Attitudes toward Mental Illness: Are there gender differences in perceptions of Personal Responsibility, Dangerousness and Avoidance?

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Abstract

This study examined males and females' attitudes towards mental illness. It also examines three factors which have been previously found to be linked with attitudes towards mental illness. Two questionnaires were employed for this piece of research, the first questionnaire was from Reisenzein's (1986) research on attribution and mental illness, Reisenzein's questionnaire determined general attitudes towards mental illness, the other questionnaire was a one designed based upon Corrigan et al.'s (2001; 2003) Attitude to Mental Illness (AMIQ) for the purpose of this study, this questionnaire consisted of three vignettes of three different mental health issues and measured three factors: Personal Responsibility, Dangerousness and Avoidance. A total of forty-seven participants took part within this study and it was found that males scored higher in terms of negative attitudes towards mental illness, a correlation analysis indicated that there were significant positive correlations between factors being measured and General Attitudes. Further analysis in the form of regressions show all of the factors being measured were significant positive predictors of General Attitudes, whereas for females, the type of mental illness used within the vignette depended on which factor was a significant positive predictor. Furthermore another regression analysis with the Avoidance factor being the criterion showed that Dangerousness scores were significant positive predictors for females indicating that despite their more positive attitude they would still avoid an individual with a mental illness. Suggestions for further research were then made.

Keywords:
Mental Illness Discrimination Stigmatisation Attitudes Multiple Regression

Introduction

Mental illness affects millions of people and their families throughout the world (Hinshaw, 2007). Within the United States it has been found that mental illness in all forms affects around 6% of the population (Corrigan et al., 2003). Whilst there have been steps taken to understand mental illness and develop successful therapies for such illnesses; public attitudes still seem to remain negative especially in some aspects of mental illness. One of these aspects is the public's negative attitudes that are mainly based around believing the individual is responsible for their illness, that they are dangerous and that they 'seek attention' (Hinshaw, 2007). Many pieces of previous research have reported that people with mental illness are subject to experience more stigma and discrimination than physical illnesses, in fact mental illness has been found to be one of the most stigmatized conditions in society (Lai, Hong and Chee, 2001).

Records document a long history of mental illness being recognised (Bewley, 2008). It affects the individual with the illness, the families of the individual and the communities. Whilst there have been advancements in terms of treatment and the respect these individuals have with their treatment options, there are still negative emotional reactions towards mental illness (Corrigan et al., 2001). These negative emotions include fear, pity and scorn. With these negative emotions aimed at the individual with mental illness, they can cause an abundance of other issues for the individual such as social and emotional isolation which exacerbates their condition (Cove, 1975).

Regarding attitudes and mental illness, Beldie et al. (2012) found that those in society without a mental illness usually accepted that the conditions existed; however, social avoidance was an issue as the general population withdrew; no longer socialising with the person with a mental illness. In relation to this, Putman (2008) found that people with mental illness who were also subjected to social avoidance, isolation and relationship distance had further troubles with unemployment, institutionalisation and also could have problems with homelessness. The implications of this are that not only does the individual with mental health problems have to cope with their health but also face other challenges which could have a more adverse impact on their mental health.

Research towards negative attitudes and mental illness include a meta-analysis by Schomerus et al. (2012) in which results showed there were consistent changes in attitudes towards mental illness in terms of mental health literacy throughout different countries such as Germany, Great Britain and the United States. It was also found levels of acceptance of mental illnesses have not increased since the 1990's but they found that countries were slowly becoming more educated about mental illnesses, their symptomology and causes. The implications are that as more people become educated about mental illness, organisations such as mental health charities such as Time to Change and the government are hopeful that the negative attitudes are lessened, which in turn decreases stigmatisation and discrimination.

The second major finding of Schomerus et al.'s (2012) research was that even throughout time attitudes towards mental illness had not changed to become more positive. This is in contrast to findings such as Corrigan et al. (2001) as

Corrigan found that the general population's attitude to mental illness had improved over the years; however, Schomerus et al.'s (2012) research found that attitudes towards mental illness, schizophrenia in particular have deteriorated, contradicting Corrigan's findings. The implications of this involve delays in receiving help for their conditions; in particular men (Berger, Addis, Green, Mackowiak & Goldberg, 2013) and the long term effects mean that their mental health could deteriorate further which could become a risk to the individual, for example is research conducted by Drapalski, Bennett and Bellack (2011) found males were more likely to receive help after a hospitalisation for their conditions.

Previously, Phelan et al. (2000) conducted a piece of research in which he compared attitudinal data from the 1950's up until 1996 within the United States and discovered that whilst there is more information available on mental illness, the dangerous stereotype of an individual with a mental illness is more prominent therefore the attitudes are more negative. As a cultural comparison Angermeyer and Dietrich (2006) compared a two year study within Hong Kong about the attitudes towards mental illness and discovered that mental health literacy had improved but their attitudes towards a mentally ill individual were more negative. This comparison suggests that there is no difference between Eastern and Western cultures in terms of negative attitudes.

Research has shown that attitudes towards mental illness are often condition specific. For example, attitudes towards schizophrenia have deteriorated (Schomerus et al. 2012), however, negative attitude levels for illnesses such as depression have decreased particularly within some Westernised countries such as Germany. The researchers noted that bio-medical explanations were relatively new to Germany and therefore mental health literacy may not have been as developed as within other Westernised societies (Angermeyer, Holzinger & Matschinger, 2009). Lack of mental health literacy has been found to impact negative attitude levels towards individuals with a mental health condition (Jorm, 2000); therefore, the decreasing negative attitudes levels could be explained by the lack of knowledge about mental illness.

A disorder that people often have strong negative attitudes about is personality disorders. These negative attitudes have even been found within mental health professionals as well as the general population (Weight & Kendal, 2013). The general population however, have also been found to not understand fully personality disorders, their symptomology and causes. Some symptomatic behaviours are attributed to 'abnormal' behaviour and therefore people avoid the individual exhibiting those behaviours (Aviram, Brodsky & Stanley, 2006). This could have important implications for individuals with personality disorders; for example, individuals diagnosed as Borderline Personality Disorder have been known to have issues such as struggling to maintain relationships and if the general population socially withdraws and actively avoids them, this could have more effects on their other aspects of mental health; for example their mood could become low and anxiety in social situations could increase, meaning more interventions for the individual is needed (Aviram, Brodsky & Stanley, 2006).

