An Experimental Examination of the Impact of Perceived Stigma of Mental

Health Problems on Help-Seeking Attitudes

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I certify that all material in this thesis which is not my own work has been identified and that no material has previously been submitted and approved for the award of a degree by this or any other University.

Signature: …………………………………………………………..

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ABSTRACT

In any year, one in four British adults will experience a mental disorder (Singleton, Bumpstead, O'Brien, Lee, & Meltzer, 2001), but barriers to accessing treatment remain, one being fear of stigmatization. In this study perceptions of the stigma associated with mental illness were experimentally manipulated and perceived public stigma of help-seeking, attitudes to mental illness, self-stigma, and attitudes to help-seeking were measured. Results indicated that lowering perceived social stigma of mental illness reduced perceived public stigma attached to help-seeking, but also resulted in less positive attitudes to help-seeking, when compared to a neutral condition. The relationship between perceived societal stigma of mental illness and attitudes to help-seeking was mediated by perceived public stigma of seeking psychological help. This research raises questions about the effect of anti-stigma campaigns, which aim to change perceptions about stigma but may have a negative effect on attitudes to help-seeking.

Keywords: mental health, mental illness, stigma, help-seeking, barriers

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Good mental health is fundamental to physical health, relationships,

work, and well-being. Between 2010-2011 almost one in five (19%) individuals

in the UK reported experiencing mild to moderate anxiety or depression

(Beaumont & Lofts, 2013), although only one in 36 (1.29 million people) were in

contact with specialist mental health services in England (Health and Social

Care Information Centre, 2011). The disparity between those who experience

symptoms of mental illness and those who choose to seek help is therefore

considerable, despite the launch of the Improving Access to Psychological

Therapies (IAPT) programme in October 2008 (Department of Health, 2012).

Whilst improving the availability of mental health services is a priority for

the UK Government (HM Government, 2011), investment in mental health

services for adults of working age has decreased in real terms by 2.36% since

2012 (Mental Health Network NHS Confederation, 2014), and the numbers of

people in contact with services also appears to be decreasing (Health and

Social Care Information Centre, 2013). Understanding what can be done to

improve access to mental health services is therefore of crucial importance to

improving the health of the nation. One aspect of this involves identifying the

barriers that people face in seeking professional help from mental health

services.

Barriers to Help-Seeking

Generally researchers have taken an exploratory approach to identifying

barriers to accessing mental health support (e.g., Boyd et al., 2007; Barney,

Griffiths, Christensen, & Jorm, 2009; Taskanen et al., 2011; Kessler et al.,

2001). This has largely focussed on examining retrospective accounts of individuals who have previously sought help from mental health services, and asking them about their experience, using qualitative research methods such as focus groups or semi-structured interviews. Findings from these studies indicate that people consider a range of factors in their decision to seek help, with many reporting practical barriers to help-seeking[1], and others referring to fears about becoming a target for stigma or discrimination (Barney, Griffiths, Christensen, & Jorm, 2009; Taskanen et al., 2011; Kessler et al., 2001; Ahmed, Stewart, Teng, Wahoush, & Gagnon, 2008; Hepworth & Paxton, 2007). In addition, feelings of shame (Hepworth & Paxton, 2007; Tang, Sevigny, Mao, Jiang, & Cai, 2007; Harris, Collinson, & das Nair, 2012), embarrassment (Ahmed, Stewart, Teng, Wahoush, & Gagnon, 2008; Visco, 2009), vulnerability (Uebelacker et al., 2012) can impact negatively on the decision to seek help from services. Although perceptions about the over-use of anti-depressant medication by mental health services can also act as a prominent barrier to help-seeking (Abrams, Dornig, & Curran, 2009; Pettigrew, Donovan, Pescud, Boldy, & Newton, 2010; Johnson, Oliffe, Kelly, Galdas, & Ogrodniczuk, 2012), as can fears about receiving stigmatised responses from health professionals (Ahmed, Stewart, Teng, Wahoush, & Gagnon, 2008; Barney, Griffiths, Christensen & Jorm, 2009; Cinnirella, & Loewenthal, 1999), and fears of incarceration (Tang, Sevigny, Mao, Jiang, & Cai, 2007; Taskanen et al., 2011).

There are also apparent differences across cultures and ethnicities, with individuals from minority ethnic groups, such as Asian Americans, identifying traditional beliefs about mental illness as a barrier to services (Lazear, Pires, Isaacs, Chaulk, & Huang, 2008; Uebelacker et al., 2012), or simply a lack of awareness of mental health problems in their community (Lee et al., 2008). In

other studies, people have reported that mental health services were not culturally appropriate for them (Mishra, Lucksted, Gioia, Barnet, & Baquet, 2009; Lee et al., 2008), and that mental illness was a private matter for the family (Uebelacker et al., 2012). However, it also seems that a perception of racism in health services is a significant concern (Mishra, Lucksted, Gioia, Barnet, & Baquet, 2009), as well as a general fear of discrimination by those in their community (Abrams, Dorning, & Curran, 2009) or by mental health professionals (Mishra, Lucksted, Gioia, Barnet, & Baquet, 2009).

Overall, there are a multitude of factors which appear to influence an individual's decision to seek help from mental health services. However, many of the perceived risks associated with accessing mental health services seem to be related to a fear of stigmatisation. This could be experienced as a concern with "losing face" (Yakunina & Weigold, 2011), fear of negative social visibility (Boyd et al., 2007), or fear of being judged as being personally or spiritually weak (Johnson, Mills, DeLeon, Hartzema, & Haddad, 2009). This not only suggests that people feel that stigma is a problem, but also that it has a direct impact on their decision to seek help for a mental health problem.

Stigma as a Barrier to Help-seeking

As stated above, researchers have generally utilised a qualitative methodology to identifying barriers to accessing mental health support. Very few studies have attempted to identify the causal relationship between perceived or expected stigma and help-seeking. Despite this, it is apparent that a number of studies have explored the existence of a correlational relationship (e.g. Masuda & Boone, 2011; Ouimette et al., 2011; Yakunina & Weigold, 2011), which the following sections will aim to summarise.

Stigma of accessing mental health services as a barrier to help-seeking. In a review of the barriers to help-seeking for mental health problems from professional providers, Jackson et al., (2007) highlight the mixed evidence regarding the relationship between perceived stigma of accessing mental health services and attitudes to help-seeking. Whilst one study in the review found that people who perceived mental health care as being highly stigmatizing were less willing to seek help for a mental health problem (Hoyt, Conger, Valde, & Weihs, 1997), other studies found no evidence of a relationship (Wrigley, Jackson, Judd, & Komiti, 2005; Komiti, Judd, & Jackson, 2006)[2].

Other research suggests that there is also a stigma attached to seeking psychological services, and that awareness of this stigma is related to more negative attitudes to seeking such help (Shea & Yea, 2008; Yakunina & Weigold, 2011; Masuda & Boone, 2011; Dotson, Masuda, & Cohen, 2011; Ting & Hwang, 2009). Specifically, it seems that feelings of shame or embarrassment are predictive of less positive attitudes towards help-seeking (Hoyt, Conger, Valde, & Weihs, 1997; Givens, Katz, Bellamy, & Holmes, 2007; Mojtabai, Olfson, & Mechanic, 2002) as are concerns about losing social integrity (Shea & Yea, 2008). In addition, fears about friends and family knowing about mental health service use are predictive of more negative attitudes to seeking counselling, although concerns about others in the community knowing bear no impact (Givens, Katz, Bellamy, Holmes, 2007)[3].

Certainly, the relationship between perceived stigma of mental health services and help-seeking is not straightforward. In addition, it also remains difficult to ascertain the extent to which attitudes to help-seeking predict actual help-seeking behaviour. In a cross-sectional study involving a sample of undergraduate and graduate students, Golberstein, Eisenberg, and Gollust

(2008) found that whilst students reporting higher levels of perceived stigma were less likely to perceive a need for mental health support, there was no relationship between perceived stigma of formal care and actual service use. This finding was corroborated by a later study from the same authors which found no association between perceived stigma of receiving psychological help in 2005 and subsequent service use over the following two years (Golberstein, Eisenberg, & Gollust, 2009).

Stigma of mental illness as a barrier to help-seeking. Another type of stigma that may present a barrier to help-seeking from mental health services is the stigma attached to mental health problems, although very few studies have attempted to explore this relationship, and only one study appears to have examined help-seeking behaviours. In a study examining help-seeking across the European Union, Mojtabai (2010) reported that beliefs about people with psychological problems as being dangerous, unpredictable, or blameworthy for their problems were associated with less willingness to seek professional help[4]; a finding which has been replicated elsewhere (Masuda & Boone, 2011; Bathje & Prior, 2011). However, the picture may be less clear for adolescents (12-17 year olds), as perceptions of people with mental illness as dangerous, unpredictable, or weak were unrelated to their attitudes towards help-seeking (Yap, Wright, & Jorm, 2011).

