Running head: ATTITUDES TOWARD TREATMENT

Attitudes toward Treatment: The Effects of Viewing Sequential TV Portrayals of Psychotherapy

Stephanie Smithson

University of British Columbia – Okanagan

Abstract

A large scale study was conducted to explore factors that influence attitudes toward seeking psychological help. The study consisted of two separate but interrelated Phases. Phase I was an online survey completed by a sample of undergraduate university students. Correlational methods were used to examine the interrelationships between mental health-related beliefs and help seeking attitudes. Results indicated that more stigmatizing attitudes with regards to mental illness were associated with more negative help seeking attitudes. Phase II was comprised of a subsample of Phase I participants. Experimental methods were used to examine the direct effects of viewing one or two related episodes of a TV drama depicting psychotherapy on attitudes. Participants reported more positive help seeking attitudes after viewing the program.

Attitudes toward Treatment: The Effects of Viewing Sequential TV Portrayals of Psychotherapy

The Canadian Mental Health Association (2008) estimates that one in five Canadians will experience a mental health disorder in their lifetime. Mental illness affects individuals and society in a number of different ways. For example, it may deprive people of social opportunities (Corrigan, 2004). It may also have economic cost both at an individual level and for society as a whole (Health Canada, 2002). Thus, mental illness is a phenomenon that impacts virtually all Canadians in some way. Given that mental health disorders are, by definition, associated with distress and impairments, one might expect that treatment would be readily sought (Corrigan, 2004). However, of those with a mental health concern, fewer than 40% have been found to seek professional help in any form (Vogel, Wade, & Haake, 2006). Moreover, it is unclear whether people are aware of the fact that mental illness is treatable (Health Canada, 2002). Indeed, there are a rising number of empirically supported therapeutic interventions (Corrigan, 2004). To this end, researchers have sought to determine why relatively few people seek psychological treatment, and what factors influence the likelihood of seeking help.

Vogel and Wester (2003) found that avoidance factors, or factors associated with a decreased likelihood of seeking psychological help, are an important part of understanding help seeking behaviour. Two interrelated sets of reasons concerning why people may avoid such services have been identified: first, fear of what is involved in the therapeutic process; and second, stigmatizing attitudes. The first component can include fear of the process of self-disclosing to a therapist (Cepeda-Benito & Short, 1998; Vogel & Wester, 2003). Cepeda-Benito and Short (1998) found that individuals with high levels of self-concealment, that is, those who tend to keep private information secret, were more likely to avoid treatment. In addition, the perceived relative risks and benefits of therapy (e.g., fearing that the risks outweigh the benefits)

have been identified as an influencing factor (Shaffer, Vogel, & Wei, 2006). The second component that has been shown to influence help seeking is mental health-related attitudes. In particular, stigmatizing attitudes have been found to decrease the likelihood of help seeking (e.g., Corrigan, 2004). Corrigan identified two types of stigma, public stigma and self stigma that may work together and cause people to avoid treatment. Specifically, prejudicial public attitudes toward those with mental illness may lead to a desire to avoid being labelled mentally ill. People who have a mental illness may also internalize public stigma by applying these prejudices to themselves. In an effort to avoid dealing with such prejudices altogether, individuals may decide not to seek therapy. Thus, a combination of fear of what is involved in the therapeutic process, as well as stigmatizing attitudes at both a public and personal level can decrease help-seeking behaviour. Moreover, one may reinforce the other, leading to a vicious cycle of factors causing people to forego treatment. For example, fear of therapy may, in part, be informed by stigmatizing beliefs about mental illness. This could exacerbate the fear and reinforce the desire to avoid therapy.

Researchers have investigated factors that may contribute to stigmatizing attitudes toward the mentally ill. The media has been shown to be particularly influential in perpetuating stigma (Granello & Pauley, 2000). Television (TV) especially has been found to augment negative perceptions of those with mental illness. Moreover, Snyder and Rouse (1995) found that TV can have an influence on a personal as well as a societal level. In particular, the researchers found that fictional portrayals were capable of affecting individuals' perceptions of safety, which in turn led to changes in behaviour. This is troubling in view of the fact that research suggests mass media, including TV, is the public's premier source for information on mental illness (Daniel Yanklovich Group, 1990, as cited in Granello & Pauley).

A number of theories have been proposed as to how specifically TV and film affects people. The *cultivation hypothesis*, proposes that TV viewing has a cumulative effect (e.g., Potter & Ching, 1989; Shrum, 1995). That is, the influence of TV may steadily increase the more one watches TV. In this case, it may be that more TV viewing causes increased internalization of stigmatizing attitudes as a result of repeated exposure to negative portrayals of the mentally ill. With Canadians watching an average of 21.4 hours of TV per week (Statistics Canada, 2004), the potential influence of such portrayals is a cause for concern. Indeed, Diefenbach (2007) demonstrated that greater hours of TV viewing were associated with more negative perceptions of mental illness. The *drench hypothesis*, on the other hand, proposes that the content of some TV programs, particularly dramatic ones, may have a more immediate effect by immersing or "drenching" people (Bahk, 2001). For instance, Bahk found that participants who viewed a film depicting the outbreak of a deadly virus reported having less power over their own health than those in a control group. Moreover, changes in participants' beliefs were found to vary as a function of reported levels of media involvement, perceived realism and role identification. In this way, the drench hypothesis may help to explain individual differences in the influence of TV. Together, the drench and cultivation hypotheses illustrate two ways in which TV may affect people in the short and long term, respectively. It is important to note that the two hypotheses are not mutually exclusive. That is, the drench hypothesis may explain the acute effects of TV viewing, while the cultivation hypothesis explains the dynamic, longer term effects. Thus, TV may be capable of influencing people's attitudes and beliefs within a variety of contexts.

Diefenbach (1997) found that 32% of surveyed TV programs contained an individual with mental illness. The influence of TV in perpetuating mental illness stigma is not surprising given the frequent negative and violent portrayals of individuals with mental illness on TV and

in film (e.g., Diefenbach, 1997; Pirkis, Blood, Francis, & McCallum, 2006). A growing body of literature has demonstrated that the mentally ill are often portrayed negatively on TV and in the media. Diefenbach (1997) found that on TV, mentally ill characters were 10 times more violent than other characters and 10 to 20 times more violent than those with mental illness in the general population. Pirkis et al. (2006) highlighted a number of common TV stereotypes of the mentally ill identified by researchers, including the “homicidal maniac” and the “zoo specimen” (e.g., objects to be viewed for entertainment). Such stereotypes may have harmful implications in terms of perpetuating prejudicial attitudes toward the mentally ill. Further, Pirkis et al. reviewed the literature on TV and film portrayals of mental health disorders. Consistent with Diefenbach, the researchers found that the mentally ill were commonly portrayed in a negative fashion. Taken together, the research analyzed by Pirkis et al. suggested that these negative depictions have a collective adverse effect on beliefs about the mentally ill and on help seeking attitudes.

Interestingly, the way in which mental illness is portrayed has been found to vary as a function of TV program and film genre (Diefenbach, 1997). Perhaps not surprisingly, the genre found to contain the most mentally ill violent criminals was drama. Other genres, such as situational comedies contained notably fewer mentally ill violent criminals. This is relevant to previous research involving the drench hypothesis suggesting that dramatic portrayals are particularly effective in immersing and thus influencing viewers (Bahk, 2001). In other words, the effect of negative portrayals of the mentally ill may be exacerbated by the fact that such depictions are usually found in drama. In this regard, it is noteworthy that Statistics Canada (2004) found drama to be the most popular type of TV program, comprising 27.3% of Canadians’ viewing time. Wahl and Lefkowits (1989) demonstrated the power that such portrayals can have. The researchers found that viewing a film portraying a mentally ill killer

was associated with more negative attitudes toward the mentally ill and their care in the community. Most disturbingly, this effect on negative beliefs was found regardless of whether participants were shown a corrective information video. These results are, in part, consistent with the drench hypothesis. In addition, the authors noted that, consistent with the cultivation hypothesis, continuous exposure to such depictions would likely aggravate this short term effect.

It is clear that there is a relationship between negative TV portrayals of mental illness and stigmatizing attitudes. This, in turn, may have an impact on help seeking attitudes. Moreover, TV and film portrayals of therapists and therapy may influence attitudes toward treatment. Accordingly, research has begun to examine the nature of such portrayals. One would assume that confidence in the skills of mental health professionals plays an important role in the utilization of treatment (Day, Edgren, & Eshleman, 2007). To this end, the ways in which therapists and therapy are portrayed may also directly influence individuals' attitudes toward help seeking. Diefenbach (1997) found that 9% of a sample of prime-time TV programs contained a mental health professional. With regard to films, Young, Boester, Whitt, and Stevens (2008) found that among the most popular movies of the 1990s, 17% contained a mental health professional. These findings suggest that therapists, much like the mentally ill, are a subject that intrigues the entertainment industry and its audiences (Pirkis et al., 2006; Young, et al., 2008). Research evaluating film depictions of therapists indicates that such portrayals often include inaccurate stereotypes (Gabbard, 2001). Indeed, a number of distinct stereotypes of therapists in TV and film have been identified (Greenberg, 2000). In film, therapists are by far most often portrayed as white males: a statistic no longer representative of today's more gender balanced world of mental health professionals (Young, et al., 2008). In addition, several common motives of therapists in film have been observed, including money, power and concern for others

(Young, et al., 2008). It is important to note that inaccurate stereotypes could have a negative impact on patients' expectations of therapy (Gabbard, 2001). Such expectations may go on to contribute directly to the previously discussed avoidance factors that impact overall willingness to seek help (Pirkis et al., 2006).

A notably small number of studies have examined the effects of TV on help seeking attitudes. Nonetheless, these studies have suggested that inaccurate portrayals of therapists can have a subsequent impact on people's beliefs. Vogel, Gentile, and Kaplan (2008) sought to determine how TV affects perceptions of therapy through the use of structural equation modeling. The researchers found that consistent viewing of TV dramas and comedies predicted more negative and stigmatizing attitudes toward therapy. This, in turn, resulted in a lower likelihood of seeking therapy and other forms of help. Schill, Harsch, and Ritter (1990) exposed participants to a film depicting a therapist who acts on his feelings of countertransference for one of his clients. The romantic comedy *Lovesick* sparked concern among researchers that it may lead to erroneous beliefs regarding the boundaries of the therapeutic relationship. It was feared that the film's positive depiction of acting upon countertransference might cause people to wrongly perceive sexual relationships between therapists and clients as acceptable rather than harmful. After viewing the film, participants were indeed more accepting toward the prospect of sexual relationships between therapists and clients. Further, participants perceived ethical restrictions on such behaviour more negatively. Together, these findings suggest that participants are indeed influenced by film and TV portrayals of therapy. This may affect individuals' overall intentions to engage in therapy, as well as their expectations of the therapy and therapist.

In sum, TV and film appear to be influential in augmenting negative attitudes toward a number of mental health-related issues. This may go on to affect attitudes toward treatment and

have a subsequent impact on help seeking behaviour. To date, most TV and mental health research has focused primarily on perceptions of the mentally ill. Fewer studies have focused specifically on the effects of TV on help seeking attitudes. Therefore the purpose of the present study was to further explore this matter. The study consisted of two separate but related phases. The purpose of Phase I was to further examine the interrelationships between beliefs about mental health disorders and attitudes toward treatment. Previous research (e.g., Corrigan, 2004) has implicated stigmatizing attitudes toward the mentally ill as an impediment to help seeking. To this end, Phase I of the present study used correlational methods to determine whether various types of stigmatizing beliefs are associated with differences in help seeking attitudes. Affirming this link is an important step in knowing how to increase the low number of individuals who seek help. For example, establishing such a relationship would highlight the need to combat negative attitudes via methods such as anti-stigma campaigns.

The purpose of Phase II was to determine the direct effects of viewing a TV drama on attitudes toward treatment and help seeking. Past research has generally used correlational methods such as self reported hours of TV viewing to make such a connection (e.g., Vogel, et al., 2008). To this end, the present study is relatively novel in its use of an experimental manipulation (i.e., direct exposure to a TV program). The selected program, *In Treatment*, is a contemporary TV series involving the fictional portrayal of the psychotherapy sessions between a psychologist and his clients. While many films and TV programs contain therapy sessions or interactions with mental health professionals, few have depicted these elements at the forefront. The series has been controversial among mental health professionals and others, as its effect on help seeking attitudes and behaviours is unknown (Becker, 2008). To this end, the study examined both the immediate and cumulative effects of viewing one or two related episodes of

the series. Episodes were selected based on a number of factors. Of particular importance was the character's stage in the therapeutic process. Specifically, for each of the characters (one male and one female), one episode was selected from early in his/her therapy and one episode from later. In the "early" episodes, the clients appear to be less committed and are more resistant to the therapy. Both clients indicated that they didn't want to be in therapy and were not sure if they would return. In the "late" episodes, the clients were portrayed as more committed to the therapy and benefitting from it. In order to examine the cumulative effects of viewing the program, half of the participants watched two related episodes one week apart. Accordingly, these participants saw the progression of a character. The other half of participants viewed only the "late" episode of the male or the female client. As follows, these participants witnessed only the more progressed storyline without an earlier context.

A number of recent theory-based measures were used to examine participants' attitudes toward mental health-related issues at three points in time (i.e., once in Phase I, and twice in Phase II). It was hypothesized that viewing the "early" episodes of the program would have a relatively negative effect on people's attitudes, as a therapeutic relationship had not yet developed. In contrast, the "late" episodes were hypothesized to have a more positive effect, as the therapeutic relationship had developed. It was further predicted that following the progression of a character across two episodes would have a more powerful and positive effect than viewing a single episode. The basis for this prediction was that a character's improvement from the early therapy session to the later session would better illustrate potential benefits of therapy over time. Thus, witnessing this positive development might address people's fears and uncertainties regarding the initial therapy sessions. In addition, it was expected that the effect of viewing two episodes would have a cumulative effect consistent with the cultivation hypothesis

and related research (e.g., Diefenbach & West, 2007). On the other hand, participants who saw the “late” episode exclusively would have no prior basis for comparison, resulting in a less powerful impact on attitudes.