There have been interventions to help the public understand the issues of mental illness and to help reduce stigma. Within the United States and Canada in the

1990's there seemed to be a change in opinions surrounding mental illness. The causes of depression, schizophrenia and their symptomology changed to a bio-medical view where brain chemistry was named as the main cause of the depression and schizophrenia rather than it being the conscious responsibility of the individual (Schomerus et al. 2012). The presentation of these disorders being caused by bio-medical issues seemed to be linked with positive views within society in terms of helping those with a mental illness and also showed that people no longer saw the individual as personally responsible for their issues (Pescosolido et al. 2010).

By having these changing opinions on mental illness, the stigmatization that often surrounds mental illness would hopefully change. There are two common forms of stigma which individuals with mental illness face; public stigma and self-stigma. Public stigma involves social groups believing stereotypes and therefore discriminating against a person or group who is 'different' from the societal norm for example, people with a mental illness (Ben-Zeev, Young & Corrigan, 2010). Corrigan et al. (2003) states self-stigma is a loss of self-esteem and self-efficacy when the individual with a mental illness internalises the public stigma they are facing. This stigmatisation can generate many negative stereotypes of mental illness and can create fear and rejection within society (Hinshaw, 2007). Stigmatisation in relation to mental illness has been shown throughout history; for example, societies have been found to banish people with mental disorders from their community and labelled them 'pariahs.' (Zilboorg, 1941).

Public stigma towards mental illness is created by people who perceive stereotypes based on 'cues' from individuals with mental illness, such as the psychiatric symptomology and physical appearance (Penn & Martin, 1998). These behaviours create negative stereotypes to the public and the stereotypes then spread throughout the general population. This leads to misinformation about the different mental illnesses due to the fact there are generalised symptoms and behaviours. This negative stereotyping in turn leads to negative emotions and attitudes towards people with a mental health condition. These negative emotions can lead to prejudice and discrimination; Corrigan et al. (2001) found that avoidance was the way many of people dealt with their negative attitudes towards people with mental illness. This further reinforces the stereotypes and the cyclical nature of stigmatisation. He also found that employers try discriminate against those with mental illness and that landlords avoid them by not renting them properties to help 'protect' other tenants. One of the implications of this is that all of these negative behaviours towards an individual with a mental illness can have a detrimental effect on their health which can cause further problems for the individual.

Previous research into stigma and mental health has shown there are common factors in terms of how people perceive mental illness. The most common stigmas found within the research includes considering people with a mental health condition as violent and erratic (Granello & Granello, 2000), less capable as a person (Angermeyer & Matschinger, 2003) and to believing the person with the illness is responsible for their condition (Schomerus et al. 2012). Hinshaw (2007) argued that negative emotions and stigma can create further problems for the individual's wellbeing and health both mentally and physically. All of these negative emotions can lead to an individual discriminating against mental illness. Individuals who have a mental health condition have found discrimination in ways such as

housing and employment opportunities (Russinova et al. 2011), getting a driver's licence and in some cases obtaining or maintaining child custody (Cummings, Lucas & Druss, 2013).

The issues surrounding discrimination and stigmatisation of those with mental illnesses become cyclical in nature as creating negative stereotyping can cause more stigmatisation and discrimination. An example of this is media stereotyping. The media highlights extreme cases of violent acts and crimes committed by individuals with mental illnesses; they also use misleading information such as crime statistics when reporting such crimes (Whitley & Berry, 2013). Teplin, McClelland, Abram and Weiner (2005) found that only a small proportion of individuals with mental illness are violent. They also found that there are more risks of individuals with a severe mental illness becoming a victim of violent crime; this has been found to be due to the vulnerability of some individuals with mental illness. As more local and national charities are aiming to decrease stigmatisation and discrimination towards those with a mental illness there would be hope that those negative attitudes would have decreased especially due to the fact there is now more known about mental illness and its causes, however, research has found that some stigmatising attitudes such as social avoidance have actually gotten worse in the past thirty years (Page, 1996).

Gender differences in this area are important due to conflicting previous research, particularly in terms of mental illness and attitudes and their implications. Min et al. (2012) found that there appeared to be a gender difference in terms of mental health literacy. The term 'mental health literacy' is used to describe what the general population know about the aetiology and symptomology of mental illnesses. Min et al.'s questionnaire consisted of a vignette in which described a male or female with depression; they found that males knew less about mental illness and they scored lower in terms of attitudes towards both the male and female with depression. Females scored higher on both the attitude toward the individual with depression and mental health literacy.

Williams and Pow (2007) further conducted a study on Scottish teenagers and discovered that males reported less knowledge and understanding of mental illness and its causes and they were also found to have more negative attitudes towards mental health than females. The females said that they would not mind receiving more information on the subject. Males were also found to have high blame scores. They were also less likely to think that understanding mental health and its issues were important and to want to know more about mental health. They were twice as likely to say they felt they had enough education on mental health. This is important due to the implications for individuals whose mental health deteriorates. Williams and Pow's (2007) research indicates that females would know more about mental health and this could mean that they would be more likely to recognise negative mental health symptoms. Females would also understand ways in which help for mental health may be important; whereas males would be less likely to attempt to receive help for their issues and it would perhaps take them longer to recognise their negative mental health symptoms therefore their mental health could deteriorate.

Previous research has found males scored significantly higher personal responsibility scores and lower scores for to the level they perceived the individual to

be dangerous in terms of depression (Leong & Zachar, 1999), however, this is in contrast to Ward et al.'s (2013) research which discovered that African American females reported that depression was down to a 'weak mind' whereas males believed that individuals were dangerous; this indicates a lack of clarity on the issue of which aspect of depression individuals score higher in terms of attitudes towards mental illness. The implications of this means that if the male individual began to have negative mental health issues that they would feel personally responsible for these issues and that they would be less inclined to attempt to seek help due to the fact they blame themselves for the issues. As for females, if they believe themselves to have a weak mind if they are suffering from mental health issues they may be less likely to seek help for their problems which could deteriorate their mental health further to a point at which it may be dangerous for the individual.

The study examines gender differences study due to the contradictory evidence in which aspect of males and females negative attitudes towards mental illness. Corrigan et al. (2001; 2003) has found that females are likely to have more positive towards mental illness however; they also are more likely to avoid a person with a mental illness and think that they are dangerous. Two questionnaires were used to measure the attitudes towards mental illness, the first measures a general attitudes score and then the second questionnaire which is constructed of three sections measures scores about three specific factors in terms of mental illness attitudes: personal responsibility, avoidance and level to which they believe the individual is dangerous. These factors were chosen as previous research by Corrigan et al. (2003) found that males had higher personal responsibility scores as well as negative general attitudes towards mental illness. The level they believe the individual is dangerous factor was chosen due to so much of the research finding that the common stereotype about mental illness was that the individual was dangerous and because of this factor's link with avoidance of an individual with a mental illness, the factor avoidance was chosen.

