An online intervention using the Continuum Message to reduce the stigma of mental health to increase positive attitudes towards mental health help seeking among the general population

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Abstract

Mental health help seeking behaviour among individuals with mental health difficulties continues to engage research in efforts to find an effective interventions to increase these help seeking behaviours. Depression and anxiety are two of the most common mental disorders found across the general population that can result in poor health outcomes, a lower quality of social and physical life and suicide when left untreated. The current study aimed to investigate whether the continuum message would increase the mental health help seeking attitudes and to explore whether there are gender differences towards mental health help seeking among the study results. In a cross sectional design 224 Participants were recruited using Snowball convenience sampling method in an online survey. Attitudes towards mental health help seeking were measured using the Inventory of Attitudes towards Seeking Mental Health Services (IASMHS). An independent-samples t-test was used for the analysis of the data. Results reviled no effect of continuum text intervention and no gender differences in attitudes toward mental health help seeking. The results provide contrary results to the majority of previous research and add additional information to already existing literature. This study have implications for the further research.

Key words: Continuum beliefs, Mental health help seeking attitudes, Gender differences

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Introduction

When it comes to mental health related help seeking behaviour, the seeking out of assistance is part of a response to a noticed change in an individual's health (Cornally & McCarthy, 2011). Help seeking behaviour is defined as a multistage process that involves a number of interrelated behaviours (Eisenberg, Downs, Golberstein & Zivin, 2009), which consist of the individual being aware of his/her own mental problem, their being willing to seek help, those individuals being in an environment where such behaviour is encouraged (Rickwood, Deane, Wilson & Ciarrochi, 2005). Help seeking behaviour differs among genders, with research suggesting that men are less likely to seek help from health professionals across different medical disciplines (Galdas, Cheater & Marshall, 2005). Studies show that males are less likely to seek professional help when experiencing mental health problems (Berger, Levant, McMillan, Kelleher & Sellers, 2005), and are more likely to rely on dealing with mental health issues by themselves, and more likely to try to obscure any mental health problems (Rickwood, Deane, Wilson & Ciarrochi, 2005).

At least 10% of the world's population is affected by some sort of mental disorder (Patel & Saxena, 2014), of which 40.5% is depression and a further 14.6% suffer from a form of anxiety disorder (Whiteford et al., 2013). Less than one-half of those affected by mental health problems seek professional help (Gulliver, Griffiths, Christensen & Brewer, 2012). It is estimated that approximately 6.6 million adults haven't met their mental health help seeking needs (Alonso et al., 2007). A national survey of Australia found that only 35% of adults that are affected by mental health problems sought out professional help (Hunt &

Eisenberg, 2010). In Europe and the USA, this figure increases to between 36- 48% (Dell'Osso, Glick, Baldwin & Altamura, 2013).

While rates of depression continue to increase (Michael & Crowley, 2002) the majority affected do not seek professional help (Barney, Griffiths, Jorm & Christensen, 2006). Depression and anxiety are two of the most common mental disorders found across the general population that can be treated or potentially prevented (Barrera, Torres & Muñoz, 2007). A study among Norwegian students revealed that only a third of the individuals that suffered from high levels of anxiety and depression sought out professional help (Zachrisson, Rödje & Mykletun, 2006).

Some people don't seek professional help even if the level of psychological problems are severe (Oliver, Pearson, Coe & Gunnell, 2005) while hoping that the problem will resolve itself without any intervention (Hunt & Eisenberg, 2010). Research shows significantly worse outcomes for untreated mental illness (Dell'Osso, Glick, Baldwin & Altamura, 2013), with some studies showing that untreated depression results in poor health outcomes (Conner et al., 2010), and a lower quality of social and physical life (Schibalski, et all, 2017). More importantly depression is strongly linked and known as the single biggest risk factor of suicide (Burns & Rapee, 2006). High levels of suicide are found among individuals with untreated mental illness such as depression (Conner et al., 2010). This is highly concerning considering the high numbers of individuals across the general population with untreated mental health problems.

The high suicide rate for men is of particular concern, as men are the least likely to seek professional help unless the mental problems are at a severe level (Rickwood, Deane, Wilson & Ciarrochi, 2005; Yousaf, Popat & Hunter, 2015). Unfortunately, individuals' help seeking behaviour decreases as the suicidal ideation increases (Rickwood, Deane, Wilson & Ciarrochi, 2005), which just serves to emphasise the importance and urgency in seeking help

for mental health issues before it is too late. People could glean great benefit from being taught that lower severity of symptoms of mental health problems does not necessarily equate to a lesser need to seek treatment for same (Bijl et al., 2003). Individuals with mild levels of mental illness who are left untreated are at greater risk of serious outcomes such as work disability, hospitalization, and suicide. Dell Osso et al (2013) found that untreated psychotic disorder causes neurodegeneration, or a change in brain structure, suggesting that similar changes might be taking place in nonpsychotic cases such as those suffering from depression and anxiety disorders. As such, mental health problems should be treated as early as possible so as to minimise or prevent these possible harmful changes to brain structure (Steiger et al., 2016; Kim & Won, 2017; Besteher et al., 2017).

With the importance of early help seeking behaviour for mental health difficulties being so clear, researchers have turned their attention to understanding the factors that prevent help seeking. They have found that the most common reasons for not seeking help are: 1) embarrassment (Wrigley, Jackson, Judd & Komiti, 2005), 2) to avoid criticism (Eisenberg, Downs, Golberstein & Zivin, 2009), and 3) procrastination (Stead, Shanahan & Neufeld, 2010). However, the most significant barriers to seeking help are the negative attitudes toward professional help seeking (Rickwood, Deane, Wilson & Ciarrochi, 2005) and the stigma of mental illness (Kakuma et al., 2010). Stigma and attitude are two different things. Stigma has been described as complex idea made up of three simpler parts: stereotypes (negative beliefs concerning a social group), prejudice (hostile feelings towards the group) and discrimination (negative behavioral reactions towards members of the group) (Corrigan & Watson, 2002). Stigma is also described as the indication of disgrace that sets an individual apart from other people due to an unspoken consensus (Avison, 2008). On the other hand, attitude is defined by Perloff (2003) as a ‘learned, global evaluation of an object..

person, place or an issue.. which influences thought and action', which while not a behaviour, can influence an individual's reaction to social stimuli.

The stigma of mental illness is one of the great challenges in psychology (Schomerus, et al, 2012). It prevents people from seeking help, which can, in turn, aggravate the state of their mental health and lead to potential problems (Freitag, Stolzenburg, Schomerus & Schmidt, 2019). The stigma of mental health is ubiquitous, being found not only amongst the general public, but even amongst health care professionals, who should be armed with sufficient information so as to prevent stigma from forming to begin with (Saridi et al., 2017). One study found that perceived stigma predicted the likelihood among doctors to seek mental health help in the case of mental health problems (Adams, Lee, Pritchard & White, 2009). These findings underline the complexity of stigma surrounding mental health disorders.

Even though anxiety and depression are widely found within the general population and roughly 30–50% of people will experience a mental disorder in their lifetime (Mackenzie, Gekoski & Knox, 2006), individuals with depression and anxiety often experience discrimination (Schibalski, et all, 2017) and negative attitudes towards them as a result of said disorders and illnesses (Bener & Ghuloum, 2010). These individuals are often mistreated by their family, friends and in the community (Kakuma et al., 2010). Results from Pescosolido's study (2010) found that 47% individuals would not want to work with, and 30% would avoid socialising with, individuals that had been diagnosed with depression. This could likely impact and decrease the probability of those affected individuals deciding to seek mental health services, so as to avoid being labelled as mentally ill (Goguen et al, 2016). Wisdom et al (2006) found that young adults avoid seeking mental health help so as not to be seen as ''mental'' by their friends. These factors can in turn decrease the likelihood of help seeking, thus worsening the mental health conditions.

Individuals who do not seek professional help prefer to seek help from their family and relatives (Oliver, Pearson, Coe & Gunnell, 2005). Younger people usually look for help from friends (Rickwood, Deane, Wilson & Ciarrochi, 2005) and it is highly probable that such friends are not properly equipped to provide the necessary support, leading to concern over how beneficial this support from untrained peers actually is.