Phase I

Method

Participants

Participants (n = 258) consisted of undergraduate students recruited principally through SONA, the Psychology Department’s online volunteer database of students registered in psychology classes. The database provides students with opportunities to receive credits as incentive for their participation in research. In addition, a number of undergraduate psychology classes that offered credits for research participation were solicited by the researchers. Those who completed Phase I received one credit. Participants were required to be at least 17 years of age, be relatively fluent in English and able to read and write English at approximately a Grade 7 level. The majority of participants were Caucasian (n = 205) and were female (n = 174).

Measures

The present research was part of a larger study that examined variables affecting attitudes toward mental health disorders and treatment (see Appendix A for full study design). Due to the complex nature of the study, only measures pertinent to the present researcher’s thesis will be described in detail (see Appendix B). Measures used in the survey that were not directly pertinent to the present study were: the *Male Role Norms Inventory – Revised* (MRNI-R; Levant, et al., 2007), *Personal Attributes Questionnaire – 18* (PAQ-18; Ward, Thorn, Clements, Dixon, & Sanford, 2006), *Television Usage and Behaviours Evaluation – General* (TUBE; Szostak & Webster, in prep.), *Active Viewing Questionnaire* (AVQ; Ward & Rivadeneyra, 1999), *Perceived*

Television Realism (PRTV; Ward, Merriwether, & Caruthers, 2006), *Viewing Motivations & Television* (VMTV; Ward & Friedman, 2006), and the *Indirect Measure of Attitudes Form I* (IMA-1; Szostak & Whidden, in prep.).

Assessing perceiver characteristics.

In order to obtain a characterization of the sample, as well as control for potential individual differences, a number of measures were included. Demographic information including age, sex, education, and ethnicity was obtained. The *Personal Reaction Inventory* (PRI; Crowne & Marlowe, 1960) was included to examine participants' tendencies to respond in a socially desirable way. The *Mental Health Inventory* (MHI; Hays, Sherbourne, & Mazel, 1995) was also included in order to gain an understanding of participants' mental health status over the past month. The MHI consists of two subscales: Psychological Wellbeing and Personal Distress. High scores in both subscales reflect more wellbeing and less distress. Given the study's focus on attitudes toward mental health related issues, questions regarding the nature and extent of participants' contact with mental illness were also addressed. The demographics questionnaire included a question asking whether participants had ever taken a class that focused on mental health disorders. In addition, the *Level of Contact Report* (LCR; Holmes, et al., 1999) was also used. The LCR consists of 12 statements describing various types of both direct and indirect experience with the mentally ill. Participants are asked to identify any of the statements that apply to them. The present researches modified the measure to include a question about whether participants had taken a course in school about mental illness.

Mental health-related attitudes.

The *Mental Illness Stigma Scale* (MISS; Day, et al., 2007) is a recently developed theory-based measure comprised of 28 statements that participants are asked to indicate their agreement

with using a 7-point Likert-type scale (e.g., 1 = Completely Disagree, 7 = Completely Agree). The measure begins by offering participants a vignette that contains information regarding mental illness. Seven subscales of attitudes and beliefs about mental illness are addressed: Anxiety (n = 7), Relationship Disruption (n = 6), Hygiene (n = 4), Visibility (n = 4), Treatability (n = 3), Professional Efficacy (n = 2), and Recovery (n = 2). High scores on all scales except Treatability, Professional Efficacy, and Recovery reflected more stigmatizing attitudes. For the latter three scales, high scores reflect more positive attitudes. It should be noted that five items (i.e., 8, 9, 11, 13, and 20) are reverse scored. Previous research has found the MISS to be internally consistent, with Cronbach's alpha ranging from $\alpha = .71$ to .90.

The *Attitudes about Depression Scale* (ADS; Wolkenstein & Meyer, 2008) involves reading a vignette that describes an individual with symptoms of depression, as defined by the DSM-IV. However, no diagnostic label is provided. Participants are then asked to rate how they believe most Canadians would react to the person described using a 5-point Likert-type scale (e.g., 0 = definitely not the case, 4 = definitely the case). The ADS measures Emotional (n = 14), Cognitive (n = 8) and Behavioural (n = 7) reactions. The Behavioural subscale is reverse scored. As such, higher scores in the ADS reflect more negative reactions to the individual portrayed in the vignette. In addition, the present researchers asked participants to rate and comment on the extent to which participants' own views were congruent with those of most Canadians.

Help-seeking attitudes.

The *Inventory of Attitudes toward Seeking Mental Health Services* (IASMHS; Mackenzie, Knox, Gekoski, & Macaulay, 2004) assesses three factors associated with help seeking attitudes and behaviour: Psychological Openness (n = 8), Help-Seeking Propensity (n = 8), and Indifference to Stigma (n = 8). Participants indicate their level of agreement with each

statement using a 5-point Likert-type scale (i.e., 0 = Disagree, 4 = Agree). The following items are reverse scored: 1, 3, 4, 6, 7, 9, 11, 12, 14, 16, 17, 18, 20, 21, 23, and 24. Previous research found the IASMHS to be internally consistent, with Cronbach's alpha ranging from α = .76 to .87.

The *Disclosure Expectations Scale* (DES; Vogel & Wester, 2003) is a brief measure of the perceived Risks (n = 4) and Utilities (n = 4) associated with disclosing personal information to a counsellor. The measure uses a 5-point Likert-type scale (e.g., 1 = Not at All, 5 = Very). Higher scores represent more perceived risks and utilities. None of the DES items are reverse scored.

Procedure

Potential participants accessed the study's webpage on the UBCO server via SONA. The webpage included information about the researchers and the study (see Appendix C). Those who wished to participate were then able to access the consent form that outlined relevant aspects of the study (see Appendix D). In this way, free and informed consent was obtained. If participants agreed to the terms in the consent form, they were directed automatically to the online survey hosted by the US-based website, Survey Monkey. Participants then completed a series of online self report questionnaires. Due to the restrictions of Survey Monkey, questionnaires were presented to participants in a fixed order: Demographics, IMA, TUBE, MRNI-R, MHI, VMTV, IASMHS, PAQ-18, PRI, ADS, PRTV, DES, LCR, AVQ, and finally the MISS. This order was such that similar measures (e.g., IASMHS and DES) were not presented sequentially. The data obtained in Phase I was used to examine interrelationships between a number of factors, including attitudes toward mental health disorders and treatment. The survey took approximately 60 minutes to complete. The survey and collected data were uploaded to a secure website (i.e.,

Survey Monkey), where information could then be transferred to password-protected computer files.

Phase II

Method

Participants

Participants who completed Phase I were eligible to participate subsequently in Phase II of the study. Recruitment procedures were similar to those described in Phase I. Participants received one credit per session. Phase II was comprised of a sub-sample of Phase I participants (n = 76). This sub-sample of participants were again mostly Caucasian (n = 64) and female (n = 53).

Materials

Testing was conducted in a designated research space with one to six participants in any given session. A computer, speakers, LCD projector and screen were used to present the selected episodes of the HBO drama *In Treatment*, which depicted fictional therapeutic sessions between a psychologist and two of his clients. All episodes were taken from the first season of *In Treatment.* The selected episodes focused on one of two clients, a male and a female, at two separate points (i.e., early and late) in the therapeutic process. The rationale for this selection was that in the “early” episodes (i.e., Episodes 7 and 8), the clients appeared more guarded and less open to the therapy, and the client-therapist relationship had not yet fully developed. In contrast, the clients were more openly engaged in the therapy sessions and a therapeutic relationship was evident in the “late” episodes (i.e., Episodes 27 and 38). A commercial free DVD version of *In Treatment* was used. In addition, one episode (Episode 27) was edited to remove the opening

scene that showed interactions between the therapist and his wife. This was done so that all episodes included only interactions between the therapist and the client.

Measures

Attitudes toward mental health disorders and treatment were assessed using the same measures as Phase I (i.e., the MISS, ADS, IASMHS, and DES). In addition, the *Television Usage and Behaviours Evaluation 2* (TUBE 2; Szostak & Webster, in prep.) was included to assess participants' immediate perceptions of viewing the episode of *In Treatment*. This measure examines interest level, emotional intensity, and perceived realism of the TV program. In addition, specific questions about the episode and its characters are addressed. Although response options vary depending on the particular question, most use a 5-point Likert-type scale. Findings from the TUBE 2 will not be discussed in this report.

Design

Phase II consisted of two sessions separated by 7 days. Participants were randomly assigned to one of four conditions (see Appendix A study design). Two conditions involved two in-person sessions, in which participants viewed one episode of *In Treatment* per session: the "early" episode then the "late" episode. Both episodes followed the same client. The other two conditions involved an initial in-person session, followed by an online session. These participants viewed an episode of *In Treatment* in the first session, and then completed an online survey similar to that of Phase I in the second session. Both in person and online test sessions were a maximum of 60 minutes in duration. The design allowed for several different comparisons to be made. First, the design allowed for comparisons to be made between viewing early and late episodes. Second, the cumulative effects of viewing two episodes (i.e., "early" followed by "late") could be examined. Third, the design was such that the effects of having

viewed two related episodes could be compared with the effects of viewing the “late” episode exclusively.

Procedure

The purpose of Phase II was to determine the direct effects of TV portrayals of psychotherapy on individuals’ help seeking attitudes. Phase I data was utilized for comparison with Phase II data. Free and informed consent was obtained at the start of Session 1 (see Appendix E). The researcher reviewed the form with participants and answered any ensuing questions. Once informed consent had been obtained, the selected episode was presented. After viewing the episode, participants completed the survey. The IMA was always presented first, followed by the TUBE 2. All subsequent questionnaires were presented in a counterbalanced order so that each appeared in every potential ordinal position. Participants were then informed as to whether they would return to view a second episode or complete an online survey. Those who were assigned to view one of the two “early” episodes in Session 1 returned to view a second episode. Those who viewed one of the two “late” episodes in Session 1 completed an online survey. Email addresses were obtained from those assigned to complete the second online survey in order for them to be provided with the survey’s URL.

For those participants whose second session was in person, verbal consent was reaffirmed following a reiteration of the form used in the previous session. This second in person session involved the same procedures as Session 1. Participants were shown the episode that followed the same client they saw in the previous session. Participants whose Session 2 consisted of completing a second online survey were notified by email 6 days after Session 1 (for consent form, see Appendix F). Participants were given 48 hours to complete the online survey.

Phase I

Results

Characterization of the sample.

The mean age of participants was 20 years (*SD* = 3.91). All participants were undergraduate university students. First and second year students comprised approximately 76% of the sample (*M* = 13.86, *SD* = 1.00). The remainder of participants were in third year university or higher. While all participants were currently taking at least one psychology course, the majority of participants (approximately 72%) reported never having taken a course that focused upon mental health disorders (e.g., Abnormal Psychology). However, all participants reported some level of experience with mental illness. Indirect contact with mental illness (e.g., watching a TV program about mental illness) was reported by 45% of participants, whereas direct contact (e.g., having a friend or family member with a mental illness) was reported by approximately 54% of participants. Participants described being in a generally positive state of mind over the past month, according to the MHI Psychological Wellbeing (*M* = 61.82, *SD* = 13.99) and Personal Distress (*M* = 71.14, *SD* = 15.10) subscales. Participants' tendency to respond in a socially desirable way was assessed with the PRI (*M* = 15.91, *SD* = 4.57). These findings were similar to those reported in past research (Crowne & Marlowe, 1960). To determine the extent to which responses to the various attitude measures were affected by socially desirable response tendencies, a series of correlations was conducted. Analyses revealed that three of the mental health-related attitude subscales were correlated with the PRI: the MISS Anxiety (i.e., -.21) and Relationship Disruption (i.e., -.14) subscales and the ADS Cognitive subscale (i.e., -.13). This indicates that more socially desirable response tendencies were associated with less stigmatizing attitudes. In addition, analyses between the PRI and the help seeking attitude subscales revealed

that the PRI was correlated with the IASMHS Indifference to Stigma subscale (i.e., .17). This indicates that socially desirable response tendencies were associated with more resilience to stigma. Accordingly, some caution should be exercised in interpreting the above subscales.

Mental health-related attitudes.

Cronbach's alphas for the MISS subscales ranged from α = .64 to .94, indicating that the subscales were generally internally consistent. These results corresponded with previous findings (Day, et al., 2007). The means, standard deviations and ranges for the subscales are presented in Table 1. The results indicate that participants' attitudes were, on average, not that stigmatizing.

Table 1

Means, Standard Deviations and Ranges for the MISS Subscales

	Scale*	Mean	Standard deviation	Range
Negative beliefs	Anxiety	3.03	1.32	6.00
	Relationship Disruption	3.23	1.27	6.00
	Hygiene	2.68	1.21	5.00
	Visibility	3.89	1.12	6.00
Positive beliefs	Treatability	5.29	1.03	4.67
	Professional Efficacy	4.83	1.35	6.00
	Recovery	5.27	1.29	5.00

*items scored on a 1-7 rating scale; 1 = completely disagree, 7 = completely agree

That is, participants' group mean scores were neutral to low on subscales reflecting negative or stigmatizing attitudes toward the mentally ill (i.e., Anxiety, Relationship Disruption, Hygiene, and Visibility). For example, the mean score for the Hygiene subscale was low relative to the other scales, indicating that as a group, participants were not especially prone to associating mental illness with a lack of personal care. Conversely, the mean scores were higher for

subscales where high numbers reflect positive attitudes (i.e., Treatability, Professional Efficacy, and Recovery). Of particular relevance, the mean score for the Treatability subscale was high, indicating that participants generally endorsed the notion that mental illness can be effectively treated. The Professional Efficacy subscale was also relatively high. This suggests that participants generally had confidence in the ability of mental health professionals. It should be noted that the range indicates that each subscale received both high and low responses. This is important because it means that rather than neutral attitudes, individual responses varied from highly stigmatizing to non-stigmatizing. Given that the sample was somewhat homogeneous in terms of consisting entirely of students in psychology courses, this wide range of attitudes is noteworthy. The range is particularly relevant given that the intention of the study was to evaluate the nature of individual differences. A diverse sample is essential to this process.