Fear of being labelled with a mental health problem may also be a reason for delaying help-seeking behaviour, as people who delayed treatment by more than one year felt more ashamed of their symptoms and were more fearful about being considered a mentally ill person than those who made contact with services within a year of symptom onset (Belloch, del Valle, Morillo,

Carrió, & Cabedo, 2009). However, there is also evidence to suggest that increased resilience for the stigma attached to mental health problems is associated with more positive attitudes to seeking psychological help (Ting & Hwang, 2009), suggesting that there may be factors which help people overcome perceived stigma in order to seek appropriate help. In any case, it appears that the relationship between perceived stigma of mental illness and help-seeking requires more research before any clear conclusions can be drawn. However, before this is possible it is necessary to better understand how people respond to societal attitudes towards mental illness. Central to this idea is the distinction between public stigma and self-stigma.

Self-Stigma and Public Stigma

In order to differentiate between the attitudes held by society and the experiences of the individual in relation to stigma, Corrigan (2000) distinguishes between public stigma and self-stigma. Public stigma is defined as the (perceived) negative attitudes held by society towards a particular group, whilst self-stigma occurs when these negative societal beliefs are internalized by an individual with mental health difficulties. Public stigma about mental illness involves the belief that people with mental health problems are dangerous and should be feared (Farina, 1998; Corrigan & Watson, 2002), that they are in control and responsible for their illness (Corrigan et al., 2000) and are not deserving of help (Corrigan et al., 2002). However, self-stigma of mental illness concerns internalisation of the idea that having a mental illness inherently decreases one's value, and may result in feelings of shame, embarrassment, fear and alienation (Link, Yang, Phelan, & Collins, 2004). Being aware of public stigma is therefore not the same as internalising stigma (Crocker & Major, 1989), as most people with mental health difficulties are aware of the

stereotypes surrounding mental illness (Wright, Gonfein, & Owens, 2000) but not all agree with them (Hayward & Bright, 1997)[5].

Public stigma as a barrier to help-seeking. Studies which have specifically assessed the relationship between public stigma and help-seeking attitudes are few and far between. Most research papers do not clearly define the types of stigma being assessed (e.g., Marques, LeBlanc, Weingarden, Timpano, Jenike, & Wilhelm, 2011; Goodman, 2009; Bruffaerts et al., 2011) or assess both public and self-stigma together as a unitary construct (e.g., Ting & Hwang, 2009). Those which have specifically assessed public stigma have found mixed evidence regarding the impact on attitudes to help-seeking (Interian et al., 2010; Deen, Bridges, McGahan, & Andrews, 2011). For example, perceptions of people with mental health problems as devalued or discriminated against in the local community (i.e., awareness of public stigma of mental illness) did not predict access to emotional care in the past three months, but did predict reduced anti-depressant usage and access to treatment for depression (Interian et al., 2010). In support of this, other research has found that perceptions of mental illness as being highly stigmatized in the local community did not predict actual help-seeking for psychological problems from a General Practitioner (Wrigley, Jackson, Judd, & Komiti, 2005; Komiti, Judd, & Jackson, 2006).

Self-stigma as a barrier to help-seeking. Whilst it has been suggested that self-stigmatization may act as a barrier to accessing mental health services, there has been very little research to support this claim. In a study of the effects of self-stigma and perceived stigmatization by others, Cheng, Kwan, and Sevig (2013) reported that people who were fearful of being stigmatized by others for

seeking professional psychological help were more likely to experience self-stigmatization about help-seeking, suggesting that increased expectation of public stigma may predict self-stigma. Furthermore, Shepherd and Rickard (2011) found that whilst self-stigma of seeking mental health services was predictive of help-seeking intentions, personal attitudes towards help-seeking fully mediated the relationship; a finding that was corroborated by Bathje and Prior (2011) in their study of American college student attitudes to help-seeking. Other evidence suggests that agreement with public stigma of mental illness partially mediates the relationship between perceived public stigma of help-seeking and predicted internalisation of stigma as a result of help-seeking (Bathje & Prior, 2011), suggesting that it is necessary to agree with public stigma for self-stigmatisation to occur. However, it appears that whilst endorsement of the belief that people with mental health problems are unworthy of help and sympathy predicted self-stigma, attitudes of anger, fear, controllability and avoidance were not predictive of self-stigma.

Summary

A number of qualitative studies have highlighted that people feel that stigma presents a barrier to accessing appropriate treatment services (Barney, Griffiths, Christensen, & Jorm, 2009; Taskanen et al., 2011; Kessler et al., 2001; Ahmed, Stewart, Teng, Wahoush, & Gagnon, 2008; Hepworth & Paxton, 2007). However, the relationship between perceived stigma and help-seeking is far from clear cut (e.g. Jackson et al., 2007), as some studies support the existence of a correlational relationship (Belloch, del Valle, Morillo, Carrió, & Cabedo, 2009; Mojtabai, 2010), and others do not (Wrigley, Jackson, Judd, & Komiti, 2005; Komiti, Judd, & Jackson, 2006). Whilst the distinction between public stigma and self-stigma has provided some conceptual clarity about mental

health-related stigma, there has been little research investigating how these concepts relate. Further research is therefore needed to explore whether perceived public stigma has a direct causal effect on help-seeking attitudes and whether other factors mediate the relationship.

The Present Research/Hypotheses

This study aimed to examine the impact of perceived public stigma of mental illness on attitudes to seeking support from appropriate services, under controlled conditions, using an experimental research design. For the purpose of this research, the terms public stigma and self-stigma are conceptualised based on Corrigan's (2000) definitions which are outlined above. Based on the research outlined above, the hypotheses were as follows:

1. When mental illness is perceived as more stigmatized, this would be associated with:

    a. Greater perceived public stigma attached to seeking psychological help for a mental health problem.

    b. Increased personal endorsement of stigmatizing attitudes towards mental illness.

    c. Greater perceived self-stigma (as defined by Corrigan, 2000) for help-seeking for mental health problem.

    d. Less positive attitudes towards help-seeking for a mental health problem (particularly treatments that involve direct contact with mental health services (e.g. counselling, group therapy or family therapy).

2. Perceptions of public stigma attached to help-seeking would mediate the relationship between perceived social stigma and self-stigmatization.

3. Endorsement of public stigma would mediate the relationship between perceived social stigma and attitudes towards help-seeking.

METHOD

Participants

Participants were volunteers who chose to complete the study online by clicking on a link advertised on a mental health or general interest website or forum. The study was not targeted at a specific population, although the instructions stated that participation was limited to individuals over 18 years of age. Following completion of the study, participants were offered the opportunity to enter a prize draw to win £50. Participants were required to provide an email address for the purpose of identifying a winner. All other data remained anonymous. Ethics documentation is provided in Appendix B.

Procedure

The study was a between-participants post-test design with two experimental conditions (high and low public stigma associated with mental illness) and one control condition (no information regarding societal views of people with mental illness). The study was designed and implemented using LimeSurvey software. After clicking a link to the study, participants were provided with some brief details and asked to indicate their consent to continue (Appendix C). Participants were then randomly allocated to a condition using a computerised randomization script. In the two experimental conditions participants were presented with a short paragraph, intending to manipulate their perception of mental health stigma in society (Appendix D). Participants in the low stigma condition were informed that stigma related to mental illness is

less apparent in society and no longer a significant problem, whereas participants in the high stigma condition informed that stigma related to mental illness remains a significant issue in society. A manipulation check was then presented (in all conditions), followed by a series of measures assessing perceptions of mental health-related stigma and attitudes to help-seeking from mental health services. At the end of the study participants were asked to report various demographic details and also state whether they had experience of mental health problems and use of services (Appendix J). Following this, participants were debriefed about the purpose of the study and provided with contact details of mental health agencies (Appendix K).

Measures

Perceptions of public stigma of mental illness. The efficacy of the manipulation was checked by asking participants about their perceptions of societal beliefs about the stigma attached to mental health problems. This was measured with four items from an adapted version of the Public Self Esteem Subscale from the Collective Self-Esteem Scale (Luhtanen & Crocker, 1992, Appendix E). Example items include "in general, others think people with mental health problems are worthless" and "most people consider individuals with mental health problems to be less capable". A higher score on this measure indicates more negative perceptions of societal attitudes about people with mental illness. This scale will henceforth be referred to as the perceived public stigma of mental illness scale.

Perceived public stigma of help-seeking for a mental health problem. Perceived public stigma of help-seeking for a mental health problem was measured using the Stigma Scale for Receiving Psychological Help

(SSRPH; Komiya, Good, & Sherrod, 2000, Appendix F). Example items include "people tend to think that it is a sign of personal weakness or inadequacy to see a mental health professional for emotional or relationship problems" and "people tend to see a person in a less favourable way if they find out that they have seen a mental health professional". Internal consistency for this measure has been reported as .72 (Komiya, Good, & Sherrod, 2000). Item 4 was removed from this scale as it was considered to overlap with the concept of self-stigma.