This piece of research was conducted in an attempt to further understand attitudes towards mental illness and to discover the gender differences in attitudes towards certain aspects of mental illness, such as personal responsibility, avoidance and level to which they believe the individual to be dangerous.

The aim of the current study was to discover the gender differences in attitudes towards mental illness, in terms of general attitudes towards mental illness and also the perceptions of personal responsibility, dangerousness and avoidance. The study also was used determine the relationships between the factors and to see if certain factors predicted other scores.

It was hypothesised the males would have higher personal responsibility scores as well as higher scores in terms of their negative general attitudes towards an individual with a mental illness than the females. The findings of this study could then be used so that they could help local and national charities by discovering where they need to target their interventions in an attempt to reduce negative attitudes. It could also reduce stigmatisation and discrimination towards individuals who suffer from a mental illness.

Method

Design

The design of this piece of research was an independent measures and questionnaire based. The independent variable of the research was gender whilst the dependent variables were: general attitudes towards mental illness scores, personal responsibility, dangerousness and avoidance scores.

Participants

The sample used within this piece of research on attitudes towards mental illness was an opportunity sample of forty-seven participants. The participants were a mix of males and females. The sample consisted of twenty-six females and twenty-one males for this research. The average age and range for the participants is unknown. The participants were found through email and social media in which they were asked to fill out the questionnaire either online or by using a hard copy of the questionnaires. An opportunity sample was used in this research due to the fact it is one of the most economical ways to collect data for research.

Materials

The materials used within this piece of research consisted of an information sheet (see Appendix 1) in which the participants were required to read before agreeing to take part in the research, if the questionnaire was conducted online, the information sheet was the first page in which participants had to read before clicking to go to the next page. After this a consent form (see Appendix 2) was given to participants to which was had to be filled in before they could complete the questionnaires (see Appendix 4), the online questionnaire required the participants to answer a question which was to consent to taking part within the study before they could progress to the next page. Once the consent form was filled in and the participants had been reminded they could withdraw at any time and the vignettes could be potentially upsetting, they completed the questionnaires.

The two questionnaires contained forty-seven items in total. The first part of the questionnaire consisted of twenty items which measured their general attitudes towards mental illness. The general attitudes towards mental illness scores were created by answering twenty questions off the first questionnaire. Each question was scored on a Likert scale from one to nine; these numbers were then coded to create a final total score for their attitudes toward mental illness. The higher the total score was, the more negative attitude the individual had towards mental illness. The second questionnaire was a adapted version of Corrigan's (2001) Attitude to Mental Illness Questionnaire (AMIQ) and it consisted of three vignettes which included nine questions in each. Three questions each measuring personal responsibility, dangerousness and avoidance. The second questionnaire consisted of three vignettes with nine questions each, all measured on a Likert scale from one to nine. The answers created the scores for factors which were: personal responsibility, dangerousness and avoidance. There were three subscales measured: three questions measuring personal responsibility (e.g. How controllable, do you think, is the cause of Jane's present condition?)*;* three questions measuring dangerousness

(e.g. I would feel unsafe around Harry) and the final three questions measured avoidance (e.g. I would interview Mary for a job). The higher the scores were for each of the factor meant that the participant had a more negative attitude towards mental illness in those three categories. Once the questionnaire had been completed, they were given a debrief sheet (see Appendix 3) which included signposts should the participants have been affected by the research.

The reliability of the questionnaires was tested using Cronbach's Alpha and were generally found to be acceptable or good: General Attitudes (α=.91), Anxiety Personal Responsibility (α=.86), Anxiety Dangerousness (α=.88), Anxiety Avoidance (α=.92), Schizophrenia Personal Responsibility (α=.83), Schizophrenia Dangerousness (α=.92), Schizophrenia Avoidance (α=.93), Depression Personal Responsibility (α=.87), Depression Dangerousness (α=.98) and Depression Avoidance (α=.95). Due to the fact some of the scores score higher than .90 this indicates that whilst it has high internal consistency it could affect the content validity.

Procedure

The raw data was collected from the participants' answers after both parts of the questionnaire were completed and the answers were collected. The answers were then complied into a data file on a statistical programme. Once the data was entered into the statistics programme, the data was then analysed; due to the fact the data was interval data and the research was to find gender differences and relationships within the data, a *t*-test was conducted to find a gender difference, also three MANOVA's were conducted due to the fact there was one independent variables and three dependent variables and also to reduce the Type I error before a Pearson's correlation was conducted to find the relationships between the variables; Once this was analysed, standard multiple regressions were conducted on all three of the second part of the questionnaires variables which were the scores for personal responsibility, dangerousness and avoidance scores with the general attitudes score being the criterion variable and the three factors being the predictor variables, before another set of standard multiple regressions were conducted with the Avoidance scores being used as the criterion variable.

Results

The raw data consisted of the responses of the forty-seven participants. For the general attitudes scores, the first twenty items responses were added up to create the total sum which indicated their general attitudes scores. The next nine items created personal responsibility, dangerousness and avoidance scores for the anxiety vignette, the next nine items measured the personal responsibility, dangerousness and avoidance scores for the schizophrenia vignette and the remaining nine items created the personal responsibility, dangerousness and avoidance scores for the depression vignette.

At first the data was analysed descriptively (see table one).

Table One:
The female and males General Attitudes, Responsibility, Dangerousness and Avoidance Scores means and standard deviations

	Gender	N	Mean	Std. Deviation
Female	GATotal	26	64.81	20.45
	AnxResp	26	8.20	3.43
	AnxDanger	26	6.04	4.39
	AnxAvoid	26	11.38	6.97
	SchizoResp	26	7.04	3.76
	SchizoDanger	26	11.12	5.44
	SchizoAvoid	26	12.81	7.27
	DepResp	26	8.65	4.73
	DepDanger	26	5.73	4.07
	DepAvoid	26	8.65	6.01
Male	GATotal	21	95.24	24.41
	AnxResp	21	17.57	5.71
	AnxDanger	21	8.76	3.99
	AnxAvoid	21	19.33	7.26
	SchizoResp	21	14.62	5.07
	SchizoDanger	21	14.33	4.94
	SchizoAvoid	21	19.71	7.02
	DepResp	21	17.43	5.66
	DepDanger	21	9.67	4.49
	DepAvoid	21	18.62	6.30

Females had a lower mean score in terms of General Attitude scores towards mental illness than males (see table above). They also had lower scores than males in terms of Anxiety Responsibility, Anxiety Dangerousness and Anxiety Avoidance scores (see table above).The scores also suggested lower scores for female scores on Schizophrenia Responsibility, Schizophrenia Dangerousness and Schizophrenia Avoidance than males (see table above) and again with all of the depression scores in terms of Responsibility, Dangerousness and Avoidance scores due to the fact the average female scores for depression were lower than the males' average scores.