Pearson correlation coefficients were calculated for the seven subscales of the MISS. The results of the correlational analyses, presented in Table 2, show a number of statistically

Table 2

Correlations among the MISS Subscales

	Anxiety	Relationship Disruption	Hygiene	Visibility	Treatability	Professional Efficacy
Relationship Disruption	.75**	-	-	-	-	-
Hygiene	.57**	.64**	-	-	-	-
Visibility	.23**	.21**	.32**	-	-	-
Treatability	-.37**	-.43**	-.42**	-.06	-	-
Professional Efficacy	-.02	-.08	-.05	.07	.43**	-
Recovery	-.44**	-.42**	-.38**	-.00	.47**	.19**

** $p < .01$

significant correlations. It should be noted that the subscales for which high scores represent negative attitudes toward mental illness were all positively correlated with one another. The strength of these correlations ranged from low (e.g., .21 for Visibility and Relationship Disruption) to very strong (e.g., .75 for Anxiety and Relationship Disruption). Similarly, the subscales for which high scores represent positive attitudes were all positively correlated with one another. These correlations ranged in strength from low (e.g., .19 for Professional Efficacy and Recovery) to high-moderate (e.g., .47 for Treatability and Recovery). In general, the positive and negative subscales were inversely correlated with one another, which is logical given that high scores in each represent more or less opposite perspectives. Professional Efficacy was the exception to this pattern, as it did not correlate with any of the negative subscales. This suggests that beliefs concerning the abilities of mental health professionals do not relate to stigmatizing attitudes about the mentally ill.

Cronbach's alphas for the ADS indicated that the various subscales were internally consistent (α = .69 to .86). Mean scores on the ADS (see Table 3) indicate, on average, neutral to slightly negative reactions to the person with depressive symptoms described in the vignette.

Table 3

Means and Standard Deviations for the ADS Subscale

Scale*	Mean	Standard deviation	Range
Emotional	2.10	.44	3.00
Cognitive	2.02	.68	3.75
Behavioural	2.53	.69	4.00
Similarity of views**	2.08	1.07	4.00

*items scored on a 0-4 rating scale; 0 = definitely not the case, 4 = definitely the case
**item scored on a 0-4 rating scale; 0 = not at all similar, 4 = completely the same

It is important to note that the responses reflect participants' views of how most Canadians would react to the individual, rather than participants' own views. In other words, on average, participants believed that most Canadians would respond in a slightly negative fashion toward the individual described in the vignette. Interestingly, participants indicated they felt that their views were moderately similar to those of most Canadians. Nonetheless, the range of each subscale again indicates that high and low responses were selected. This means that a spectrum of attitudes was expressed by participants, rather than a narrow range of responses.

Pearson correlations were calculated for the ADS subscales. The analyses revealed that the Emotional and Cognitive subscales were strongly correlated (i.e., .56). In other words, there was a relationship between internal reactions (i.e., Emotional and Cognitive) to the individual with depression symptoms described in the vignette. Conversely, the Behavioural subscale was somewhat weakly correlated with the Emotional (i.e., .16) and Cognitive (i.e., .26) subscales. Thus, there was a less strong relationship found between the behavioural responses and the internal reactions than between the two internal reactions. This is likely due to the fact that behaviour is informed by more than just attitudes. Interestingly, Similarity of Views was inversely correlated, albeit weakly, with the Behavioural subscale (i.e., -.24). This indicates that as the perceived behaviours of the average Canadian were reported as more stigmatizing, participants reported less concurrence with this group.

To determine the interrelationships between the ADS and MISS subscales, Pearson correlations were calculated (see Table 4). A number of the correlations were significant and in the anticipated direction, though none was particularly strong. The Emotional subscale was weakly correlated with the negative MISS subscales. The Cognitive subscale was also weakly correlated with the MISS Anxiety, Relationship Disruption and Hygiene subscales.

Table 4

Correlations among the MISS and ADS Subscales

	ADS Emotional	ADS Cognitive	ADS Behavioural
MISS Anxiety	.26**	.19**	.01
MISS Relationship Disruption	.14*	.17**	.05
MISS Hygiene	.14*	.16*	-.03
MISS Visibility	.17**	.11	.08
MISS Treatability	.05	.02	.03
MISS Professional Efficacy	.04	.01	-.02
MISS Recovery	-.01	-.05	-.01

* $p < .05$, ** $p < .01$

The ADS Behavioural subscale did not significantly correlate with the MISS subscales. It is notable that the strongest correlation, though small, was between the two subscales that deal with emotional responses to mental illness: the ADS Emotional and the MISS Anxiety subscales. The positive MISS subscales did not correlate with the ADS subscales. This is noteworthy because it indicates that emotional and cognitive responses to an individual with mental illness were unrelated to attitudes regarding treatment and recovery. Given the modest relationships between the two measures, it appears that the MISS and ADS may be tapping two different aspects of mental illness stigma.

Help seeking attitudes.

The IASMHS subscales were generally internally consistent, with alphas ranging from $\alpha = .65$ to .80. These findings are consistent with previous research (Mackenzie, et al., 2004). As seen in Table 5, the results from the IASMHS indicate somewhat positive attitudes in regards to the utilization of mental health services. The Help Seeking Propensity subscale indicated a general willingness to pursue help for psychological issues. In addition, participants, on average,

Table 5

Means and Standard Deviations for the IASMHS Data

Scale*	Mean	Standard deviation	Range
Psychological Openness	2.27	.65	3.12
Help Seeking Propensity	2.62	.69	3.75
Indifference to Stigma	2.50	.66	3.50

*items scored on a 0-4 rating scale; 0 = disagree, 4 = agree

reported that they would not be concerned with stigma arising from seeking help from a mental health professional. Participants also appeared to be psychologically open, meaning that they described being reasonably likely to divulge their problems to others. While attitudes were generally positive, it is important to note that the ranges indicate that both high and low scores were obtained for each subscale. Thus, many participants also expressed very negative attitudes, making for a heterogeneous sample of responses. Pearson correlation coefficients were computed for the IASMHS (see Table 6). All of the IASMHS subscales were significantly correlated with

Table 6

Correlations among the IASMHS and DES Subscales

Measure	Subscale	IASMHS Psychological Openness	Help Seeking Propensity	Indifference to Stigma	DES Anticipated Risk
IASMHS	Help Seeking Propensity	.34**	-	-	-
	Indifference to Stigma	.40**	.26**	-	-
DES	Anticipated Risk	-.35**	-.26**	-.32**	-
	Anticipated Utility	.29**	.43**	.20**	-.01

** $p < .01$

one another. The strength of these relationships ranged from weak (e.g., Help Seeking Propensity and Indifference to Stigma) to moderate (e.g., Indifference to Stigma and Psychological Openness).

The two DES subscales were internally consistent (Cronbach's α = .79 and .85). The mean score for the DES Anticipated Utility subscale (M = 3.35, SD = .90) was somewhat higher than the Anticipated Risk subscale (M = 2.88, SD = .92). The Anticipated Risks subscale indicated that participants were, on average, somewhat apprehensive at the prospect of disclosing to a counsellor. However, the perceived gains associated with self disclosure to a counsellor were reportedly higher, reflecting generally positive attitudes. Once again, the range indicated that participants endorsed a gamut of beliefs. A significant correlation was not found between the two subscales of the DES (see Table 6). This would suggest that participants weighed the anticipated risks and utilities of therapy independent of one another. These data were similar to past findings (Vogel and Wester, 2003).

In order to examine the interrelationships between the IASMHS and DES subscales, Pearson correlations were conducted (see Table 6). Significant correlations were found for each of the subscales. The DES Anticipated Utility subscale correlated weakly to moderately with each IASMHS subscale. Interestingly, it had a moderate relationship with the IASMHS Help Seeking Propensity subscale. This indicates that the belief that disclosure to a counsellor is beneficial is related to whether people are likely to seek professional help. The DES Anticipated Risk subscale was found to be inversely correlated with the three IASMHS subscales. Given that this subscale represents negative views of treatment, while all of the other subscales represent positive views, this inverse relationship is expected.

Nature of help seeking attitudes.

A series of correlations was run in order to examine the interrelationships between mental health beliefs and help seeking attitudes. Results indicate that the MISS Anxiety, Relationship Disruption and Hygiene subscales were correlated with the help seeking subscales, with the exception of the MISS Hygiene and DES Anticipated Utility subscale (see Table 7).

Table 7

Correlations among the Help Seeking Measure Subscales and the MISS Subscales

		IASMHS			DES	
		Psychological Openness	Help Seeking Propensity	Indifference to Stigma	Anticipated Risk	Anticipated Utility
MISS	Anxiety	-.34**	-.15*	-.52**	.32**	-.14*
	Relationship Disruption	-.37**	-.21**	-.48**	.21**	-.20**
	Hygiene	-.36**	-.16**	-.41**	.24**	-.12
	Visibility	-.10	.07	-.15*	.10	-.06
	Treatability	.35**	.38**	.35**	-.16**	.29**
	Professional Efficacy	.21**	.37**	.10	-.05	.25**
	Recovery	.27**	.18**	.35**	-.13*	.15**

*$p < .05$, **$p < .01$

These correlations ranged from weak (e.g., MISS Recovery and DES Anticipated Utility) to strong (e.g., MISS Anxiety and IASMHS Indifference to Stigma). Interestingly, the MISS Visibility subscale was found to be weakly inversely correlated with only one subscale: IASMHS Indifference to Stigma. This relationship indicates that the more recognizable participants considered the mentally ill, the more concerned they were with the prospect of being

stigmatized. The positive MISS subscales, Treatability, Professional Efficacy and Recovery were also weakly to moderately correlated with the IASMHS and DES. The only exception was the MISS Professional Efficacy subscale, which was not correlated with the IASMHS Indifference to Stigma or DES Anticipated Utility subscales. Taken together, these data suggest that more stigmatizing attitudes are associated with more negative help seeking attitudes.

The results of correlations calculated for the ADS subscales and the help seeking measures are presented in Table 8. Unlike the MISS, few significant correlations were found

Table 8

Correlations among the Help Seeking Measure Subscales and the ADS Subscales

		IASMHS			DES	
		Psychological Openness	Help Seeking Propensity	Indifference to Stigma	Anticipated Risk	Anticipated Utility
ADS	Emotional	-.13*	.01	-.21**	.14*	.14*
	Cognitive	-.12	.03	-.18**	.12	.08
	Behavioural	.00	-.04	-.05	.07	-.03

*$p < .05$, **$p < .01$

between the ADS and the IASMHS and DES subscales. Of the significant correlations, none was particularly strong. The ADS Emotional subscale was found to be significantly correlated with all of the help seeking subscales except the IASMHS Help Seeking Propensity subscale. Interestingly, the significant correlations between the ADS and IASMHS subscales were inverse, indicating that more stigmatizing beliefs were associated with lower help seeking attitudes. Interestingly, for the DES, more negative beliefs on the ADS Emotional subscale were associated with both higher perceived risks and benefits of therapy.

Correlations were calculated to determine whether there were any interrelationships between perceiver characteristics and the help seeking measures. Correlations were found between a number of the variables, though the effects were reasonably weak (see Table 9).

Table 9

Correlations among the Help Seeking Subscales and Perceiver Characteristics

	IASMHS		DES		
	Psychological Openness	Help Seeking Propensity	Indifference to Stigma	Anticipated Risk	Anticipated Utility
Abnormal Psychology	.12	.17**	.04	-.13*	.20**
Level of Contact	.05	.13*	.10	-.13*	.01
MHI Psychological Wellbeing	.11	.10	.22**	-.09	.03
MHI Personal Distress	.11	.07	.27**	-.17**	.00

*$p < .05$, **$p < .01$

For example, a more positive psychological state, as measured by the two MHI subscales, was associated with a greater reported resilience to stigma. It is also notable that having taken a course in psychopathology was associated with greater perceived benefits and likelihood of seeking help, as well as fewer perceived risks.

Multiple regression analyses.

To determine the proportion of variance of help seeking attitudes associated with mental health-related beliefs, a series of multiple regression analyses were conducted. The results of bivariate correlations were used to determine the predictor variables to be used in each analysis. Only those variables found to be significantly correlated with each outcome variable (i.e., IASMHS and DES subscales) were included. Variables were entered into multiple regression

equations hierarchically: perceiver characteristics, including the PRI, in the first block, and mental health-related attitudes in the second block. Before conducting the analyses, it was ensured that the assumptions of multiple regression were fulfilled. Examination of the data revealed no univariate outliers. However, using the Mahalanobis distance criteria several multivariate outliers (n = 4) were removed, χ^2(df = 14) = 36.12, p < .001.

