well as

gender, age, ethnicity, highest level of education obtained, type of graduate program, work

environment, age of clients, amount of time working with clients with schizophrenia, and

interest in working with client's with schizophrenia and their caregivers.

Response Rate

In response to one thousand invitations to participate in this survey, 111 LPCs submitted

completed surveys. Five individuals began the survey but did not submit it.   The total response

rate was 11.1% with response rates for each state as follows: Texas (13.3%), Pennsylvania

(10.4%), Missouri (8.1%), and Colorado (10.0%). Figure 1 shows percentage of respondents by

the states they indicated as the locations of their primary counseling practices.
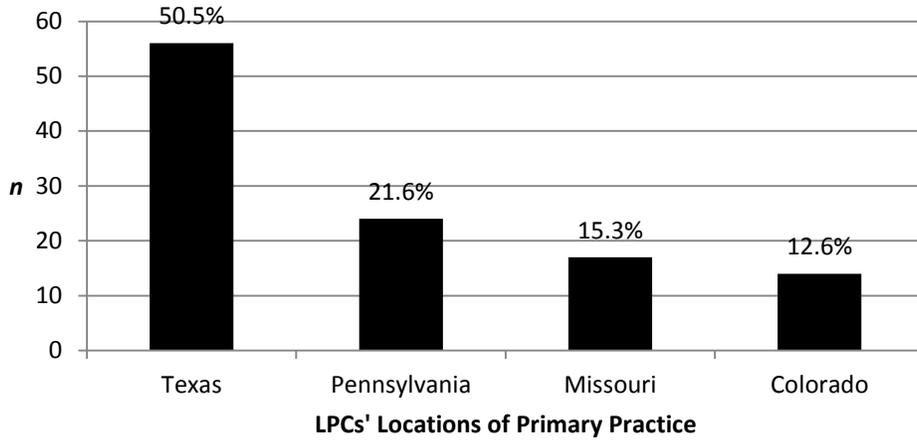
Figure C.1. Distribution of participants by state of primary practice.

Figures C.2 – C.10 show participants' demographic data. They also show distributions

related to research questions.
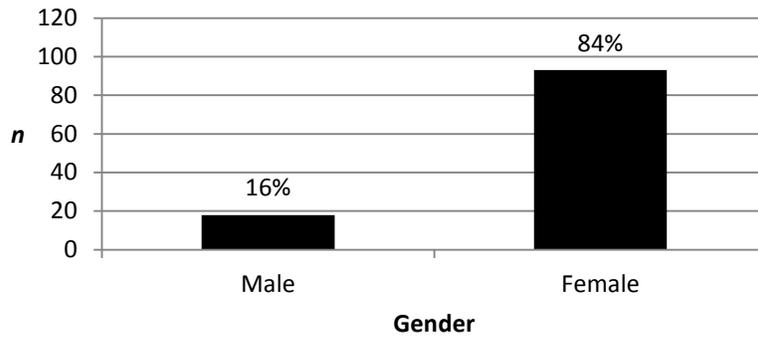
Figure C.2. Distribution of participants by gender.
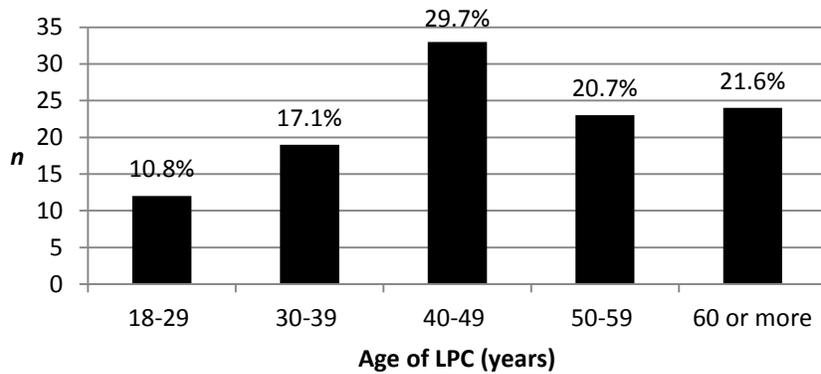
Figure C.3. Distribution of participants by age.
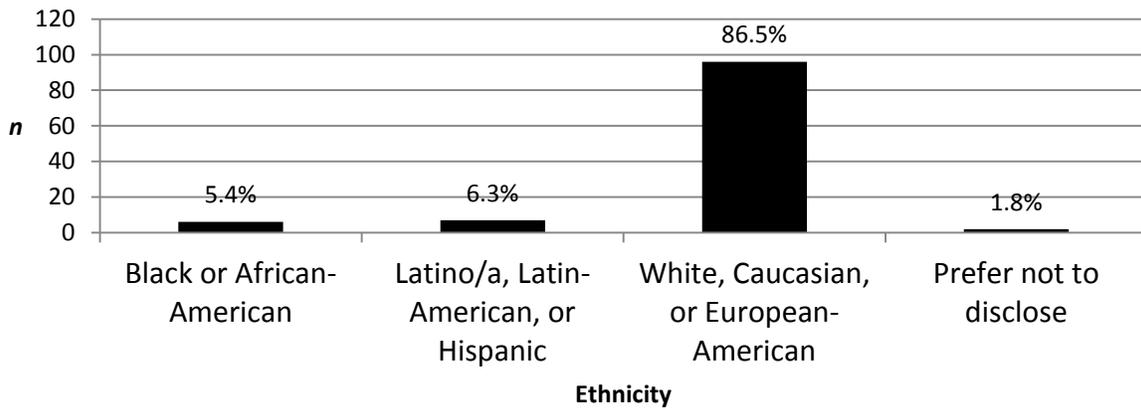
Figure C.4. Distribution of participants by ethnicity groups.
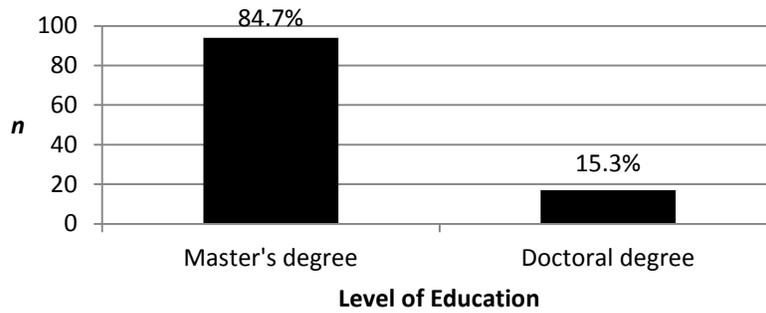
Figure C.5. Distribution of participants by highest level of education.
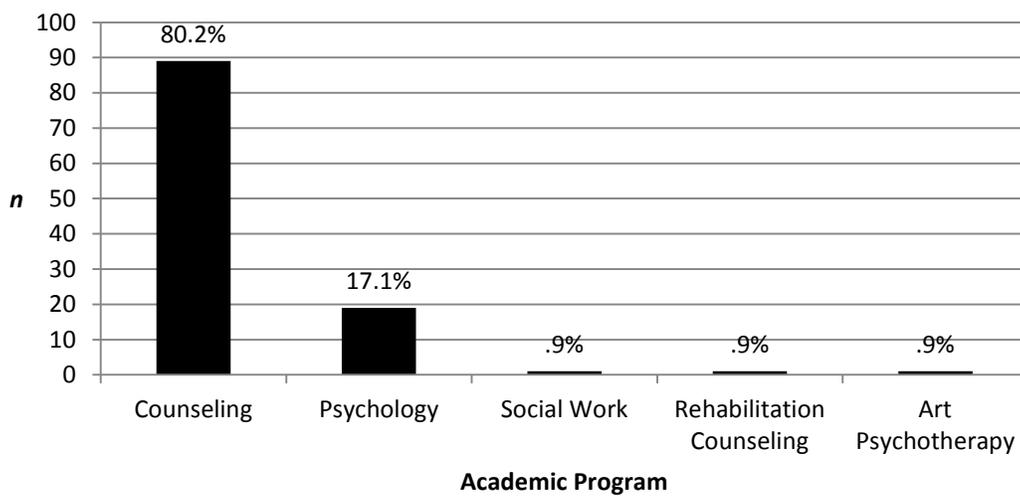
Figure C.6. Distribution of participants by academic program.
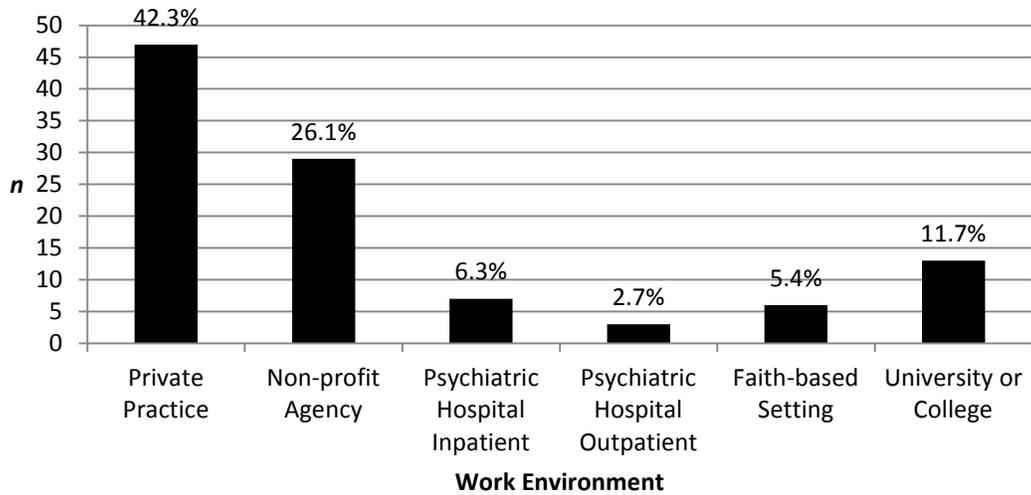
Figure C.7. Distribution of participants by most common work environment.
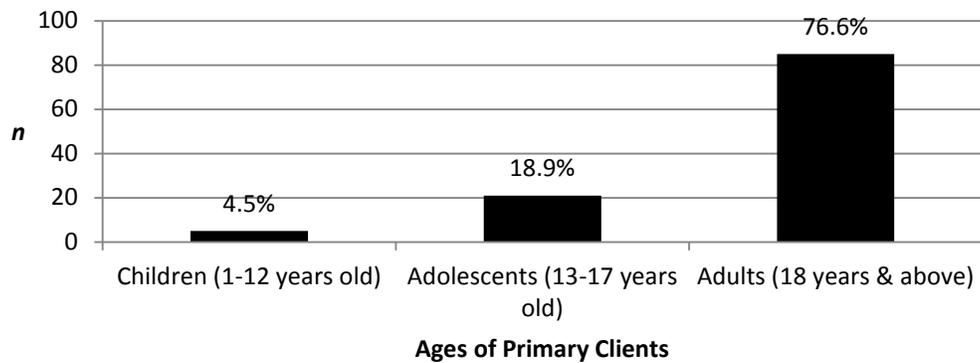
Figure C.8. Distribution of participants by ages of primary clients

Figure C.9. Distribution of participants by frequency of working with people like Harry.