Personal endorsement of public stigma of seeking psychological help. Endorsement of public stigma was measured using the Attribution Questionnaire (AQ-9; Corrigan, Markowitz, Watson, Rowan, & Kubiak, 2003, Appendix G), which measures perceptions of a hypothetical individual (Harry) with recurrent schizophrenia. Example questions for this measure are "I would feel pity for Harry" and "I would think that it was Harry's own fault that he is in that situation". A higher score on this measure indicates more negative views of people with mental illness. Internal consistency for the AQ-9 is usually between .70 and .96 (Corrigan, Markowitz, Watson, Rowan, & Kubiak, 2003; Bathje & Prior, 2011).

Self-stigma of help-seeking. Self-stigma of seeking mental health support was measured using the Self-Stigma of Seeking Help Scale (SSOSH; Vogel, Wade, & Haake, 2006, Appendix H). This 10 item scale assesses perceived self-stigma in the event of seeking psychological support for a mental health problem, for example "I would feel inadequate if I sought help from a mental health professional" and "seeking help from a mental health professional would make me feel less competent". The higher the score on this measure the more self-stigma the person perceives they would experience self-stigma for

help-seeking for a mental health problem. The scale has demonstrated internal consistency between .86 and .92, convergent validity between .46 to .48 with the SSRPH, and adequate divergent validity (Vogel, Wade, & Haake, 2006).

Attitudes towards help-seeking. Participants' attitudes to seeking formal mental health support were measured using three items from the Attitudes towards Seeking Professional Psychological Help Scale (ATSPPHS; Fischer & Farina, 1995, Appendix I), which was extended with questions designed to assess attitudes towards seeking alternative sources of support (e.g. friends, family, support groups etc). A high score on this measure indicated more positive attitudes to help-seeking (example item: "If I were upset or worried for a long time I would (agree to) seek help from a therapist or counsellor"). This scale will henceforth be referred to as the Attitudes Towards Seeking Help (ATSH) scale.

Analytical Strategy

Power analyses were completed to determine the number of participants required to detect a moderate effect size at an alpha level of .05 for ANOVA. Using Cohen's (1992) calculations for statistical power, 52 participants each in each condition were required. Factor analysis was completed on all questionnaires, as well as internal reliability analyses, with question items re-coded as appropriate. To determine if participants with experience of mental illness were distributed equally between the conditions, χ^2 tests for independence were calculated. ANCOVAs assessed the effectiveness of the manipulation on awareness of mental health stigma, controlling for previous and current mental health. Additional ANCOVA's were conducted on all other measures to assess differences across conditions, again controlling for previous

and current mental health. Mediation effects were calculated using PROCESS, a mediation analysis programme for SPSS (Hayes, 2013).

RESULTS

We obtained a total of 698 responses, although data from 13 participants were removed from the analysis due to only completing the manipulation check. This left a total sample of $N = 685$. The sample size was larger than initially intended due to an error in the randomisation procedure, which led to a larger amount of people being allocated to the low stigma condition than the high and neutral conditions[6]. To achieve a more balanced distribution of participants across conditions, recruitment was halted on the low stigma condition and continued on the high and neutral conditions until the numbers were relatively even across all three conditions.

With regards to data cleaning, the ATSHS had between 5 and 7% missing data on 15 out of 30 questions, and the manipulation check questions, the SSRPH, the AQ-9 and the SOSSH all had less than 5% missing data. Following various missing completely at random (MCAR) tests, it was decided that missing data would not be replaced[7]. Assumptions of normality were checked using Kolmogorov-Smirnov and Shapiro-Wilk tests and normal Q-Q plots. Assumptions of homogeneity of variance were checked using Levene's test of equality of variances.

Factor Analyses

In order to identify underlying latent variables reflected in the observed variables, a Principal Component Analysis (PCA) using oblique (direct oblimin) was completed for each scale. Measures were considered suitable for factor analysis if they had a Kaiser-Meyer Olkin (KMO) measure of more than 0.50

and Bartlett's Test of Sphericity was significant (Hair, Anderson, Tatham, & Black, 1995; Tabachnick & Fidell, 2007). Factors were extracted using a combination of Kaiser's criteria (eigenvalue > 1 rule; Kaiser, 1960), the Scree test (Cattell, 1966), and the cumulative percent of variance extracted (Table 1).

TABLE 1 HERE

All measures yielded a single factor solution, apart from the AQ-9, which revealed a three-factor solution. Factor one (items 2, 3, 5, 8 and 9) in this scale could be construed as the belief that individuals with mental illness are dangerous and should be forced into treatment, and will henceforth be referred to as the "threat" subscale. Factor two (items 4 and 6) was related to blaming people with mental illness for their difficulties, and will therefore be referred to as the "blame" subscale. Factor three (items 1 and 7) was dropped from the analysis as the questions did not combine to form an easily recognisable construct. A Pearson product-moment correlation revealed that the threat and blame subscales were highly correlated, $r(643) = .50$, $p < .001$. Factor analysis was not completed on the ATSHS (attitudes to seeking help) as these were grouped based on types of support (e.g., support from friends, family, support groups). This resulted in 10 subscales regarding attitudes to different sources of support.

Internal Reliability of the Measures

Cronbach's alpha was calculated for all six measures (Table 2). A number of the questionnaire items were reverse scored, which improved the reliability of the scale or subscale[8].

TABLE 2 HERE

Sample Characteristics

In total, 77.7% (n = 532) of the sample were female, 20.9% (n = 143) were male, 0.4% (n = 3) were transgender, and 1.0% (n = 7) choose not to disclose their gender. With regards to participant age, 41.3% (n = 283) were aged between 18 and 29 years, 27.2% (n = 186) between 30 and 39 years, 15.0% (n = 103) between 40 and 49 years, 11.5% (n = 79) between 50 and 59 years, 3.5% (n = 24) between 60 and 69 years, 0.3% (n = 2) aged 70 years or above and 1.2% (n = 8) chose not to report their age.

With regard to nationality, 18.7% (n = 128) of the sample reported their nationality as British, with 12.3% (n = 84) specifically identifying as English, 1.8% (n = 12) as Scottish, 1.3% (n = 9) as Welsh, and 0.1% (n = 1) as Northern Irish. In addition, 4.1 (n = 28) were from other European countries, 0.9% (n = 6) from Asian countries including Singapore, Malaysia and Thailand. However, participant nationality was unknown a high proportion of sample, as 74.5% (n = 510) chose not to answer this question.

Across conditions, 38% (n = 260) of participants reported currently having a mental health problem with 56.5% rating their difficulties as being moderate to extremely severe. Only 49.2% (n = 128) of those 260 were in treatment at the time of completing the survey, with 34.4% in contact with a psychiatrist, 24.2% (n = 31) a counsellor, 19.5% (n = 25) a psychologist, 4.7% (n = 6) seeing a nurse, and 16.4% (n = 21) selecting 'other'. Furthermore, 54.6% of the total sample (n = 374) reported having experienced a mental

problem in the past, with 81.6% of those 374 (n = 305) having previously used mental health services[9].

A χ^2 test for independence indicated that individuals with prior experience of mental illness were not equally distributed across conditions, χ^2 (4) = 54.14, p < .001, with comparatively more people reporting previous mental illness in the high stigma condition (74.3% of responders) than in the neutral condition (55.0% of responders), and the low stigma condition (41.3% of responders). In addition, a further χ^2 test yielded that individuals with a current mental illness were also unequally distributed across experimental conditions, χ^2 (4) = 43.59, p < .001, with more people reporting current mental illness in the high stigma condition (55.0% of responders), than in the neutral condition (38.3% of responders), and the low stigma condition (26.4% of responders). Due to this unequal spread, past and current experiences of mental health problems were included as covariates in subsequent analyses.

Perceptions of Public Stigma of Mental Illness (Manipulation Check)

An analysis of covariance (ANCOVA) was used to test the effect of the manipulation on perceptions of societal attitudes about mental illness. The covariate current mental health was significantly related to the effect of condition, $F(1,596)$ = 11.03, p < .001, partial η^2 = .02, as was the covariate past mental health, $F(1,596)$ = 3.21, p = .074, partial η^2 < .01. There was also a main effect of condition after controlling for past mental health and current mental health, $F(2,596)$ = 12.67, p < .001, partial η^2 = .04. Bonferroni post hoc tests revealed that participants in the high stigma condition (M = 3.66, SD = .70) reported more negative perceptions of societal attitudes to mental illness than participants in the low stigma condition (M = 3.25, SD = .71, p < .001), and

participants in the low stigma condition reported less negative perceptions than those in the neutral condition ($M = 3.58$, $SD = .67$, $p < .001$). However, differences between perceptions of societal attitudes to mental illness in the high stigma and neutral conditions were not significant ($p = 1.00$).