Although research shows positive ongoing impact for individuals who seek mental health assistance (Rickwood, Deane, Wilson & Ciarrochi, 2005), the levels of help seeking behaviours are low. There are indications that these negative attitudes among younger adults are shifting in a more positive direction (Eisenberg, Speer & Hunt, 2012). It is important to study possible causes of these attitudes towards mental health help seeking behaviours as it is not entirely clear what are the causes and barriers of the help seeking behaviour (Mackenzie, Gekoski & Knox, 2006). It is clear that it is not possible to use a one-size-fits-all approach globally (Patel & Saxena, 2014), as the roots of negative attitudes towards mental health help seeking differ across different cultures.

For example, it is accepted that stigma interventions by themselves are not enough, as negative attitudes are also a significant factor in predicting help seeking behaviour (Corrigan et al., 2016). Individuals who have not sought mental health treatment possess more negative attitudes towards mental health help seeking (Conner et al., 2010) than those who at some point in their lives have attended psychologists (Wrigley, Jackson, Judd & Komiti, 2005). Furthermore, knowing someone that has sought mental health treatment significantly increases the likelihood of mental health help seeking behaviour (Vogel, Wade, Wester, Larson & Hackler, 2007). These findings suggest that increasing mental health help seeking behaviour and acceptance of same within society might well have a snowball effect.

Apart from negative attitudes and the stigma of mental health, personal attitudes are also a predictor of mental health help seeking (Barney, Griffiths, Jorm & Christensen, 2006).

Individuals' own negative attitudes towards people with mental illness known as 'personal stigma' were likely to influence the likelihood of the individual to seek professional help themselves (Eisenberg, Downs, Golberstein & Zivin, 2009). Schomerus et al. (2012) found that individuals who had strong stigmatizing attitudes towards people with mental illness were less likely to seek mental health help themselves. It is important to understand the Stigma process model that is made of several distinct, but interrelated steps which involve distinguishing and labelling individual differences, dominant cultural beliefs (stereotype), placing these individuals in distinct categories to separate ''us'' from ''them''; and status loss (discrimination) (Makowski, Mnich, Angermeyer & von dem Knesebeck, 2016). This ingroup-outgroup effect, where groups are separated according to whether they belong to 'us' or 'them' (Angermeyer et al., 2014), is one cause of the feeling whereby people with mental health difficulties are viewed as being different from everyone else ('us') which causes them to be placed in the outgroup. This tendency to categorize certain groups in 'us' and 'them' and behaving differently towards them could be learned and fostered within certain societies (Tajfel, 1970). This division in groups also leads to viewing these people as homogenous (all the same as each other) and can cause us to view them in a derogatory manner (Tajfel et al, 1971). As a consequence a distance is created, and increases between those people that are thought of as "like us", and those seen as mentally unwell ("them"). With this in mind, decreasing the ingroup-outgroup effect is of utmost importance if stigma and negative attitude are to be lessened. Creating less differentiation between the two would allow society to better view those individuals living with mental illness as being equally part of the ingroup. A method of integrating the two groups into one could be by introducing the idea that mental health is on a spectrum, which can vary from very well to very unwell, and that all individuals are situated somewhere on this continuum and this position can change. This is

known as the continuum belief (Wiesjahn, Brabban, Jung, Gebauer & Lincoln, 2012) and it stresses the similarities among people with and without mental disorder.

Symptoms and disabilities in continuum beliefs are outlined as differences on an interval scale of behaviour instead of a qualitatively unique item (Corrigan et al., 2016). This removes a division of 'us' and 'them' leaving just an 'us', where all individuals are positioned together along the line of a variety of mental health wellnesses – separated by interval scales rather than distinct separate phenomena (Corrigan et al., 2016).

Furthermore, research findings support the view that describing mental health as a continuum reduces both negative attitudes and stigma to mental health (Angermeyer et al., 2014). Wiesjahn et al, (2012) found that stronger continuum beliefs predicted lower levels of negative attitudes towards those with schizophrenia.

Schomerus et al, in an online study (2016), presented participants with a fictional vignette which explained mental illness as a continuum. This fictional text contained accurate facts explaining the continuous nature of mental illness, noting for example that most of people at some point in their lives experience mental illness to some degree. The study found that the group that received the vignette showed significantly more positive attitudes towards a person with mental illness, as well as increased continuity beliefs of mental illness over those of the group that did not receive a vignette. This supports the continuum belief theory that emphasising the continuous nature of mental illness might be an effective tool to reduce stigma and negative attitudes.

Rationale

Schomeru's study (2016) was interested in the continuum message effect on social acceptance and perceived differences towards persons with mental illness and reducing the stigma. This study will investigate whether these findings can be replicated to increase help

seeking intentions among general population by using a continuum message. Previous research shows that negative attitudes towards mental illness (Eisenberg, Downs, Golberstein & Zivin, 2009) and fear of stigmatization predicts a decreased likelihood to seek mental health help when experiencing mental health problems (Kakuma et al., 2010). As mentioned earlier this is particularly important as approximately only one half of those affected by mental health problems seek professional help (Gulliver, Griffiths, Christensen & Brewer, 2012). It is highly worrying as studies show that consequences for individuals leaving mental health issues going untreated included a lower quality of social and physical life (Schibalski, et all, 2017), poorer health outcomes (Conner et al., 2010) and suicide (Conner et al., 2010). High suicide rates among males are also highly concerning as some studies show that males are less likely to seek professional help (Rickwood, Deane, Wilson & Ciarrochi, 2005; Yousaf, Popat & Hunter, 2015).

Previous studies that have used continuum message were looking at attitudes towards schizophrenia (Makowski, Mnich, Angermeyer & von dem Knesebeck, 2016), anti-stigma programmes (Corrigan et al., 2016), social acceptance and perceived differentness towards person with mental illness (Schomerus et al., 2016) but there are no known studies to date that have looked at whether a continuum message could be used to increase an individual's likelihood to seek mental health help.

The first aim of the present study is to investigate whether continuum message would increase the mental health help seeking attitudes. The second aim of the study is to explore whether there are gender differences towards mental health help seeking.

Hypothesis 1: It is hypothesized that the group that received the continuum intervention message will have more positive attitudes towards mental health help seeking than the group without an intervention.

Hypothesis 2: It is hypothesized that there will be significantly different results when comparing mental health help seeking behaviours between genders.

Methods

Participants

The present study consists of 224 participants between the age 18 and 67 years that completed an online questionnaire, with 80 Males and 55 Females (n= 135) participants in the No Intervention group, and 38 Males and 53 Females (n= 91) participants in the Intervention group. For full demographics information (see Table 2). This sample was gathered from 20 December 2019 to 24 January 2020.

Participants for this study were recruited through a non-probability sampling technique known as the snowball convenience sampling method. The research was conducted via online questionnaire/survey that was published using platforms such as Reddit and Facebook. Depending on which link participants clicked on they were brought to one of two conditions of which one was the Intervention group and the other was No Intervention group depending on where and when they saw the research as the two links were changed between social media platforms. Participants had a chance to share the research with others. Participants were required to be older then 18 years old. No confidential information that could identify the participants was requested in order to ensure the retention of participants' anonymity.

Design

Quantitative, cross sectional, between groups, experimental, and independent measures design were used to conduct the current research. The measured es were attitudes towards mental health help seeking between intervention on the no intervention group. The dependent

variable of this study were the IASMHS scores and the independent variable was the presence of intervention in one group and the absence of an intervention in the other group.

Measures

The present research questionnaire was created through Google Forms which is a web-based application that is used to create questionnaires and surveys in order to collect the data. The research questionnaires were published on social media for both groups. Participants were presented with an information sheet that described the nature of the study followed by a consent form stating their rights. The questionnaire consisted of two sections in the No Intervention group and three in the Intervention group; (1.) demographic, (2.) intervention text in intervention group, (3.) the IASMHS scale. In this study, participants could only proceed if they provided answers to all of the questions that led to very little missing data.

Within the demographics section participants were asked to select their gender (Male, female, other), insert their age, to select whether they had ever consulted a psychologist or any other mental health professional (Yes/No), and whether they thought that mental illness lies on a continuum (Yes/No/Don't Know).

The demographics section followed, where the Intervention group was presented with the Intervention text. The research utilised a continuum message which was developed for the study. Schomerus et al (2016), created a continuum message that contained reference to a fictional study and research ''Dr. Harald Buch'' validating the text's message. Although it was a fictional story, all of the facts included in the message were true, as the researcher was careful not to include false information. The continuum text provided information on high commonness and different degrees of severity of the mental illness and its symptoms. For

example, the continuum message referred to some core symptoms of depression, such as 'loss of interest', which was followed by Dr. Buch's explanations, where he noted "One in four persons in our study stated that they had experienced this at some point during the last two weeks. Some told us they experienced it strongly all the time, whereas others said they experienced it much less strongly and for shorter periods of time". For the full text, see Appendix A.