Interest in Providing Interventions for Individuals with Schizophrenia and their Caregivers
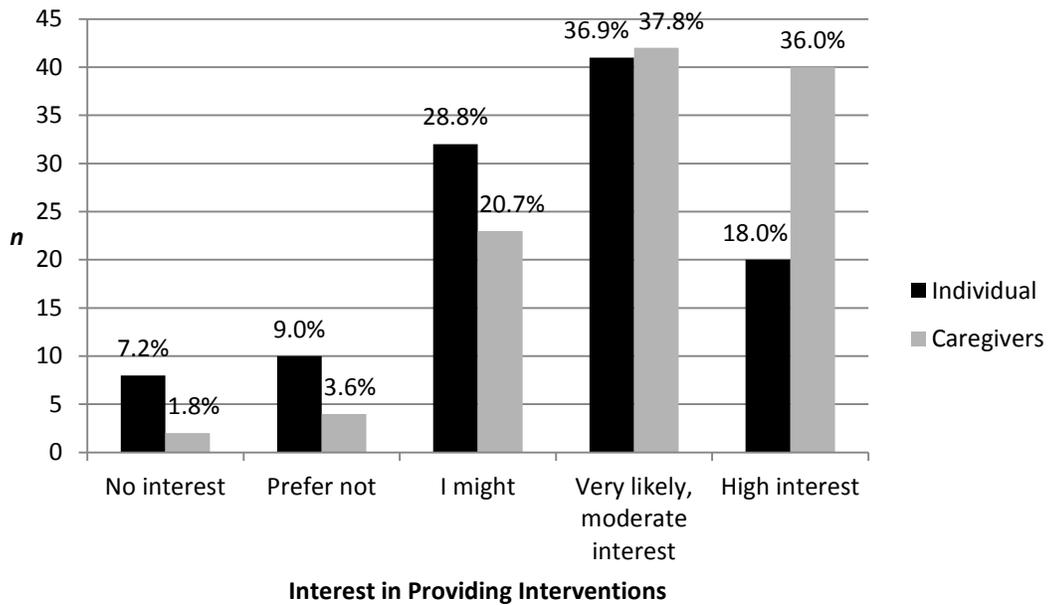
Figure C.10. Distribution of participants by interest in offering services to people like Harry and their caregivers.

The sample consisted predominantly of white females, ranging in age in years from 20's to 60's with the largest group in their 40's, most with master's degrees in counseling. Participants worked primarily in private practice or non-profit agencies with smaller numbers in university, hospital, and faith-based settings. The sample provided interventions primarily for adults but also for children and adolescents. Participants worked with people with schizophrenia ranging from never to daily with the largest group reporting some professional contact – less than six times a year. Ranging from "no interest" to "high interest", the sample had mild to moderate interest in providing interventions for people with schizophrenia and moderate to high interest in providing interventions to caregivers of people with schizophrenia.

Research Question 1: Descriptive Analyses

The intention of Research Question 1 was to describe the degree of LPCs' familiarity with, attitudes toward, hope of recovery for, desire for social distance from, and interest in providing interventions for people with schizophrenia and caregivers. These variables were measured utilizing the following instruments: Attribution Questionnaire (AQ-21); Social Distance Scale (SDS); Recovery Beliefs Scale (RBS); and Level of Familiarity (LOF). Descriptive statistics for each variable were computed, including means, standard deviations, Cronbach's alpha, skewness, kurtosis, and maximum and minimum values (see Table C.1).

Table C.1

Descriptive Statistics of Nine Independent Variables and Two Dependent Variables: Five Subscales of the Attribution Questionnaire (AQ-21); Frequency of Working with People Like Harry (Freq); Social Distance Scale (SDS); Recovery Beliefs Scale (RBS); Level of Familiarity Scale (LOF); Interest in Providing Interventions for People Like Harry (IIH); Interest in Providing Services for Caregivers (IIC)

Scale	*n*	*Mean*	*Median*	*SD*	*α*	Skewness	Kurtosis	Minimum	Maximum
Resp AQ-21	111	2.12	2	.97	.42	.91	.21	1	5
Pity AQ-21	111	5.68	5	1.80	.66	-.25	-.45	1	9
Anger AQ-21	111	1.60	1	.89	.78	2.40	6.70	1	6
Help AQ-21	111	6.00	6	1.61	.69	- .23	- .29	2	9
Fear AQ-21	111	2.06	2	1.60	.91	2.10	6.04	1	8
Seg AQ-21	111	1.49	1	.69	.61	1.83	2.58	1	4
Freq	111	2.76	3	1.34	--	.410	-1.034	1	5
RBS	111	7.55	8	1.38	.76	- 1.17	2.02	2	9
SDS	111	2.31	2	.526	.86	.04	.25	1	4
LOF	111	7.79	8	1.48	--	- 1.08	1.20	3	10
IIH	111	3.50	4	1.11	--	- .60	- .14	1	5
IIC	111	4.03	4	.94	--	- .86	.59	1	5

Results indicated that participants were relatively positive in their attitudes toward people like Harry. Participating LPCs reported being quite hopeful for recovery, in medium intimacy or familiarity with people with severe mental illness, and desiring moderate social distance.

Research Question 2

Research Question 2 asked what correlations existed between LPCs' familiarity with, attitudes toward, hope in recovery of, desire for social distance from, and interest in providing interventions for people with schizophrenia and their caregivers. To determine the appropriate correlational statistic to use and variables to include in the correlational analysis, skewness, kurtosis, and reliability for each variable were evaluated.

According to Heppner and Heppner (2004), the closer the absolute values of skewness and kurtosis are to zero, the better. Furthermore, each of those values needs to be less than 2 to be acceptable and to indicate normal distributions of data. As seen in Table 1, although seven variables had the absolute value of both skewness and kurtosis less than 2, four variables revealed skewness and/or kurtosis greater than 2: Anger, Fear, Segregation, and RBS. Thus, the data for these four skewed and/or kurtotic variables were non-normal. Furthermore, Shapiro-Wilk tests confirmed that the same four variables were each significantly different from a normal distribution ($p < .01$; Field, 2008). Therefore, Kendall's tau, τ, a non-parametric correlation, was used for data analysis rather than Pearson's r, and the median of variables was reported alongside the mean. Kendall's tau is useful for small data sets with a large number of tied ranks within the data (Field, 2008).

According to Field (2008), values of Cronbach's alpha, α, substantially lower than .7 usually indicate an unreliable scale, but when dealing with psychological constructs, values below .7 can be expected because of the diversity of the constructs. Furthermore, scales with only a few items may have lower values of alpha yet be equally reliable as scales with larger numbers of items (Field, 2008). After computing α, inter-item correlations and correlations of each item with total score, scales with α > .6 and correlation values greater than .3 were maintained (Field, 2008), resulting in the Responsibility scale being removed from further analysis.

Due to the multiple bivariate correlations conducted, a more stringent alpha level ($p < .01$) was used to detect statistical significance, and Kendall's tau was utilized to assess effect size. According to Cohen (1988), correlation coefficients with values of .1, .3, and .5 traditionally represent effect sizes that are small (explaining 1% of total variance), medium (explaining 9% of total variance), and large (explaining 25% of total variance), respectively.

Follow-up analysis among demographic variables and criterion variables indicated that frequency of working with people like Harry (Freq) was significantly positively correlated with both IIH and IIC, showed skewness and kurtosis indicative of normal distribution, and was not multi-collinear with other variables. Therefore, Freq is included in Table C.2 and was included in subsequent regression models as a predictor variable.

Results of Bivariate Correlations

Table C.2

Correlation Matrix (Kendall's tau) for the Level of Familiarity (LOF), Attribution Questionnaire-21 (AQ-21), Recovery Belief Scale (RBS), Social Distance Scale (SDS), Frequency in Working With (Freq), Interest in Providing Interventions for People like Harry (IIH), and Interest in Providing Interventions for Caregivers (IIC)

Scale		Pity	Anger	Help	Fear	Seg	RBS	SDS	LOF	Freq	IIH	IIC
Pity	τ	___										
	p	___										
Anger	τ	.11	___									
	p	.14	___									
Help	τ	-.09	-.22**	___								
	p	.17	.00	___								
Fear	τ	.25**	.45**	-.34**	___							
	p	.00	.00	.00	___							
Seg	τ	.24**	.24**	-.28**	.47**	___						
	p	.00	.00	.00	.00	___						
RBS	τ	-.01	-.14	.26**	-.17	-.18	___					
	p	.82	.06	.00	.02	.02	___					
SDS	τ	.25**	.12	-.51**	.32**	.32**	-.18	___				
	p	.00	.10	.00	.00	.00	.01	___				
LOF	τ	-.10	.04	.04	.04	-.01	.26**	-.19	___			
	p	.15	.59	.59	.64	.91	.00	.11	___			
Freq	τ	-.08	-.16	.25**	-.26**	-.22**	.27**	-.17	.18	___		
	p	.86	.04	.00	.00	.01	.00	.02	.02	___		
IIH	τ	-.09	-.27**	.37**	-.28**	-.14	.19**	-.34**	.11	.52**	___	
	p	.15	.00	.00	.00	.07	.01	.00	.16	.00	___	
IIC	τ	.01	-.18	.21**	-.15**	-.13	.14	-.18	.04	.31**	.53**	___
	p	.86	.02	.00	.01	.10	.06	.20	.62	.00	.00	___

Note. * *Correlation is significant at the p < .01 level (2-tailed).

As shown in Table C.2, many correlations between the five subscales of AQ-21, the LOF, the RBS, the SDS, IIH, and IIC were statistically significant with effect sizes ranging from small to large. The strongest findings were that as participants' frequency of working with people like Harry increased, so did their beliefs in recovery and their interest in providing interventions for people like Harry and their caregivers. Also, the more social distance participants wanted the less social Help and interventions they wanted to provide. Finally, the more participants reported Fear, the more they reported Anger, Segregation/coercion, and desire for social distance, and the less they wanted to help people like Harry.

Research Question 3: Hierarchical Regression Analysis

Research Question 3 asked to what degree LPCs' familiarity with, attitudes toward, hope in recovery of, and desire for social distance from people with schizophrenia predicted their interest in providing interventions for people with schizophrenia. Prior to conducting the analysis, several assumptions were considered and problems with data were resolved. First, correlations were checked for multicollinearity because correlations between variables greater than .80 may increase the probability of a Type II error, finding a good predictor of the outcome to be non-significant (Field, 2009).

Next, analysis was undertaken regarding non-normal distributions of three variables: Anger, Fear, Segregation/Coercion, and RBS. Once again, Heppner and Heppner's (2004) criteria were used. Skewness and kurtosis appeared to be the result not of outliers but of frequent similar response choices. Attempts to transform the data into more normal distributions using square root, logarithms base 10, and reciprocal procedures corrected normalcy for the problematic predictors but caused the previously normal predictors to

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become skewed and kurtotic. Because all predictors need to be transformed in the same way in order to compare differences between them (Field, 2005) and transformations created more problems than they solved, the original data were retained. Bootstrapping (Mooney & Duval, 1993) all data did not change any of the statistical significance in results, so again, the original data were retained.