After this an Independent samples *t*-test was conducted in an attempt to discover if there was a gender difference in General Attitudes towards mental illness. The Independent samples *t*-test revealed that females reported significantly lower negative attitudes scores compared to males (t (45) = 4.65, p<.001) indicating that females had lower scores in terms of General Attitudes towards mental illness.

The next step was to conduct three MANOVAs to test for gender differences for the three dependent variables measured within the second questionnaire. The first MANOVA was conducted to see if there was a gender difference in terms of the Responsibility, Dangerousness and Avoidance factors scores in relation to the Anxiety vignette. A MANOVA revealed a significant multivariate effect for gender (F (3, 43) = 15.68, p<.001, eta^2=.52). Due to the significance of the overall test the univariate main effects were examined. There was a significant gender difference Anxiety-Responsibility scores (F (1, 45) = 48.65*; p*< .001; eta^2 = .52) indicating that females had lower negative attitude scores than males meaning that they were less likely to feel like the individual would be personally responsible for their anxiety issues; a significant effect on Anxiety-Dangerousness scores (F (1, 45) = 4.85*; p*< .05; eta^2 = .10) demonstrating that the females have lower negative attitude scores than males in terms of believing the individual to be dangerous due to their mental health, and also a significant effect on Anxiety-Avoidance scores (F (1, 45) = 14.56*; p*< .001; eta^2 = .24) indicating that males had higher negative attitude scores in terms of to what extent they would try to avoid the individual with anxiety issues.

A second MANOVA revealed a significant multivariate effect for gender for the schizophrenia vignette (F (3, 43) = 12.05, p<.001, eta^2=.46). Due to the significance of the overall test the univariate main effects were examined. There was a significant gender difference on Schizophrenia-Responsibility scores (F (1, 45) = 34.61*; p*< .001; eta^2 = .44), indicating that females had lower negative scores than males therefore were less likely to feel like the individual would be responsible for their mental illness; a significant effect on Schizophrenia-Dangerousness scores (F (1, 45) = 4.40*; p*< .05; eta^2 = .09), demonstrating that males had higher negative attitude scores in terms of believe in the individual to be dangerous due to their mental illness than females and also a significant effect on Schizophrenia-Avoidance scores (F (1, 45) = 10.81 p< .01; eta^2 = .19) indicating that females had lower negative attitude scores in terms of to what extent they would try and avoid the individual with schizophrenia.

The third MANOVA revealed a significant multivariate effect for gender (F (3, 43) = 14.12, p<.001, eta^2=.50). Due to the significance of the overall test the univariate main effects were examined There was a significant gender difference for Depression-Responsibility scores (F (1, 45) = 33.51*; p*< .001; eta^2 = .43), indicating that females had a lower negative attitude score in terms of feeling like the individual was to blame for their mental illness; a significant effect on Depression-Dangerousness scores (F (1, 45) = 9.90*; p*< .01; eta^2 = .18), demonstrating that males had higher negative attitude scores meaning that they were more likely to believe the individual to be dangerous and also a significant effect on Depression-Avoidance scores (F (1, 45) = 30.59*; p*< .001; eta^2 = .41) indicating that females had lower negative attitude scores in terms of to what extent they would try avoiding the individual with depression meaning that males would be more likely to try avoid the individual with the mental illness.

A series of Pearson's correlations was then conducted on all of the data to see if there was a relationship between the three factors for the three vignettes and the general attitudes scores (see Table Two.)

Table Two:
Zero-order correlations between Male and Female General Attitudes scores, Anxiety-Responsibility scores, Anxiety-Dangerousness scores, Anxiety-Avoidance scores, Schizophrenia-Responsibility scores, Schizophrenia-Dangerousness scores, Schizophrenia-Avoidance scores, Depression-responsibility scores, Depression-Dangerousness scores and Depression-Avoidance scores (N=47)

	GATot	AnxResp	AnxDan	AnxAvoid	SchiResp	SchiDan	SchiAvoid	DepResp	DepDan	DepAvoid
GATot		[**.86****/*.54***]	[**.58****/*.60***]	[**.64**/***.50***]	[**.78**/***.58***]	[**.69**/***.58***]	[**.68**/.***53***]	[**.90**/.***43**]	[**.68**/***.62***]	[**.65**/***.74***]
AnxResp			[**.42/.***40***]**	[**.56**/.***45**]	[**.89/.***53***]	[**.58**/***.42**]	[**.59**/.***36**]**	[**.90**/.***75***]	[**.54*/.***59***]	[**.57**/.***55***]**
AnxDan			.	[**.08/.***53***]	[**.55**/.***54***]	[**.48*/.***57****]	[**.03/.***62***]	[**.63**/.***47**]	[**.90**/.***81***]	[**.03/.***66***]
AnxAvoid					[**.30/.***36**]**	[**.39/.***77****]**	[**.95**/***.91***]	[**.54*/.***25**]**	[**.10/.***52***]	[**.92**/***.81***]
SchiResp						**[.38/.***31**]**	[**.36/.***265**]**	[**.90**/.***64***]	[**.60**/.***58***]	[**.36/.***52***]
SchiDan							[**.42/***.75***]	[**.52*/***.24**]**	[**.60**/***.54***]	[**.34/***.65***]
SchiAvoid								[**.58**/***.20**]**	[**.05/***.57***]	[**.94**/***.85***]
DepResp									[**.66**/***.56***]	[**.54*/***.45**]
DepDan										[**.08/***.79***]
DepAvoid										

** $p < .01$, * $p < .05$
[**men**/*women*]

Female Factor Correlations with General Attitudes

In terms of the females' correlations for the three factors: Responsibility, Dangerousness and Avoidance and their relationship with their General Attitudes scores, all were found to have significant positive correlations. All three of the factors being measured for Anxiety were found to have a significant positive correlation with the General Attitudes scores: Responsibility (r = .54, p < .01), Dangerousness (r = .60, p < .01), Avoidance (r = .50, p < .01). For Schizophrenia and the three factors being measured, they too were found all to have significant positive correlations in terms of their relationship with the General Attitudes scores: Responsibility (r = .58, p < .01), Dangerousness (r = .58, p < .01), Avoidance (r = .53, p < .01). The significant positive correlations were also found in all of the correlations in relation to Depression and the three factors being measured and the relationship with General Attitudes scores: Responsibility (r = .43, p < .05), Dangerousness (r = .62, p < .01), Avoidance (r = .74, p < .01).