After completing the demographic section in the No Intervention group and finishing reading the intervention text in the Intervention group, participants were asked to complete the Inventory of Attitudes towards Seeking Mental Health Services (IASMHS) questionnaire that measures attitudes to seeking mental health help.

We were thus able to compare attitudes towards mental health help seeking between the two groups. Attitudes to seeking professional psychological help were assessed with by using the Inventory of Attitudes towards Seeking Mental Health Services (IASMHS) questionnaire (Mackenzie, Knox, Gekoski & Macaulay, 2004).

The IASMHS scale consists of 24 Likert type scale items, which consists of three internally consistent factors (Cronbach's alpha = 0.87) psychological openness (Cronbach's alpha = 0.82) help-seeking propensity (Cronbach's alpha = 0.76), and indifference to stigma (Cronbach's alpha = 0.79, each factor is measured via 8 items that range from 0 (disagree) to 4 (agree) (Mackenzie, Knox, Gekoski & Macaulay, 2004). Total scores range from 0 to 96, and 0-32 in each subscale were deemed higher scores indicating more positive attitudes towards seeking mental health services. The total score is obtained by adding the scores, with reverse coding required in fifteen of the items. Mackenzie, Knox, et al.(2004) reported that the inventory has good internal reliability (.87). Hyland et al., (2014) study also found good internal reliability for all three factors. Table 1 displays Cronbach's alpha for the current study.

The three subscales in the IASMHS measures included: the psychological openness which measures the individual's readiness to acknowledge psychological problems and the likelihood of seeking professional help if experiencing psychological problems. A sample item of same would be "People should work out their own problems; getting professional help should be a last resort." The help seeking properties factor is a measure of one's belief to be willing and able to seek professional help if they were experiencing psychological problems. Another example would be: "I would have a very good idea of what to do and who to talk to if I decided to seek professional help for psychological problems". The indifference to stigma factor measures the level of an individual's concern to be stigmatised by friends and family and whether they would disclose this sort of information with them. Another sample item would be "Having been mentally ill carries with it a burden of shame."

The IASMHS has been widely used across different studies such as; Attitudes Toward Mental Health Services Among, Adolescents with Mood Disorders (Munson, Floersch & Townsend, 2009), institutional abuse survivors (Kantor, Knefel & Lueger-Schuster, 2017), police officers (Hyland et al., 2014) and others. No permission was necessitated to use this instrument (Mackenzie, Knox, et al., 2004).

Finally participants were provided with the debriefing sheet, (see Appendix F.)

Procedure

Prior to carrying out the research ethical approval was obtained from the Ethics Review Board of the National College of Ireland.

Research questionnaires were published on social media for both groups with the same title and description in order to blind the participants of two different conditions. After clicking on the link participants were brought to the one of the conditions depending on where and when the participants found the study. Participants were asked to not complete the

questionnaire twice. When the questionnaire was reposted it was tagged as 'repost' so as to avoid the same participants completing more the questionnaire more than once.

Firstly participants were provided with an information sheet (see Appendix B) and a consent form (see Appendix C) before answering any questions. Before Section 1, participants were asked to confirm that they are over 18 years old. The participants who selected (No) were not able to continue with the study. In section 1 participants were asked four demographic questions; age, gender, whether they had ever consulted a psychologist or any other mental health professional and whether they thought mental illness was positioned on a continuum (see Appendix D.)

After completing the demographic section of the questionnaire, the intervention group was provided with the intervention text. Participants were asked to read the text carefully before moving to the next section (see Appendix A).

After reading the text in the Intervention group and completing demographics section in the No Intervention group participants were brought to the IASMHS questionnaire, participants were then provided with the definition of what the term professional refers to, what the term psychological problems refers to and what scores indicated. (See Appendix E.) After completing the IASMHS scale participants were provided with the debrief form and thanked for their time (See Appendix F.)

Ethical consideration

Research was approved by the Ethics Review Board of the National College of Ireland. Participants were advised about the nature of the study and the terminology that they could expect to experience during the study. Participants were advised not to take part in this study if they felt that this subject might cause any distress and also advised to cease their participation at any time if they were to feel in any way distressed during the study. A list of

available mental health help resources were provided in the informed consent and debrief forms that participants were advised to reach out to in case of any caused distress.

Results

Reliability Statistics

Reliability statistics were conducted on the Inventory of Attitudes towards Seeking Mental Health Services (IASMHS) scale that consists of 24 items which consists of three internally consistent factors that are measured via 8 items in each (Mackenzie, Knox, Gekoski & Macaulay, 2004). The IASMHS scale displayed high reliability with Cronbach's Alpha in the No Intervention group of (α=0.85) and in the Intervention group of (α=0.82). It was noted that Cronbach's Alpha was below normal in one of the sub scales in the Intervention group where psychological openness was (α=0.59). Although acceptable, Chronbach's alpha is above 0.7, when dealing with psychological constructs values below 0.7 it can, realistically, be excepted as per the diversity of the constructs being measured (Field & Iles, 2018). (Table 1) shows the mean, standard deviation, range and internal consistencies for IASMHS scale and three subscales in each group.

Table 1

IASMHS scale Means, standard deviation, range for primary study variables and internal consistency across scale in both groups.

	No intervention (N=133)	Intervention (N=91)

Scale (IASMHS)	Mean (SD)	Obtained Range	Possible range	α	Mean (SD)	Obtained Range	Possible range	α
Attitudes towards mental health services	68.33 (13)	37-95	0-96	.85	70.10 (12.22)	37-90	0-96	.82
Psychological openness	22.57 (5.07)	9-32	0-32	.68	22.94 (5.88)	12-31	0-32	.59
Help-seeking propensity	22.84 (5.54)	10-32	0-32	.79	23.62 (5.60)	4-31	0-32	.78
Indifference to stigma	22.90 (6.08)	0-32	0-32	.77	23.53 (4.67)	0-32	0-32	.75

Descriptive statistics

Descriptive statistics were conducted on the data, (please see table 2) for frequency of gender, Age, 'Have you ever consulted psychologist' and 'Mental illness lies on a continuum' in the current sample.

Infernal statistics

Preliminary assumption testing was conducted to ensure there were no violations of the assumption of data normality , homogeneity, linearity and univariate and multivariate outliers. Kurtosis and Skewness were investigated through histograms and q-q plots. Histogram in the Intervention group was slightly positively skewed while in the No Intervention group data was normally distributed. Both Q-Q plots showed normal data

distribution. A Shapiro-Wilk test showed a significant departure from normality in Intervention group W(91)= 0.96, p= .012. A chi-square test of goodness-of-fit was performed to determine whether two groups where equally distributed. A Chi Square test for normality of independence showed no significant difference in between two groups X2(51)= 48.94, p= .592 As per Central Limitation theory we have not violated the Independent T-tests assumptions (Field & Iles, 2018).

After examining Boxplot 3 univariate outliers were found and removed from the dataset and was not included in the further data analysis. Participants (n=3) that didn't indicate their gender or selected ''other where'' excluded from the further statistical analysis.

Hypothesis 1:

It was hypothesized that the Group that received the continuum intervention message (Intervention group) will have more positive attitudes towards mental health help seeking than the group that didn't (No Intervention group).

An independent sample T-test was performed to test this hypothesis.

Significance p value for 3 subscales was calculated $p < .05 / 3 = .016$.

There was not a significant difference in the scores for the No Intervention group (M=68.34, SD=13.01) and the Intervention group (M=70.10, SD=12,22,) conditions; t(222)= (-1.03), p= .306 in the IASMA_total scores. The magnitude of the differences in the means (mean difference = -1.77, 95% CI: -5.17 to 1.63) effect was small (Cohen's d = .14).

Independent sample t-test was also conducted for all three subscales. There was no significant difference in scores among the two groups in and any of the three IASMA subcategories (see table 3).

Hypothesis 2:

It was hypothesized that there will be significantly different results when comparing mental health help seeking attitudes between genders. A series of Independent sample T- test were performed to investigate the hypothesis.

In the No Intervention condition:

There was no significant difference in the scores for Males (M=66.85, SD=13.39) and Females (M=70.58, SD=12.18,) conditions; t(131)= (-1.63), p= .105 in the IASMA_total scores. The magnitude of the differences in the means (mean difference = -3.73 95% CI: -8.26 to .79) effect was small (Cohen's d = 0.29).