Field (2005) recommended six or fewer predictors for a sample of 111 to detect medium effect sizes and to allow for testing the overall fit of both the regression model and the individual predictors within the model. Predictors selected for inclusion in the model were those statistically significant in correlation with the criterion variable IIH, normally distributed, and internally consistent: Freq, Help, SDS, and RBS. Because Freq was strongly correlated with the other predictors and might hinder detecting their individual contributions to the variance, Freq was added as a predictor in the second step.

Thus, a hierarchical regression was conducted to predict LPCs interest in providing interventions for people with schizophrenia from LPCs' (1) attitude of offering help (Help), (2) desire for social distance from people with schizophrenia (SDS), (3) recovery beliefs regarding people with schizophrenia (RBS), and (4) frequency in working with people with schizophrenia (Freq). Statistical significance of the overall model and the individual predictors was determined by $p < 0.05$. Results appear in Table C.3.

Table C.3

Hierarchical Regression Analysis and the Degree to which the Social Distance (SDS), Attitude of Helpfulness (Help), Recovery Beliefs (RBS), and Frequency of Working (Freq) Predicted Interest in Providing Interventions for People with Schizophrenia (IIH)

				Block 1			Block 2		
Predictor Variables	R^2	adjR²	Block ΔR²	β	p	sr²	β	p	sr²
Model 1 Social Distance (SDS)	.26	.24	.26***	-.20	.09	.02			
Helpfulness (Help)				.30	.01**	.05			
Recovery Beliefs (RBS)				.10	.28	.01			
Model 2 Frequency of Work (FW)	.46	.44	.20***				.49	.00***	.20
Social Distance (SDS)							-.21	.04*	.02
Helpfulness (Help)							.17	.11	.01
Recovery Beliefs (RBS)							-.00	-.04	.00

Note. F_1(3, 107) = 12.35, p < .001; F_2(4, 106) = 22.42; p < .001, *p < .05, **p < .01,***p < .001.

In the first step, Model 1 (Help, SDS, and RBS) accounted for a significant amount of variance in interest in providing interventions for people with schizophrenia, adjusted R^2 = .24, *F*(3, 107) = 12.35, *p* < .001. Helpfulness was identified as a statistically significant predictor of IIH, contributing a unique 5% of variance to the model. Thus, the combination of participants' attitude of social helpfulness, desire for social distance, and recovery beliefs predicted 24% of the variation in interest in providing interventions for people with schizophrenia and social helpfulness contributed a unique 5% of the variance if the other variables are held constant. Thus, as participants indicated more social helpfulness and belief in recovery and less desire for social distance, they indicated more interest in providing counseling interventions for people like Harry.

The addition of frequency of working with people with schizophrenia in Model 2 also

resulted in a statistically significant model, adjusted R^2 = .44, F(4, 106) = 22.42, p < .001. This

model accounted for 44% of the variance in IIH scores. In Model 2, Freq and SDS were found to

be significant unique predictors of IIH. Frequency contributed a unique 20% of the variance in

IIH if RBS, SDS, and Help is held constant, and SDS contributed a unique 2% of the variance if

RBS, Freq, and Help is held constant. Results appear in Table C.3.

Thus, adding frequency of working with people like Harry doubled the amount of

variance accounted for by predictors of recovery beliefs, social help, and social distance and

created a model that predicted almost half of the variance in participants' interest in providing

interventions for people with schizophrenia. Frequency of working with people with

schizophrenia and desire for social distance contributed the most to that model. Thus, as

participants indicated working more frequently with people like Harry and less desire for social

distance, they indicated more interest in providing counseling interventions for people like

Harry.

<div align="center">Research Question 4: Hierarchical Regression</div>

Research Question 4 asked to what degree LPCs' attitude towards, recovery beliefs

about, desire for social distance from, and frequency of working with people with schizophrenia

predicted their interest in providing interventions for caregivers of people with schizophrenia.

Predictors chosen for inclusion in the model were those statistically significant in

correlation with the criterion variable IIC, close to normally distributed, and internally

consistent. The predictors Freq and Help were the only variables to meet all these

specifications. RBS and SDS are included in the regression model to be consistent with

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Research Question 3. Because Freq was correlated with the other predictors and might hinder detecting their individual contributions to the variance, Freq was added in the second step. Results are shown in Table 4.C.

Table 4.C

Hierarchical Regression Analysis and the Degree to which the Social Distance (SDS), Attitude of Helpfulness (Help), Recovery Beliefs (RBS), and Frequency of Working (Freq) Predicted Interest in Providing Interventions for Caregivers of People with Schizophrenia (IIC)

Predictor Variables	R^2	adjR^2	Block ΔR^2	Block 1			Block 2		
				β	p	sr^2	β	p	sr^2
Model 1	.08	.05	.08*						
Social Distance (SDS)				-.10	.46	.00			
Helpfulness (Help)				.20	.13	.01			
Recovery Beliefs (RBS)				.02	.86	.00			
Model 2	.16	.12	.08***						
Frequency of Work (FW)							.30	.00**	.08
Social Distance (SDS)							-.10	.42	.00
Helpfulness (Help)							.11	.40	.01
Recovery Beliefs (RBS)							-.04	.64	.00

Note. $*p < .05$, $**p < .01$, $***p < .001$.

Regression results indicated Model 1 was statistically significant, adjusted R^2 = .05, $F(3, 107)$ = 3.01, $p < .05$. The model accounted for 5% of the variance in IIC scores. Although the overall model was statistically significant, no individual predictors were statistically significant. Thus, the combination of participants' attitude of social helpfulness, desire for social distance,

and recovery beliefs predicted a very small, yet significant, amount of variance in their interest in providing interventions for caregivers.

With the inclusion of Freq in Model 2, regression results indicated the model was statistically significant, adjusted R^2 = .12, $F(4, 106)$ = 9.71, $p < .01$. The model accounted for 12% of the variance in IIC scores. Frequency of working with people with schizophrenia (β = .30, p = .00, sr^2 = .08) was found to be the only statistically significant unique predictor of IIC. Frequency contributed a unique 8% of the information in the model if the other predictors (RBS, SDS, and Help) were held constant. Adding frequency of working with people like Harry more than doubled the amount of variance accounted for by predictors of recovery beliefs, social help, and social distance, yet the model still predicted only a small, but significant, percentage of variance in participants' interest in providing interventions for caregivers.   Thus, as participants indicated working more frequently with people like Harry, they indicated more interest in providing counseling interventions for caregivers.

Summary

In summary, this chapter described the statistical analyses of the data provided by the participants. Among this sample of 111 predominantly female participant LPCs from four U.S. states who represented an 11.1% response rate, a large number of statistically significant correlations existed among the nine predictor variables and two criterion variables. Specifically, as frequency of working with people like Harry reportedly increased, desire to offer social help reportedly increased, fear reportedly decreased, and desire for social distance reportedly decreased, participants indicated more interest in providing counseling interventions for people with schizophrenia. Participants' interest in providing counseling

interventions for caregivers was reportedly influenced by the same factors in the same way

except for fear. Participants indicated that fear of people with schizophrenia did not influence

their interest in offering counseling services to the caregivers. Increasing frequency of working

with people with schizophrenia was reportedly the strongest predictor of interest in providing

interventions for people with schizophrenia and their caregivers.

APPENDIX D

DISCUSSION

In this section, I discuss the implications of this study. First, I discuss the findings of the research and how they compare with previous studies. Then implications for theory and practice are discussed. Lastly, I review the limitations of the study and recommend future research.

Review of Results

The important findings in this study include that the majority of LPC participants reported low to moderate stigmatizing attitudes, strong beliefs in recovery, and moderate to high interest in providing interventions for people with schizophrenia and their caregivers. Furthermore, a large percent of LPCs reportedly already frequently work with individuals with schizophrenia, and this frequency of work was significantly correlated with positive attitudes, beliefs in recovery, and interest in providing interventions for this population and their caregivers. LPCs' positive attitudes and beliefs in recovery for individuals with schizophrenia are important characteristics for providing quality care and enhancing positive outcomes (Moore & Kuipers, 1992; Snyder et al., 1996).

Demographics

In summary of the demographics, a high percentage of respondents were white females at least 40 years old with masters' degrees in counseling. Half of participants were licensed to practice as LPCs in Texas and worked primarily in private practice or non-profit agencies with adults. Almost half of the participants reported working with clients with schizophrenia at least monthly. The disproportionate number of white females in the sample seems to be a reflection of LPC demographics. Although no socio-demographic data on LPCs could be found in the professional literature, two sources suggest that the study sample was reasonably

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representative of the LPC population. One counselor educator with 25 years of experience stated that the preponderance of females in the sample reflected a preponderance of females in counselor preparation programs (Janice Holden, personal communication, May 21, 2012). Also, a rapid estimate of male names included in the first 3500 individuals listed on the Texas LPC roster revealed a composition of approximately 20% male that is comparable to the study sample (16%).

Follow-up analysis of the demographic characteristics of participating LPCs revealed no significant relationships between socio-demographic characteristics and attitudes. These findings are consistent with Angermeyer and Dietrich's (2005) review of population-based attitude research in psychiatry from 1990-2004 in which socio-demographic characteristics revealed very poor explanatory power regarding attitudes toward mental illness.

Gender was not associated with attitudes or social distance. This finding did not correspond to Smith and Cashwell's (2011) finding that women tended to distance themselves less than men from people with mental illness. However, Angermeyer and Dietrich's (2005) findings support that gender is very inconsistently associated with stigma, and the majority of past studies reported no association. Educational level was also not associated with social distance, but this result was expected due to all participants having graduate degrees. Although Smith and Cashwell (2010) reported higher education was associated with less social distance, this study did not support that finding, probably because of little difference in participants' educational levels.

Educational program was not associated with attitudes. This finding corresponds to Smith and Cashwell's (2010) conclusion of no difference in stigma between mental health

workers educated as counselors, social workers, and psychologists. Further corroborating this

finding is a past study in which Swiss psychologists, nurses, and social workers did not differ in

their stereotyping of people with SMI, although psychiatrists did report higher stereotyping

than the other professionals (Nordt et al., 2006).

Age was not associated with attitudes and is consistent with Smith and Cashwell's

findings regarding mental health professionals.   However, studies have reported inconsistent

findings regarding age. Some studies have found older participants indicating more negative

attitudes than those indicated by younger participants (Angermeyer & Dietrich, 2005; Magliano

et al., 2004b) but other studies have found older participants reporting more positive attitudes

than those reported by younger participants (Nordt et al., 2006). Overall, as in previous

research, demographics were poor predictors of attitudes toward people with mental illness.

Attitudes

Participating LPCs scored high in social help by affirming they would help people with

schizophrenia through such means as interviewing for a job, renting an apartment, or sharing a

carpool. Participants also indicated a normal distribution of pity for people with schizophrenia

and low amounts of anger, irritation, and annoyance. Participants in this study generally did

not view Harry as dangerous or a threat to themselves or others.