Male Factor Correlations with General Attitudes

In terms of the males' correlations for the three factors: Responsibility, Dangerousness and Avoidance and their relationship with their General Attitudes scores, all were found to have significant positive correlations. The three factors being measured for Anxiety were found to have significant positive correlations with the General Attitudes scores: Responsibility (r = .86, p < .01), Dangerousness (r = .58, p < .01), Avoidance (r = .64, p < .01). For Schizophrenia and the three measured factors, they were also found to all have significant positive correlations: Responsibility (r = .78, p < .01), Dangerousness (r = .69, p < .01), Avoidance (r = .68, p < .01). Significant positive correlations were also found in the three factors being measured scores in terms of Depression and the General Attitudes scores: Responsibility (r = .90, p < .01), Dangerousness (r = .68, p < .01), Avoidance (r = .65, p < .01).

Multiple Regressions

Standard multiple regressions were conducted on the data to discover if the three factors: Responsibility, Dangerousness and Avoidance scores for anxiety, schizophrenia and depression significantly predicted the General Attitudes scores towards mental illness for both males and females.

Female General Attitudes

The results of the regression for females for the Anxiety factors indicated that three predictors explained 48% of the variance (Adjusted R^2=41%) with a significant overall model (F (3, 22) = 6.77; p<.01). It was found that only the Dangerousness was a significant positive predictor of the General Attitudes scores (β = .39, t = 2.11, p<.05) suggesting that as the Dangerousness scores increase so does the General Attitudes scores.

For the Schizophrenia vignette, the factors indicated that three predictors explained 53% of the variance (Adjusted R^2=47%) with a significant overall model (F (3, 22) = 8.32; p<.01). It was found that only the Responsibility was a significant

positive predictor of the General Attitudes scores (β = .44, t = 2.86, p<.01) suggesting that as the Responsibility scores increase so does the General Attitudes scores.

The results of the regression for females for the Depression factors indicated that three predictors explained 55% of the variance (Adjusted R^2=49%) with a significant overall model (F (3, 22) = 9.02; p<.001). It was found that only the Avoidance was a significant positive predictor of the General Attitudes scores (β = .67, t = 2.84, p<.05) suggesting that as the Avoidance scores increase so does the General Attitudes scores.

Male General Attitudes

The results of the regression for males for the Anxiety factors indicated that three predictors explained 93% of the variance (Adjusted R^2=86%) with a significant overall model (F (3, 17) = 34.30; p<.001). It was found that Responsibility was a significant positive predictor of the General Attitudes scores (β = .54, t = 4.42, p<.001) demonstrating that as Responsibility scores increase so do the General Attitudes scores, also Dangerousness was a significant positive predictor of the General Attitudes scores (β = .33, t = 3.25, p<.01) suggesting that as the Dangerousness scores increase so does the General Attitudes scores and also Avoidance was a significant positive predictor of the General Attitudes scores (β = .31, t = 2.77, p<.05) suggesting that as the Avoidance scores increase so does the General Attitudes scores.

For the Schizophrenia vignette, the factors indicated that three predictors explained 88% of the variance (Adjusted R^2=86%) with a significant overall model (F (3, 17) = 43.29; p<.001). It was found that Responsibility was a significant positive predictor of the General Attitudes scores (β = .52, t = 5.67, p<.001) suggesting that as the Responsibility scores increase so does the General Attitudes scores, also Dangerousness was a significant positive predictor of the General Attitudes scores (β = .35, t = 3.69, p<.01) suggesting that as the Dangerousness scores increase so does the General Attitudes scores and also Avoidance was a significant positive predictor of the General Attitudes scores (β = .35, t = 3.72, p<.01) indicating that as the Avoidance scores increase so does the General Attitudes scores.

The results of the regression for males for the Depression factors indicated that three predictors explained 90% of the variance (Adjusted R^2=88%) with a significant overall model (F (3, 17) = 50.42; p<.001). It was found that Responsibility was a significant positive predictor of the General Attitudes scores (β = .50, t = 3.76, p<.01) indicating that as Responsibility scores increase so does the General Attitudes scores, also Dangerousness was a significant positive predictor of the General Attitudes scores (β = .32, t = 2.84, p<.05) suggesting that as the Dangerousness scores increase so does the General Attitudes scores and also Avoidance was a significant positive predictor of the General Attitudes scores (β = .35, t = 3.44, p<.01) indicating that as Avoidance scores increase so does the General Attitudes scores.

Avoidance as the Criterion

Another series of standard multiple regressions were conducted using Avoidance as the criterion variable for Anxiety, Schizophrenia, and Depression for both males and females.

Females

The first standard multiple regression conducted was on the anxiety factors
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Table Three: Standard multiple regression of Female Anxiety-Avoidance scores on Anxiety-Responsibility scores and Anxiety-Dangerousness scores

Variables	Beta	t	Sig	R^2	Adj R^2
Anxiety Responsibility	.28	1.51	.145		
Anxiety Dangerousness	.42	2.27	<.05	.34	.29

ANOVA: F(2, 23) = 6.06; p<.01

The results of the regression for females for the anxiety factors indicated that the two predictors explained 34% of the variance (Adjusted R^2=29%) with a significant overall model (F (2, 23) = 6.06; p<.01). It was found that only Dangerousness was a significant positive predictor of the Avoidance scores (β = .42, t = 2.27, p<.01) suggesting that as the Dangerousness scores increase so does the Avoidance scores.

The second standard multiple regression conducted was on the schizophrenia factors.

Table Four: Standard multiple regression of Female Schizophrenia-Avoidance scores on Schizophrenia-Responsibility scores and Schizophrenia-Dangerousness scores

Variables	Beta	t	Sig	R^2	Adj R^2
Schizophrenia Responsibility	.04	.26	.795		
Schizophrenia Dangerousness	.74	5.07	<.001	.56	.52

ANOVA: F(2, 23) = 14.68; p<.001

The results of the regression for females for the schizophrenia factors indicated that the two predictors explained 56% of the variance (Adjusted R^2= 52%) with a significant overall model (F (2, 23) = 14.68; p<.001). It was found that only Dangerousness was a significant positive predictor of the Avoidance scores (β = .74, t = 5.07, p<.001) suggesting that as the Dangerousness scores increase so does the Avoidance scores.