Bivariate correlations revealed that none of the perceiver characteristics were significantly correlated with the IASMHS Psychological Openness subscale. For this reason, the MISS subscales were entered into the first and only block in the model. Results of the regression analysis are presented in Table 10. The model was found to be significant, $R = .48$, $F(6, 243) = 11.88$, $p < .001$. The R^2 statistic indicated that the MISS subscales accounted for 23% of the

Table 10

Summary of Regression Analysis for Variables Predicting Changes in IASMHS Psychological Openness

Variable	*B*	*SE B*	β
MISS subscales			
Anxiety	-.03	.05	-.07
Relationship Disruption	-.08	.05	-.15
Hygiene	-.07	.04	-.14
Treatability	.08	.05	.13
Professional efficacy	.08	.03	.16*
Recovery	.01	.04	.02

*$p < .05$.

variance in Psychological Openness. When all other variables in the model were controlled for, Professional Efficacy was the only variable with significant independent contribution to

Psychological Openness (see Table 10). Examination of the semi-partial squared statistic indicated that it was found to account for approximately 2% of the variance. In other words, higher confidence in the ability of mental health professionals was a significant predictor of greater Psychological Openness over and above the other MISS subscales.

For the IASMHS Help Seeking Propensity subscale, both models were found to be statistically significant. The results of the analysis are presented in Table 11. Block 1 consisted

Table 11

Summary of Hierarchical Regression Analysis for Variables Predicting Changes in IASMHS Help Seeking Propensity

Variable	*B*	*SE B*	β
Block 1			
Level of Contact	.16	.09	.12
Abnormal Psychology	.23	.09	.15*
Block 2			
Level of Contact	.12	.08	.09
Abnormal Psychology	.12	.09	.08
MISS subscales			
Anxiety	.01	.05	.01
Relationship Disruption	-.04	.06	-.07
Hygiene	-.004	.05	-.01
Treatability	.14	.05	.21**
Professional Efficacy	.13	.03	.26***
Recovery	-.001	.04	-.01

*$p < .05$, **$p < .01$, ***$p < .001$.

of Level of Contact and Abnormal Psychology, $R = .21$ $F(2, 246) = 5.42$, $p < .01$. The R^2 statistic indicated that these two perceiver characteristics accounted for 4% of the variance in

Help Seeking Propensity. Abnormal Psychology was found to have a significant independent contribution to the model. Examination of the semi-partial squared statistic indicated that it accounted for approximately 2% of the variance. This means that having taken a class on psychopathology was a significant predictor of greater likelihood of seeking help over and above experience with mental illness. Block 2 was also found to be significant, $R = .45$ $F(8, 240) = 7.75$, $p < .001$. Moreover, the R^2 change statistic indicated that the inclusion of the MISS subscales accounted for 16% more variance in Help Seeking Propensity. Treatability and Professional Efficacy were found to have significant independent contributions. Examination of the semi-partial squared statistic for these variables indicated that they accounted for 2% and 5% of the variance, respectively. In other words, belief that mental illness can be effectively treated and faith in the ability of professionals were predictors of increased Help Seeking Propensity scores over and above the other variables. Interestingly, the contribution of having taken a class on psychopathology was no longer significant after the MISS subscales were introduced to the model.

Results of the multiple regression analysis for the IASMHS Indifference to Stigma subscale are presented in Table 12. The first block contained the MHI Psychological Wellbeing and Personal Distress subscales and the PRI. The analysis revealed that Block 1 was significant, $R = .30$ $F(3, 246) = 8.31$, $p < .001$. The R^2statistic indicated that these variables accounted for 9% of variance in concern with being stigmatized. In addition, Personal Distress was found to have a significant independent contribution to the model. Examination of the semi-partial squared statistic indicated that it accounted for 2% of the variance in Indifference to Stigma. That is, lower reported distress was associated with more resilience to stigma. Block 2 was also significant, $R = .58$ $F(9, 240) = 13.35$, $p < .001$. The R^2 change statistic indicated that the MISS

subscales accounted for an additional 24% of variance. The MISS Anxiety subscale was the only variable found to have a significant independent contribution. Examination of the semi-partial

Table 12

Summary of Hierarchical Regression Analysis for Variables Predicting Changes in IASMHS Indifference to Stigma

Variable	*B*	*SE B*	β
Block 1			
MHI Psychological Wellbeing	.01	.004	.10
MHI Personal Distress	.01	.004	.18*
Personal Reactions Inventory	.02	.01	.12
Block 2			
MHI Psychological Wellbeing	.001	.003	.02
MHI Personal Distress	.01	.003	.15
Personal Reactions Inventory	.01	.01	.07
MISS subscales			
Anxiety	-.11	.05	-.20*
Relationship Disruption	-.07	.05	-.13
Hygiene	-.05	.04	-.10
Visibility	-.02	.03	-.03
Treatability	.07	.04	.12
Recovery	.04	.03	.07

*$p < .05$.

squared statistic indicated that it accounted for 1% of variance over and above the other subscales. In other words, less anxiety with regards to mentally ill individuals was a significant predictor of greater Indifference to Stigma. The independent contribution of MHI Personal Distress was no longer significant in Block 2.

Results of regression analyses for the DES Anticipated Utility subscale are presented in Table 13. Block 1 contained Abnormal Psychology, $R = .20$ $F(1, 247) = 10.13$, $p < .01$. The R^2 statistic for Block 1 indicated that this variable accounted for 4% of the variance in attitudes.

Table 13

Summary of Hierarchical Regression Analysis for Variables Predicting Changes in DES Anticipated Utility

Variable	*B*	*SE B*	β
Block 1			
Abnormal Psychology	.39	.12	.20**
Block 2			
Abnormal Psychology	.29	.12	.15*
MISS subscales			
Anxiety	-.04	.07	-.06
Relationship Disruption	-.04	.07	-.05
Treatability	.13	.07	.14
Professional Efficacy	.09	.05	.14*
Recovery	.01	.05	.01

$*p < .05$, $**p < .01$.

Specifically, having taken a class on psychopathology was associated with greater perceived benefits of disclosing to a counsellor. Block 2 was also found to be significant, $R = .39$ $F(6, 242) = 5.54$, $p < .001$. The R^2 change statistic in Block 2 indicated that the MISS subscales accounted for an additional 8% of the variance in attitudes. Abnormal Psychology was found to have a significant independent contribution in Block 2. Examination of the semi-partial squared statistic indicated that it accounted for 2% of variance over and above the other variables. The Professional Efficacy subscale of the MISS was also found to have a significant independent

contribution. Examination of the semi-partial squared statistic for this variable indicated that it accounted for another 2% of variance. This suggests that faith in the ability of mental health professionals is also predictive of more perceived benefits of disclosing to a counsellor.

Analysis of the DES Anticipated Risk subscale indicated that both Blocks were significant. The results of the analysis can be found in Table 14. Block 1 contained Abnormal

Table 14

Summary of Hierarchical Regression Analysis for Variables Predicting Changes in DES Anticipated Risk

Variable	*B*	*SE B*	β
Block 1			
Abnormal Psychology	-.27	.13	-.13*
Level of Contact	-.20	.12	-.11
MHI Personal Distress	-.01	.004	-.16**
Block 2			
Abnormal Psychology	-.19	.13	-.09
Level of Contact	-.14	.11	-.08
MHI Personal Distress	-.01	.004	-.12
MISS subscales			
Anxiety	.23	.07	.32***
Relationship Disruption	-.07	.08	-.09
Hygiene	.06	.06	.08
Treatability	-.06	.07	-.06
Recovery	.05	.05	.07

*$p < .05$, **$p < .01$, ***$p < .001$.

Psychology, Level of Contact and the MHI Personal Distress subscale, $R = .24$ $F(8, 240) = 4.97$, $p < .01$. These variables were found to account for 6% of variance. Abnormal Psychology and

the MHI Personal Distress subscale each had a significant independent contribution to the model. Examination of the semi-partial squared statistic indicated that the two variables accounted for 2% and 3% of variance, respectively. In other words, having taking a class on psychopathology was associated with lower perceived risks of disclosing to a counsellor. Less reported distress was also associated with lower perceived risks. Block 2, which was significant, $R = .39$ $F(8, 240) = 5.27$, $p < .001$. The R^2 change statistic indicated that the MISS subscales accounted for 9% of variance over and above the perceiver characteristics in Block 1. In particular, the MISS Anxiety subscale was found to be making a significant independent contribution in Block 2. Examination of the semi-partial squared statistic indicated that it accounted for approximately 4% of the variance. In other words, more anxiety with regards to mental illness was predictive of greater perceived risks of disclosing to a counsellor. Interestingly, neither Abnormal Psychology, nor MHI Personal Distress had a significant independent contribution in Block 2.

In sum, the analyses indicate that mental health-related beliefs are useful in explaining differences in help seeking attitudes. The general trend was that more stigmatizing attitudes regarding mental illness were associated with more negative help seeking attitudes. The R^2 statistic for the models indicates that mental illness beliefs accounted for 8 to 24% of help seeking attitudes over and above selected perceiver characteristics (e.g., Abnormal Psychology). Interestingly, the MISS Anxiety subscale made a significant independent contribution in two of the models (i.e., the IASMHS Indifference to Stigma, and DES Anticipated Risk subscales). This suggests that feelings of uneasiness in the presence of individuals with mental illness may be particularly relevant in understanding help seeking attitudes. In addition, the positive MISS subscales (i.e., Treatability, Professional Efficacy and Recovery) made significant independent

contributions in a number of the models. This is logical given that these subscales address positive outcomes.

Phase II

Results

The subsample of participants from Phase I who participated in Phase II was similar in characteristics to the full sample. The mean age of participants was 20 years (ranging from 17 to 61 years). The majority of the sample (i.e., 75%) was either first or second year university students, while the remainder were third year or higher. Approximately 67% of participants reported never having taken a class focusing on mental health disorders. Participants' experience with the mentally ill was also consistent with the original sample, with 43% reporting indirect contact and 57% reporting direct contact. Participants' MHI scores were also comparable to the original sample, with a generally positive state of mind being reported, according to the Psychological Wellbeing (M = 62.61, SD = 13.85) and Personal Distress subscales (M = 72.02, SD = 13.45). Finally, the PRI indicated that participants scored similarly to the larger sample in terms of socially desirable response tendencies (M = 15.72, SD = 4.77). Thus, it is reasonable to assume that the Phase II subsample was representative of the original Phase I sample. Correlations run between the PRI and the help seeking attitude measures revealed no relationships in Sessions 1 or 2. This is promising, as it suggests that participants were responding honestly, rather than in a socially desirable way.

To determine the effect of viewing two related episodes of *In Treatment* on attitudes and beliefs about therapy, a series of mixed model ANOVAs were conducted on each of the IASMHS and DES subscales (see Appendix G ANOVA tables). The within-subjects factor was Time, which consisted of three levels. These levels were: baseline (i.e., in Phase I, before

viewing either episode), immediately after viewing one episode, and immediately after viewing the second episode. The between-subjects factor was Character (i.e., whether participants saw the male or the female client). Univariate analyses were used for all subscales in which sphericity was not violated. In cases where sphericity was violated, multivariate analyses were used.

Analyses of the IASMHS Psychological Openness subscale indicated no significant main effect for either Time, or Character, or for the Time x Character interaction (all *F*'s < 1.00). Thus, viewing the "early" and "late" episodes, together, did not influence participants' willingness to be emotionally expressive. Likewise for the IASMHS Indifference to Stigma subscale, no significant effects were found for Time, Character, or for the Time × Character interaction (all *p*'s > .23). This indicates that participants' beliefs about the prospect of being stigmatized for seeking psychological help were not altered by viewing either of the two episodes of the program.

Multivariate analyses were used for the IASMHS Help Seeking Propensity subscale, as the assumption of sphericity was violated according to Mauchley's Sphericity Test. Analyses indicated a significant main effect for Time, $\Lambda = .75$, $F(2, 33) = 5.40$, $p < .01$, $\eta^2 = .25$ (see Table 15). The η^2 indicates a medium effect size. Neither Character, nor Time × Character

Table 15

Means and Standard Deviations for IASMHS Help Seeking Propensity Subscale

Time	Mean	Standard deviation
1	2.60	.59
2	2.80	.62
3	2.80	.66

Note. Items scored on a 0-4 rating scale; 0 = disagree, 4 = agree

interaction was significant (all *p*'s > .29). A follow-up one-way repeated measures ANOVA, collapsed across Character, was conducted in order to determine the specific changes in attitudes across the three time periods. Sidak post hoc comparisons confirmed that there was a significant difference between the baseline and Session 1 attitudes ($p < .05$). Specifically, participants reported a significantly increased willingness to seek help for psychological problems after viewing the "early" episode. There was no significant difference between Time 2 and 3. While the difference between the baseline and Session 2 was not significant, it is noteworthy that the means indicate there was a general trend of an increase in Help Seeking Propensity. It is likely that this comparison was not significant because of the greater variation in responses at Time 3, as seen in the standard deviation.

For the DES Utility subscale, analyses indicated a significant main effect for Time, F (2, 68) = 7.26, $p < .01$, $\eta^2 = .18$ (see Table 16). The η^2 indicates that there was a small to medium

Table 16

Means and Standard Deviations for DES Anticipated Utility Subscale

Time	Mean	Standard deviation
1	3.34	.89
2	3.69	.86
3	3.83	.69

Note. Items scored on a 1-5 rating scale; 1 = not at all, 5 = very

effect size. However, neither the Character main effects, nor Time × Character interaction were significant (all *F*'s < 1.00). A follow-up one-way repeated measures ANOVA, collapsed across Character, was conducted in order to examine changes in attitudes across the three time periods. Sidak post hoc comparisons confirmed that there were significant differences between the

baseline and Session 1 ($p < .05$), as well as between the baseline and Session 2 ($p < .01$). However, there was no significant difference between Session 1 and Session 2 ($p = .88$). These data suggest that exposure to the TV program caused participants to perceive disclosure to a counsellor as more beneficial than they had prior to watching *In Treatment*. While this effect was maintained across the two episodes, there was no evidence of cumulative effects. For the DES Anticipated Risk subscale, no significance was found for Time, or Character main effects, or for the Time × Character interaction (all *p*'s > .31). Thus, viewing *In Treatment* did not impact participants' beliefs regarding possible negative outcomes associated with disclosing to a counsellor.