As participants indicated greater fear, they also indicated greater anger, pity, and desire

for greater social distance.   Alternately, as participants' fear reportedly decreased their desire

to help socially and through counseling interventions for individuals with schizophrenia and

caregivers reportedly increased.   Similarly, Corrigan (2004) and Link et al. (2004) found that

increased pity was often associated with increased fear and that people feeling stigmatized

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often reported feeling others pitying or fearing them. Finally, participating LPCs reported a low desire to send people with mental illness to institutions away from their community or to force them to participate in medication management or other treatments.

The very low amounts of fear reported by participating LPCs differed from high measures of fear reported by the general public in previous studies (Angermeyer & Dietrich, 2005). Also, based on comparisons of scores on the AQ-21, LPCs reported less fear, anger, and desire for segregation/coercion towards people with schizophrenia than police officers (Watson et al., 2004) and community college students in Midwestern U.S. did (Corrigan et al., 2003) yet expressed similar levels of pity and desire to help. Although one research team found no differences between professionals' and non-professionals' attitudes (Nordt et al., 2006), results of this study are consistent with other research findings that mental health professionals seem to possess more positive attitudes toward people with mental illness than non-mental health professionals (Caldwell & Jorm, 2001; Smith & Cashwell, 2010);

Social Distance

Participating LPCs reported a desire for a moderate amount of social distance from people with schizophrenia. Their responses are summarized in Table 5. Although participants indicated they were willing to work on the same job with, rent a room to, be neighbors with, or recommend for a job someone like Harry, they also indicated they would feel unwilling for someone like Harry to take care of their children for a couple of hours or to marry one of their children. Results are shown in Table D.1.

Table D.1

Social Distance Scale (SDS) Responses by Item

Items	Percent				Stats	
How would you feel about…?	Definitely Unwilling (1)	Probably Not (2)	Probably (3)	Definitely Willing (4)	*Mean*	*SD*
1…renting a room to someone like Harry	3.6	26.1	51.4	18.9	2.10	.76
2…working on the same job with someone like Harry	0	7.2	39.6	53.2	1.54	.63
3…having someone like Harry as a neighbor	0	5.4	45.9	48.6	1.57	.56
4…having someone like Harry taking care of your children for a couple of hours	37.8	50.5	9.0	2.7	3.23	.73
5…having one of your children marry someone like Harry	19.8	52.3	26.1	1.8	2.90	.73
6…introducing someone like Harry to a young woman with whom you are friends	14.4	46.8	33.3	5.4	2.70	.78
7…recommending someone like Harry for a job working for a friend of yours	2.7	21.6	54.1	21.6	2.05	.74

Compared to other studies, LPC participants indicated less need for social distance than several other mental health professionals. Nordt et al. (2006) conducted a large, national survey in Switzerland of the attitudes of mental health professionals and members of the general public toward people with various mental illnesses. In order to compare the results from the two studies, the mean SDS score of this study was converted to an equivalent mean

on a 5-point scale used in the Swiss study. The resulting converted mean (2.89) for U.S. LPCs was lower than the SDS mean for Switzerland psychiatrists (3.33), psychologists (3.01), nurses (3.09), and general public (2.96); indicating LPCs desired less social distance. Participants in this study scored exactly the same as the Swiss "other therapists" (2.89) listed in the study. These "other therapists" were described as professionals who had daily contact with patients with mental illness, such as vocational workers, social workers, and physiotherapists – a finding that seems to echo the result in this study that frequent contact is related to lower desire for social distance.

Furthermore, participating LPCs indicated less desire for social distance than participants in a large study of the general public in Germany (Gaebel et al., 2002). In Gaebel et al.'s study, twice the percentage of German participants as LPCs indicated that they would "probably or definitely" be disturbed about working on the same job with someone who had schizophrenia.

However, participating LPCs in this study indicated a greater desire for social distance than the participating LPCs in Smith and Cashwell's (2011) study. The discrepancy was expected due to Smith and Cashwell's focus on general mental illness rather than schizophrenia, a more stigmatizing label.

As participants indicated greater fear, pity, and desire for segregation-coercion, they also indicated greater desire for more social distance from people with schizophrenia, consistent with findings by Smith and Cashwell (2011). Corrigan (2001) explained that feelings of benevolence, or pity, may lead to social distance because viewing people with mental illness as innocent children in need of benevolence may enhance images of irresponsibility, feelings of

anger, and belief that segregation/coercion is necessary. This theoretical explanation might account for why LPCs who wanted to help and believed recovery was possible were more likely to be comfortable with less social distance and yet to have less pity.

The relationships between attitudes in this study were in general agreement and direction with Corrigan's (1998, 2004) social cognitive theory of stigma in which he hypothesized that a prejudiced person will react in fear to someone with schizophrenia and choose discriminatory behaviors such as avoiding, calling the police, or refusing to help by leasing a house or carpooling.   Similarly, an LPC who fears people with schizophrenia might discriminate by avoiding or refusing to provide interventions to those persons or their families. Even though the majority of participants reported low fear, the approximately 15% of participants who reported mild to strong fear of people like Harry indicated the likelihood of prejudice and discrimination existing among some LPCs.

Recovery Beliefs

Another important finding was that LPCs in this sample indicated a strong belief in the potential of recovery from schizophrenia. A large percentage (77%) of participants agreed strongly or moderately that "people with schizophrenia may experience partial or full recovery with appropriate professional care." At the low end, 10% of LPCs strongly or moderately disagreed that recovery from schizophrenia was possible, similar to the 11% of Italian psychiatrists who were convinced that there was "little to do for patients with schizophrenia other than helping them live in a quiet environment" (Magliano et al., 2004, p. 324).

The fact that as participants' hope in recovery increased, they also reported increasingly positive attitudes seems to support Cohen's (1990) hypothesis that when mental health

professionals possess and express stigmatizing attitudes, they may do so due to underlying feelings of helplessness and futility. Thus, beliefs in recovery may lessen stigmatizing attitudes. LPCs with greater beliefs in the possibility of recovery for people like Harry were more likely to frequently work with, to help socially, to desire less social distance from, to have a high level of familiarity with, and to have an interest in providing interventions for people with schizophrenia.

Familiarity

Participating LPCs more familiar with people with schizophrenia reported stronger beliefs in the possibility of recovery. However, contrary to expectations and past studies, increasing or decreasing familiarity seemed to have no influence on fear, anger, pity, segregation-coercion, or helpfulness (Corrigan et al., 2001a; 2001b; 2003). Perhaps the detection of any relationship between familiarity and attitudes was hindered by respondents' similar responses grouped closely together on the high end of the LOF scale.

Because the intent of the LOF is to measure knowledge of and experience with mental illness, LPCs' frequency of working with people with schizophrenia seemed to provide a good substitute for a type of familiarity. As participants reported increasing frequency of working with people with schizophrenia, they also reported increasing positive attitudes, increasing recovery beliefs, and decreasing negative attitudes. LPCs who worked the most with people with schizophrenia were less likely to fear or to want to segregate-coerce them and were more likely to want to offer social help and to believe in recovery than those who worked the least with that population.

Interest in Providing Interventions

When participating LPCs' indicated greater interest in providing interventions for people with schizophrenia, they also indicated greater frequency of working with this population, increased desire to help socially, and stronger recovery beliefs accompanied by less desire for social distance, fear, and anger. Furthermore, a combination of attitude of wanting to help, social distance, recovery beliefs, and frequency of working with people with schizophrenia explained a large amount of variance in LPCs' interest in providing interventions.   However, reverse causation cannot be ruled out. It is possible that LPCs interested in providing interventions for people with schizophrenia are more familiar with someone with schizophrenia and thus more likely to seek out information regarding prognosis and to develop more positive attitudes. Desire to provide interventions may influence recovery beliefs, not vice versa.

The association of frequency of work and/or familiarity with positive attitudes and interest in providing interventions corresponds with Eack and Newhill's (2008) findings that social work students' knowledge about and contact with persons with schizophrenia were strongly related to positive attitudes toward this population but that knowledge related to positive attitudes only among students who had more personal contact with the population. An intervention study by Holmes et al. (1999), although limited to general mental illness and not to schizophrenia, supports this study's findings. Holmes et al. (1999) found that undergraduate psychology students provided with an intervention of both knowledge and direct contact with individuals with mental illness exhibited significantly larger improvements in stigmatizing attitudes than students provided with an intervention of knowledge alone.

Similarly, as participating LPCs' indicated increased interest in providing interventions for caregivers of people with schizophrenia, they also indicated increased frequency of working with people with schizophrenia, increased desire to offer interpersonal help, and decreasing fear. Furthermore, a combination of increasing desire to offer social help, decreasing need for social distance, increasing recovery beliefs, and increasing frequency of working with people with schizophrenia explained a large amount of change in LPCs' interest in providing interventions for caregivers. As participants indicated a higher frequency of working with people with schizophrenia, they also indicated a greater desire to provide services for caregivers.

Implications for Practice

This study was the first known attempt to examine a national sample of LPCs for their attitudes toward people with schizophrenia and their interest in providing interventions for this population and their caregivers; thus, the results need to be interpreted tentatively. Nevertheless, the results provide increased confidence in LPCs as potential providers of interventions for people with schizophrenia and other serious mental illnesses and their caregivers. There currently exists a critical shortage of mental health workers to integrate evidence-based psychosocial interventions into care for people with serious mental illness and their families (Frank, 2005; Schulze, 2007). Suggested reasons for this shortage are inadequate reimbursement for services (Clay, 2012), stigma (Corrigan, 2003), and lack of training and familiarity with this population (Each & Newhill, 2008). However, LPCs' low stigma and moderate to high recovery beliefs regarding people with schizophrenia seem to indicate a solid foundation for working with people with schizophrenia. Lack of recognition as providers of

interventions for people with schizophrenia may be the greatest barrier for LPCs to effectively fill the gap in services.

Over the past 30 years, psychosocial interventions were developed to help people with serious mental illness recover and lead meaningful lives, but the interventions have not been well integrated into available health care in the U.S. (Clay, 2012). The American Psychology Association President, Melba Vasquez, stated recently that psychologists' perceptions of recovery need to change and that recovery concepts and principles need to be incorporated into education and training for doctoral students and current providers (Clay, 2012). Recently, five national mental health organizations received grants from the Substance Abuse and Mental Health Services Administration (SAMHSA) to participate in an initiative to create online resources on recovery principles and practices and to develop recovery-oriented curriculum for mental health professionals (Clay, 2012). The list of mental health organizations collaborating on this project includes psychiatrists (APA), psychiatric nurses (APNA), psychologists (APA), social workers (CSWE), and peer specialists (NAPS). Counselors were not included.