The third standard multiple regression conducted was on the depression factors.

Table Five: Standard multiple regression of Female Depression-Avoidance scores on Depression-Responsibility scores and Depression-Dangerousness scores

Variables	Beta	t	Sig	R^2	Adj R^2
Depression Responsibility	.01	.07	.943		
Depression Dangerousness	.79	5.14	<.001	.63	.60
ANOVA: F(2, 23) = 19.57; p<.001					

The results of the regression for females for the depression factors indicated that the two predictors explained 63% of the variance (Adjusted R^2=.60%) with a significant overall model (F (2, 23) = 19.57; p<.001). It was found that only Dangerousness was a significant positive predictor of the Avoidance scores (β = .79, t = 5.14, p<.001) suggesting that as the Dangerousness scores increase so does the Avoidance scores.

Males

The first standard multiple regression conducted was on the anxiety factors
.

Table Six: Standard multiple regression of Male Anxiety-Avoidance scores on Anxiety-Responsibility scores and Anxiety-Dangerousness scores

Variables	Beta	t	Sig	R^2	Adj R^2
Anxiety Responsibility	.63	3.01	<.01		
Anxiety Dangerousness	-.19	-.88	.390	.34	.26
ANOVA: F(2, 18) = 4.60; p<.05					

The results of the regression for males for the anxiety factors indicated that the two predictors explained 34% of the variance (Adjusted R^2=26%) with a significant overall model (F (2, 18) = 4.60; p<.05). It was found that only Responsibility was a significant positive predictor of the Avoidance scores (β = .63, t = 3.01, p<.01) suggesting that as the Responsibility scores increase so does the Avoidance scores.

The second standard multiple regression conducted was on the schizophrenia factors.

Table Seven: Standard multiple regression of Male Schizophrenia-Avoidance scores on Schizophrenia-Responsibility scores and Schizophrenia-Dangerousness scores

Variables	Beta	t	Sig	R^2	Adj R^2
Schizophrenia Responsibility	.24	1.06	.305		
Schizophrenia Dangerousness	.32	1.44	.167	.22	.13
ANOVA: F(2, 18) = 2.54; p=.106					

The results of the regression for males for the schizophrenia factors indicated that the two predictors explained 22% of the variance (Adjusted R^2=13%) with a not significant overall model (F (2, 18) = 2.54; p=.106) and no significant predictors.

The third standard multiple regression conducted was on the depression factors.

Table Eight: Standard multiple regression of Male Depression-Avoidance scores on Depression-Responsibility scores and Depression-Dangerousness scores

Variables	Beta	t	Sig	R^2	Adj R^2
Depression Responsibility	.85	3.58	<.01		
Depression Dangerousness	-.48	-2.01	.059	.42	.36
ANOVA: F(2, 18) = 6.53; p<.01					

The results of the regression for males for the Depression factors indicated that the two predictors explained 42% of the variance (Adjusted R^2=36%) with a significant overall model (F (2, 18) = 6.53; p<.01). It was found that only Responsibility was a significant positive predictor of the =Avoidance scores (β = .85, t = 3.58, p<.01) suggesting that as the Responsibility scores increase so does the Avoidance scores.

The results showed that within the Independent sample t-test that there was a significant gender difference in negative attitudes towards mental illness as males scored higher than females for general attitudes towards mental illness. The MANOVAs results all indicate significant gender differences in which males were found to score higher than females on all subscales measured. The correlation indicated that all of the subscales had a positive significant relationship with the general attitudes scores suggesting that as the subscales score increase so does the general attitudes score. The first set of multiple regressions suggest that for males all of their subscales for each vignette predict their general attitudes score whereas for females the subscales which predicted their general attitudes scores differed with each mental health condition. The final regressions indicated that for females their avoidance scored are significantly predicted with their avoidance

scores whereas for males their responsibility scores were more likely to predict their avoidance scores.

Discussion

The aim of this research was to discover and understand if there were a gender differences in terms of negative attitudes towards mental illness. It was also conducted to see if the different factors that previous research had found to be related to attitudes towards mental illness were still apparent within this investigation. The most common factors found to be linked with attitudes towards mental illness within previous research included personal responsibility, avoidance and dangerousness levels; therefore these three factors were measured within the current study. Relationships between the three factors and the general attitude scores were also examined to see if these indicated how predictive these factors may be of general attitudes towards mental illness as a whole.

The findings of this piece of research indicate that there is still a significant gender difference in terms of attitudes towards mental health; males were found to have more negative attitudes in relation to mental health. This supports previous studies findings such as Corrigan et al.'s (2001; 2003) when researching attitudes towards mental illness. Males' negative attitudes towards mental illness could be due to the lack of knowledge and understanding about mental health and its symptomology. Research indicates that males have lower scores in terms of mental health literacy demonstrating that males would therefore not have as much awareness of mental illness and its implications (Williams & Pow, 2007). This finding therefore supports the hypothesis in which males would be found to have higher negative attitudes scores.

Significant gender differences were found in scores for the three factors when conducting the three MANOVAs as males scored higher than females in terms of personal responsibility, avoidance and dangerousness scores in terms of the anxiety, schizophrenia and depression vignettes. These results clearly supports that males' have more negative scores which again could be explained in terms of the lack of mental health literacy.

For males all of the three factors being measured within the three different vignettes, predicted the males' general attitudes scores towards mental illness. For females the predictors of general attitudes scores was more complex, for example the dangerousness factor was the significant predictor of their general attitudes only for anxiety. For schizophrenia, responsibility was found to be the significant predictor of their general attitudes scores and for depression it was their avoidance scores as the significant predictor of their general attitudes. This supports previous research such as Corrigan et al.'s (2001; 2003) with responsibility being found within one of the vignettes to be a significant predictor. These results could also be explained by Corrigan et al.'s (2001) research on discrimination towards individuals with a mental illness and attribution; as people make attributions on the causation and controllability of mental illness.

It was found that in all three vignettes for females, the dangerousness scores significantly predicted the avoidance scores which seems to suggest that even

though they have more positive attitudes towards mental illness, their belief of the dangerousness of the individual was linked to their avoidance of people with mental illness. This could be explained in terms of evolutionary theory. Campbell (1999) found that women are found to have a lower threshold for fear and that they have a greater reason than males for protecting their lives due to reproductive values as evolutionary theory suggests that infant survival determined more by maternal care rather than paternal. If they believe the individual to be dangerous they would be more likely to avoid the individual. For males, their responsibility scores for both the anxiety and depression vignette significantly predicted the avoidance scores. This seems to suggest that males who believe the individual to be responsible for their illness will be more likely to avoid the individual.