Taken together, these results indicate that TV is capable of influencing individuals' attitudes. Specifically, participants reported significantly more positive attitudes on a number of help seeking measure subscales immediately after having viewed *In Treatment*. While there was no significant difference between viewing one or two episodes, there were hints at a possible trend of an increase in positive attitudes.

It was also hypothesized that participants who viewed the "late" episode of *In Treatment* after viewing the "early" episode would exhibit more positive attitudes than participants who only viewed the late episode. In order to test this, a series of mixed model ANOVAs were conducted on the IASMHS and DES subscales (see Appendix H ANOVA tables). The within-subjects factor was Time (i.e., baseline and immediately after viewing the "late" episode) and the between-subjects factors were Character and viewing one or two episodes. Analysis of the IASMHS Psychological Openness subscale yielded a significant, albeit small, effect for Time, $F(1, 70) = 5.15$, $p < .05$, $\eta^2 = .07$ (see Table 17). Inspection of the means indicated that participants were more likely to report a willingness to be emotionally expressive after viewing

Table 17

Means (and Standard Deviations) for IASMHS Psychological Openness Subscale

Number of episodes	Time 1	Time 2
1	2.21 (.71)	2.40 (.84)
2	2.39 (.67)	2.50 (.74)

Note. Items scored on a 0-4 rating scale; 0 = disagree, 4 = agree

the “late” episode. Given that the clients are more emotionally expressive in the “late” episodes, this is sensible. This was the case regardless of whether the “early” episode was seen first. No other main effects or interaction terms were significant (all *F*’s < 1.00). Analyses of the IASMHS Indifference to Stigma subscale failed to yield any significant differences (all *F*’s < 1.00).

Analysis of the IASMHS Help Seeking Propensity subscale yielded no significant effect for Time, for the Time × Character interaction, or for the Time × Episode × Character interaction (all *F*’s < 1.00). In addition, no significant between-subjects effects were found for Episode, Character, or for the Episode × Character interaction (all *F*’s < 1.00). However, a significant, albeit small, effect was found for the Time × Episode interaction, $F\ (1, 70) = 4.62$, $p < .05$, $\eta^2 = .06$ (see Table 18). Follow-up analyses were conducted to examine the simple effects.

Table 18

Means (and Standard Deviations) for IASMHS Help Seeking Propensity Subscale

Number of episodes	Time 1	Time 2
1	2.75 (.82)	2.62 (.70)
2	2.62 (.59)	2.80 (.66)

Note. Items scored on a 0-4 rating scale; 0 = disagree, 4 = agree

Pooled error terms were used for the within-subjects calculations. No simple effects were found for Time or Episode. Nonetheless, there is a trend toward a slight decrease in Help Seeking Propensity when only the "late" episode was viewed. Conversely, there was a slight increase in inclination to seek help when the "early" episode was seen prior to the "late" episode.

Significant effects were found for the DES Utility subscale both for Time, $F\ (1, 71) = 5.76$, $p < .05$, $\eta^2 = .08$, as well as for the Time × Episode interaction, $F\ (1, 71) = 6.99$, $p = .01$, $\eta^2 = .09$ (see Table 19). Follow-up analyses were conducted to examine the simple effects.

Table 19

Means (and Standard Deviations) for DES Anticipated Utility Subscale

Number of episodes	Time 1	Time 2
1	3.50 (.86)	3.48 (.81)
2	3.40 (.85)	3.83 (.69)

Note. Items scored on a 1-5 rating scale; 1 = not at all, 5 = very

Pooled error terms were used for the within-subjects calculations. A simple effect of Time was found for those who saw the "late" episode after having seen the "early" episode ($p < .01$). In other words, these participants reported significantly more perceived benefits of disclosing to a counsellor from the baseline to immediately after the "late" episode. While no additional simple effects were found, there was a trend toward higher Time 2 scores among those participants who previously saw the "early" episode. No other significant interactions or effects were found (all F's < 1.00). Analyses of the DES Risk subscale failed to yield any significant results (all p's > .14).

Discussion

The present study had two primary objectives. The first objective was to examine mental-health related beliefs and help seeking attitudes, as well as the interrelationships between the two. Previous research has implicated mental illness stigma as an impediment to help seeking (e.g., Corrigan, 2004). To this end, it was predicted that stronger stigmatizing beliefs about mental health disorders would be associated with more negative help seeking attitudes. The study's second objective was to examine the direct effects of viewing specific episodes from a TV program that depicted fictional psychotherapy sessions between a psychologist and his clients. With regards to the second objective, it is important to note that to date, most research exploring the relationship between TV and help seeking attitudes has done so using correlational methods, such as reported hours of TV viewing (e.g., Vogel, et al., 2008). Thus, the present study had the advantage of utilizing a more direct approach (i.e., an experimental manipulation) compared to the existing literature. To this end, participants were shown one or two related episodes of the program in order to determine their effects on help seeking attitudes. For participants who saw two episodes, it was expected that there would be a cumulative effect over time. It was also expected that viewing two related episodes, in which the therapeutic progression of a client was shown, would result in more positive attitudes toward therapy than viewing the later episode exclusively.

Mental Health-Related Beliefs and Help Seeking Attitudes (Phase I)

Two self report questionnaires were used to assess mental health-related attitudes, (i.e., the MISS and the ADS) and two were used to assess help seeking attitudes (i.e., the IASMHS and the DES). It is important to acknowledge that the attitudes and beliefs addressed by these measures are relatively sensitive in nature. That is, there may be some reluctance on the part of

participants to respond in an open and honest manner. As such, it is important to evaluate the potential influence of response bias. With a few exceptions, responses to the measures did not correlate with the PRI, a measure of socially desirable response tendencies. This suggests that participants were not prone to responding in a socially desirable manner and, as such, most of the data are assumed to be an accurate reflection of the participants' beliefs and attitudes. However, correlations with the PRI were obtained for two of the MISS subscales (i.e., Anxiety and Relationship Disruption) and one of the ADS subscales (i.e., Cognitive). This suggests that these subscales may serve to underestimate the stigmatizing nature of these beliefs and attitudes.

As a whole, the mental health-related attitudes expressed by participants in the present study, as assessed by both the MISS and the ADS, were not especially stigmatizing. Similarly, participants' help seeking attitudes, as assessed by both the IASMHS and the DES, were on average positive. These results are not particularly surprising given that the sample consisted of university students currently taking at least one psychology course. In fact, one might expect the attitudes of the present sample to be even less stigmatizing due to their greater exposure to mental health-related issues in their psychology courses. In this regard, previous research has demonstrated an inverse relationship between education and the endorsement of stigmatizing attitudes (Corrigan & Watson, 2007). It is also important to note that while the sample was relatively homogeneous in terms of age, gender and ethnicity, there was still marked diversity in terms of mental health-related beliefs across individual participants. The range of scores for each measure demonstrated that a broad spectrum of attitudes was held by participants. Thus, even among a narrow sample of psychology students, both highly stigmatizing and non-stigmatizing attitudes about mental health disorders and treatment were expressed.

Given the consistency of results across each set of related measures, it is helpful to consider whether it is important to use multiple measures in future research. In this regard, the two measures of mental health-related attitudes were only weakly correlated with one another. This is not surprising given the differences between the two measures. First, the measures differ in the specificity of their focus. The MISS assesses beliefs about mental illness generally, rather than any one particular disorder. The ADS, on the other hand, assess attitudes and beliefs about an individual with depression. The second difference between the two measures is that they appear to tap distinct domains of stigma. That is, the subscales of the MISS and the ADS appear to conceptualize stigma in very different ways. For example, with the MISS, three of the negative subscales (i.e., Relationship Disruption, Hygiene and Visibility) address beliefs about mental illness, while the other addresses reactions to mentally ill individuals (i.e., Anxiety). All three of the ADS subscales address reactions to a mentally ill individual. The third difference between the MISS and the ADS is in the way participants are prompted to respond. Specifically, the MISS is a direct measure in that it asks participants for their own opinions regarding mental illness. The ADS is an indirect measure in that participants are asked to indicate how they believe the average Canadian would respond. It is assumed that participants are more prone to respond with their honest opinions when asked to respond this way (Wolkenstein & Meyer, 2008). Taken together, it appears that the MISS and ADS are two distinct ways of measuring stigma. Based on this evidence, it is reasonable to conclude that it is beneficial to utilize both measures in future research examining mental illness stigma, as their combined use will allow for a more comprehensive consideration of the nature of stigmatizing attitudes.

With regard to the use of the two measures of help seeking, only weak correlations were found between most of the IASMHS and DES subscales. An exception was the moderate

correlation that was obtained between the IASMHS Help Seeking Propensity and the DES Anticipated Utility subscales. Thus, while there may be some redundancy between these two measures, the results when taken together suggest that the two measures address relatively distinct aspects of help seeking attitudes. As such, it is also recommended that future research addressing help seeking attitudes include both measures.

Understanding Help Seeking Attitudes (Phase I)

As discussed previously, fewer than 40% of those in need seek any kind of psychological help (Vogel, et al., 2006). Given the costs associated with not seeking help, it is important to identify variables that impede help seeking (Corrigan, 2004). Past research has implicated a variety of perceiver characteristics (e.g., Corrigan & Watson, 2007) and mental illness stigma (e.g., Corrigan, 2004) as barriers to seeking psychological services. In the present study, bivariate correlations and hierarchical multiple regression analyses were used to determine the separate and conjoint influence of several perceiver characteristics and mental health-related beliefs on help seeking attitudes. These analyses revealed that a number of perceiver characteristics were associated with attitudes toward treatment. In particular, having taken a class on psychopathology, and mental health status, as measured by the MHI Personal Distress subscale, were associated with more positive attitudes toward treatment. However, it should be noted that none of these effects were particularly strong. Beliefs about mental illness were also found to be associated with help seeking attitudes. Specifically, negative mental health beliefs, as assessed by four of the MISS subscales, were found to be predictive of negative attitudes toward help seeking. This relationship was observed consistently across each of the IASMHS and DES subscales. In addition, the three positive attitude subscales of the MISS (that address factors concerning recovery), were found to be related to almost all of the help seeking subscales. These

relationships were also in the predicted direction. That is, more positive attitudes on these three MISS subscales were associated with more positive attitudes on the help seeking subscales. In general, these effects were small to moderate, and were stronger relative to the observed relationships between the perceiver characteristics and help seeking attitudes. Interestingly, when the conjoint influence of the two sets of variables was examined, the influence of the perceiver characteristics was, in most cases, no longer significant. Taken together, these results suggest that mental health-related attitudes are more robust predictors of help seeking attitudes. In addition, they suggest that the influence of perceiver characteristics, at least those included in the present study, are mediated by mental health related attitudes. Future research should examine more fully the nature of these interrelationships.

Taken together, these data highlight the negative impact of mental illness stigma on people's willingness to seek help. They also provide evidence of the need to work toward discrediting such stigma. To this end, Corrigan (2004) has identified three major means of overcoming stigma: protest, education and contact. The present study provides some support for the latter two approaches. First, the present study found that participants who had taken a class that focused upon psychopathology held more positive mental health-related beliefs and help seeking attitudes, relative to those who had not taken such a course. While it is possible that the attitudes of these participants were more positive even before taking such a course, the finding is congruent with Corrigan's suggestion that education is an effective means of overcoming stigma. Future research is needed to examine more directly the impact of such courses on stigma and help seeking attitudes. With regard to contact, it was observed that participants who had more direct experiences with mental illness perceived more benefits of therapy and reported that they were more likely to seek help for psychological difficulties. In the future, it would be interesting

to evaluate more directly the impact of contact on mental health-related beliefs and help seeking attitudes. For example, it might be possible to experimentally manipulate contact with mentally ill individuals.

Direct Effects of Viewing a TV Portrayal of Psychotherapy on Help Seeking Attitudes (Phase II)

Previous research has generally utilized correlational methods to explore the link between TV and mental health-related beliefs and help seeking attitudes (e.g., Vogel et al., 2008). In most cases, past research has found a negative relationship between TV viewing and beliefs about mental illness and treatment (e.g., Vogel et al., 2008). Given the negative way these subjects are typically portrayed on TV and in film (e.g., Diefenbach, 1997), this is hardly surprising. It has, however, been hypothesized that positive and accurate portrayals of mental health disorders and therapy could, in turn, have a positive effect on attitudes (Vogel et al., 2008). To date, there has been little evidence to support this contention. The present study expanded on previous research by examining the effects of an experimental manipulation (e.g., viewing a TV program) on people's help seeking attitudes.

The program, *In Treatment,* presents an unusual case in offering its audience a program revolving almost exclusively around therapy. In view of the program's uniqueness, it was unclear as to what effect such a depiction may have on public attitudes (Becker, 2008). Indeed, the nature of the potential influence of *In Treatment* has been debated. The present research team speculated that the effect of the program would depend upon the specific episode or episodes viewed. Accordingly, episodes were carefully selected based on a number of factors that the researchers thought might be influential. These factors included the stage in the therapeutic relationship (i.e., "early" versus "late") and gender of the client (i.e., one male and one female),

among others. The “early” episodes were selected to show the clients when they were less committed to the therapy, and more unsure about the process. In contrast, the client-therapist relationship was more developed in the “late” episodes, relative to the “early” episodes. As well, the “late” episodes of *In Treatment* showed the clients as more open and engaged in the therapy and appearing to be benefitting more.