Counselors (ACA) were not included in the SAMHSA initiative despite the fact that LPCs clearly are already providing interventions for people with serious mental illness founded on a strong recovery-focused paradigm promoting wellness. Mary Jansen, a member of the Recovery Advisory Committee that guides APA's Recovery to Practice initiative stated that the profession of psychology must embrace the training of psychologists in recovery oriented interventions or be left behind (Clay, 2012). Already deeply rooted in wellness and recovery oriented beliefs and practices, LPCs might make important contributions toward developing recovery oriented curriculum and training, with or without help from SAMSHA. Professional

counselors could provide much assistance and expertise towards filling the gap in interventions for people recovering from schizophrenia and their caregivers.

Preparation to work with the SMI population requires both knowledge and interpersonal contact with members of the stigmatized group to influence attitudes (Corrigan et al., 2001, 2002; Corrigan & Shapiro, 2010; Holmes et al., 1999; Eack & Newhill, 2008). Programs preparing clinical mental health counselors and providing continuing education for existing LPCs need to include information on prognosis, the potential for recovery, effective treatments, the impact on families, and the needs of caregivers as well as challenging inaccurate stereotypes and replacing them with factual information (Corrigan, 2010). However, participants in stigma intervention programs that include interacting with a person with SMI have shown significant improvements in their attitudes that are significantly greater than education alone or control groups (Corrigan et al., 2001; Corrigan & Shapiro, 2010; Eack & Newhill, 2008). One study has demonstrated that attitude change following direct contact was maintained over time and was related to change in behavior (Corrigan et al., 2003).

However, some types of direct contact with people with SMI are not effective and may increase or perpetuate stigma (Corrigan & Shapiro, 2010). Mental health workers who have repetitive contact with individuals when they are in crisis, psychotic, and agitated may not have stereotypes disconfirmed. Contact effectively improves attitudes toward people with schizrenia when it includes equal status between groups, one-on-one contact in which each person learns of similar interests and cultivates friendships, common goals, something rewarding, and/or a moderate disconfirmation of stereotypes (Corrigan & Shapiro, 2010).

Wahl et al. (2010) wrote that the persistence of mental health professionals' negative or inconsistent attitudes toward people with SMI seems to indicate the need for improved training and inspection of current methods of training that may be creating or reinforcing negative attitudes. The results of some studies of stigma among psychologists, psychiatrists, social workers, and nurses have indicated that service providers are more likely to endorse stereotypes of dangerousness than the general public (Schultz, 2007). Wahl et al. (2010) recommended, at a minimum, the inclusion of more discussion of attitudes toward people with SMI during training programs.

Practical suggestions to increase familiarity and contact with people with schizophrenia might include Smith and Cashwell's (2010) recommendation for practicum counseling students to be involved with clients with serious mental illnesses. Perhaps counseling students could be required to volunteer or obtain a certain percentage of practicum or internship hours at community agencies, homeless shelters, the National Alliance on Mental Illness, or hospitals to meet people with schizophrenia and work with them over a period of time (Eack & Newhill, 2008). Individuals in recovery from schizophrenia, bipolar disorder, or first episode psychosis might be located through Peer Specialist programs and asked to speak to students in various courses regarding their experiences and recovery process. The same could be done with family members and caretakers of people with schizophrenia.

Ultimately, reduction in stigma and increases in available interventions for people with serious mental illness may depend on framing mental illness as a social justice issue rather than just a medical concern (Corrigan, 2004). Stigma often hinders people from seeking mental health services because they fear social disapproval and diminished self-esteem from being

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labeled mentally ill.   When mental health professionals speak of mentally ill clients in terms

such as "weird" or "not able to improve," they reveal their own prejudice and hinder recovery.

When mental health professionals refuse to provide interventions for caregivers of people with

schizophrenia because they "do not want the children of those people in my waiting room,"

they discriminate.   Perhaps more research is needed to better understand stigma in terms of

social justice in order to create more effective anti-stigma programs, even within mental health

training programs.

<div align="center">Limitations and Recommendations for Future Research</div>

This research contains some important limitations. First, this study was based on a

relatively small sample of licensed professional counselors in the U.S. Although a strong

research design was utilized, a stratified random sampling of LPCs listed by state licensure

boards, the response rate was only 11%. LPCs who decided to respond might be those who had

more interest in serious mental illness. Those LPCs who were not interested in serious mental

illness might have been less likely to take the survey, thus skewing the results toward positive

scores. Incentives to participate might have attracted some LPCs who were more motivated to

complete the survey quickly with socially desirable answers rather than thoughtfully with

genuine responses. Nonetheless, the study had the power to detect moderate effect size and

the results may accurately depict the general attitudes and beliefs of LPCs in the U.S.

The clustering of responses on the scales for Fear, Anger, and Segregation was

problematic for analysis, as well as the seeming lack of consistent responses to the Segregation

scale. Close inspection of the four items comprising the Segregation variable revealed that one

question did not fit with the others. LPCs were more likely to respond less negatively to forcing

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Harry, the man in the vignette, to live in a group home, than to forcing him into a psychiatric hospital, asylum, or hospital. Research into LPCs views of group homes versus asylum and hospitals might prove interesting.

The instrument used to measure familiarity with people with serious mental illness indicated participating LPCs reportedly had predominantly moderate to high familiarity based on the fact that they usually work professionally with people with mental illnesses. Perhaps a new instrument or a modification of the LOF would be beneficial for use with mental health professionals. An instrument is needed with the ability to differentiate between those people at the upper end of the familiarity scale.

Because LPCs are already providing interventions for this population and report strong interest in providing care to this population and their caregivers, LPCs need to seek out future collaborative research and clinical efforts with other mental health professionals.   Professional counselors working with psychiatrists, psychologists, psychiatric nurses, and social workers may be able to improve availability and quality of care for people with schizophrenia and other SMI.

Future research needs to investigate how effectively counseling students are prepared to work with people with SMI and the effectiveness of interventions for decreasing stigma and increasing beliefs and desire. Past research focused mainly on schizophrenia and depression. Research is needed for other disorders such as bipolar disorder. Because different disorders have very different levels of stigma associated with them, research of people with general mental illness does not seem to be very helpful at this time. Also, longitudinal studies are needed to explore and clarify causes of attitudes and recovery beliefs over time.

Although very difficult to measure, research into how reported beliefs and attitudes towards people with schizophrenia are related to actual behavior may be very important. Although participants are reporting certain attitudes and intentions, some may not be following through with the expected behaviors. Furthermore, research is immediately needed concerning effective methods of preparation and of gaining broader access as providers of interventions for this underserved population and their families.

Conclusion

In conclusion, this research found that the majority of LPCs in this sample reported predominantly positive attitudes towards, moderate contact with, and strong beliefs in the possibility of recovery for individuals with schizophrenia, yet still desired moderate social distance. Some participating LPCs reported stigmatizing attitudes that need to be addressed in training, workshops, and personal reflection to prevent harm to clients. High frequency of working with people with schizophrenia, strong recovery beliefs, high desire to offer social help, and low desire for social distance were the variables most likely to indicate LPCs' interest in providing interventions for these two underserved populations: individuals with schizophrenia and caregivers. Although larger and longitudinal studies are needed to verify these results, the findings of this study emphasize the importance of including LPCs as valuable contributors in all areas pertaining to treatment and recovery from serious mental illness, including professional interventions, curriculum development and instruction, and research.

APPENDIX E

OTHER ADDITIONAL MATERIALS

Cover Letter

Dear Licensed Professional Counselor,

My name is Kathleen Bell, and I am a doctoral candidate in the Counseling Program at the University of North Texas. I am researching the interests, attitudes, and familiarity of LPCs regarding people who are seriously mentally ill and their caregivers. LPCs have rarely been included in professional studies on this topic. Your participation in this study will help correct that exclusion.

To participate, you must hold a current license as a Licensed Professional Counselor (LPC). Participation involves completing a brief 10-15 minute online survey. Upon completing the survey, you will be eligible to enter a drawing in which three (3) winners will be selected to each receive $150 Visa Gift cards.

All surveys are completely anonymous. You will not be asked to provide your name or contact information on the survey. Your IP address will not be collected. Information for the drawing for the three $150 Visa Gift cards will be collected separately from the survey and destroyed within 30 days of awarding the prizes. There will be no way to connect your survey responses with your drawing entry information.

Please click the link below to continue to the survey!

Thank you for your time and thoughtful participation,

Kathleen Bell, M.Ed., CSC, LPC-Intern, Doctoral Candidate

University of North Texas Institutional Review Board

Informed Consent Notice

Before agreeing to participate in this research study, it is important that you read and understand the following explanation of the purpose, benefits and risks of the study and how it will be conducted.

Title of the Study: Attitudes of Licensed Professional Counselors about People with Serious Mental Illness: Predictors of Interest in Offering Services

Principal Investigator: This study is being conducted by Dr. Janice Holden, Ed.D., LPC-S, LMFT, NCC, Chair of the Department of Counseling and Higher Education at the University of North Texas.

Student Investigator: The principal investigator is working with Kathleen Hoy, M.Ed., CSC, LPC-Intern, a doctoral candidate in the Department of Counseling and Higher Education at the University of North Texas.

Purpose of the Study: You are being asked to participate in a research study designed to explore Licensed Professional Counselors' attitudes about people with serious mental illness.

Study Procedures: You will complete three assessments of your attitudes toward, prognosis beliefs about, and level of familiarity with people with serious mental illness. Completion of the survey will take about 10-15 minutes of your time.

Foreseeable Risks: No foreseeable risks are involved in this study.

Benefits to the Subjects and Others: This study is expected to be helpful to counselors by including LPCs in studies about mental health professionals' attitudes towards people with serious mental illness, increasing self-awareness within the profession, and possibly helping people with serious mental illness and their caregivers gain quality health care.

Compensation for Participants: You will not be compensated for participation in the study. However, upon completion of the survey, you may choose to enter a random drawing for a $500 American Express Gift Card to be awarded at the end of the data collection period. Everyone who completes the survey and enters the drawing will have an equal chance to win.

Procedures for Maintaining Confidentiality of Research Records: Despite you receiving this electronic survey link, no personally identifiable information will be collected about you. Your participation in this study is anonymous. You will be randomly assigned an identification code that will be used only for computing response rates. Once the data collection period has closed, codes will be destroyed. If you choose to enter the incentive drawing, you will be taken to a separate survey link to enter your contact information for the $500 American Express Gift

Card drawing. All of the sites associated with the study are configured so that your IP address will not be stored with any of the survey results. It will be impossible to connect any survey responses with the incentive drawing entries. Records will be kept in the PI's private office on a password-protected computer and via a password-protected secure Qualtrics account. Research records will be maintained by the PI for at least three years. The confidentiality of your individually provided anonymous information will be maintained in any publications or presentations regarding this study.

Questions about the Study: Please direct any questions about the study to Kathleen Hoy, M.Ed., CSC, LPC-Intern, at KathleenE.Bell@unt.edu or at telephone number xxx-xxx-xxxx.

Review for the Protection of Participants: This research study has been reviewed and approved by the UNT Institutional Review Board (IRB). The UNT IRB can be contacted at 940-565-3940 with any questions regarding the rights of research subjects.