An independent sample t-test was also conducted for all three subscales. There was no significant difference in scores among the genders when comparing the three IASMA subcategories (see table 4).

Intervention Condition:

There was not a significant difference in the scores for Males (M=70.78, SD=12.99) and Females (M=69.62, SD=,11.75) conditions; t(89)= (447), p=656 . in the IASMA_total scores. The magnitude of the differences in the means (mean difference = 1.16 95% CI: -4.02 to 6.35) was almost no effect (Cohen's d = .09).

Independent sample t-test was also conducted for all three subscales. There was no significant difference in scores among the genders when comparing three IASMHA subcategories (see table 5).

Males between the two groups:

There was not a significant difference in the scores for no intervention group (M=66.85, SD=13.39) and intervention group (M=70.78, SD=12.99) conditions; t(116)= (-1.51), p= .13

in the IASMA_total scores. The magnitude of the differences in the means (mean difference = -.3.93 95% CI: -9.11 to 1.23) was small (Cohen's d = .29). Independent sample t-test was also conducted for all three subscales among males. There was no significant difference in scores among No Intervention and Intervention group in three IASMHS subcategories (see table 6).

Females between the two groups:

There was not a significant difference between females in the scores for the No Intervention group (M=70.58, SD=12.17) and the Intervention group (M=69.62, SD=11.75) conditions; t(104)= (.414), p= .680 in the IASMA_total scores. The magnitude of the differences in the means (mean difference = .96 95% CI: -3.64 to 5.57) was almost no effect (Cohen's d = .08). There was no significant difference in scores among no intervention and intervention group in three IASMHS subcategories (see table 7).

Table 4

Results of Independent sample T-tests (No Intervention group Males vs Females)

	Males (N=80)		Females (N=55)						95% Confidence Interval of the Difference	
	M	SD	M	SD	t	df	p	Cohen's d	Lower	Upper
IASMHS	66.85	13.39	70.58	12.18	-1.63	131	.10	.29	-8.26	.79
PO	21.77	5.41	23.79	4.28	-2.28	131	.02	.41	3.76	-.26
HSP	22.84	5.74	22.87	5.29	-.031	131	.97	.00	.98	-1.98
IS	22.23	5.91	23.92	6.26	-1.57	131	.11	.27	1.07	-3.80

Note: M= Mean. SD= Standard deviation. df=degrees. df=degrees. PO- Psychological openness, HSP- Help-seeking property, IS- Indifference to stigma

Table 5

Results of Independent sample T-tests (Intervention group Males vs Females)

	Males (N=38)		Females (N=53)						95% Confidence Interval of the Difference	
	M	SD	M	SD	t	df	p	Cohen's d	Lower	Upper
IASMHS	70.78	12.99	69.62	11.75	.447	89	.65	.09	-4.02	6.35
PO	23.26	4.83	22.71	4.60	.547	89	.58	.11	-1.43	2.53
HSP	24.13	4.78	23.26	6.14	.726	89	.47	.13	-1.50	3.24

IS	23.39	6.70	23.64	5.28	-.196	89	.84	.04	1.25	-2.74

Note: M= Mean. SD= Standard deviation. df=degrees. PO- Psychological openness, HSP- Help-seeking property, IS- Indifference to stigma

Table 6

Results of Independent sample T-tests (Males between the 2 groups)

	No intervention (N=80)		Intervention (N=38)						95% Confidence Interval of the Difference	
	M	SD	M	SD	t	df	p	Cohen's d	Lower	Upper
IASMHS	66.85	13.39	70.78	12.99	-1.51	116	.13	.29	-9.11	1.23
PO	21.77	5.41	23.26	4.83	-.89	116	.15	.29	-3.52	.55
HSP	22.83	5.73	24.13	4.78	-1.28	85.95	.20	.24	-3.42	.83
IS	22.23	5.91	23.39	6.79	-.95	116	.34	.18	-3.42	.83

Note: M= Mean. SD= Standard deviation. df=degrees. PO- Psychological openness, HSP- Help-seeking property, IS- Indifference to stigma

Table 7

Results of Independent sample T-tests (Females between the groups)

	No intervention (N=55)		Intervention (N=53)						95% Confidence Interval of the Difference	
	M	SD	M	SD	t	df	p	Cohen's d	Lower	Upper

IASMHS	70.58	12.17	69.62	11.75	.41	104	.68	.08	-3.64	5.57
PO	23.79	4.29	22.71	4.60	1.24	104	.21	.24	-.63	2.78
HSP	22.86	5.29	23.26	6.14	-.356	104	.72	.06	-2.60	1.81
IS	23.92	6.26	23.64	5.28	.251	104	.80	.04	-1.94	2.51

Note: M= Mean. SD= Standard deviation. df=degrees. PO- Psychological openness, HSP- Help-seeking property, IS- Indifference to stigma

Discussion

The primary aim of this study was to investigate whether the continuum message would increase the mental health help seeking attitudes, with the secondary aim of determining any differences between males and females in their attitudes towards mental health help seeking, between the two conditions as well as looking at each condition separately. It is hypothesized that the group that will receive the continuum intervention message will have more positive attitudes towards mental health help seeking than the group without intervention. It is also hypothesized that there will be significantly different results when comparing mental health help seeking behaviours between genders.

Overall, the present study's findings from a series of independent sample t-tests, reveal no significant differences between the groups, concluding that the continuum text had no effect on attitudes towards mental health help seeking. In addition no gender differences

were found towards attitudes of mental health help seeking. These findings conflict with previous research as there was no significant effect found between the Intervention group and No Intervention group indicating that there is no effect in increasing positive attitudes by using the continuum message. Results also show no gender differences in attitudes towards mental health help seeking across the study (see table 3,4,5,6,7).

Despite the fact that past research had reported significant results when using the continuum message (Makowski, Mnich, Angermeyer & von dem Knesebeck, 2016; Corrigan et al., 2016; Schomerus et al., 2016) other studies' findings have suggested that the continuum intervention would have a smaller effect in reducing stigmatization (Wiesjahn, Jung, Kremser, Rief & Lincoln, 2016) which supports the results of this current study. Other previous research has also found little relationship between a fear of stigmatization and help-seeking intentions (Schomerus, Matschinger & Angermeyer, 2009), which may go some way to explaining why previous studies have found significant results in reduced stigma towards individuals with mental illness when using continuum message, in contrast to the present study. This may support the idea that the continuum message has no effect on increasing positive attitudes towards mental health help seeking. These results might also be explained by some methodological issues, as this study was conducted as an online questionnaire and as such, the researcher had no control over the environment in which the participants participated, so it is highly possible that participants did not read the text in full, or with care due to distracting environments, or in a hurry.

A comparison between males and females indicated no difference in attitudes towards mental health help seeking. These findings remained the same when comparing the results between the Intervention and the No Intervention group, and within each group separately (see table 4,5,6,7). These findings suggest that firstly, there is no difference with respect to gender in the effect of continuum message, and secondly, there is no difference between

males and female in attitudes towards mental health help seeking. The results contradict the majority of findings from previous research which report gender differences in attitudes towards mental health help seeking (Rickwood, Deane, Wilson & Ciarrochi, 2005; Yousaf, Popat & Hunter, 2015). Although there was a gender disbalance in distribution between the groups, it seems unlikely that this would have skewed the results, as the non-significant result remained the same across the groups. In turn, this indicates no differences in attitudes towards mental health help seeking between males and females.

In contract to continuum beliefs, gender differences have been studied across a wide variety of research for decades, reporting more negative attitudes towards mental health help seeking amongst males (Nam et al., 2010). One of the reasons for the high numbers of studies that report gender differences in comparison with no differences could be a publication bias, where only studies with significant results were published. The last decade has seen a gradual change in relation to such bias, and again, this change re-emphasises the importance to focus on the quality of the scientific investigation rather than the significant findings (Francis, 2012).

Although previous studies have found gender differences in attitudes towards mental health help seeking there are however, some inconsistencies (Galdas, Cheater & Marshall, 2005). For instance Gonzalez et al (2005) conducted a meta-analysis which highlighted that men are not a homogenous group that can be compared against ‘women’. Results remained the same when controlling for the history of seeking professional help and pre-existing continuum beliefs.

Limitations, Strengths and Implications

There are some limitations in this study which would warrant further examination in any future research. There are some methodological issues which may have impacted the results;

the current study was cross-sectional in design which does not allow the researcher to control for all of the confounding variables. Further longitudinal research should be conducted to fully examine the possible effect from continuum intervention and mental health help seeking behaviours. This would allow not only control for the confounding variables, but would also assist in observing participants' behaviour, as self- report measures can often be open to biased results.