It is important to acknowledge that this research is exploratory. As might be expected, the observed effects were generally small. This likely reflects the complexity of help seeking attitudes. That is, help seeking attitudes are not informed exclusively by TV. In addition, the study involved what might be considered a relatively weak manipulation of TV exposure. That is, attitudes were assessed following exposure to only one or two episodes of *In Treatment.* Moreover, these episodes were quite short (i.e., under 30 min in length). It should also be noted that the sample was quite small, resulting in low statistical power. Despite these limitations, several important findings were obtained and are discussed below.

It was hypothesized that help seeking attitudes would depend upon the number of episodes viewed. Specifically it was predicted that attitudes would be different relative to the baseline after viewing either one or two episodes. It was also anticipated that a change in attitudes would be obtained following the “late” episode relative to the “early” episode. While the change in attitudes was maintained across both episodes, evidence of a cumulative effect consistent with the cultivation hypothesis was not found in these comparisons (e.g., Shrum, 1995). It is possible that a cultivation effect would be found with exposure to a greater number of episodes. Therefore, future research could examine the effects of viewing more episodes of *In Treatment.*

Comparisons were also made between those who viewed only the “late” episode and those who viewed the “late” episode after viewing the “early” episode. It was predicted that witnessing the progression of a character in therapy across the two episodes of *In Treatment* would have more of a positive effect on help seeking attitudes, relative to viewing the “late” episode exclusively. Some support was found for this prediction, though again none of the effect sizes was particularly large. Moreover, support was only provided with two of the measures: the IASMHS Help Seeking Propensity and the DES Anticipated Utility subscales. Interestingly these were the two measures found to show an effect in the comparison of two related episodes. The general pattern found with these two measures was that witnessing the progression of a client in therapy resulted in more positive attitudes compared to those who did not witness the progression, but who only saw the “late” episode. These findings provide some support for the cultivation hypothesis suggesting that TV has a cumulative effect on attitudes (e.g., Shrum, 1995). These findings also demonstrate the importance of the specific TV viewing experience.

It should also be noted that a more general effect of viewing the late episode was found with the IASMHS Psychological Openness subscale. That is, participants reported being more willing to discuss their problems with others after viewing either of the two “late” episodes, relative to baseline. This effect was not dependent upon participants seeing the “early” episode. Given that the clients are shown to be benefitting from such disclosures in the “late” episodes, the increase in Psychological Openness is sensible. This suggests that more frequent depictions of beneficial disclosures within a therapeutic relationship on TV might lead to more positive views of therapy.

In considering the generalizability of the present results, it is important to note that the episodes of *In Treatment* used in the study were carefully selected by the researchers, and as

such, may not be representative of the other episodes. For this reason, it is not possible to determine what effect other specific episodes of *In Treatment,* or the series as a whole, might have on people's attitudes. For example, questionable behaviour and decisions on the part of the therapist, including issues of countertransference, were depicted in some of the episodes not used in the present study. In addition, other types of psychological problems were depicted by other clients, which may also have different effects on viewers' help seeking attitudes. Thus, it is possible that some specific episodes may, in fact, have a negative impact on help seeking attitudes. Accordingly, future research is needed to examine this possibility. It would also be interesting to evaluate the effect of watching the entire set of episodes on help seeking attitudes.

Future research should also examine the effects of exposure to *In Treatment* using a sample that is more representative. Indeed, this is a future goal of the present research team. Further, it will be important to ascertain the longevity of the observer effects. That is, there is the possibility that the observed acute effects of viewing *In Treatment* may diminish over time. To this end, research should examine the possibility that the observed increases in help seeking attitudes may later return to baseline levels. It is also possible that the specific effect of viewing the selected episodes may depend upon individual differences in psychological aspects of the experience of viewing the episodes (e.g., Bahk, 2001). That is, the effect may vary as a function of how involved the viewer became, how realistic s/he thought the episode was and the extent to which s/he identified with the client and/or the therapist. While the present researchers intend to examine the effect of these variables, it is beyond the scope of this report.

In sum, the present study demonstrated that all of the selected episodes of *In Treatment* had a favourable impact on at least some aspects of people's help seeking attitudes. In particular, willingness to seek help, and the perceived benefits of therapy increased as a result of viewing

the program. Given the fact that *In Treatment* emphasizes the therapeutic relationship, this may not be surprising. It is possible that other programs that depict therapists and therapy in different ways might impact other types of help seeking attitudes. The present findings also demonstrated that TV is capable of influencing people's attitudes and that TV can have a positive effect. This is in keeping with suggestions that TV can work to create more favourable attitudes through positive and accurate portrayals of mental health disorders and treatment (Vogel et al., 2007). This provides further evidence that the TV and film industry should carefully consider the nature and accuracy of what they depict. Given that *In Treatment* is highly acclaimed and has garnered a strong following, it is clear that a TV program can be successful without relying exclusively on false, negative depictions of mental health disorders and therapy.

References

Bahk, C. M. (2001). Drench effects of media portrayal of fatal virus disease on health locus of control beliefs. *Health Communication, 13*(2), 187-204.

Becker, A. (2008). Rise of the TV shrink. *Broadcasting & Cable,* 8(1), 12-13.

Canadian Mental Health Association. (2008). *Fast facts: Mental health/mental illness*. Retrieved from http://www.cmha.ca/bins/content_page.asp?cid=6-20-23-43

Cepeda-Benito, A., & Short, P. (1998). Self-concealment, avoidance of psychological services, and perceived likelihood of seeking professional help. *Journal of Counselling Psychology, 45*(1), 58-64.

Corrigan, P. W. (2004). How stigma interferes with mental health care. *American Psychologist, 59*(7), 614-625.

Corrigan, P. W., Green, A., Lundin, R., Kubiak, M. A., & Penn, D. L. (2001). Familiarity with and social distance from people who have serious mental illness. *Psychiatric Services, 52*(7), 953-958.

Corrigan, P. W., & Watson, A. C. (2007). The stigma of psychiatric disorders and the gender, ethnicity, and education of the perceiver. *Community Mental Health Journal, 43*(5), 438-458.

Crowne, D. P., & Marlowe, D. (1960). A new scale of social desirability independent of psychopathology. *Journal of Consulting Psychology, 24*(4), 349-354.

Day, E. N., Edgren. K., & Eshlemen, A. (2007). Measuring stigma toward mental illness: Development and application of the Mental Illness Stigma Scale. *Journal of Applied Social Psychology, 37*(10), 2191-2219.

Diefenbach, D. L. (1997). The portrayal of mental illness on prime-time television. *Journal of Community Psychology, 25*(3), 289-302.

Diefenbach, D. L., & West, M. D. (2007). Television and attitudes towards mental health issues: Cultivation analysis and the third-person effect. *Journal of Community Psychology, 35*(2), 181-195.

Gabbard, G. (2001). Psychotherapy in Hollywood cinema. *Australian Psychiatry, 9*(4), 365-369.

Granello, D. H., & Pauley, P. S. (2000). Television viewing habits and their relationship to tolerance toward people with mental illness. *Journal of Mental Health Counselling, 22*(2), 162-175.

Greenberg, H. R. (2000). A field guide to cinetherapy: On celluloid psychoanalysis and its practitioners. *American Journal of Psychoanalysis, 60*(4), 329-339.

Hays, R. D., Sherbroune, C. D., & Mazel, R. M. (1995). *Users manual for the Medical Outcomes Study (MOS) core measures of health-related quality of life.* Retrieved from http://www.rand.org/health

Health Canada (2002). *A report on mental illnesses in Canada.* Retreived from http://www.phac-aspc.gc.ca/publicat/miic-mmac/pdf/men_ill_e.pdf

Levant, R.F., Smalley, A.T., Aupont, M., House, A.T., Richmond, K., & Noronha, D. (2007). Initial validation of the Male Role Norms Inventory-Revised (MRNI-R). *Journal of Men's Studies, 15*(1), 83-100.

Mackenzie, C. S., Knox, V. J., Gekoski, W. L., & Macaulay, H. L. (2004). An adaptation and extension of the attitudes towards seeking professional psychological help scale. *Journal of Applied Social Psychology, 34*(11), 2410-2435.

Pirkis, J., Blood, R. W., Francis, C., & McCallum, K. (2006). On-screen portrayals of mental illness: Extent, nature, and impacts. *Journal of Health Communication, 11,* 523-541.

Potter, W. J., & Ching, I. C. (1989). Television exposure measures and the cultivation hypothesis. *Journal of Broadcasting & Electronic Media, 34*(3), 313-333.

Schill, T., Harsch, J., & Ritter, K. (1990). Countertransference in the movies: Effects on beliefs about psychiatric treatment. *Psychological Reports, 67*(2), 399-402.

Shaffer, P. A., Vogel, D. L., & Wei, M. (2006). The mediating roles of anticipated risks, anticipated benefits, and attitudes on the decision to seek professional help: An attachment perspective. *Journal of Counselling Psychology, 53*(4), 442-452.

Shrum, L. J. (1995). Assessing the social influence of television: A social cognition perspective on cultivation effects. *Communication Research, 22*(4), 402-429.

Snyder, L. B., & Rouse, R. A. (1995). The media can have more than an impersonal impact: The case of AIDS risk perceptions and behaviour. *Health Communication, 7*(2), 125-145.

Statistics Canada. (2004). *Television Viewing, by Age and Sex, by Province.* Retrieved from http://www40.statcan.ca/l01/cst01/arts23.htm

Vogel, D. L., Gentile, D. A., & Kaplan, S. A. (2008). Influence of television on willingness to seek therapy. *Journal of Clinical Psychology, 64*(3), 276-295.

Vogel, D. L., Wade, N. G., & Haake, S. (2006). Measuring the self-stigma associated with seeking psychological help. *Journal of Counselling Psychology, 53*(3), 325-337.

Vogel, D. L., & Wester, S. R. (2003). To seek help or not to seek help: The risks of self-disclosure. *Journal of Counselling Psychology, 50*(3), 351-361.

Wahl, O. F., & Lefkowits, J. Y. (1989). Impact of a television film on attitudes toward mental illness. *American Journal of Community Psychology, 17*(4), 521-528.

Ward, L.C., Thorn, B.E., Clements, K.L., Dixon, K.E., & Sanford, S.D. (2006). Measurement of agency, communion, and emotional vulnerability with the Personal Attributes Questionnaire. *Journal of Personality Assessment, 86*(2), 206-216.

Ward, L. M., & Friedman, K. (2006). Using TV as a guide: Associations between television viewing and adolescents' sexual attitudes and behaviour. *Journal of Research on Adolescence, 16*(1), 133-156.

Ward, L.M., Merriwether, A., & Caruthers, A. (2006). Breasts are for men: media, masculinity ideologies, and men's beliefs about women's bodies. *Sex Roles, 55,* 703–714.

Ward, L.M., & Rivadeneyra, R. (1999). Contributions of entertainment television to adolescents' sexual attitudes and expectations: The role of viewing amount versus viewer involvement. *Journal of Sex Research, 36,* 237–249.

Wolkenstein, L., & Meyer, T. D. (2008). Attitudes of young people towards depression and mania. *Psychology and Psychotherapy: Theory, Research and Practice, 81,* 15-31.

Young, S. D., Boester, A., Whitt, M. T., & Stevens, M. (2008). Character motivations in the representation of mental health professionals in popular film. *Mass Communication & Society, 11,* 82-99.

Appendix A

Study Design

Phase I: on-line administration of self-report questionnaires (e.g., demographic, dispositional and psychosocial characteristics of participants) (1 hour)

The responses to these questionnaires will be used to investigate the nature of stigmatizing attitudes about mental health/disorders and the psychological treatment of these disorders.

In addition, the data will serve to establish the baseline of Phase II participants. In this regard, it is important to note that all Phase I participants are eligible to participate in Phase II of the study.

Phase II: This phase consists of two hour-long sessions. As depicted below, the exact nature of the 2nd session will depend upon the condition the participant is randomly assigned to. All Session 1's involve viewing the specified episode of "In Treatment" and then completing a series of self-report questionnaires designed to assess participants' reactions to the episode, and the effects of the episodes on their attitudes related to mental health.

	Session 1	**Session 2**
Condition A	In-person session "Alex/early" (i.e., Episode 7)	In-person session "Alex/late" (i.e., Episode 27)
Condition B	In-person session "Sophie/early" (i.e., Episode 8)	In-person session "Sophie/late" (i.e., Episode 38)
Condition C	In-person session "Alex/late" (i.e., Episode 27)	On-line session (Similar to Phase I)
Condition D	In-person session "Sophie/late" (i.e., Episode 38)	On-line session (Similar to Phase I)

Appendix B

Measures

Demographic Information

Please provide the following demographic Information.

1. Date of birth _______ month _______ year

2. Sex
- ○ Male
- ○ Female

3. Education
- ○ First year undergraduate
- ○ Second year undergraduate
- ○ Third year undergraduate
- ○ Fourth (or more) year undergraduate
- ○ Graduate Studies Please specify highest level completed: ________________

Have you ever taken a psychology course that focused upon mental health/ psychological disorders (e.g., Abnormal Psychology)?
- ○ No
- ○ Yes

4. Marital Status
- ○ Single
- ○ Married or common-law
- ○ Separated or divorced
- ○ Other

5. Ethnicity
- ○ Caucasian
- ○ Aboriginal
- ○ Asian
- ○ Other Please specify: ____

Personal Reaction Inventory

Listed below are a number of statements concerning personal attitudes and traits. Read each item and decide whether the treatment is *true* or *false* as it pertains to you personally.