Research Participants' Rights: Your participation in the survey confirms that you have read all of the above and that you agree to all of the following:

- Dr. Janice M Holden, Ph.D. has explained the study to you and you have had an opportunity to contact him/her with any questions about the study. You have been informed of the possible benefits and the potential risks of the study.
- You understand that you do not have to take part in this study, and your refusal to participate or your decision to withdraw will involve no penalty or loss of rights or benefits. The study personnel may choose to stop your participation at any time.
- You understand why the study is being conducted and how it will be performed.
- You understand your rights as a research participant and you voluntarily consent to participate in this study.
- You understand you may print a copy of this form for your records.

COMPREHENSIVE REFERENCE LIST

Addington, J., McCleery, A., & Addington, D. (2005). The role of family work in early psychosis. *Schizophrenia Resource, 79,* 77-83.

Allport, G. W. (1954). *The nature of prejudice*. Cambridge, MA: Addison-Wesley.

American Counseling Association. (2011). *Who are licensed professional counselors?* Retrieved from http://www.counseling.org/Counselors/LicensureAndCert/TP/StateRequirements/CT2.aspx

American Psychiatric Association. (2000). *Diagnostic and statistical manual of mental disorders* (4th ed., text rev.). Washington, DC: Author.

Angermeyer, M., & Dietrich, S. (2005). Public beliefs about and attitudes toward people with mental illness: A review of population studies. *Acta Psychiatrica Scandinavica, 111*, 163-179. doi:10.1111/j.1600-0447.2005.00699.x

Anthony, W. A. (1993). Recovery from mental illness: The guiding vision of the mental health service in the 1990's. *Rehabilitation Psychosocial Journal, 16*(4), 11-23.

Askey, R., Holmshaw, J., Gamble, C., & Gray, R. (2009). What do carers of people with psychosis need from mental health services? Exploring the views of carers, service users and professionals. *Journal of Family Therapy, 31,* 310-331.

Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioral change. *Psychological Review, 84,* 191-215.

Barton, K., & Jackson, C. (2008). Reducing symptoms of trauma among carers of people with psychosis: Pilot study examining the impact of writing about caregiving experiences. *Australian and New Zealand Journal of Psychiatry, 42*, 693-701.

Bauml, J., Forbose, T., Kraemer, S., Rentrop, M., & Pitschel-Walz, G. (2006). Psychoeducation: A

basic psychotherapeutic intervention for patients with schizophrenia and their families.

Schizophrenia Bulletin, 32(S1), S1-S9. doi:10.1093/schbul/sbl017

Birchwood, M., Todd, P., & Jackson, C. (1998). Early intervention in psychosis: The critical period

hypothesis. *International Clinical Psychopharmacology, 13*, 31-40.

Borkin, J. R., Steffen, J. J., Ensfield, L. B., Krzton, K., Wishnick, H., Wilder, K. E., &

Yangarber, N. (2000). Development and evaluation of the Recovery Attitudes

Questionnaire.

Byrne, P. (2000). Stigma of mental illness and ways of diminishing it. *Advances in Psychiatric

Treatment, 6,* 65-72.

Caldwell, T., & Jorm, A. (2001). Mental health nurses' beliefs about likely outcomes for

people with schizophrenia or depression: A comparison with the public

and other healthcare professionals. *Australian and New Zealand Journal of Mental

Health Nursing, 10,* 42–54.

Cassidy, E., Hill, S., & O'Callaghan, E. (2001). Efficacy of a psychoeducational intervention in

improving relatives' knowledge about schizophrenia and reducing re-hospitalization.

European Psychiatry, 16, 446-450.

Clay, R. (2012, January). Yes, recovery is possible: APA is participating in a new federally funded

initiative designed to spread the word that people can – and do – recover from mental

illnesses. *Monitor on Psychology, 43,* 1. Retrieved from http://www.apa.org/monitor/

Cohen, J., & Struening, E.L. (1962). Opinions about mental illness in the personnel of two large

    hospitals. Journal of Abnormal and Social Psychology, 64, 349-360.

Corey, G. (1990). *Theory and practice of group counseling.* Pacific Grove, CA: Brooks/

    Cole.

Corrigan, P. (1998). The impact of stigma on severe mental illness. *Cognitive and Behavioral*

    Practice, 5, 201-222.

Corrigan, P. (2003). An attribution model of public discrimination toward persons with mental

    illness. *Journal of Health and Social Behavior, 44*, 162-179.

Corrigan, P. (2004). Target-specific stigma change: A strategy for impacting mental illness

    stigma. *Psychiatric Rehabilitation Journal, 28,* 113-121.

Corrigan, P. (2010). A *toolkit for evaluating programs meant to erase the stigma of mental*

    illness. Retrieved from National Consortium on Stigma and Empowerment website:

    http://www.stigmaandempowerment.org/resources

Corrigan, P., Green, A., Lundin, R., Kubiak, M., & Penn, D. (2001). Familiarity with and social

    distance from people with serious mental illness. *Psychiatric Services, 52*, 953-958.

Corrigan, P., & Kleinlein, P. (2005). The impact of mental illness stigma. In P. W. Corrigan (Ed.),

    On the stigma of mental illness, (pp. 11-44). Washington, DC: American Psychological

    Association.

Corrigan, P., River, L., Lundin, R., Penn, D., Uphoff-Wasowski, K., …Campion, J. (2001). Three

    strategies for changing attributions about severe mental illness. *Schizophrenia Bulletin,*

    27, 187-195.

Corrigan, P., Rowan, D., Green, A., Lundin, R., River, P., Uphoff-Wasowski, K., … Kubiak, M.

（2002). Challenging two mental illness stigmas: Personal responsibility and

dangerousness. *Schizophrenia Bulletin, 28*(2), 293-309.

Corrigan, P., Salzer, M., Ralph, R., Sangster, Y., & Keck, L. (2004). Examining the factor structure

of the Recovery Assessment Scale*. Schizophrenia Bulletin, 30*, 1035-1042.

Corrigan, P., & Shapiro, J. (2010). Measuring the impact of programs that challenge the public

stigma of mental illness. *Clinical Psychology Review, 30*, 907-922.

doi:10.1016/j.cpr.2010.06.004

Corrigan, P., Markowitz, G., Watson, A., Rowan, D., & Kubiak, M. (2003). An attribution model

of public discrimination towards persons with mental illness. *Journal of Health and

Social Behavior, 44*, 162 – 179.

Cramer, J. , & Rosenbeck, R. (1998). Compliance with medication regimens for psychiatric and

medical disorders*. Psychiatric Services, 49*, 196-210.

Crisp, A., Gelder, M., Rix, S., Meltzer, H., & Rowlands, O. (2000). Stigmatisation of people with

mental illness. *British Journal of Psychiatry, 177*, 4-7.

Crowne, D. P., & Marlowe, D. (1960). A new scale of social desirability independent of

psychopathology. *Journal of Consulting Psychology, 24,* 349-354.

Deegan, P. E. (1988). Recovery: The lived experience of rehabilitation. *Psychosocial

Rehabilitation Journal, 11*, 11-19.

Deegan, P. E. (1992). The independent living movement and people with psychiatric disabilities:

Taking back control over our own lives. *Psychosocial Rehabilitation Journal, 15*, 5-19.

Dixon, L., McFarlane, W., Lefley, H., Lucksted, A., Cohen, M., Falloon, I., & Sondheimer, D. (2001). Evidence-based practices for services to families of people with psychiatric disabilities. *Psychiatric Services, 52,* 903-910.

Druss, B., & Rosenheck, R. (1998). Mental disorders and access to medical care in the United States. *American Journal of Psychiatry, 155*, 1775-1777.

Eack, S., & Newhill, C. (2008). An investigation of the relations between student knowledge, personal contact, and attitudes toward individuals with schizophrenia. *Journal of Social Work Education, 44* (3), 77-95.

Economou, M., Richardson, C., Gramandani, C., Stalikas, A., & Stefanis, C. (2009). Knowledge about schizophrenia and attitudes toward people with schizophrenia in Greece. *International Journal of Social Psychiatry, 55,* 361-371. doi:10.1177/0020764008093957

Faul, F., Erdfelder, E., Buchner, A., & Lang, A.G. (2009). Statistical power analyses using G*Power 3.1: Tests for correlation and regression analyses. *Behavior Research Methods, 41*, 1149-1160.

Field, A. (2008). *Discovering Statistics Using SPSS*. London, England: Sage Publications.

Fenton, W., Blyler, C., & Heinssen, R. (1997). Determinants of medication compliance in schizophrenia: Empirical and clinical findings. *Schizophrenia Bulletin, 23*, 637-651.

Francey, S., Nelson, B., Thompson, A., Parker, A., Kerr, M., Macneil, C.,…McGorry, P. (2010). Who needs antipsychotic medication in the earliest stages of psychosis? A reconsideration of benefits, risks, neurobiology, and ethics in the era of early intervention. *Schizophrenia Research, 119*, 1-10.

Frank, E. (2005). *Treating bipolar disorder: A clinician's guide to interpersonal and social rhythm*

    therapy. New York, NY: Guilford Press.

Frese, F., Walker, W., & Davis, W. (1997). The consumer-survivor movement, recovery, and

    consumer professionals. *Professional Psychology: Research and Practice, 28*(3), 243-245.

Freudenreich, O., Holt, D., Cather, C., & Goff, D. (2007). The evaluation of management of

    patients with first-episode Schizophrenia: A selective, clinical review of diagnosis,

    treatment, and prognosis. *Harvard Review Psychiatry, 15*(5), 189-211. doi:

    10.1080/10673220701679804

Gaebel, W., Bauman, A., Witte, A., & Zaeske, H. (2002). Public attitudes towards people with

    mental illness in six German cities: Results of a public survey under special consideration

    of schizophrenia. *European Archives of Psychiatry and Clinical Neuroscience, 252,* 278-

    287. Doi: 10.1007/s00406-002-0393-2

Grant, P., Huh, G., Perivoliotis, D., Stolar, N., and Beck, A. (2011). Randomized trial to evaluate

    the efficacy of cognitive therapy for low-functioning patients with schizophrenia.

    Archives of General Psychiatry. Published online October 3, 2011.

    doi:10.1001/archgenpsychiatry.2011.129

Grausgruber, A., Meise, U., Katschnig, H., Schony, Wl, & Fleishhacker, W. (2007). Patterns of

    social distance towards people suffering from schizophrenia in Austria: A comparison

    between the general public, relatives, and mental health staff. *Acta Psychiatrica*

    Scandinavia, 115, 310-319.

Gray, B., Robinson, C., Seddon, D., & Roberts, A. (2008). 'Confidentiality smokescreens' and

    carers for people with mental health problems: the perspectives of professionals. *Health*

and Social Care in the Community, 16(4), 378-387. doi:

10.1111/j.1365/2524.2007.00748.x

Gray, B., Robinson, C., Seddon, D., & Roberts, A. (2010). Patterns of exclusion of carers for

people with mental health problems: The perspectives of professionals. *Journal of Social*

Work, 24(4), 475-492.