The current study also did not control for financial, educational or cultural background. The previous studies suggested that cultural background could account for the differing attitudes towards mental health help seeking (Gonzalez, Alegria & Prihoda, 2005; Nam et al., 2010). It has been suggested that this tendency to categorise certain groups into 'us' and 'them', and behaving differently towards respective groups could be learned and fostered within certain societies (Tajfel, 1970), which lends weight to the importance of examining participants' cultural background.

The current study was conducted as an online survey which has been tested to be an sufficient data collection method; and according to Birnbaum (2004) data obtained online can replicate results from studies where data had been obtained in more controlled environments.

The sample size of the current study was sufficient, which suggests that these findings could be generalised to the general population. However the previous studies have had much larger sample sizes which should be noted for any future studies, and research undertaken going forward should aim for as large a sample size as possible.

This study has provided additional information to the existing literature about continuum beliefs and attitudes towards mental health help seeking. Contradicting results from the core papers suggests that future research should examine whether there are gender differences, and whether continuum messages are effective as a form of intervention when trying to increase positive attitudes towards mental health help seeking.

Further studies could look at the how the continuum message is presented, as it has been suggested that presenting it in a manner that would increase the likelihood of emotional response could be more effective in adjusting attitudes towards seeking mental health services (Wiesjahn, Jung, Kremser, Rief & Lincoln, 2016).

Conclusion

This is the first known study that utilised a continuum message as an a possible intervention method to increase positive attitudes towards mental health help seeking among the healthy population. Although results suggest that the continuum message has no effect on attitudes towards mental health help seeking, further studies should be conducted to examine the effect of continuum message as the findings thus far among similar studies is contradictory and warrants further examination.

It is important to further examine continuum message as an intervention method, as this could be helpful and beneficial among individuals who are suffering from mental health problems who do not seek professional help due to their fear to be stigmatized. This intervention message could then be used in GP offices to help the individuals to make the decision to seek professional help.

To conclude the study outlined has provided some additional insights into the continuum message effect of attitudes towards seeking mental health help and suggested that there are no gender differences among these attitudes.

References

Adams, E., Lee, A., Pritchard, C., & White, R. (2009). What Stops Us From Healing the Healers: a Survey of Help-Seeking Behaviour, Stigmatisation and Depression Within the Medical Profession. *International Journal Of Social Psychiatry*, *56*(4), 359-370. doi: 10.1177/0020764008099123

Alonso, J., Codony, M., Kovess, V., Angermeyer, M., Katz, S., & Haro, J. et al. (2007). Population level of unmet need for mental healthcare in Europe. *British Journal Of Psychiatry*, *190*(4), 299-306. doi: 10.1192/bjp.bp.106.022004

Angermeyer, M., Millier, A., Rémuzat, C., Refaï, T., Schomerus, G., & Toumi, M. (2014). Continuum beliefs and attitudes towards people with mental illness: Results from a national survey in France. *International Journal Of Social Psychiatry*, *61*(3), 297-303. doi: 10.1177/0020764014543312

Avison, W. (2008). *Mental health, social mirror* (p. 307). New York: Springer.

Barney, L., Griffiths, K., Jorm, A., & Christensen, H. (2006). Stigma about Depression and its Impact on Help-Seeking Intentions. *Australian & New Zealand Journal Of Psychiatry*, *40*(1), 51-54. doi: 10.1080/j.1440-1614.2006.01741.x

Barrera, A., Torres, L., & Muñoz, R. (2007). Prevention of depression: The state of the science at the beginning of the 21st Century. *International Review Of Psychiatry*, *19*(6), 655-670. doi: 10.1080/09540260701797894

Bener, A., & Ghuloum, S. (2010). Gender differences in the knowledge, attitude and practice towards mental health illness in a rapidly developing Arab society. *International Journal Of Social Psychiatry*, *57*(5), 480-486. doi: 10.1177/0020764010374415

Berger, J., Levant, R., McMillan, K., Kelleher, W., & Sellers, A. (2005). Impact of Gender Role Conflict, Traditional Masculinity Ideology, Alexithymia, and Age on Men's Attitudes Toward Psychological Help Seeking. *Psychology Of Men & Masculinity*, *6*(1), 73-78. doi: 10.1037/1524-9220.6.1.73

Besteher, B., Gaser, C., Langbein, K., Dietzek, M., Sauer, H., & Nenadić, I. (2017). Effects of subclinical depression, anxiety and somatization on brain structure in healthy subjects. *Journal Of Affective Disorders*, *215*, 111-117. doi: 10.1016/j.jad.2017.03.039

Bijl, R., de Graaf, R., Hiripi, E., Kessler, R., Kohn, R., & Offord, D. et al. (2003). The Prevalence Of Treated And Untreated Mental Disorders In Five Countries. *Health Affairs*, *22*(3), 122-133. doi: 10.1377/hlthaff.22.3.122

Birnbaum, M. (2004). Human Research and Data Collection via the Internet. *Annual Review Of Psychology*, *55*(1), 803-832. doi: 10.1146/annurev.psych.55.090902.141601

Burns, J., & Rapee, R. (2006). Adolescent mental health literacy: Young people's knowledge of depression and help seeking. *Journal Of Adolescence*, *29*(2), 225-239. doi: 10.1016/j.adolescence.2005.05.004

Conner, K., Copeland, V., Grote, N., Koeske, G., Rosen, D., Reynolds, C., & Brown, C. (2010). Mental Health Treatment Seeking Among Older Adults With Depression: The Impact of Stigma and Race. *The American Journal Of Geriatric Psychiatry*, *18*(6), 531-543. doi: 10.1097/jgp.0b013e3181cc0366

Cornally, N., & McCarthy, G. (2011). Help-seeking behaviour: A concept analysis. *International Journal Of Nursing Practice*, *17*(3), 280-288. doi: 10.1111/j.1440-172x.2011.01936.x

Corrigan, P., & Watson, A. (2002). The Paradox of Self-Stigma and Mental Illness. *Clinical Psychology: Science And Practice*, *9*(1), 35-53. doi: 10.1093/clipsy.9.1.35

Corrigan, P., Schmidt, A., Bink, A., Nieweglowski, K., Al-Khouja, M., Qin, S., & Discont, S. (2016). Changing public stigma with continuum beliefs. *Journal Of Mental Health*, *26*(5), 411-418. doi: 10.1080/09638237.2016.1207224

Dell'Osso, B., Glick, I., Baldwin, D., & Altamura, A. (2013). Can Long-Term Outcomes Be Improved by Shortening the Duration of Untreated Illness in Psychiatric Disorders? A Conceptual Framework. *Psychopathology*, *46*(1), 14-21. doi: 10.1159/000338608

Eisenberg, D., Downs, M., Golberstein, E., & Zivin, K. (2009). Stigma and Help Seeking for Mental Health Among College Students. *Medical Care Research And Review*, *66*(5), 522-541. doi: 10.1177/1077558709335173

Eisenberg, D., Speer, N., & Hunt, J. (2012). Attitudes and Beliefs About Treatment Among College Students With Untreated Mental Health Problems. *Psychiatric Services*, *63*(7), 711-713. doi: 10.1176/appi.ps.201100250

Field, A., & Iles, J. (2018). *Discovering statistics using IBM SPSS statistics* (5th ed., pp. 823, 233,). London: SAGE.