Perceptions of Public Stigma of Seeking Psychological Help

To test Hypothesis 1a, an ANCOVA was conducted on scores on the SSRPH, controlling for past and present mental health difficulties. The covariate current mental health was significantly related to the effect of condition, $F(1,605) = 18.10$, $p < .001$, partial $\eta^2 = .03$, although there was no effect of the covariate past mental health, $F(1,605) = 0.53$, $p = .465$. There was also a main effect of condition, after controlling for past mental health and current mental health, $F(2,605) = 3.91$, $p = .021$, partial $\eta^2 = .01$. Bonferroni post hoc tests indicated that participants in the high stigma condition ($M = 3.81$, $SD = .79$) perceived higher levels of public stigma attached to seeking professional psychological help than participants in the low stigma condition ($M = 3.50$, $SD = .83$, $p < .001$); whilst participants in the neutral condition ($M = 3.70$, $SD = .89$) perceived higher levels of public stigma attached to help-seeking than those in the low stigma condition ($p < .001$). However, there were no differences in participant responses on this measure between the high stigma and neutral conditions ($p = 1.00$).

Personal Endorsement of Public Stigma of Mental illness

To investigate Hypothesis 1b, scores on the Blame and Threat subscales of the AQ-9 were assessed using ANCOVAs, once again controlling for past and present mental health difficulties. Regarding the Blame subscale of the AQ-9, neither the covariate current mental health, $F(1,607) = 1.04$, $p =$

.309, nor the covariate past mental health, $F(1,607) = 2.46$, $p = .118$ were found to significantly relate to the dependent variable. There was a main effect of condition, $F(2,607) = 4.24$, $p = .015$, partial $\eta^2 = .01$. Due to a violation of the assumption of homogeneity of residuals (based on examination of a histogram and normal P-P plots of standardised residuals), bootstrapping based on 1000 samples was calculated for the Bonferroni post hoc tests. This indicated that, contrary to our expectations, participants in the high stigma condition ($M = 1.13$, $SD = .37$) were less blaming of people with mental illness than participants in the low stigma condition ($M = 1.35$, $SD = .70$, $p = .013$), although the attitudes of participants in the neutral condition ($M = 1.29$, $SD = .62$) did not did not differ from the low ($p = 1.00$) or high stigma conditions ($p = .133$).

Unlike the Blame subscale, homogeneity of residuals was assumed for the Threat subscale of the AQ-9, therefore bootstrapping was not required. An ANCOVA revealed that the covariate current mental health was significantly related to the effect of condition, $F(1,584) = 4.87$, $p = .028$, partial $\eta^2 = .01$, as was the covariate past mental health, $F(1,584) = .6.50$, $p = .011$, partial $\eta^2 = .01$. There was also a main effect of condition, after controlling for past mental health and current mental health, $F(2,584) = 17.50$, $p < .001$. However, contrary to our expectations, Bonferroni post hoc tests revealed that participants in the high stigma condition ($M = 1.76$, $SD = .67$) were significantly less threatened by people with mental illness than participants in the low stigma condition ($M = 2.34$, $SD = .87$, $p < .001$) and the neutral condition ($M = 2.08$, $SD = .80$), although participants in the low stigma condition were more threatened than participants in the neutral condition ($p = .021$).

Perceived Self-stigma of Help-seeking from Mental Health Services

To test Hypothesis 1c, an ANCOVA was conducted on scores from the SSOSH, controlling for the same covariates. The covariate current mental health was not significantly related to the effect of condition, $F(1,587) = 3.21$, $p = .074$, although there was an effect of the covariate past mental health, $F(1,587) = 12.61$, $p < .001$, partial $\eta^2 = .02$. There was no main effect of condition, after controlling for past mental health and current mental health, $F(2,587) = 0.20$, $p = .817$ (Grand $M = 2.69$, $SD = .04$). Mediation analysis as described in Hypothesis 2 was therefore not appropriate.

Attitudes towards Help-seeking for Mental Health Difficulties

To test the main hypothesis that increased perceptions of mental illness as being stigmatized in society would have a significant and negative effect on attitudes to seeking support (Hypothesis 1d), an ANCOVA was conducted using scores on the ATSHS, controlling for past and present mental health difficulties[10]. This revealed that the covariate current mental health was not significantly related to the effect of condition, $F(1,499) = 0.70$, $p = .405$, although there was an effect of the covariate past mental health, $F(1,499) = 5.73$, $p = .017$, partial $\eta^2 = .01$. There was also a main effect of experimental condition, after controlling for past mental health and current mental health, $F(2,499) = 3.15$, $p = .044$, partial $\eta^2 = .01$. Bonferroni post hoc tests indicated that participants in the high stigma condition ($M = 3.68$, $SD = .61$) did not differ in their responses from participants in the low ($M = 3.53$, $SD = .65$, $p = .347$) or neutral ($M = 3.72$, $SD = .61$, $p = 1.00$) conditions, although participants in the neutral condition reported significantly more positive attitudes to help-seeking than those in the low stigma condition ($p = .046$). Condition effects of the univariate analysis for each of the subscales are presented in Table 3.

TABLE 3 HERE

Mediators of the Relationship Between Condition and Attitudes to Help-seeking

To identify possible mediators of the relationship between perceptions of societal attitudes about people with mental illness and attitudes to help-seeking, bivariate correlations were calculated (Table 4). These were used to construct mediation models, which were subsequently entered into PROCESS, a statistical mediation analysis programme for SPSS (Hayes, 2013). This calculated indirect effects using bootstrapping procedures based on 1000 samples. All mediation models included past and present mental illness as covariates.

TABLE 4 HERE

Contrary to Hypothesis 3, neither the AQ-9 Threat nor AQ-9 Blame subscales mediated the relationship between condition and attitudes to help-seeking. However, there was a significant effect of condition on attitudes to help-seeking through perceived public stigma of seeking psychological help, controlling for previous and current mental health, $\beta = -.02$, $p < .017$, 95% BCa CI [-0.04, -0.01], see Figure 1.

FIGURE 1 HERE

DISCUSSION

The main aim of the present research was to investigate the impact of perceived societal stigma of mental illness on attitudes to help-seeking for a mental health problem. This was investigated using an experimental research design, whereby awareness of the stigma attached to mental illness in society was manipulated. The results revealed that participants who were informed that mental illness is highly stigmatized in society did not differ in their responses from participants who were told nothing about societal stigma. However, in line with predictions, participants who were informed that stigma is less of a problem in society reported less perceived societal stigma attached to mental illness, and less public stigma regarding help-seeking, compared to participants in the other two conditions. In addition, contrary to predictions and to previous research (Bathje & Prior, 2011), people who believed there was less stigma attached to mental illness in society were more likely to blame people with mental illness for their problems and less likely to seek help for a mental health problem.

Effects of the Experimental Manipulation

Whilst it appeared that the induction of low stigma did lead to the perception that mental illness is less stigmatized in society, the induction of high stigma did not affect participants' perceptions regarding societal attitudes to mental illness. This suggests that participants reacted to the high stigma induction in a way that was not anticipated, although it is apparent that this could have been identified through the completion of a brief pilot study, which would also have highlighted the problems with the randomisation procedure. One possible reason for this reaction is that participants in the high stigma condition simply did not read the manipulation text with sufficient attention.

However, this is unlikely considering there were significant differences between responses on the manipulation check in the high and low conditions. Alternatively, participants may have held pre-existing views of mental illness carrying a considerable social stigma, which caused the induction to have no effect. However, this seems improbable considering that the mean scores in the high stigma and neutral conditions fell just above the mid-point of the Likert-type scale, indicating moderate views on the topic. Conversely, perhaps participants read and understood the manipulation text but experienced a dissonance between the message of the manipulation and their own feelings towards mental illness. If they felt that whilst it may be true that people with mental health problems do face reactions of fear, irritation, and a lack of sympathy from others, perhaps they did not want to be associated with these perceptions, and therefore distanced themselves from these ideas by responding more positively to the manipulation check. This would not only explain why scores on the manipulation check in the high stigma condition were not distinguishable from those in the neutral condition, but also why this pattern continued in other measures in the study.

Effect of Public Stigma of Mental Illness on Public Stigma of Help-seeking

As stated above, participants in the low stigma condition reported less perceived public stigma of help-seeking than those in the neutral condition and high stigma conditions. This was partially consistent with Hypothesis 1a, although it was expected that responses in the high stigma condition would be less positive than in the neutral condition. This suggests that it is possible to positively reduce people's perceptions of public stigma by informing them that stigma is less of a problem in society due to a change in public attitudes, which

is an important finding that has broader implications for challenging the stigma of mental illness, despite the small effect size. However, before considering the implications of this, it is necessary to understand the impact these perceptions had on participants' attitudes towards people with mental illness (i.e. endorsement of public stigma) and their perceived self-stigma if they were to seek help for mental health problem.

Effect of Public Stigma of Mental Illness on Endorsement of Public Stigma of Mental illness

Contrary to Hypothesis 1b, participants who believed there was less societal stigma attached to mental illness were in fact more blaming of people with mental illness for their problems and felt more threatened by them, believing that a person with recurrent schizophrenia would likely be dangerous and should be forced into treatment. However, it should be noted that effect sizes for these findings were minimal, and scores on these subscales were low overall, indicating a general disagreement with stigmatized attitudes to people with mental illness.