Gureje, O., Lasebikan, V., Ephraim-Oluwanuga, O., Olley, B., & Kola, L. (2005). Community study

of knowledge of and attitude toward mental illness in Nigeria. *British Journal of*

Psychiatry, 186, 436-441.

Harding, C. M. (1988). Course types in schizophrenia: An analysis of European and American

studies. *Schizophrenia Bulletin, 14*, 633-643.

Harding, C., & McCrory, D. (2009). Psychotherapy and rehabilitation: A comparison between

psychotherapeutic approaches and psychiatric rehabilitation for persons with serious

and persistent mental illness. *Psychotherapeutic approaches to schizophrenia psychoses:*

past, present and future, 1, 314-327.

Hayward, P., & Bright, J. (1997). Stigma and mental illness: A review and critique. *Journal of*

Mental Health, 6, 345-354.

Henry, L., Edwards, J., Jackson, H., Hulbert, C., & McGorry, P. (2002). *Cognitively*

Oriented Psychotherapy for First Episode Psychosis (COPE): A Practitioner's Manual.

Melbourne, Australia: EPPIC.

Heppner, P., & Heppner, M. (2004). *Writing and publishing your thesis, dissertation, & research:*

A guide for students in the helping professions. Belmont, CA: Brooks/Cole.

Hinkle, J. (1999). A voice from the trenches: A reaction to Ivey and Ivey (1998). *Journal of Counseling and Development, 77*, 474-483.

Holmes, E., Corrigan, P., Williams, P., Canar, J., & Kubiak, M. (1999). Changing public attitudes about schizophrenia. *Schizophrenia Bulletin, 25*, 447-456.

Insel, T. (2010). Rethinking Schizophrenia. *Nature. 468*(7321):187-193.

Iqbal, Z., Birchwood, M., Hemsley, D., Jackson, C., & Morris, E. (2004). Autobiographical memory and post-psychotic depression in first episode psychosis. *British Journal of Clinical Psychology, 43*(1), 97-104.

Ishige, N., & Hayashi, N. (2005). Occupation and social experience: Factors influencing attitude toward people with schizophrenia. *Psychiatry and Clinical Neurosciences, 59*, 89-95.

Jamison, K. R. (1996). *An Unquiet Mind.* New York, NY: Vintage Books.

Jeffries, J. J. (1977). The trauma of being psychotic: A neglected element in the management of chronic schizophrenia. *Canadian Psychiatric Association Journal. 22*:199–206.

Jeppesen, P., Petersen, I., Thorup, A., et al. (2005). Integrated treatment of first-episode psychosis: Effect of treatment on family burden. *British Journal of Psychiatry, 187,* (suppl. 48), s85-s90.

Jones, E. E., Wynne, M. F. & Watson, D. D. (1986). Client perception of treatment in crisis intervention and longer-term psychotherapies. *Psychotherapy. 23*(1): 120–132.

Jones, K. (2009). Addressing the needs of carers during early psychosis. *Early Intervention in Psychiatry, 3,* 522-526.

Judd, C., & Park, B. (1993). Definition and assessment of accuracy in social stereotypes. *Psychological Review, 100*, 109-128.

Jung, C. G. (1965). *Memories, dreams and reflections.* New York: Vintage Books.

Kelly, M., & Gamble, C. (2005). Exploring the concept of recovery in schizophrenia. *Journal of Psychiatric and Mental Health Nursing,12,* 245–251

Kessler, R., Berglund, P., Bruce, M., Koch, R., Laska, E., & Leaf, P. (2001). The prevalence and correlates of untreated serious mental illness. Health Services Research, 36, 987-1007.

Kingdon, D., Sharma, T., & Hart, D (2004). What attitudes do psychiatrists hold towards people with mental illness? *Psychiatric Bulletin, 28*, 401-406.

Kuipers, E. (1999). The effects of family interventions on relatives' burden: A meta-analysis. *Journal of Mental Health, 8*, 275-285.

Kuipers, E. (2010). Time for a separate psychosis caregiver service? *Journal of Mental Health, 19*(5), 401-404.

Kuipers, E., Onwumere, J., & Bebbington, P. (2010). Cognitive model of caregiving in psychosis. *British Journal of Psychiatry, 196,* 259-264.

Kurumatani, T., Ukawa, K., Kawaguchi, Y., Miyata, S., Suzuki, M., Ide, H., …Uemoto, M. (2004). Teachers' knowledge, beliefs and attitudes concerning schizophrenia: A cross-cultural approach in Japan and Taiwan. *Social Psychiatry and Psychiatric Epidemiology, 39,* 402-409. doi: 10.1007/s00127-004-0758-0

Lauber C., Anthony, M., Ajdacic-Gross, V., & Rossler, W. (2004). What about psychiatrists' attitudes to mentally ill people? *European Psychiatry, 19*, 423-427.

Lefley, H. (2010) Treating difficult cases in a psychoeducational family support group

for serious mental illness, *Journal of Family Psychotherapy*, *21*(4), 253-268. doi:

10.1080/08975353.2010.529014

Lehman, A. F., Kreyenbuhl, J., Buchanan, R. W., Dickerson, F. B., Dixon, L. B., Goldberg, R.,

& ... Steinwachs, D. M. (2004). The schizophrenia Patient Outcomes Research Team (PORT):

Updated treatment recommendations 2003. *Schizophrenia Bulletin*, 30(2), 193-217.

Lepage, S. (2005). Family intervention in first episode psychosis: Expanding and integrating the

partnership and family consultation models. Journal of Family Psychotherapy, 16(3), 85-

104. Doi: 10.1300/J085v16n03_07

Link, B. (1987). Understanding labeling effects in the area of mental disorders: An assessment of

the effects of expectations of rejection. *American Sociological Review, 52,* 96-112.

Link, B., Cullen, F., Frank, J., & Wozniak, J. (1987). The social rejection of former mental

patients; Understanding why labels matter. *American Journal of Sociology, 92,* 1461-

1500.

Link, B., Cullen, F., Struening, E., Shrout, P., & Dohrenwend, B. (1989). A modified labeling

theory approach to mental disorders: An empirical assessment. *American Sociological

Review, 54*, 400-423.

Link, B., Phelan, J., Bresnahan, M., Stueve, A., & Pescosolido, B. (1999). Public conceptions of

mental illness: Labels, causes, dangerousness, and social distance. *American Journal of

Public Health, 89*, 1328-1333.

Link, B., Struening, E., Neese-Todd, s., Asmussen, S., & Phelan, J. (2001). The consequences of

stigma for the self-esteem of people with mental illness. *Psychiatric Services, 52,* 1621-

1626.

Link, B., Yang, L., Phelan, J., & Collins, P. (2004). Measuring mental illness stigma. *Schizophrenia Bulletin, 30*, 511-541.

Locke, D. (2011). From the president: 20/20 and beyond. *Counseling Today*, 54(6), 5.

Lowenstein, J., Butler, D., & Ashcroft, K. (2010). The efficacy of a cognitively oriented carers group in an early intervention in psychosis service – a pilot study. *Journal of Psychiatric and Mental Health Nursing, 17*(7), 628-635.

Macdonald, E., Sauer, K., Howie, L., & Albiston, D. (2005). What happens to social relationships in early psychosis? A phenomenological study of young people's experiences. *Journal of Mental Health, 14*(2), 129-143. doi: 10.1080/09638230500060052

Magliano, L., De Rosa, C., Fiorillo, A., Malangone, C., Guarneri, M., Marasco, C., et al. (2004a). Beliefs of psychiatric nurses about schizophrenia: A comparison with patients' relatives and psychiatrists. *International Journal of Social Psychiatry, 50,* 319–330.

Magliano, L., Fiorillo, A., De Rosa, C., Malangone, C., & Maj, M. (2004b). Beliefs about schizophrenia in Italy: A comparative nationwide survey of the general public, mental health professionals, and patients' relatives. *Canadian Journal of Psychiatry, 49*, 322-330.

Magliano, L., Marasco, C., Guarneri, M., Malangone, C., Lacrimini, G., Zanus, P., et al. (1999). A new questionnaire assessing the opinions of the relatives of patients with schizophrenia on the causes and social consequences of the disorder: Reliability and validity. EuropeanPsychiatry, 41, 71–75.

Markowitz, F. (2005). Sociological models of mental illness stigma. In P. W. Corrigan (Ed.), *On the stigma of mental illness,* (pp. 129-144). Washington, DC: American Psychological Association.

McGuire, P. (2000). New hope for people with schizophrenia. *Monitor on Psychology, 31*, 1-11.

Miklowitz, D., Otto, M., Frank, E., Reilly-Harrington, N., Kogan, J., Sachs, G., et al. (2007). Integrated family and individual therapy for bipolar disorder: Results of a treatment development study. *Journal of Clinical Psychiatry, 64*, 182-191.

Miller, N., Brewer, M. B., & Edwards, K. (1985). Cooperative interaction in desegregated settings: A laboratory analogue. *Journal of Social Issues, 41*, 63-79.

Miller, R., & Mason, S. E. (2005). Shame and guilt in first-episode schizophrenia and schizoaffective disorders. *Journal of Contemporary Psychotherapy, 35*(2), 211-221. doi: 10.1007/s10879-005-2701-4

Moldivan, V. (2007). Attitudes of mental health workers toward community integration of the persons with serious and persistent mental illness. *American Journal of Psychiatric Rehabilitation,10,*19-30. doi: 10.1080/15487760601166332

Mojtabai, R., Fochtmann, L., Chang, S., Kotov, R., Craig, T., & Bromet, E. (2009). Unmet need for mental health care in schizophrenia: An overview of literature and new data from a first-admission study. Schizophrenia Bulletin, 35(4), 679-695. doi:10.1093/schbul/sbpo45

Mooney, C., & Duval, R. (1993). *Bootstrapping: A nonparametric approach to statistical inference.* Newbury Park, CA: Sage Publications.

Moore, E. & Kuipers, L. (1992). Behavioural correlates of expressed emotion in staff-

patient interactions. *Social Psychiatry and Psychiatric Epidemiology, 27,* 298-303.

Mowbray, C., Megivern, D., Mandiberg, J. M., Strauss, S., Stein, C. H., Collins, K., . . ., & Lett, R. (2006). Campus mental health services: Recommendations for change. *American Journal of Orthopsychiatry, 76*(2), 226-237. doi: 10.1037/002-9432.76.2.226

Mueser, K. T., & Gingerich, S. (2006). *The complete family guide to Schizophrenia: Helping your loved one get the most out of life.* New York, NY: Guilford Press.

Munro, S., & Baker, J. (2007). Surveying the attitudes of acute mental health nurses. *Journal of Psychiatric and Mental Health Nursing, 14,* 196-202.

Nehra, R., Chakrabarti, S., Kulhara P., & Sharma, R. (2005). Caregiver-coping in bipolar disorder and schizophrenia: A re-examination. *Social Psychiatry Psychiatric Epidemiology, 40,* 329-336. DOI: 10.1007/s00127-005-0884-3

National Institute for Clinical Excellence (2009). *Schizophrenia: Core interventions in the treatment and management of schizophrenia in primary and secondary care.* London: NICE.