Francis, G. (2012). Publication bias and the failure of replication in experimental psychology. *Psychonomic Bulletin & Review*, *19*(6), 975-991. doi: 10.3758/s13423-012-0322-y

Freitag, S., Stolzenburg, S., Schomerus, G., & Schmidt, S. (2019). Title: Brief Implicit Association Tests of Stigmatizing Attitudes, Awareness of Mental Distress and Label-Avoidance: A Study in People with Depressive Symptoms. *Community Mental Health Journal*, *55*(3), 507-518. doi: 10.1007/s10597-019-00372-1

Galdas, P., Cheater, F., & Marshall, P. (2005). Men and health help-seeking behaviour: literature review. *Journal Of Advanced Nursing*, *49*(6), 616-623. doi: 10.1111/j.1365-2648.2004.03331.x

Goguen, K., Britt, T., Jennings, K., Sytine, A., Jeffirs, S., & Peasley, A. et al. (2016). Implicit and Explicit Attitudes Toward Mental Health Treatment. *Journal Of Social And Clinical Psychology*, *35*(1), 45-63. doi: 10.1521/jscp.2016.35.1.45

Gonzalez, J., Alegria, M., & Prihoda, T. (2005). How do attitudes toward mental health treatment vary by age, gender, and ethnicity/race in young adults?. *Journal Of Community Psychology*, *33*(5), 611-629. doi: 10.1002/jcop.20071

Gulliver, A., Griffiths, K., & Christensen, H. (2012). Barriers and facilitators to mental health help-seeking for young elite athletes: a qualitative study. *BMC Psychiatry*, *12*(1). doi: 10.1186/1471-244x-12-157

Hunt, J., & Eisenberg, D. (2010). Mental Health Problems and Help-Seeking Behavior Among College Students. *Journal Of Adolescent Health*, *46*(1), 3-10. doi: 10.1016/j.jadohealth.2009.08.008

Hyland, P., Boduszek, D., Dhingra, K., Shevlin, M., Maguire, R., & Morley, K. (2014). A test of the inventory of attitudes towards seeking mental health services. *British Journal Of Guidance & Counselling*, *43*(4), 397-412. doi: 10.1080/03069885.2014.963510

Kakuma, R., Kleintjes, S., Lund, C., Drew, N., Green, A., & Flisher, A. (2010). Mental Health Stigma: What is being done to raise awareness and reduce stigma in South Africa?. *African Journal Of Psychiatry*, *13*(2). doi: 10.4314/ajpsy.v13i2.54357

Kantor, V., Knefel, M., & Lueger-Schuster, B. (2017). Investigating institutional abuse survivors' help-seeking attitudes with the Inventory of Attitudes towards Seeking Mental Health Services. *European Journal Of Psychotraumatology*, *8*(1), 1377528. doi: 10.1080/20008198.2017.1377528

Kim, Y., & Won, E. (2017). The influence of stress on neuroinflammation and alterations in brain structure and function in major depressive disorder. *Behavioural Brain Research*, *329*, 6-11. doi: 10.1016/j.bbr.2017.04.020

Mackenzie, C., Gekoski, W., & Knox, V. (2006). Age, gender, and the underutilization of mental health services: The influence of help-seeking attitudes. *Aging & Mental Health*, *10*(6), 574-582. doi: 10.1080/13607860600641200

Mackenzie, C., Knox, J., Gekoski, W., & Macaulay, H. (2004). An Adaptation and Extension of the Attitudes Toward Seeking Professional Psychological Help Scale1. *Journal Of Applied Social Psychology*, *34*(11), 2410-2433. doi: 10.1111/j.1559-1816.2004.tb01984.x

Makowski, A., Mnich, E., Angermeyer, M., & von dem Knesebeck, O. (2016). Continuum beliefs in the stigma process regarding persons with schizophrenia and depression: results of path analyses. *Peerj*, *4*, e2360. doi: 10.7717/peerj.2360

Michael, K., & Crowley, S. (2002). How effective are treatments for child and adolescent depression?. *Clinical Psychology Review*, *22*(2), 247-269. doi: 10.1016/s0272-7358(01)00089-7

Munson, M., Floersch, J., & Townsend, L. (2009). Attitudes Toward Mental Health Services and Illness Perceptions Among Adolescents with Mood Disorders. *Child And Adolescent Social Work Journal*, *26*(5), 447-466. doi: 10.1007/s10560-009-0174-0

Nam, S., Chu, H., Lee, M., Lee, J., Kim, N., & Lee, S. (2010). A Meta-analysis of Gender Differences in Attitudes Toward Seeking Professional Psychological Help. *Journal Of American College Health*, *59*(2), 110-116. doi: 10.1080/07448481.2010.483714

Oliver, M., Pearson, N., Coe, N., & Gunnell, D. (2005). Help-seeking behaviour in men and women with common mental health problems: cross-sectional study. *British Journal Of Psychiatry*, *186*(4), 297-301. doi: 10.1192/bjp.186.4.297

Patel, V., & Saxena, S. (2014). Transforming Lives, Enhancing Communities — Innovations in Global Mental Health. *New England Journal Of Medicine*, *370*(6), 498-501. doi: 10.1056/nejmp1315214

Perloff, R. (2003). *The dynamics of persuasion* (6th ed.). Mahwah, N.J.: Lawrence Erlbaum Associates.

Pescosolido, B., Martin, J., Long, J., Medina, T., Phelan, J., & Link, B. (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. doi: 10.1176/appi.ajp.2010.09121743

Rickwood, D., Deane, F., Wilson, C., & Ciarrochi, J. (2005). Young people's help-seeking for mental health problems. *Australian E-Journal For The Advancement Of Mental Health*, *4*(3), 218-251. doi: 10.5172/jamh.4.3.218

Saridi, M., Kordosi, A., Toska, A., Peppou, L., Economou, M., & Souliotis, K. (2017). Attitudes of health professionals towards the stigma surrounding depression in times of economic crisis. *International Journal Of Social Psychiatry*, *63*(2), 115-125. doi: 10.1177/0020764016685348

Schibalski, J., Müller, M., Ajdacic-Gross, V., Vetter, S., Rodgers, S., & Oexle, N. et al. (2017). Stigma-related stress, shame and avoidant coping reactions among members of the general population with elevated symptom levels. *Comprehensive Psychiatry*, *74*, 224-230. doi: 10.1016/j.comppsych.2017.02.001

Schomerus, G., Angermeyer, M., Baumeister, S., Stolzenburg, S., Link, B., & Phelan, J. (2016). An online intervention using information on the mental health-mental illness continuum to reduce stigma. *European Psychiatry*, *32*, 21-27. doi: 10.1016/j.eurpsy.2015.11.006

Schomerus, G., Auer, C., Rhode, D., Luppa, M., Freyberger, H., & Schmidt, S. (2012). Personal stigma, problem appraisal and perceived need for professional help in currently untreated depressed persons. *Journal Of Affective Disorders*, *139*(1), 94-97. doi: 10.1016/j.jad.2012.02.022

Schomerus, G., Matschinger, H., & Angermeyer, M. (2009). The stigma of psychiatric treatment and help-seeking intentions for depression. *European Archives Of Psychiatry And Clinical Neuroscience*, *259*(5), 298-306. doi: 10.1007/s00406-009-0870-y

Stead, R., Shanahan, M., & Neufeld, R. (2010). "I'll go to therapy, eventually": Procrastination, stress and mental health. *Personality And Individual Differences*, *49*(3), 175-180. doi: 10.1016/j.paid.2010.03.028

Steiger, V., Brühl, A., Weidt, S., Delsignore, A., Rufer, M., & Jäncke, L. et al. (2016). Pattern of structural brain changes in social anxiety disorder after cognitive behavioral group therapy: a longitudinal multimodal MRI study. *Molecular Psychiatry*, *22*(8), 1164-1171. doi: 10.1038/mp.2016.217

Tajfel, H. (1970). Aspects of national and ethnic loyalty. *Social Science Information*, *9*(3), 119-144. doi: 10.1177/053901847000900305

Tajfel, H., Billig, M., Bundy, R., & Flament, C. (1971). Social categorization and intergroup behaviour. *European Journal Of Social Psychology*, *1*(2), 149-178. doi: 10.1002/ejsp.2420010202

Vogel, D., Wade, N., Wester, S., Larson, L., & Hackler, A. (2007). Seeking help from a mental health professional: The influence of one's social network. *Journal Of Clinical Psychology*, *63*(3), 233-245. doi: 10.1002/jclp.20345

Whiteford, H., Degenhardt, L., Rehm, J., Baxter, A., Ferrari, A., & Erskine, H. et al. (2013). Global burden of disease attributable to mental and substance use disorders: findings from the Global Burden of Disease Study 2010. *The Lancet*, *382*(9904), 1575-1586. doi: 10.1016/s0140-6736(13)61611-6

Wiesjahn, M., Brabban, A., Jung, E., Gebauer, U., & Lincoln, T. (2012). Are continuum beliefs about psychotic symptoms associated with stereotypes about schizophrenia?. *Psychosis*, *6*(1), 50-60. doi: 10.1080/17522439.2012.740068

Wiesjahn, M., Jung, E., Kremser, J., Rief, W., & Lincoln, T. (2016). The potential of continuum versus biogenetic beliefs in reducing stigmatization against persons with schizophrenia: An experimental study. *Journal Of Behavior Therapy And Experimental Psychiatry*, *50*, 231-237. doi: 10.1016/j.jbtep.2015.09.007