Whilst this result was unexpected, it emphasises the gap between awareness of societal attitudes to mental illness and personal attitudes to mental illness. Certainly, people do react differently to societal stigma of mental illness, with some experiencing it as damaging to their self-esteem and self-efficacy (Wahl, 1999; Corrigan, 1998; Holmes & River, 1998), and others reacting with anger (Corrigan, Faber, Rashid, & Leary, 1999; Rogers, Chamberlin, Ellison, & Crean, 1997) or indifference (Corrigan & Watson, 2002). It is also apparent that people may be more stigmatizing of schizophrenia compared to other mental health conditions (Day, Edgren, & Eshleman, 2007),

perhaps suggesting that although people believed that societal stigma of mental illness was low, they still perceived people with more severe problems as presenting a threat and holding some responsibility for their difficulties. This is particularly concerning considering that attitudes about the dangerousness of mental illness are predictive of fear and desire for social avoidance (Corrigan et al., 2002).

Effect of Public Stigma of Mental Illness on Self-stigma of Help-seeking

Contrary to previous research (Cheng, Kwan, and Sevig, 2013) and Hypothesis 1c, perceptions of mental illness as being highly stigmatized in society had no effect on the anticipated sense of harm to self-esteem as a result of seeking help for a mental health problem. There were no significant differences across conditions in this regard, with mean scores falling just below the mid-way point on the scale. Due to this, the mediation effects described in Hypothesis 2 were not explored, despite the apparent predictive value reported in previous research (Vogel, Wade, & Haake, 2006).

Effect of Public Stigma of Mental Illness on Attitudes to Help-seeking

Once again, findings in this area were not consistent with our expectations (i.e., Hypothesis 1d), or with previous research (Komiya, Good, & Sherod, 2000; Wrigley, Jackson, Judd, & Komiti, 2005; Komiti, Judd, & Jackson, 2006; Deen, Bridges, McGahan, & Andrews, 2011), as participants who believed that there was less societal stigma attached to mental illness reported less positive attitudes to help-seeking for emotional problems, although this was a small effect. Furthermore, unlike our predictions, this relationship was not mediated by endorsement of public stigma (Hypothesis 3), but instead was partially mediated by perceptions of the public stigma attached to help-seeking.

This implied that as perceptions of societal stigma of mental illness improved, perceptions of the stigma attached to help-seeking also improved, although attitudes to help-seeking become less positive.

One possible explanation for this finding is that the low stigma manipulation raised participants' awareness about the stigma attached to mental illness, which perhaps influenced them in their consideration of their own attitudes to seeking mental health support. Indeed, there is qualitative evidence to suggest that people are generally aware of the potential negative consequences of help-seeking (e.g., Barney, Griffiths, Christensen, & Jorm, 2009; Taskanen et al., 2011; Ahmed, Stewart, Teng, Wahoush, & Gagnon, 2008), and perhaps by raising the topic of stigma in people's minds, it caused them to connect with personal fears of judgement and discrimination, and subsequently feel less positive about help-seeking. If this is the case, then this has important implications for anti-stigma campaigns (e.g., Time For Change), which attempt to reduce the stigma attached to mental illness by increasing awareness of mental health in the general public. Instead, by drawing attention to stigma-related issues it is possible that campaigns could cause increased awareness of personal fears of being a target of stigma, which may have the unintended consequence of negatively affecting people's own attitudes to seeking help. However, being aware of public stigma is not the same as internalising stigma (Crocker & Major, 1989), and this was evident in the lack of effect of perceptions about societal attitudes to mental illness on self-stigmatization. Nevertheless, further experimental research into the impact of awareness of the public stigma attached to mental illness on attitudes to help-seeking from services is needed to clarify the mechanisms of this relationship. This may also involve certain improvements to the methodology, including

randomising of the order of the measures to minimise the possibility of a priming effect from any particular measure, for example if exposure to the Attribution Questionnaire had an effect on participants responses on the Self-Stigma of Seeking Help Scale.

It could also be assumed that this heightened awareness of societal stigma might cause participants to report more favourable attitudes to treatments that involve less direct contact with mental health services, as people who perceive mental health care as being highly stigmatizing are less willing to seek help for a mental health problem (Hoyt, Conger, Valde, & Weihs, 1997; Shea & Yea, 2008; Yakunina & Weigold, 2011; Masuda & Boone, 2011). As predicted (Hypothesis 1d), there was some support for this, as participants in the high stigma and neutral conditions did demonstrate some preference for help-seeking from places or people that did not involve direct contact with mental health services (e.g., support groups and confiding in friends). However, they also favoured seeking counselling and group therapy, both of which would necessitate contact with mental health services, suggesting that people may have different attitudes in this regard. Where some people felt more positive about speaking to family or friends about their difficulties, perhaps due to fears about becoming a target for stigma or discrimination (Barney, Griffiths, Christensen, & Jorm, 2009; Taskanen et al., 2011) or believing that mental illness was a private matter for the family (Uebelacker et al., 2012), others preferred to access mental health services, perhaps due to fears of judgement or rejection by others in the community (Cinnerella, & Loewnthal, 1999) or even by those closest to them.

Regardless of the reasons for people's attitudes to seeking help, what is clear is that drawing people's attention to the stigma attached to mental health can have some unexpected negative effects. Whilst perceptions of reduced societal stigma can improve perceptions of the public stigma attached to help-seeking, raising awareness of public stigma can not only have a negative impact on personal attitudes towards people with mental illness but also have adverse consequences for personal help-seeking.

Limitations

Despite best attempts to execute a more experimentally rigorous exploration into the effects of mental health-related stigma on attitudes to help-seeking, there are a number of limitations to this study. The limited variability between participant responses in each of the conditions suggests that the high stigma induction in particular could have been better designed, perhaps by using real-life personal accounts of experiences of social stigma, possibly presented through video or audio. This could be tested by completing a pilot study to determine whether these changes to the manipulation cause more or less positive perceptions of public stigma compared to the manipulation used in this study. However, it should be noted that adapting the manipulation in this way would not be expected to produce different findings, but rather improve the methodology of the experimental design.

The quality of the measures could also have impacted on the results, as some of the scales were adapted for the purpose of the study, which may have affected the validity of the scales. In particular, only 3 items were used from the ATSPPH scale, which was originally a 29-item scale. These items were then adapted and extended to assess attitudes to other forms of support, leading to

the formation of a scale which was likely significantly limited compared to the 29-item version. However, the SSOSH and SSRPH remained unchanged, and the short version of the AQ was deemed appropriate for the study for the reason of minimising participant fatigue. In addition, the Collective Self-Esteem scale was originally designed to withstand minor alterations to the wording (Luhtanen & Crocker, 1992), and should therefore have retained its reliability, although this could have been investigated in a pilot or feasibility study.

Conclusions

This study set out to test the effect of perceived stigma of mental illness on help-seeking attitudes. Whilst the results were mostly not consistent with the hypotheses, the findings provide some further insight into the ways in which people respond to messages about stigma in society and how reduced perceptions of stigma can lead to less perceived public stigma attached to help-seeking, but increased tendency to blame people with mental illness for their problems or feel threatened by them, along with less positive attitudes to help-seeking.

List of Tables and Figures

Table 1.

Main Statistics for the Factor Analyses

	Variance explained (%)	Eigenvalue	KMO	*p*
Stigma MI	55.25	2.21	.75	.001
SSRPH	67.94	2.72	.81	.001
AQ-9			.84	.001
Threat	44.62	4.02		
Blame	13.14	1.18		
SSOSH	60.68	4.85	.91	.001

Note. Stigma MI = public stigma of mental illness (manipulation check), SSRPH = public stigma of professional mental health support, AQ-9 Threat = perceived threat of people with mental illness, AQ-9 Blame = blaming of people with mental illness for their difficulties, SSOSH = self-stigma of seeking help, KMO = Kaiser-Meyer Olkin.

Table 2.

Internal Consistency and Descriptive Statistics of the Scales

Variable	*n*	*M*	*SD*	α	Range Potential	Actual	Skew
Stigma MI	663	3.46	0.71	.73	1.0-5.0	1.0-5.0	-0.18
SSRPH	668	3.65	0.83	.84	1.0-5.0	1.0-5.0	-0.71
AQ-9 Threat	645	2.10	0.84	.86	1.0-5.0	1.0-5.0	0.75
AQ-9 Blame	669	1.29	0.63	.73	1.0-5.0	1.0-5.0	2.86
SSOSH	642	2.69	0.93	.90	1.0-5.0	1.0-5.0	0.24
ATSHS	543	3.49	0.61	.92	1.0-5.0	1.3-4.8	-0.35

Note. Stigma MI = public stigma of mental illness (manipulation check), SSRPH = public stigma of professional mental health support, AQ-9 Threat = perceived threat of people with mental illness, AQ-9 Blame = blaming of people with mental illness for their difficulties, SSOSH = self-stigma of seeking help, ATSHS = attitudes to seeking help.