In terms of the previous research in which males were found to have a more negative attitude towards mental illness, this piece of research appears to support this notion as a whole. It suggests that males still have distorted beliefs about the level of personal responsibility of the individuals who have mental health issues, therefore supporting findings of Williams and Pow's (2007) research on the gender differences for mental health literacy. The current findings also appears to support Corrigan et al.'s (2001; 2003) findings as avoidance scores were found to have an effect on the individual's general attitude towards mental illness scores, particularly in terms of females and their avoidance and dangerousness scores. It further supports Corrigan et al.'s (2001; 2003) findings in that females were found to have lower negative attitudes scores towards mental illness.

In contrast, the current research contradicts the findings of Ward et al. (2013); they found that African American males had higher scores in terms of believing an individual with a mental illness was dangerous as well as females having higher responsibility scores, whereas, this piece of research found the opposite as males scored higher personal responsibility scores and lower scores for dangerousness.

There are some limitations of this piece of research. The first limitation is the small sample size used for this study. Using a small sample size reduces generalizability due to the fact the demographic information of all of the participants would be similar due to the fact the participants were university students. The issue of using these university students was that the participants were psychology students, therefore their knowledge in terms of certain aspects of mental illness they had been taught could have influenced their responses to the questionnaire. Another limitation of this sample is that it was an opportunity sample therefore the participants were unrepresentative of the entire population. Another limitation within this current study is that the questionnaires may have encountered social desirability as participants may not want to answer the questions within the questionnaire truthfully as they were measuring negative attitudes towards mental illness which is a sensitive issue; the participants may have not liked to get high scores within the questionnaire, as this was an indicator of negative attitudes, this might have been prominent within the sample as the participants were psychology students; also the vignettes could also have been potentially upsetting, which could have affected the participants answers. There also needs to be steps taken in terms of the questionnaires used within this research to measure the negative attitudes towards mental illness as they have been found to have too high of a Cronbach's Alpha score which could have affected the content validity.

Further Research

Further areas of study in relation to research on mental illness could be conducted in order to gain further insight into the negative attitudes towards mental illness. Within this piece of research the vignettes all contained information about the treatment and help the fictional individuals were having, therefore, to see if this affected the attitudes scores in a positive way a questionnaire could be created with vignettes which do not contain any information about the positive steps the fictional vignette is taking to help their mental health condition. This could help indicate which pieces of information reported to the general population can affect their attitude towards an individual with a mental health condition. By doing this it could indicate what type of information the general population need to see for it to affect their attitudes towards people with mental health conditions for example statistics of people who have improved since receiving help for their condition and this would educate the general population about mental health issues and the ways treatment can help. This could have a positive effect on the individual with the mental illness as they could not be subjected to the negative attitudes which can sometimes have detrimental effects on their mental health. Other aspects of a questionnaire could also be developed to find other factors of mental illness may affect an individual's attitude towards mental illness. By doing this, it could be used as a tool by organizations such as the government and mental health charities in which they educate the population about what mental illness is and its symptomology. The knowledge would then help decrease negative attitudes as the stereotypical view of an individual with a mental illness would change and therefore people would be educated in how an individual with a mental illness such as schizophrenia is not always dangerous as it is normally presented by the media

Finally, another way to gain further and more insightful information into negative attitudes towards mental health would be to conduct a mixed-methods or qualitative studies into this area as more information could be gained in an attempt to learn about what it is about mental illness that causes people to have such negative attitudes towards it. This could be used to eliminate and identify the core aspects of negative attitudes towards mental illness and can then be used as a basis for organizations to educate the population.

Implications

The implications of this study include that it shows that there is still a trend of negative attitudes towards mental illness despite organizations working to eliminate stigma and discrimination in terms of mental illness. Therefore this study could be used as the first step in gaining information into how negative attitudes of mental illness are formed and to which aspects of negative mental health attitudes need to be focussed on in an attempt to decrease these negative attitudes. The implications of the findings show that females, despite having more positive attitudes towards mental illness still score high on avoidance scores which could have detrimental effects on individuals with mental illnesses. The dangerousness scores for the illnesses, schizophrenia in particular show that not enough is being done in an attempt to eradicate the stigmatisation and discrimination of mental illness therefore individuals with mental health issues are still being subjected to for example, the way the media portrays violent crime when committed by a person with a mental illness,

this portrays a negative view on mental illness and if this is an individual's main source of information on mental illness, the consequence could be creating stigmatisation and discrimination of an individual with a mental illness especially in terms of avoidance. By applying this piece of research and other pieces on attitudes towards mental illness, this can help educate the general population on all aspects of mental illness which in turn would help change negative attitudes towards mental illness.

Conclusion

The data of this study shows clearly that males have more of a negative attitude towards mental illness supporting previous research (Williams & Pow, 2007; Min et al. 2012; Corrigan et al., 2001; 2003). It also shows that despite the more positive attitudes towards mental illness females are still likely to avoid an individual with a mental illness especially if they perceive the individual with a mental illness to be dangerous. This research shows that more steps need to be taken to educate the general population on mental illness in an attempt to decrease negative attitudes which can lead to stigmatization and discrimination. The previous research seems to support the findings of this research due to the fact males scored higher scores in terms of negative attitudes towards mental illness. The ideas for further research could be used in an attempt to help combat the negative attitudes, stigmatization and discrimination individuals with mental illnesses are subjected to.

References

Angermeyer, M. C., & Matschinger, H. H. (2003). The stigma of mental illness: effects of labelling on public attitudes towards people with mental disorder. *Acta Psychiatrica Scandinavica*, 108(4), 304. doi:10.1034/j.1600-0447.2003.00150.x

Angermeyer, M. C., Holzinger, A., & Matschinger, H. (2009). Mental health literacy and attitude towards people with mental illness: a trend analysis based on population surveys in the eastern part of Germany. *European Psychiatry*,24(4), 225-232.