Wisdom, J., Clarke, G., & Green, C. (2006). What Teens Want: Barriers to Seeking Care for Depression. *Administration And Policy In Mental Health And Mental Health Services Research*, *33*(2), 133-145. doi: 10.1007/s10488-006-0036-4

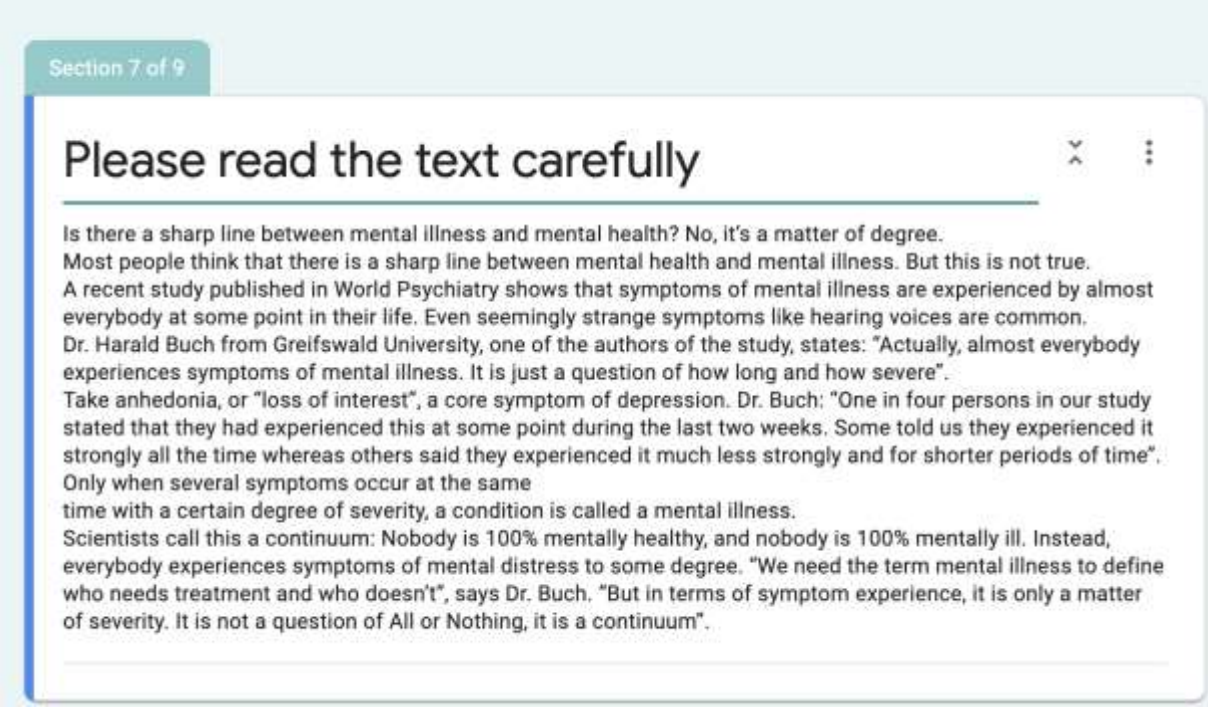
Wrigley, S., Jackson, H., Judd, F., & Komiti, A. (2005). Role of Stigma and Attitudes Toward Help-Seeking from a General Practitioner for Mental Health Problems in a Rural Town. *Australian & New Zealand Journal Of Psychiatry*, *39*(6), 514-521. doi: 10.1080/j.1440-1614.2005.01612.x

Yousaf, O., Popat, A., & Hunter, M. (2015). An investigation of masculinity attitudes, gender, and attitudes toward psychological help-seeking. *Psychology Of Men & Masculinity*, *16*(2), 234-237. doi: 10.1037/a0036241

Zachrisson, H., Rödje, K., & Mykletun, A. (2006). Utilization of health services in relation to mental health problems in adolescents: A population based survey. *BMC Public Health*, *6*(1). doi: 10.1186/1471-2458-6-34

Appendix

Appendix A



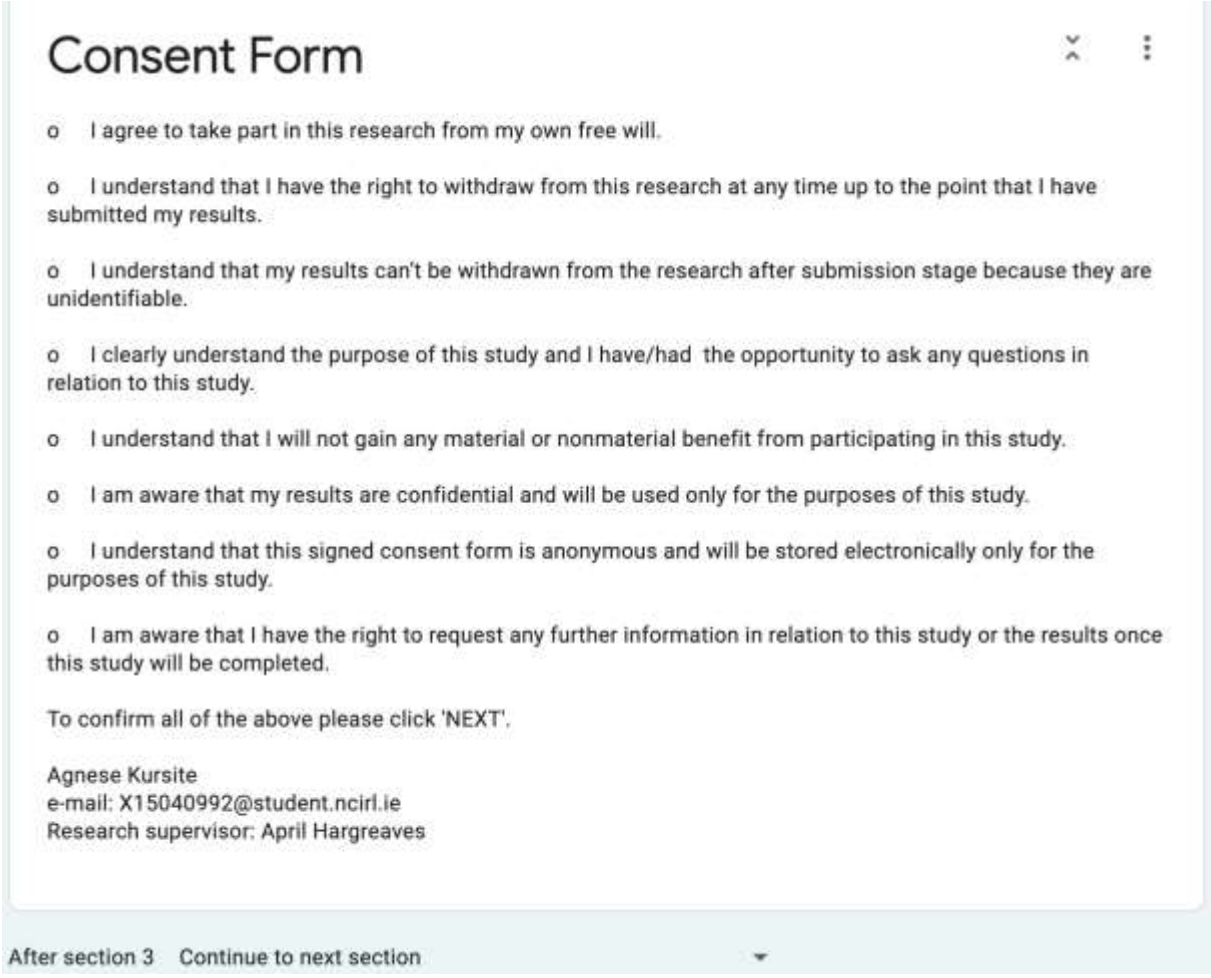
Appendix B

Information sheet

- This study will take approximately 10 minutes to complete.
- Thank you for taking your time to participate in our study. We hope you will enjoy taking part in this research.
- This study is completely anonymous.
- Your participation in this study is voluntary and you have the right to withdraw from this research at any stage up to the point you have submitted your results by exiting the webpage. There will be no consequences and your results will not be saved. You will not be able to withdraw from the research after submitting your results as your results will be unidentifiable.
- If you have any further questions regarding this research please do not hesitate to contact me. You can find my contact details at the bottom of this page.
- This experiment will measure your attitudes towards seeking mental health assistance.
- After answering a few questions you will receive a vignette (text). Please read it carefully. After you are finished reading the text you will be asked to complete the questionnaire.
- This research topic is interested in attitudes towards mental health help seeking. You can expect to come across terms like depression, anxiety and other psychological terms. If you have any past experiences that might cause you to feel distressed, we recommend against participation in this research.
- If you are affected in any way by this research please see the link below for help (http://www.mentalhealthireland.ie/need-help-now/). You can also find researcher's contact details at the bottom of this page.