Table 3.

Results of the one-way ANCOVAs for the ATSHS across conditions

Variable	Condition M(SD)			F	p	95% CI		Partial η^2
	High stigma	Low stigma	Neutral			LL	UL	
Counsellor	4.21(0.81)a	3.84(0.86)b	4.14(0.80)a	6.62	.001	3.79	3.99	.02
Group therapy	3.68(0.97)a	3.34(0.97)b	3.59(0.89)a	5.28	.005	3.46	3.61	.02
Family therapy	3.90(0.93)a	3.69(0.89)a	3.87(0.83)a	2.36	.095	3.75	3.89	
Support group	3.94(0.93)a	3.57(0.93)b	3.90(0.87)a	7.31	.001	3.73	3.88	.02
Internet help	3.66(0.94)a	3.48(0.91)a	3.57(0.94)a	0.39	.675	3.49	3.64	
Medication	3.55(1.15)a	3.49(0.99)a	3.53(1.07)a	1.22	.297	3.43	3.60	
Friends	4.20(0.93)a	3.01(0.91)b	4.18(0.84)a	4.47	.012	4.01	4.21	.02
Family	3.88(1.04)a	3.98(0.97)a	4.11(0.87)a	2.09	.125	3.92	4.10	
Religion	2.98(1.08)a	2.80(1.01)a	2.96(1.03)a	1.66	.191	2.83	3.00	
Colleagues	2.90(1.11)a	2.81(1.10)a	2.92(1.11)a	0.68	.509	2.79	2.97	

Table 4.

Pearson's product-moment inter-correlation matrix

Variable	1	2	3	4	5
1. Stigma MI					
2. SSRPH	.567**				
3. AQ-9 Threat	-.031	.049			
4. AQ-9 Blame	-.101*	.028	.499**		
5. ATSHS	-.004	-.099*	-.353**	-.273**	

Note. Stigma MI = public stigma of mental illness (manipulation check), SSRPH = public stigma of professional mental health support, AQ-9 Threat = perceived threat of people with mental illness, AQ-9 Blame = blaming of people with mental illness for their difficulties, SSOSH = self-stigma of seeking help, ATSHS = attitudes to seeking help.

* Significant at p < .05 level, ** significant at p < .001 level (2-tailed)

a) Simple Pathway
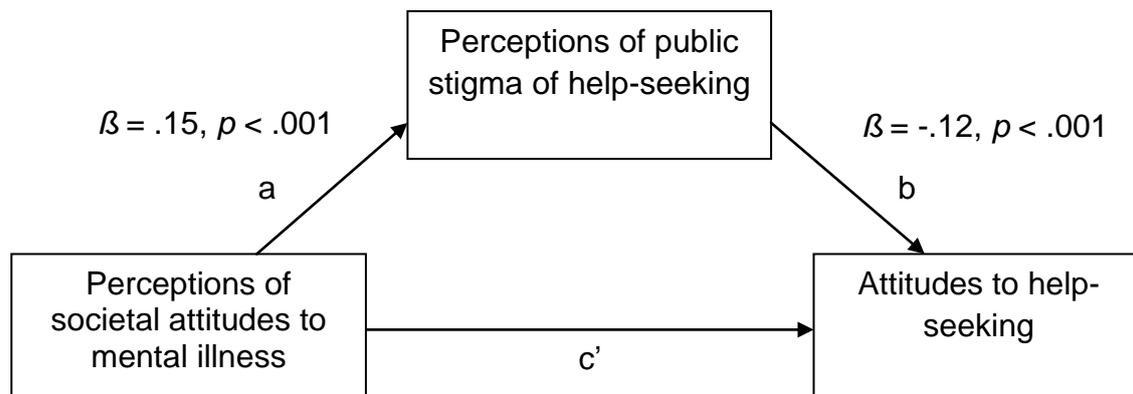
b) Indirect or Mediated Pathway

Figure 1. Model of the relationship between perceptions of societal attitudes to mental illness and attitudes to help-seeking, mediated by perceptions of public stigma of help-seeking, controlling for previous and current mental health difficulties. *ß* values are unstandardized regression coefficients.

Table 1A.

Predictors of Attitudes to Help-seeking

	B (BS CI)	SE B	*ß*	*p*
Step 1				.001
Constant	4.02 (3.88, 4.15)	0.07		.001
AQ-9 Blame	-.33 (-0.43, -0.24)	0.05	-.27	.001
Step 2				.001
Constant	4.61 (4.34, 4.88)	0.14		.001
AQ-9 Blame	-.16 (-0.27, -0.06)	0.05	-.14	.004
AQ-9 Threat	-.24 (-0.31, -0.16)	0.04	-.30	.001
SSRPH	-.08 (-0.14, -0.02)	0.03	-.11	.010

Note. $R^2 = .07$ for step 1, $\Delta R^2 = .08$ for step 2 ($p < .001$).

SSRPH = public stigma of professional mental health support, AQ-9 Threat = perceived threat of people with mental illness, AQ-9 Blame = blaming of people with mental illness for their difficulties.

APPENDICES

Appendix A: Notes

Note 1. Practical barriers to seeking help include the financial cost of accessing services (Abrams, Dorning, & Curran, 2009; Callister, Beckstrand, & Corbett, 2011; Tang, Sevigny, Mao, Jiang, & Cai, 2007), lack of information or accessibility of services (Barney, Griffiths, Christensen, & Jorm, 2009; Pettigrew, Donovan, Pescud, Boldy, & Newton, 2010; Tang, Sevigny, Mao, Jiang, & Cai, 2007), and lack of time, child care, or transportation (Callister, Beckstrand, & Corbett, 2011).

Note 2. Jackson et al. (2007) suggested that this may be due to the type of help-seeking studied, as studies that found no evidence of a relationship specifically asked about willingness to seek help from a General Practitioner (GP), which is likely to be less stigmatized than seeking help from mental health services.

Note 3. However, it is also the case that people who believed that friends and family would support them in their treatment were more accepting of mental health counselling and medication for depression (Givens, Katz, Bellamy, & Holmes, 2007), indicating that support from others may be important in overcoming the fear of judgement by others for accessing mental health services.

Note 4. Mojtabai (2010) specifically focussed on willingness to seek professional help as a first line of support if "feeling bad". However, the authors provided no explanation of what was meant by "feeling bad" or why formal

mental health care would be sought out prior to other informal sources of support.

Note 5. Where some people with mental health problems may internalise public stigma and experience it as damaging to their self-esteem and self-efficacy (Wahl, 1999; Corrigan, 1998; Holmes & River, 1998), others appear to be energised by it, reacting with anger (Corrigan, Faber, Rashid, & Leary, 1999; Rogers, Chamberlin, Ellison, & Crean, 1997), or even relative indifference (Corrigan & Watson, 2002).

Note 6. Self-selection to condition was explored as an additional explanation for the unequal sample sizes across conditions. Drop-out rates were calculated for each condition and 17.1% of those people allocated to the high stigma condition did not complete survey, 17.5% of people allocated to the low stigma condition did not complete and 20.9% of people allocated to the control condition did not complete the study. There was therefore was no evidence of self-selection to conditions.

Note 7. Whilst it could be the case that participants found these questions particularly challenging to answer, it is also apparent that the majority of these questions were asked towards the end of the study, suggesting that participants may have fatigued. Little's (1988) missing completely at random (MCAR) test was highly significant ($p < .001$), suggesting that the data was not missing completely at random. However, independent t-tests suggested that the data *was* mostly missing at random, with 20% of comparisons demonstrating a small but significant effect, with Cohen's d effect sizes ranging from .17 to .28. Only 5 of the 15 questions with more than 5% missing data were statistically significant. Due to this, the missing data was not replaced.

Note 8. This included reverse scoring items one and three of the public stigma of mental illness scale (manipulation check), so that a higher score indicated negative perceptions of societal attitudes to people with mental health problems. Items one and seven of the AQ-9 subscales were also reversed, so that a higher score indicated negative personal attitudes to people with mental health problems. In addition, items four, six and eight of the SSOSH were reversed, so that a high score denoted increased self-stigmatization for help-seeking for a mental health problem. Finally, 20 items of the ATSHS were reversed so that a high score signified more positive attitudes to help-seeking.

Note 9. Of the 305 participants reporting previous access to mental health services, 40% ($n = 122$) had seen a counsellor, 33.1% ($n = 101$) had seen a psychiatrist, 14.1% ($n = 43$) a psychologist, 7.1% ($n = 22$) a nurse, 0.3% ($n = 1$) a social worker and 7.9% ($n = 24$) 'other'. 64.9% ($n = 198$) rated their experience with mental health services as either somewhat helpful or extremely helpful, and 28.2% ($n = 86$) rated it as either somewhat unhelpful or extremely unhelpful.

Note 10. In addition to the main analysis, predictors of attitudes to help-seeking were identified using a linear regression model (Table 1A). Confidence intervals and standard errors are based on 1000 bootstrap samples.