National Institute of Mental Health (2008). *Prevalence of serious mental illness among U. S. adults by age, sex, and race.* Retrieved May 2011 from http://www.nimh.nih.gov/ statistics/SMI_AASR.shtml.

Newman, C. F. (2004). Suicidality. In Johnson, S. L., & Leahy, R. L. (Eds.) *Psychological treatment of Bipolar Disorder.* New York: Guilford Press.

New Freedom Commission on Mental Health, (2003). *Achieving the promise: Transforming mental health care in America.* Executive Summary. DHHS Pub. No. SMA-03-3831. Rockville, MD.

Nordt, C., Rossler, W., & Lauber, C. (2006). Attitudes of mental health professionals toward people with schizophrenia and major depression. *Schizophrenia Bulletin, 32*(4), 709-714.

O'Brien, M., Zinberg, J., Bearden, C., Lopez, S., Kopelowicz, A., Daley, M., & Cannon, T. (2008). Parent attitudes and parent adolescent interaction in families of youth at risk for psychosis and with recent-onset psychotic symptoms. *Early Intervention in Psychiatry, 2,* 268-276.

Onwumere, J., & Kuipers, E. (2009). Family communication in psychosis. Communication in Healthcare, 13, 379- 385.

Patterson, P., Birchwood, M., & Cochrane, R. (2005). Expressed emotion as an adaptation to loss: Prospective study in first-episode psychosis. *British Journal of Psychiatry, 187*, s59-s64.

Pedhazur, E. J. (1997). Multiple regression in behavioral research: Explanation and prediction (3rd ed.). Fort Worth, TX: Harcourt Brace.

Penn, D., Guynan, K., Daily, T., Spaulding, W., Garbin, C., & Sullivan, M. (1994). Dispelling the stigma of schizophrenia: What sort of information is best? *Schizophrenia Bulletin, 20*(3), 567-578.

Peris, T., Teachman, B., & Nosek, B. (2008). Implicit and explicit stigma of mental illness. *Journal of Nervous and Mental Disease, 196*, 752-760.

Perlick, D. (2001). Special section on stigma as a barrier to recovery: Introduction. *Psychiatric Services, 52,* 1613-1614.*

Perry, B. M., Taylor, D., & Shaw, S. (2007). "You've got to have a positive state of mind": An

interpretative phenomenological analysis of hope and first episode psychosis. *Journal of*

Mental Health, 16(6), 781-793. doi: 10.1080/09638230701496360

Pescosolido, B., Monahan, J., Link, B., Stueve, A., & Kikuzawa, S. (1999). The public's view of the

competence, dangerousness, and need for legal coercion of persons with mental health

problems. *American Journal of Public Health, 89*, 1339-1345.

Pharoah, R., Mari, J., Rathbone, J., & Wong, W. (2006). Family intervention for schizophrenia.

Cochrane Database of Systematic Reviews 2006, 4. Art. No.: CD000088. DOI:

10.1002/14651858.CD000088.pub2

Phelan, J., Link, B., Stueve, A., & Pescosolido, B. (2000). Public conceptions of mental illness in

1950 and 1996: What is mental illness and is it to be feared? *Journal of Health and*

Sociological Behavior, 41, 188-207.

Ponizovsky, A., Shvarts, S., Sasson, R., & Grinshpoon, A. (2008). Mental health

knowledge and attitudes among social workers employed in a supported education

program for adult students with schizophrenia. *American Journal of Psychiatric*

Rehabilitation, 11, 279-294. doi: 10:1080/15487760802186451

Reed, S. I. (2008). First episode psychosis: A literature review. *International Journal of Mental*

Health Nursing, 17, 85-91. doi: 10.1111/j.1447-0349.2008.00515.x

Rettenbacher, M., Burns, T., Kemmler, G., & Fleischhacker, W. (2004). Schizophrenia: Attitudes

of patients and professional carers towards the illness and antipsychotic medication.

Pharmacopsychiatry, 37, 103-109.

Riley, G., Gregory, N., Bellinger, J., Davies, N., Mabbott, G., & Sabourin, R. (2010). Carer's education groups for relatives with a first episode of psychosis: An evaluation of an eight-week education group. *Early Intervention in Psychiatry, 5*, 57-63.

Rokeach, M. (1968). A theory of organization and change within value-attitude systems. Journal of Social Issues, 24(1), 13-33.

Rotondi, A., Anderson, C., Haas, G., Eack, S., Spring, M., Ganguli, R.,…Rosenstock, J. (2010). Web-based psychoeducational intervention for persons with schizophrenia and their supporters: One-year outcomes. *Psychiatric Services: A Journal of the American Psychiatric Association, 61*(11), 1099-1105.

Sartorius, N. (2002). Iatrogenic stigma of mental illness. *British Medical Journal, 324*, 1470-1471.

Schon, U., Denhov, A., & Topor, A. (2009). Social relationships as a decisive factor in recovering from severe mental illness. *International Journal of Social Psychiatry, 55*, 336-347.

Schulze, B. (2007). Stigma and mental health professionals: A review of the literature. *International Review of Psychiatry, 19,* 137-155.

Servais, L., & Saunders, S. (2007). Clinical psychologists' perceptions of persons with mental illness. *Professional Psychology: Research and Practice, 38*, 214-219.

Sin, J., Moone, N., & Newell, J. (2007). Developing services for the carers of young adults with early-onset psychosis – implementing evidence-based practice on psycho-educational family intervention. *Journal of Psychiatric and Mental Health Nursing, 14,* 282-290.

Singer, G., Biegel, D., & Ethridge, B. (2010). Trends impacting public policy support for

    caregiving families. *Journal of Family Social Work, 13*(3), 191-207.

Sirey, J., Bruce. M., Alexopoulos, G., Perlick, D., Friedman, S., & Myers, B. (2001). Stigma as a

    barrier to recovery: Perceived stigma and patient-rated severity of illness as predictors

    of antidepressant drug adherence. *Psychiatric Services, 52*, 1615-1620.

Smith, A. L., & Cashwell, C. S. (2010). Stigma and mental illness: Investigating attitudes of

    mental health and non mental health professionals and trainees. *Journal of Humanistic*

    Counseling, Education, and Development, 49, 189-202.

Smith, A. L., & Cashwell, C. S. (2011). Social distance and mental illness: Attitudes among mental

    health and non mental health professionals and trainees. *The Professional Counselor:*

    Research and Practice, 1(1), 13-20.

Snyder, K. S., Wallace, C. J., Moe, K., Ventura, J., & Liberman, R. P. (1996). The relationship of

    residential care-home operators' expressed emotion and schizophrenic residents'

    symptoms and quality of life. *International Journal of Mental Health, 24,* 27-37.

Song, L., & Shih, C. (2009). Factors, process and outcomes of recovery from psychiatric

    disabilities: The unity model. International Journal of Social Psychiatry, 55, 348-360. doi:

    10.1177/0020754008093805.

Stanhope, V. (2002). Culture, control, and family involvement: A comparison of psychosocial

    rehabilitation in India and the United States. *Psychiatric Rehabilitation Journal, 25*(3),

    273-280

Steinkuller, A., & Rheineck, J. (2009). A review of evidence-based therapeutic interventions for

    bipolar disorder. *Journal of Mental Health Counseling, 31*(4), 338-350.

Substance Abuse and Mental Health Services. (2011). *Recovery defined – give us your feedback.*

    Retrieved from http://blog.samhsa.gov/2011/08/12/recovery-defined---give-us-your-

    feedback/

Taylor, S. M., & Dear, M. (1981). Scaling community attitudes toward the mentally ill.

    Schizophrenia Bulletin, 7, 225-240.

Thornhill, H., Clare, L., & May, R. (2004). Escape, enlightenment and endurance; Narratives of

    recovery from psychosis. *Anthropology and Medicine, 11,* 181-199.

Torrey, E. F. (2001). *Surviving Schizophrenia: A manual for families, patients, and providers.* New

    York: HarperCollins.

Tucker, C., Barker, A., & Gregoire, A. (1998). Living with schizophrenia: Caring for a person with

    a severe mental illness. *Social Psychiatry Psychiatric Epidemiology, 33,* 305-309*.*

U. S. Department of Health and Human Services (1999). *Executive Summary*. Retrieved May 1,

    2011 from www.surgeongeneral.gov-mental health: A report of the surgeon general.

U. S. Department of Health and Human Services (2007). *Testimony*. Retrieved December 2,

    2011 from www.hhs.gov/asl/testify/2007/05/t20070508c.

U. S. Department of Health and Human Services (2003). *Achieving the promise: Transforming*

    mental health care in America, executive summary. Retrieved May 1, 2011from

    http://store.samhsa.gov/product/Achieving-the-Promise-Transforming-Mental-Health-

    Care-in-America-Executive-Summary/SMA03-3831.

Vibha, P., & Saddichha, S., & Kumar, R. (2008). Attitudes of ward attendants towards mental

    illness: Comparisons and predictors. *International Journal of Social Psychiatry, 54*(5),

    469-478. DOI:10.1177/0020764008092190

Wahl, O. (1999). Mental health consumers' experience of stigma. *Schizophrenia Bulletin, 25*, 467-478.

Wahl, O., & Aroesty-Cohen, E. (2010). Attitudes of mental health professionals about mental illness: A review of the recent literature. *Journal of Community Psychology, 38* (1), 49-62.

Watson, A., & Corrigan, P. (2005). Challenging public stigma: A targeted approach. In P. W. Corrigan (Ed.), *On the stigma of mental illness* (pp. 281-295). Washington, DC: American Psychological Association.

Weiden, P. J., & Olfson, M. (1995). Cost of relapse in schizophrenia. *Schizophrenia Bulletin, 21*, 419-429.

Wong, C., Davidson, L., McGlashan, T., Gerson, R., Malaspina, D., & Corcoran, C. (2008). Comparable family burden in families of clinical high-risk and recent-onset psychosis patients. *Early Intervention in Psychiatry, 2*, 256-261.

World Health Organization. (2011). *Mental health: A state of well-being.* Retrieved from http://www.who.int/features/factfiles/mental_health/en/index.html

World Psychiatric Association (1998). Fighting stigma and discrimination because of schizophrenia. New York, NY: World Psychiatric Association.

World Psychiatric Association (2001). *The WPA global programme to reduce the stigma and discrimination because of schizophrenia – and interim report 2001.* Geneva: World Psychiatric Association.

Wykes, T., Steel, C., Everitt, B., & Tarrier, N. (2008). Cognitive behavior therapy for

schizophrenia: Effect sizes, clinical models, and methodological rigor. *Schizophrenia*

Bulletin, 34(3), 523-537.

Yalom, I. (2005). *The theory and practice of group psychotherapy*. New York, NY: Basic Books.

Zanna, M., & Rempel, J. (1988). Attitudes: A new look at an old concept. In D. Bar-Tal & A.

Kruglanski (Eds.), *The social psychology of knowledge* (pp. 315-334). Cambridge, MA:

Cambridge University