Aviram, R. B., Brodsky, B. S., & Stanley, B. (2006). Borderline Personality Disorder, Stigma, and Treatment Implications. *Harvard Review Of Psychiatry (Taylor & Francis Ltd*), 14(5), 249-256. doi:10.1080/10673220600975121

Beldie, A., Boer, J., Brain, C., Constant, E., Figueira, M., Filipcic, I., & ... Ringen, P. (2012). Fighting stigma of mental illness in midsize European countries. *Social Psychiatry & Psychiatric Epidemiology*, 471-38. doi:10.1007/s00127-012-0491-z

Ben-Zeev, D., Young, M. A., & Corrigan, P. W. (2010). DSM-V and the stigma of mental illness. *Journal Of Mental Health,* 19(4), 318-327 doi:10.3109/09638237.2010.492484

Berger, J. L., Addis, M. E., Green, J. D., Mackowiak, C., & Goldberg, V. (2013). Men's reactions to mental health labels, forms of help-seeking, and sources of help-seeking advice. *Psychology Of Men & Masculinity,* 14(4), 433-443. doi:10.1037/a0030175

Bewley, T. (2008). *Madness to Mental Illness : A History of the Royal College of Psychiatrists.* London: RCPsych Publications.

Campbell, A. (1999). Staying alive: Evolution, culture, and women's intrasexual aggression. *Behavioral and Brain Sciences,* 22(02), 203-214.

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

Corrigan, P. W., 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., Markowitz, F. E., Watson, A., Rowan, D., & Kubiak, M. (2003). An Attribution Model of Public Discrimination towards Persons with Mental Illness. *Journal Of Health & Social Behavior*, 44(2), 162-179.

Cove, W. R. (1975). The Labelling theory of mental illness: a reply to Scheff. *American Sociological Review*, 40(2), 242-248.

Cummings, J. R., Lucas, S. M., & Druss, B. G. (2013). Addressing Public Stigma and

Disparities Among Persons With Mental Illness: The Role of Federal Policy. *American Journal Of Public Health*, 103(5), 781-785. doi:10.2105/AJPH.2013.301224

Drapalski, A., Bennett, M., & Bellack, A. (2011). Gender Differences in Substance Use, Consequences, Motivation to Change, and Treatment Seeking in People With Serious Mental Illness. *Substance Use & Misuse*, 46(6), 808-818.

Hinshaw, S. P. (2007). *The Mark of Shame : Stigma of Mental Illness and an Agenda for Change.* Oxford: Oxford University Press.

Jorm, A. F. (2000). Mental health literacy Public knowledge and beliefs about mental disorders. *The British Journal of Psychiatry*, 177(5), 396-401.

Lai Y. M, Hong C. P., & Chee C. Y., (2001) Stigma of mental illness. *Singapore Medical Journal*, 42(3): 111-114.

Leong, F. T., & Zachar, P. (1999). Gender and opinions about mental illness as predictors of attitudes toward seeking professional psychological help. *British Journal of Guidance and Counselling*, 27(1), 123-132.

Link, B. G. (1987). Understanding labeling effects in the area of mental disorders: An assessment of the effects of expectations of rejection. *American Sociological Review*, 96-112
.
Min, G., Danielsen, J., Lei-Zhen, W., Dong-Ping, Z., Qian, X., Miao-Miao, L., & ... Yun-Gui, Y. (2012). Mental Health Literacy of Depression: Gender Differences and Attitudinal Antecedents in a Representative British Sample*. Plos ONE*, 7(11), 1-6.

Page, S. (1996). Effects of the mental illness label in 1993: Acceptance and rejection in the community. *Journal of health & social policy*, 7(2), 61-68.

Penn, D.L., & Martin, J. (1998). The stigma of severe mental illness: Some potential solutions for a recalcitrant problem. *Psychiatric Quarterly*, 69, 235–247
.
Pescosolido, B. A., Martin, J. K., Long, J. S., Medina, T. R., Phelan, J. C., & Link, B. G. (2010). “A disease like any other”? A decade of change in public reactions to schizophrenia, depression, and alcohol dependence. *American Journal of Psychiatry,* 167(11), 1321-1330.

Phelan, J. C., Link, B. G., Stueve, A., & Pescosolido, B. A. (2000). Public Conceptions of Mental Illness in 1950 and 1996: What is Mental Illness and Is It To Be Feared?. *Journal Of Health & Social Behavior,* 41(2), 188-207.

Putman, S. S. (2008). Mental illness: diagnostic title or derogatory term? (Attitudes towards mental illness) Developing a learning resource for use within a clinical call centre. A systematic literature review on attitudes towards mental illness. *Journal Of Psychiatric & Mental Health Nursing,* 15(8), 684-693. doi:10.1111/j.1365-2850.2008.01288.x

Reisenzein, R.A structural equation analysis of Weiner's attribution—affect model of helping behavior. *Journal of Personality and Social Psychology,* 50: 1123– 1133, 1986.

Russinova, Z., Griffin, S., Bloch, P., Wewiorski, N. J., & Rosoklija, I. (2011). Workplace prejudice and discrimination toward individuals with mental illnesses. *Journal Of Vocational Rehabilitation*, 35(3), 227-241.

Schomerus, G., Schwahn, C., Holzinger, A., Corrigan, P., Grabe, H., Carta, M., & Angermeyer, M. (2012). Evolution of public attitudes about mental illness: a systematic review and meta-analysis. *Acta Psychiatrica Scandinavica*, 125(6), 440-452. doi:10.1111/j.1600-0447.2012.01826.x

Teplin, L. A., McClelland, G. M., Abram, K. M., & Weiner, D. A. (2005). Crime victimization in adults with severe mental illness: Comparison with the National Crime Victimizatiom Survey. *Archives of General Psychiatry*, 62, 911-921.

Ward, E. C., Wiltshire, J. C., Detry, M. A., & Brown, R. L. (2013). African American Men and Women's Attitude Toward Mental Illness, Perceptions of Stigma, and Preferred Coping Behaviors. *Nursing Research*, 62(3), 185-194. doi:10.1097/NNR.0b013e31827bf533

Weight, E., & Kendal, S. (2013). Staff attitudes towards inpatients with borderline personality disorder. *Mental Health Practice*, 17(3), 34-38.

Whitley, R., & Berry, S. (2013). Analyzing media representations of mental illness: Lessons learnt from a national project. *Journal Of Mental Health*, 22(3), 246-253. doi:10.3109/09638237.2012.745188

Williams, B., & Pow, J. (2007). Gender Differences and Mental Health: An Exploratory Study of Knowledge and Attitudes to Mental Health Among Scottish Teenagers. *Child & Adolescent Mental Health,* 12(1), 8-12. doi:10.1111/j.1475-3588.2006.00413.x

Zilboorg, G., with Henry, G. W. (1941). *A history of medical psychology.* New York: Norton