1.	Before voting I thoroughly investigate the qualifications of all the candidates.	T	F
2.	I never hesitate to go out of my way to help someone in trouble.	T	F
3.	It is sometimes hard for me to go on with my work if I am not encouraged.	T	F
4.	I have never intensely disliked anyone.	T	F
5.	On occasion I have had doubts about my ability to succeed in life.	T	F
6.	I sometimes feel resentful when I don’t get my way.	T	F
7.	I am always careful about my manner of dress.	T	F
8.	My table manners at home are as good as when I eat out in a restaurant.	T	F
9.	If I could get into a movie without paying and be sure I was not seen I would probably do it.	T	F
10.	On a few occasions, I have given up doing something because I thought too little of my ability.	T	F
11.	I like to gossip at times.	T	F
12.	There have been times when I felt like rebelling against people in authority even though I knew they were right.	T	F
13.	No matter who I’m talking to, I’m always a good listener.	T	F
14.	I can remember “playing sick” to get out of something.	T	F
15.	There have been occasions when I took advantage of someone.	T	F
16.	I’m always willing to admit it when I make a mistake.	T	F
17.	I always try to practice what I preach.	T	F
18.	I don’t find it particularly difficult to get along with loud mouthed, obnoxious people.	T	F

19.	I sometimes try to get even rather than forgive and forget.	T	F
20.	When I don't know something I don't at all mind admitting it.	T	F
21.	I am always courteous, even to people who are disagreeable.	T	F
22.	At times I have really insisted on having things my own ways.	T	F
23.	There have been occasions when I felt like smashing things.	T	F
24.	I would never think of letting someone else be punished for my wrong-doings.	T	F
25.	I never resent being asked to return a favor.	T	F
26.	I have never been irked when people expressed ideas very different from my own.	T	F
27.	I never make a long trip without checking the safety of my car.	T	F
28.	There have been times when I was quite jealous of the good fortune of others.	T	F
29.	I have almost never felt the urge to tell someone off.	T	F
30.	I am sometimes irritated by people who ask favors of me.	T	F
31.	I have felt that I was punished without a cause.	T	F
32.	I sometimes think when people have a misfortune they only got what they deserved.	T	F
33.	I have never deliberately said something that hurt someone's feelings.	T	F

Mental Health Inventory

The following questions are about how you feel and how things have been with you *during the past month*. For each question, please circle a number for the one answer that comes closest to the way you have been feeling.

1. How happy, satisfied, or pleased have you been with your personal life during the past month?

Extremely happy, could not have been more satisfied or pleased	Very happy most of the time	Generally satisfied, pleased	Sometimes fairly satisfied, sometimes fairly unhappy	Generally dissatisfied, unhappy	Very dissatisfied, unhappy most of the time
1	2	3	4	5	6

2. During the past month, how often did you feel there were people you were close to?

Always	Very often	Fairly often	Sometimes	Almost never	Never
1	2	3	4	5	6

3. During the past month, how much of the time have you generally enjoyed the things you do?

All of the time	Most of the time	A good bit of the time	Some of the time	A little of the time	None of the time
1	2	3	4	5	6

4. How much of the time, during the past month, has your daily life been full of things that were interesting to you?

All of the time	Most of the time	A good bit of the time	Some of the time	A little of the time	None of the time
1	2	3	4	5	6

5. During the past month, how much of the time have you felt loved and wanted?

All of the time	Most of the time	A good bit of the time	Some of the time	A little of the time	None of the time
1	2	3	4	5	6

6. How much of the time, during the past month, have you been a very nervous person?

All of the time	Most of the time	A good bit of the time	Some of the time	A little of the time	None of the time
1	2	3	4	5	6

7. During the past month, how much of the time did you feel depressed?

All of the time	Most of the time	A good bit of the time	Some of the time	A little of the time	None of the time
1	2	3	4	5	6

8. During the past month, how much of the time have you felt tense or "high-strung"

All of the time	Most of the time	A good bit of the time	Some of the time	A little of the time	None of the time
1	2	3	4	5	6

9. During the past month, how much of the time have you been in firm control of your behavior, thoughts, emotions, feelings?

All of the time	Most of the time	A good bit of the time	Some of the time	A little of the time	None of the time
1	2	3	4	5	6

10. During the past month, how much of the time did you feel that you had nothing to look forward to?

All of the time	Most of the time	A good bit of the time	Some of the time	A little of the time	None of the time
1	2	3	4	5	6

11. How much of the time, during the past month, have you felt calm and peaceful?

All of the time	Most of the time	A good bit of the time	Some of the time	A little of the time	None of the time
1	2	3	4	5	6

12. How much of the time, during the past month, have you felt emotionally stable?

All of the time	Most of the time	A good bit of the time	Some of the time	A little of the time	None of the time
1	2	3	4	5	6

13. How much of the time, during the past month, have you felt downhearted and blue?

All of the time	Most of the time	A good bit of the time	Some of the time	A little of the time	None of the time
1	2	3	4	5	6

14. During the past month, how much of the time did you feel that your love relationships, loving and being loved, were full and complete?

All of the time	Most of the time	A good bit of the time	Some of the time	A little of the time	None of the time
1	2	3	4	5	6

15. During the past month, how much of the time has living been a wonderful adventure for you?

All of the time	Most of the time	A good bit of the time	Some of the time	A little of the time	None of the time
1	2	3	4	5	6

16. How much of the time, during the past month, have you felt so down in the dumps that nothing could cheer you up?

All of the time	Most of the time	A good bit of the time	Some of the time	A little of the time	None of the time
1	2	3	4	5	6

17. During the past month, how much of the time have you felt restless, fidgety, or impatient?

All of the time	Most of the time	A good bit of the time	Some of the time	A little of the time	None of the time
1	2	3	4	5	6

18. During the past month, how much of the time have you been moody or brooded about things?

All of the time	Most of the time	A good bit of the time	Some of the time	A little of the time	None of the time
1	2	3	4	5	6

19. During the past month, how much of the time have you been anxious or worried?

All of the time	Most of the time	A good bit of the time	Some of the time	A little of the time	None of the time
1	2	3	4	5	6

20. During the past month, how much of the time have you been a happy person?

All of the time	Most of the time	A good bit of the time	Some of the time	A little of the time	None of the time
1	2	3	4	5	6

21. During the past month, how much of the time have you been in low or very low spirits?

All of the time	Most of the time	A good bit of the time	Some of the time	A little of the time	None of the time
1	2	3	4	5	6

22. How much of the time, during the past month, have you felt cheerful, lighthearted?

All of the time	Most of the time	A good bit of the time	Some of the time	A little of the time	None of the time
1	2	3	4	5	6

Level of Contact Report

Please read each of the following statements carefully. After you have read all of the statements below, place a check by EVERY statement that represents your experience with persons with a severe mental illness.

____ I have watched a movie or television show in which a character depicted a person with mental illness.

____ My job involves providing services/treatment for persons with a severe mental illness.

____ I have observed, in passing, a person I believe may have had a severe mental illness.

____ I have observed persons with a severe mental illness on a frequent basis.

____ I have a severe mental illness.

____ I have worked with a person who had a severe mental illness at my place of employment.

____ I have never observed a person that I was aware had a severe mental illness.

____ A friend of the family has a severe mental illness.

____ I have taken a course at school about mental illness.

____ I have a relative who has a severe mental illness.

____ I have watched a documentary on television about severe mental illness.

____ I live with a person who has a severe mental illness.

Mental Illness Stigma Scale

Please indicate the extent to which you agree or disagree with the statements listed below using the following scale:

1	2	3	4	5	6	7
Completely disagree						**Completely agree**

_____ **1.** There are effective medications for depression that allow people to return to normal and productive lives.

_____ **2.** I don't think that it is possible to have a normal relationship with someone with depression.

_____ **3.** I would find it difficult to trust someone with depression.

_____ **4.** People with depression tend to neglect their appearance.

_____ **5.** It would be difficult to have a close meaningful relationship with someone with depression.

_____ **6.** I feel anxious and uncomfortable when I'm around someone with depression.

_____ **7.** It is easy for me to recognize the symptoms of depression.

_____ **8.** There are no effective treatments for depression.

_____ **9.** I probably wouldn't know that someone has depression unless I was told.

_____ **10.** A close relationship with someone with depression would be like living on an emotional roller coaster.

_____ **11.** There is little that can be done to control the symptoms of depression.

_____ **12.** I think that a personal relationship with someone with depression would be too demanding.

_____ **13.** Once someone develops depression, he or she will never be able to fully recover from it.

_____ **14.** People with depression ignore their hygiene such as bathing and using deodorant.

1	2	3	4	5	6	7
Completely disagree						**Completely agree**

_____ **15.** Depression prevents people from having normal relationships with others.

_____ **16.** I tend to feel anxious and nervous when I am around someone with depression.

_____ **17.** When talking with someone with depression, I worry that I might say something that will upset him or her.

_____ **18.** I can tell that someone has depression by the way he or she acts.

_____ **19.** People with depression do not groom themselves properly.

_____ **20.** People with depression will remain ill for the rest of their lives.

_____ **21.** I don't think that I can really relax and be myself when I'm around someone with depression.

_____ **22.** When I am around someone with depression I worry that he or she might harm me physically.

_____ **23.** Psychiatrists and psychologists have the knowledge and skills needed to effectively treat depression.

_____ **24.** I would feel unsure about what to say or do if I were around someone with depression.

_____ **25.** I feel nervous and uneasy when I'm near someone with depression.

_____ **26.** I can tell that someone has depression by the way he or she talks.

_____ **27.** People with depression need to take better care of their grooming (bathe, clean teeth, use deodorant).

_____ **28.** Mental health professionals, such as psychiatrists and psychologists, can provide effective treatments for depression.

Attitudes about Depression Scale

Imagine that you hear the following about an acquaintance – that is, someone who is not a close friend, but who you have hung out with occasionally in social settings:

> Over the past two months, your acquaintance has changed in his nature. As opposed to before, he seems down and sad, without being able to make out a concrete reason for his feeling low. He appears serious and worried. Lately, there is nothing that makes him laugh. He hardly ever talks, and if he says something, he speaks in a low tone of voice about the worries he has with regard to his future. Your acquaintance feels useless and has the impression that everything he does is wrong. All attempts to cheer him up have failed. He has lost all interest in things and is not motivated to do anything. He complains of frequently waking up in the middle of the night and not being able to get back to sleep. In the morning, he says that he feels exhausted and he has no energy. He says that he has a hard time concentrating at work. In contrast with before, everything takes so much longer. He is hardly able to manage his workload. As a consequence, his boss has asked to talk with him about his work.

Below are statements that describe possible reactions to, and beliefs about the person described in the vignette that you just read. Please indicate how you think MOST Canadians would feel about this person. That is, we are not interested in your personal beliefs. Instead, we are interested in knowing how you think others –the majority of Canadians – would respond.

Please use the following scale to indicate the extent to which MOST Canadians might believe that each item applies to the person described in the vignette. If you believe that most Canadians would feel that the item doesn't apply at all, you would circle "0" to indicate "definitely not the case". On the other hand, if you believe that most Canadians would believe that the item is a very accurate description or that it definitely applies to the person, you would circle "4" to indicate "definitely the case". Please use either "1", "2" or "3" to indicate less strong beliefs. Please read each item carefully before responding.

Definitely not the case				**Definitely the case**
0	**1**	**2**	**3**	**4**

To what extent do you think MOST Canadians would experience the following emotions in response to the person described in the vignette?

1.	**Fear**	**0**	**1**	**2**	**3**	**4**
2.	**Unease**	**0**	**1**	**2**	**3**	**4**

Definitely not the case				Definitely the case
0	1	2	3	4

To what extent do you think MOST Canadians would experience the following in response to the person described in the vignette?

3.	Insecurity	0	1	2	3	4
4.	Pity	0	1	2	3	4
5.	Concern	0	1	2	3	4
6.	Sympathy	0	1	2	3	4
7.	Desire to help	0	1	2	3	4
8.	Dismay	0	1	2	3	4
9.	Disgust	0	1	2	3	4
10.	Irritation	0	1	2	3	4
11.	Embarrassment	0	1	2	3	4
12.	Ridicule	0	1	2	3	4
13.	Desire to withdraw	0	1	2	3	4
14.	Lack of understanding	0	1	2	3	4

To what extent do you think MOST Canadians would feel that the following attributes apply to the person described in the vignette?

1.	Unpredictable	0	1	2	3	4
2.	Frightening	0	1	2	3	4
3.	Helpless	0	1	2	3	4
4.	Aggressive	0	1	2	3	4
5.	Lacking of self control	0	1	2	3	4
6.	Dangerous	0	1	2	3	4
7.	Dependent on others	0	1	2	3	4
8.	Needy	0	1	2	3	4

Definitely not the case				Definitely the case
0	1	2	3	4

To what extent do you think MOST Canadians would respond in the following ways to the person depicted in the vignette?