Appendix B: Ethics documentation

Psychology Research
Ethics Committee

Psychology, College of
Life & Environmental
Sciences

Washington Singer Laboratories
Perry Road
Exeter
EX4 4QG

Telephone   +44 (0)1392 724611
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Re: **Application 2013/ 237Ethics Committee**

Date: **July 30, 2014**

The School of Psychology Ethics Committee has now discussed your application,
2013/237 – AN EXPERIMENTAL EXAMINATION OF THE IMPACT OF PERCEIVED
STIGMA OF MENTAL ILLNESS ON HELP-SEEKING*.* The project has been approved
in principle for the duration of your study.

The agreement of the Committee is subject to your compliance with the British
Psychological Society Code of Conduct and the University of Exeter procedures for
data protection (http://www.ex.ac.uk/admin/academic/datapro/). In any correspondence
with the Ethics Committee about this application, please quote the reference number
above.

I wish you every success with your research.

Psychology Research Ethics Committee

Appendix C: Information about the Study and Consent to Participate

A Study Investigating People's Views of Mental Health Problems

A questionnaire about your views on mental illness.

This research is being carried out as part of a Doctorate course in Clinical Psychology at the University of Exeter.

If you complete this survey you have the opportunity to enter a prize draw to win £50.

Background Information

This study is about attitudes towards mental health. **You do <u>not</u> need to have experienced a mental health problem to complete this study.** You will be asked about your views on mental illness and your potential actions were you to experience a mental health problem. You will not be asked to report on your own experiences in detail.

Confidentiality

All data will be kept confidential. **If you wish to enter the prize draw to win £50 you will need to provide an email address** but this will be kept separate from your answers to the questions. The surveys will be stored electronically on a secure and encrypted computer. Participation in this study is voluntary. If you decide to withdraw, you are free to do so at any time. If the results of the study are published, all data will remain anonymous.

You must be at least 18 years of age to participate in this study. Please confirm your age and consent to take part in this study.

Please choose **only one** of the following:

◯ Yes, I am over the age of 18 and agree to take part.

◯ No, I am under the age of 18.

Appendix D: Manipulation Texts

High stigma condition:

Please read the information below carefully.

People with mental illness can experience stigma by society in a number of ways. Some experience discrimination in employment, housing, healthcare and social interaction, others are met with reactions of fear, irritation, and a lack of sympathy or pity. People will mental health problems are also sometimes thought of as being dangerous and somehow responsible for their condition. This can result in people with mental health problems being excluded from society, which can leave people feeling alone and alienated in their communities.

○ Please confirm that you have read the information above.

Low stigma condition:

Please read the information below carefully.

In the past, people experiencing mental health problems were often targeted by negative attitudes. However, in more recent times attitudes have changed, and people with mental health problems are less likely to experience discrimination in employment, housing, healthcare, or in social interactions. Large-scale government initiatives (such as the 'Time for Change' project) have raised public awareness of mental health problems and this has helped to reduce the stigma associated with mental illness and to increase empathy for those who suffer from mental health problems. It is now recognised that mental health problems are not a result of a 'weak personality' or 'poor upbringing' but can happen to anybody irrespective of class, ethnicity, race, wealth or background. This way of thinking contributes towards a great inclusion of people with mental health problems in their communities.

○ Please confirm that you have read the information above.

Appendix E: Adapted Version of the Collective Self-Esteem Scale, Public

Subscale (Luhtanen & Crocker, 1992)

Please read the following statements and indicate how much you agree with them using the scale provided. There are no right or wrong answers. Please be as honest as you can about what you feel or believe.

Please choose the appropriate response for each item:

	Completely disagree	Mostly disagree	Neither agree nor disagree	Mostly agree	Completely agree
In general, others respect people with mental health problems.	○	○	○	○	○
In general, others think that people with mental health problems are worthless.	○	○	○	○	○
Overall, people with mental health problems are considered good by others.	○	○	○	○	○
Most people consider individuals with mental health problems to be less capable than others.	○	○	○	○	○

Appendix F: Stigma Scale for Receiving Psychological Help (SSRPH;

Komiya, Good, & Sherrod, 2000)

The following questions are about what you think others believe about seeking professional help for mental health problems.

Please choose the appropriate response for each item:

	Completely disagree	Mostly disagree	Neither agree nor disagree	Mostly agree	Completely agree
People tend to think that it is a sign of personal weakness or inadequacy to see a mental health professional for emotional or relationship problems.	○	○	○	○	○
People tend to see a person in a less favourable way if they find out that they have seen a mental health professional.	○	○	○	○	○
Seeing a psychologist for emotional or relationship problems carries social stigma.	○	○	○	○	○
People tend to feel uncomfortable around those who are receiving professional mental health support.	○	○	○	○	○

Appendix G: Attribution Questionnaire (Corrigan, Markowitz, Watson,

Rowan, & Kubiak, 2003)

The following questions are about what you think of Harry. Please read the information we provide about Harry and indicate what you think about him.

Harry is a 30 year-old single man with schizophrenia. Sometimes he hears voices and becomes upset. He lives alone in an apartment and works as a clerk at a large law firm. He had been hospitalized six times before this because of this illness.

If you were to meet Harry, how would you feel?

Please choose the appropriate response for each item:

	Completely disagree	Mostly disagree	Neither agree nor disagree	Mostly agree	Completely agree
I would feel pity for Harry.	○	○	○	○	○
I would feel that Harry is dangerous.	○	○	○	○	○
I would feel scared of Harry.	○	○	○	○	○
I would think that it was Harry's own fault that he is in that situation.	○	○	○	○	○
I think it would be best for the community where Harry lives if he were admitted to a psychiatric hospital.	○	○	○	○	○
I would feel angry at Harry.	○	○	○	○	○
I would try to help Harry.	○	○	○	○	○
I would try to stay away from Harry.	○	○	○	○	○
Harry should be forced into treatment with his doctor even if he does not want to	○	○	○	○	○

Appendix H: Self-Stigma of Seeking Help Scale (Vogel, Wade, & Haake, 2006)

The following questions are about how <u>you</u> would feel about seeking help for a mental health problem.

	Completely disagree	Mostly disagree	Neither agree nor disagree	Mostly agree	Completely agree
I would feel inadequate if I sought help from a mental health professional.	○	○	○	○	○
My self-confidence would be threatened if I sought help from a mental health professional.	○	○	○	○	○
Seeking help from a mental health professional would make me feel less competent.	○	○	○	○	○
My self-esteem would increase if I talked to a mental health professional.	○	○	○	○	○
It would make me feel bad about myself to ask for help from a mental health professional.	○	○	○	○	○
I would feel okay about myself if I made the choice to seek help from a mental health professional.	○	○	○	○	○
If I sought help from a mental health professional, I would feel less satisfied with myself.	○	○	○	○	○
My self-confidence would remain the same if I sought help from a mental health professional for a psychological or emotional problem.	○	○	○	○	○

Appendix I: Extended Version of the Attitudes towards Seeking

Professional Psychological Help Scale (ATSPPHS; Fischer & Farina, 1995)

The next questions are about your attitudes to seeking help for a mental health problem.

Please choose the appropriate response for each item:

	Completely disagree	Mostly disagree	Neither agree nor disagree	Mostly agree	Completely agree
Talking about problems with a therapist or counsellor strikes me as a poor way to get rid of emotional problems.	O	O	O	O	O
A person should work out their own problems; getting therapy or counselling should be a last resort.	O	O	O	O	O
If I were worried or upset for a long period of time, I would (agree to) seek help from a therapist or counsellor.	O	O	O	O	O
Talking about problems in a group with a therapist strikes me as a poor way to get rid of emotional problems.	O	O	O	O	O
A person should work out his or her own problems; having group therapy should be a last resort.	O	O	O	O	O
If I were worried or upset for a long period of time, I would (agree to) seek group therapy.	O	O	O	O	O
Having therapy for myself and close family strikes me as a poor way to get rid of emotional problems.	O	O	O	O	O
A person should work out his or her own problems; having family therapy should be a last resort.	O	O	O	O	O
If I were worried or upset for a long period of time, I would (agree to) seek family therapy.	O	O	O	O	O

	Completely disagree	Mostly disagree	Neither agree nor disagree	Mostly agree	Completely agree
Talking about problems in an informal support group with other people with mental health problems strikes me as a poor way to get rid of emotional problems.	○	○	○	○	○
A person should work out his or her own problems; attending an informal support group should be a last resort.	○	○	○	○	○
If I were worried or upset for a long period of time, I would (agree to) attend an informal support group.	○	○	○	○	○
Doing an internet-based self-help programme strikes me as a poor way to get rid of emotional problems.	○	○	○	○	○
A person should work out his or her own problems; doing an internet-based self-help programme should be a last resort.	○	○	○	○	○
If I were worried or upset for a long period of time, I would (agree to) do internet-based self-help programme.	○	○	○	○	○
Taking medication strikes me as a poor way to get rid of emotional problems.	○	○	○	○	○
A person should work out his or her own problems; taking medication should be a last resort.	○	○	○	○	○
If I were worried or upset for a long period of time, I would (agree to) take medication.	○	○	○	○	○
Talking to friends about my problems strikes me as a poor way to get rid of emotional problems.	○	○	○	○	○
A person should work out his or her own problems; talking to friends about your problems should be a last resort.	○	○	○	○	○