Agnese Kursite
e-mail: X15040992@student.ncirl.ie
Research supervisor: April Hargreaves

Appendix C



Consent Form

o I agree to take part in this research from my own free will.

o I understand that I have the right to withdraw from this research at any time up to the point that I have submitted my results.

o I understand that my results can't be withdrawn from the research after submission stage because they are unidentifiable.

o I clearly understand the purpose of this study and I have/had the opportunity to ask any questions in relation to this study.

o I understand that I will not gain any material or nonmaterial benefit from participating in this study.

o I am aware that my results are confidential and will be used only for the purposes of this study.

o I understand that this signed consent form is anonymous and will be stored electronically only for the purposes of this study.

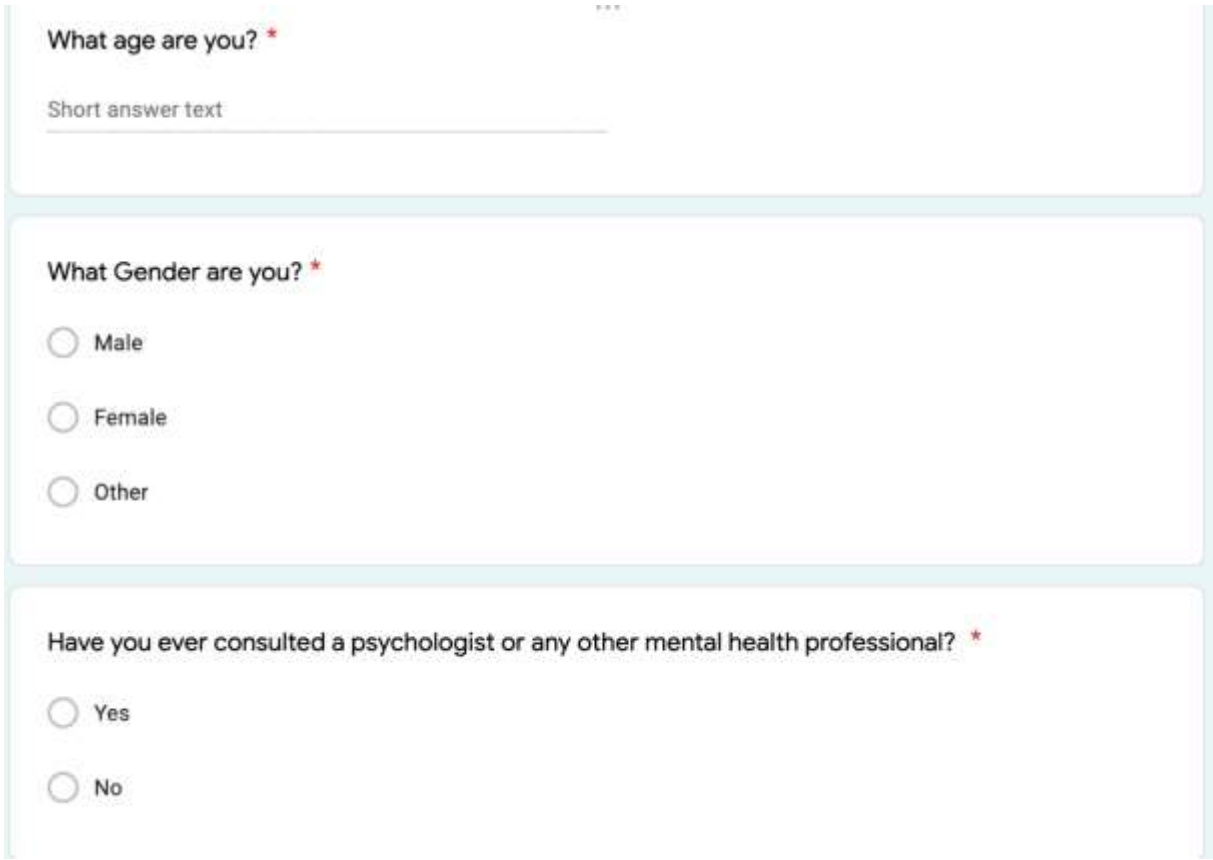
o I am aware that I have the right to request any further information in relation to this study or the results once this study will be completed.

To confirm all of the above please click 'NEXT'.

Agnese Kursite
e-mail: X15040992@student.ncirl.ie
Research supervisor: April Hargreaves

After section 3 Continue to next section

Appendix D


What age are you? *
Short answer text
What Gender are you? *
Male
Female
Other
Have you ever consulted a psychologist or any other mental health professional? *
Yes
No


Do you think mental illness lies on a continuum?
Multiple choice
Yes
No
Don't know

Appendix E

Inventory of Attitudes Toward Seeking Mental Health Services (IASMHS)

Mackenzie et al., 2004

The term professional refers to individuals who have been trained to deal with mental health problems (e.g. psychologists, psychiatrists, social workers, licensed counsellors).

The term psychological problems refers to reasons one might visit a profession (mental health concerns, emotional problems, mental troubles, and personal difficulties.

For each item, indicate whether you disagree (0), somewhat disagree (1), are undecided (2), somewhat agree (3), or agree (4).

Statement	Disagree 0	Somewhat Disagree 1	Undecided 2	Somewhat Agree 3	Agree 4
1. There are certain problems which should not be discussed outside of one's immediate family. R					
2. I would have a very good idea of what to do and who to talk to if I decided to seek professional help for psychological problems					
3. I would not want my significant other (spouse, partner, etc.) to know if I were suffering from psychological problems. R					
4. Keeping one's mind on a job is a good solution for avoiding personal worries and concerns. R					

5. If good friends asked my advice about a psychological problem, I might recommend that they see a professional.					
6. Having been mentally ill carries with it a burden of shame. R					
7. It is probably best not to know everything about oneself. R					
8. If I were experiencing a serious psychological problem at this point in my life, I would be confident that I could find relief in psychotherapy.					
9. People should work out their own problems; getting professional help should be a last resort. R					
10. If I were to experience psychological problems, I could get professional help if I wanted to.					
11. Important people in my life would think less of me if they were to find out that I was experiencing psychological problems. R					
12. Psychological problems, like many things, tend to work out by themselves. R					
13. It would be relatively easy for me to find the time to see a professional for psychological problems.					
14. There are experiences in my life that I would not discuss with anyone. R					
15. I would want to get professional help if I were worried or upset for a long period of time.					
16. I would be uncomfortable seeking professional help for psychological problems because people in my social or business circles might find out about it. R					
17. Having been diagnosed with a mental disorder is a blot on a person's life. R					
18. There is something admirable in the attitude of people who are willing to cope with their conflicts and fears without resorting to professional help. R					
19. If I believed I were having a mental breakdown, my first inclination would be to get professional attention.					

20. I would feel uneasy going to a professional because of what some people would think. R					
21. People with strong characters can get over psychological problems by themselves and would have little need for professional help.R					
22. I would willingly confide intimate matters to an appropriate person if I thought it might help me or a member of my family.					
23. Had I received treatment for psychological problems, I would not feel that it ought to be “covered up”.					
24. I would be embarrassed if my neighbour saw me going into the office of a professional who deals with psychological problem.R					

Appendix F

Debrief

- Thank you for taking your time to participate in our study. We hope you enjoyed taking part in this research.
- This study is completely anonymous.
- Your participation in this study was voluntary and you have the right to withdraw from this research up to the point where you submit your results by exiting from the webpage. There are no consequences associated with your withdrawal from the study and if you withdrew before submitting your results, no data would have been saved. You will not be able to withdraw from the research now after submitting your results as your results will be unidentifiable.
- If you have any further questions regarding this research, please do not hesitate to contact me. You can find my contact details at the bottom of this page.
- This experiment is measuring attitudes towards mental health help seeking.
- If you feel you may have been affected by any content that you came across during the course of your participation in this study than please consult the below link for further advice. Consult the below link for further advice. (http://www.mentalhealthireland.ie/need-help-now/). The researcher's contact details are also included at the bottom of this page.

Please click on 'SUBMIT' at the bottom of this page if you are happy to submit your results.

Many thanks again for taking the time to participate in the study.

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