	Completely disagree	Mostly disagree	Neither agree nor disagree	Mostly agree	Completely agree
If I were worried or upset for a long period of time, I would talk to my friends about my problems.	○	○	○	○	○
Talking to my family about my problems strikes me as a poor way to get rid of emotional problems.	○	○	○	○	○
A person should work out his or her own problems; talking to family about your problems should be a last resort.	○	○	○	○	○
If I were worried or upset for a long period of time, I would talk to my family about my problems.	○	○	○	○	○
Talking to a religious leader strikes me as a poor way to get rid of emotional problems.	○	○	○	○	○
A person should work out his or her own problems; talking to a religious leader should be a last resort.	○	○	○	○	○
If I were worried or upset for a long period of time, I would talk to a religious leader.	○	○	○	○	○
Talking to work colleagues about my problems strikes me as a poor way to get rid of emotional problems.	○	○	○	○	○
A person should work out his or her own problems; talking to work colleagues about your problems should be a last resort.	○	○	○	○	○
If I were worried or upset for a long period of time, I would talk to my work colleagues about my problems.	○	○	○	○	○

Appendix J: Questions about Mental Health History and Demographics

Do you currently have a mental health problem?
- ○ Yes
- ○ No

	Extremely mild		Moderate		Extremely severe
How severe are your mental health difficulties? *[only presented if person answered yes to previous question]*	○	○	○	○	○

Are you currently getting help from mental health services (e.g. from a Psychologist, Psychiatrist, Social Worker, Nurse or Counsellor)?
- ○ Yes
- ○ No

Please indicate, to the best of your knowledge, who you are currently seeing for mental health services:
- ○ Psychologist
- ○ Psychiatrist
- ○ Social Worker
- ○ Nurse
- ○ Counsellor
- ○ Other

	Extremely helpful	Somewhat helpful	Neutral	Somewhat unhelpful	Extremely unhelpful
So far, to what extent do you feel that your experience with mental health services has been helpful?	○	○	○	○	○

Have you experienced a mental health problem in the past? [*presented to all participants*]
- ○ Yes
- ○ No

Have you used professional mental health services in the past (e.g. from a psychologist, psychiatrist, social worker, nurse or counsellor)? *[only presented if person answered yes to previous question]*
- ○ Yes
- ○ No

Please indicate, to the best of your knowledge, who you saw from mental health services (mark more than one if necessary):
- ○ Psychologist
- ○ Psychiatrist
- ○ Social Worker
- ○ Counsellor
- ○ Nurse

○ Other

To what extent do you feel that your past experiences with mental health services were helpful?	Extremely helpful	Somewhat helpful	Neutral	Somewhat unhelpful	Extremely unhelpful
	○	○	○	○	○

Thank you for completing the study. We would appreciate it if you would finish by answering some questions about yourself.

What is your age range?
○ 18-29
○ 30-39
○ 40-49
○ 50-59
○ 60-69
○ 70 or above

What gender are you?
○ Male
○ Female
○ Transgender

What is your nationality? Please write your answer
here:_____

What is your race and ethnicity? Please write your answer
here:_____

What is your relationship status?

○ Single
○ Married
○ Civil partnership
○ Long-term relationship
○ Widowed
○ Divorced

What is your highest level of education?
○ No formal education completed
○ GSCE/O Levels
○ A Levels
○ University Degree/Diploma
○ Postgraduate Degree
○ Other

 If you would like to be entered into the prize draw to win £50 please enter your email address:

 _____

Appendix K: Debriefing Statement

Debriefing Statement

You have just completed a questionnaire designed to measure the impact of stigma associated with mental illness on attitudes to help-seeking from mental health services. At the start of the study we asked you to read some information that was designed to influence your perception of the stigma attached to mental health problems. Other participants in the study read a slightly different text. That is, some read that this stigma is still highly prevalent, while others read that this stigma is decreasing. In fact, these can both be considered truthful, but each is only part of the story: the stigma associated with mental illness is still prevalent, but a lot less prevalent than in the past. Our goal was to make one of these aspects salient and examine how that affects people's attitudes towards help-seeking. Ultimately, we are interested in whether expecting to be stigmatized is a strong deterrent to help-seeking for people who suffer from mental health problems.

If you feel upset by the questions or you have concerns about your mental health and are not receiving formal support we would encourage you to contact your GP. Other sources of support are:

The Samaritans
http://www.samaritans.org
Telephone: 08457 90 90 90

Rethink Mental Health
http://www.rethink.org/
Telephone: 0300 5000 927

Mind
http://www.mind.org.uk
Telephone: 0300 123 3393

If you have any questions relating to the study or you would like a copy of the final report of the findings you can contact the research team on:

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Thank you very much for your participation in this study.

We will contact the winner of the prize draw on the email address provided. The draw will take place in March 2014.

Appendix L: Dissemination Statement

Participants who requested a copy of the results of the study will be provided with a summary of the main finding following the final submission of the project. The results will also be shared with the various organizations which were kind enough to advertise the study free of charge, which among others will include Mind, Rethink Mental Illness, Mental Health Foundation, SANE, INVOLVE, The Beauty Magazine and Be Involved. A hyperlink to a website with details of the findings will also be made available on Facebook, Twitter and LinkedIn. Subsequent to completing the course, an article will be submitted to the Personality and Social Psychology Bulletin for publication.

Appendix M: Guidance for Authors from the Personality and Social Psychology Bulletin (PSPB)

Manuscript Preparation Details:

To prepare your manuscript for publication, the below guidelines follow both **APA style** and **Sage Publications'** requests. For details of manuscript preparation not covered in the following sections, see the Publication Manual of the American Psychological Association, 6th edition, 2009.

- ❑ Final version of your manuscript should be submitted electronically to http://mc.manuscriptcentral.com/pspb. See the decision letter for the instructions.
- ❑ The author should keep an extra, exact copy for future reference.
- ❑ Manuscripts should be created in MS Word format and typed double-spaced, including references. Do not use single spacing anywhere. A tab indent should begin each paragraph.
- ❑ Please group all sections of the article in **one MS Word file**; do not use separate files for the title page, tables, references, etc. It should all be uploaded as the "main document," except the figures, which should be uploaded separately.
- ❑ **Each section begins on a separate page:** title page, abstract, text, appendix(es), author notes, references, each table, each figure.
- ❑ **Title page** includes the title, and all authors' names and e-mail addresses, as well as the corresponding author's complete address, phone numbers (work and alternate number), fax number, and any other pertinent **contact information**. If you previously requested a double-blind review, please remember to add in your names and university affiliations as well as an author note. Please review the author affiliations to make sure they are appropriate and current.
- ❑ The **Abstract** should be no more than 150 words or 960 characters.
- ❑ Five - six **keywords** should appear below the abstract.
- ❑ The **Body** of the text should generally include major headings centred on the page and subheadings flush with the left margin. Major headings should use all uppercase letters; subheadings should be typed in upper- and lowercase letters. Refer to the APA manual for more detailed options.
- ❑ PSPB uses "**Notes**." Notes are grouped on a separate page. There are no footnotes (see a recent issue of PSPB). All notes should be placed on one page at the end of the paper, as opposed to at the bottom of the text that the note occurs on. Make sure each one is cited in the text.
- ❑ All in-text **citations** are included in the reference list; all references have in-text citations.
- ❑ **Reference list** follows the journal's style (APA). References should be typed double-spaced in alphabetical order by author's last name. Note that to be in accordance with APA guidelines, references should be reverse indented with the start of each new reference not indented, and then any continuing lines indented. Make sure that all underlining is removed from your references. Titles and volume numbers should be italicized instead.
- ❑ Each **table or figure** should be prepared on a separate page.
- ❑ **Tables** should be formatted in table form with separate cell divisions and rows. To format tables, please do not use the space bar to separate elements. If possible, please use the Microsoft Word table formatting function, with either visible or invisible lines, or separate each element by tabs. **Sage Publications requires** that table placement must be indicated in the text. Additionally, the tables must be in an editable format and must be embedded at the end of the Word doc (no excel files or separate Word files).
- ❑ **Figures** are high resolution (at least 300 d.p.i.), and an electronic version is provided; they appear exactly as they should in the journal. Please view the Artwork Submission Guidelines attachment, and consider whether the quality of your artwork is ready for press. (If your figures are "line art" then they do not need to conform to the dpi requirement.) For non-line art figures: The original image files should be sent along with the MS (for example, in JPEG, TIFF etc.); image files should not be embedded in the Word doc as this decreases the image resolution.

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