1.	**Accept this person as a neighbour**	**0**	**1**	**2**	**3**	**4**
2.	**Accept this person as a co-worker**	**0**	**1**	**2**	**3**	**4**
3.	**Introduce this person to a friend**	**0**	**1**	**2**	**3**	**4**
4.	**Rent out a room to this person**	**0**	**1**	**2**	**3**	**4**
5.	**Recommend this person to a friend for a job**	**0**	**1**	**2**	**3**	**4**
6.	**Accept this person's marriage into one's own family**	**0**	**1**	**2**	**3**	**4**
7.	**Hire this person for taking care of their own kids**	**0**	**1**	**2**	**3**	**4**

Please indicate to what extent YOUR views/beliefs are similar to those of most Canadians:

Not at all similar				Completely the same
0	1	2	3	4

If you do not believe that your views/beliefs are similar to those of most Canadians, briefly describe how they differ:

____

____

____

____

____

____

Inventory of Attitudes toward Seeking Mental Health Services

The term *professional* refers to individuals who have been trained to deal with mental health problems (e.g., psychologists, psychiatrists, social workers, and family physicians). The term "*psychological problems"* refers to reasons one might visit a professional. Similar terms include *mental health concerns, emotional problems, mental troubles,* and *personal difficulties.*

For each item, indicate whether you *disagree* (0), *somewhat disagree* (l), *are undecided (2), somewhat agree (3),* or *agree* (4):

	Disagree				Agree
1. There are certain problems which should not be discussed outside of one's immediate family.	0	1	2	3	4
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.	0	1	2	3	4
3. I would not want my significant other (spouse, partner, etc.) to know if I were suffering from psychological problems.	0	1	2	3	4
4. Keeping one's mind on a job is a good solution for avoiding personal worries and concerns.	0	1	2	3	4
5. If good friends asked my advice about a psychological problem, I might recommend that they see a professional.	0	1	2	3	4
6. Having been mentally ill carries with it a burden of shame.	0	1	2	3	4
7. It is probably best not to know everything about oneself.	0	1	2	3	4
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.	0	1	2	3	4
9. People should work out their own problems; getting professional help should be a last resort.	0	1	2	3	4
10. If I were to experience psychological problems, I could get professional help if I wanted to.	0	1	2	3	4
11. Important people in my life would think less of me if they were to find out that I was experiencing psychological problems.	0	1	2	3	4
12. Psychological problems, like many things, tend to work out by themselves.	0	1	2	3	4
13. It would be relatively easy for me to find the time to see a professional for psychological problems.	0	1	2	3	4
14. There are experiences in my life I would not discuss with anyone.	0	1	2	3	4
15. I would want to get professional help if I were worried or upset for a long period of time.	0	1	2	3	4
16. I would be uncomfortable seeking professional help for psychological problems because people in my social or business circles might find out about it.	0	1	2	3	4

	Disagree				Agree
17. Having been diagnosed with a mental disorder is a blot on a person's life.	0	1	2	3	4
18. There is something admirable in the attitudes of people who are willing to cope with their conflicts and fears without resorting to professional help.	0	1	2	3	4
19. If I believed I were having a mental breakdown, my first inclination would be to get professional attention.	0	1	2	3	4
20. I would feel uneasy going to a professional because of what some people would think.	0	1	2	3	4
21. People with strong characters can get over psychological problems by themselves and would have little need for professional help.	0	1	2	3	4
22. I would willingly confide intimate matters to an appropriate person if I thought it might help me or a member of my family.	0	1	2	3	4
23. Had I received treatment for psychological problems, I would not feel that it ought to be "covered up."	0	1	2	3	4
24. I would be embarrassed if my neighbor saw me going into the office of a professional who deals with psychological problems.	0	1	2	3	4

Disclosure Expectations Scale

For the following questions, you are asked to respond using the following scale: (1) Not at all, (2) Slightly, (3) Somewhat, (4) Moderately, or (5) Very.

1 Not at all	2 Slightly	3 Somewhat	4 Moderately	5 Very

1.	How difficult would it be for you to disclose personal information to a counselor?	1	2	3	4	5
2.	How vulnerable would you feel if you disclosed something very personal you had never told anyone before to a counselor?	1	2	3	4	5
3.	If you were dealing with an emotional problem, how beneficial for yourself would it be to self-disclose personal information about the problem to a counselor?	1	2	3	4	5
4.	How risky would it be to disclose your hidden feelings to a counselor?	1	2	3	4	5
5.	How worried about what the other person is thinking would you be if you disclosed negative emotions to a counselor?	1	2	3	4	5
6.	How helpful would it be to self-disclose a personal problem to a counselor?	1	2	3	4	5
7.	Would you feel better if you disclosed feelings of sadness or anxiety to a counselor?	1	2	3	4	5
8.	How likely would you get a useful response if you disclosed an emotional problem you were struggling with to a counselor?	1	2	3	4	5

Appendix C

Online Study Description

The following is the information that will be posted on SONA, the Psychology Department's web-based Volunteer Subject Pool. Please note that only students registered in some Psychology courses (i.e., those offered by instructors who provide bonus marks for participating in research or completing an alternate task) have access to SONA. Upon accessing SONA, students can review brief descriptions of on-going studies involving human participants. Anyone who, after reading the following information, is interested in participating in Phase I of this study would follow the SONA links to the "Drama of Television" study's website. SONA also provides information on how to contact the researchers for additional information about the study.

Note: Although this study has two phases, participants can choose to participate in 1 or both of the phases. That is, everyone who completes Phase I is eligible to participate in Phase II. We are not, however, initially asking participants to agree to participate in both phases. For this reason, there are two separate SONA descriptions.

SONA Description: Phase I

Short name (displayed on list of all studies): Drama of TV Phase I

Study name: The Drama of Television (Phase I)

Abstract: This study is about television viewing and beliefs about mental health.

Description: The present study is a two-phase project designed to address a series of questions concerning peoples' attitudes and beliefs about mental health-related issues.

The first phase of the study examines the extent to which psychosocial characteristics and TV viewing habits influence people's attitudes and beliefs about mental health disorders and treatment. It involves completing an on-line survey. Phase I will take approximately 60 minutes to complete.

If you participate in Phase I, you will have the option of participating in Phase II (see the separate SONA description of Drama and TV Phase II). You do not have to decide about Phase II until later. However, for your information, the second phase of the study examines the effects of viewing specific episodes from a contemporary TV drama series on attitudes and beliefs about mental health-related issues.

Eligibility: You must be 17 years or older. You must be relatively fluent in English and be able to read and write English at approximately the Grade 7 level.

Duration: 60 minutes

Credit: 1 credit

Short name (displayed on list of all studies): Drama of TV Phase II

Study Name: The Drama of Television (Phase II)

2 Part Study: Phase II of this study involves two sessions. You must sign up for both sessions at the same time. In addition, both sessions must be scheduled for the same time slot, separated by one week.

Abstract: This study is about television viewing and beliefs about mental health.

Description: Phase II of this study is about television viewing and beliefs about mental health. Participation will involve two hour-long sessions. In the first session, you will be asked to watch one of four episodes of a TV drama and then complete a set of self-report questionnaires designed to assess your perceptions of and responses to the TV episode, and also mental health issues.

The second session of Phase II will take place either in-person and follow the same format as described above, or it will involve completing an on-line survey, similar to which you completed during Phase I of this study. Half of Phase II participants will be assigned to the in-person type of session, and the other half will be assigned to the on-line condition. You will be told which type of session you have been assigned to at the end of the first session.

You will receive 1.0 credit for participating in Session 1 and 1.0 credit for participating in Session 2.

Sign-Up Restrictions: You must have participated in Phase I of the Drama of Television study.

Eligibility Requirements: You must be 17 years or older. You must be relatively fluent in English and be able to read and write English at approximately the Grade 7 level.

Duration: 60 minutes (Session 1)
60 minutes (Session 2)
Total time: 2 hours

Credits: 1.0 Credit (Session 1)
1.0 Credit (Session 2)
(2 Credits total)

Appendix D

Phase I Consent Form

THE UNIVERSITY OF BRITISH COLUMBIA

OKANAGAN

Irving K. Barber School of Arts and Sciences
Psychology and Computer Science
3333 University Way
Kelowna, BC Canada V1V 1V7

Consent Form

The Drama of Television – Phase I

Principal Investigator: Carolyn Szostak, Associate Professor of Psychology, UBCO, 250-807-8736.

Co-investigators: Carson Kivari, Undergraduate Student (Psychology), UBCO
Stephanie Smithson, Undergraduate Student (Psychology), UBCO
Ashley Whidden, Undergraduate Student (Psychology), UBCO

Purpose: People's attitudes and beliefs about mental health-related issues are informed by many different sources of information and types of experiences. Research suggests that television (TV) is a strong source of influence for many people. In addition, one's attitudes and beliefs may be determined, in part, by psychosocial characteristics, or trait-like features, of the individual.

The present study is a two-phase project designed to address a series of questions concerning peoples' attitudes and beliefs about mental health-related issues. The first phase of the study will examine the nature of these attitudes and beliefs. Specifically, we are interested in evaluating the extent to which people's attitudes and beliefs about mental health disorders and treatment are shaped by psychosocial characteristics and TV viewing habits. The second phase of the study will evaluate the effects of viewing specific episodes from a contemporary TV drama series on attitudes and beliefs about mental health-related issues.

This study is the basis of two undergraduate Honours Theses (Carson Kivari and Stephanie Smithson) and one undergraduate Directed Study (Ashley Whidden). It is anticipated that the final results will be submitted for publication in a peer-reviewed psychology journal.

Study Procedures: You have been asked to participate in a single research session. However, it is important that you know that this study, in fact, consists of up to two phases. The first phase (i.e., this one) involves completing an on-line survey. It will take approximately 60 minutes to complete this survey.

If you participate in Phase I, you may choose to also participate in Phase II of this study. Phase II will consist of two 60 minute sessions, separated by approximately 7 days. The first Phase II session will involve watching a single episode of a contemporary TV drama and filling out a series of self-report questionnaires. The second session will either be similar to the first Phase II session, or it will involve completing an on-line survey, similar to the Phase I survey. Please note that you do not have to decide about participating in Phase II at this time.

As a volunteer participant in Phase I of this study, you will be asked to complete a series of on-line questionnaires designed to assess attitudes and beliefs about mental health/disorders and treatment. In addition, there will be some questions regarding various psychosocial trait-like characteristics and your personal TV viewing habits. You will also be asked some general questions about your personal mental health and that of your family and acquaintances. Please note that there are no right or wrong answers to any of these questions. We are interested in your honest answers regarding your attitudes, beliefs, and experiences. While we ask that you try to answer all questions, if there are any questions that you do not feel comfortable answering, you are free to leave those questions blank. To help us know about our research sample (e.g., the average age, number of males/females, typical living arrangements, etc.), you will also be asked to provide some information about your personal demographics. It will take you approximately 60 minutes to complete these questionnaires.

You will not receive any financial compensation for your participation in this study. However, given that you are registered in a psychology course, and you volunteered through SONA, you will receive 1 credit/mark in an eligible Psychology class for participating in Phase I of this study. (If you volunteer to participate in Phase II, you will receive up to 2 credits; 1 credit for each session.)

You should also know that none of the researchers conducting this study are involved in any related conflicts of interest.

Confidentiality: Your participation and all information you provide will be kept confidential. However, the information that you provide will not be anonymous. That is, the researchers will know who provided what information. Each questionnaire will be coded in order to link the answers from each participant. Only you and the researchers will know this code. Information from your participation in this on-line session will be transferred to password-protected computer files. Only individuals directly involved in this study will have access to these computerized files.

Please be aware that we will not identify you, or connect your name with your responses, to anyone not directly involved in the project. Moreover, in all publications and presentations of the research findings, no information that would allow someone to identify specific participants will be released. In addition, your individual responses will not be released.

It is also important for you to know that "Survey Monkey", a web-survey company that is located in the USA, is the host of this on-line research. This company is subject to U.S. laws; in particular, the US Patriot Act that allows authorities access to the records of internet service providers. Survey Monkey's servers record incoming IP addresses – including that of the computer that you use to access the survey. However, no connection is made between your data and your computer's IP address. If you choose to participate in the survey, you understand that your responses to the survey questions will be stored and accessed in the USA. The security and privacy policy for the Survey Monkey can be found at the following link: http://www.surveymonkey.com/Monkey_Privacy.aspx.

Risk and Benefits of Participating in this Study: There are no known risks or direct, personal benefits associated with participating in this study.

Contact for information about the study: If you have any further questions about the study you may contact Carolyn Szostak at 250-807-8736 or by email at Carolyn.Szostak@ubc.ca.

Contact for the concerns of research participants: If you have any questions or concerns about your treatment or rights as a research participant, you may contact the Research Subject

Information line in the UBC Office of Research Services at 604-822-8598, or if long distance e-mail to RSIL@ors.ubc.ca.

Consent: Your participation in this study is strictly voluntary. At any time during the study, you are free to stop your participation without penalty by clicking on the “exit this survey” button. If you wish to stop your participation after you have submitted the questionnaires, you may email Carolyn Szostak (Carolyn.Szostak@ubc.ca) and indicate that you would like to withdraw from the Drama of Television study. All data that belongs to you will then be destroyed.

Please print a copy of this consent form for your records by clicking on the “print” button.

If you agree to participate, please click on the Survey Monkey icon to begin the study session. This will indicate that you have read and understood the above information and have consented to participate in this study. If you do not wish to participate, please exit the Drama of Television study website.

Appendix E

Phase II, Session 1 Consent Form

THE UNIVERSITY OF BRITISH COLUMBIA

OKANAGAN

Irving K. Barber School of Arts and Sciences
Psychology and Computer Science
3333 University Way
Kelowna, BC Canada V1V 1V7

Consent Form

The Drama of Television Study – Phase II

Principal Investigator: Carolyn Szostak, Associate Professor of Psychology, UBCO, 250-807-8736.
Co-investigators: Carson Kivari, Undergraduate Student (Psychology), UBCO
Stephanie Smithson, Undergraduate Student (Psychology), UBCO
Ashley Whidden, Undergraduate Student (Psychology), UBCO

Purpose: The purpose of "The Drama of Television" study is to evaluate the relationships between TV viewing habits and experiences, psychosocial characteristics, and attitudes and beliefs about mental health-related issues. As you may recall, this study consists of two phases. You have already participated in the first phase. The purpose of Phase II is to assess the individual differences in people's reactions to and perceptions of selected episodes of a contemporary TV drama series.

This study is the basis of two undergraduate Honours Theses (Carson Kivari and Stephanie Smithson) and one undergraduate Directed Study (Ashley Whidden). It is anticipated that the final results will be submitted for publication in a peer-reviewed psychology journal.

Study Procedures: To participate in Phase II of the study, you must have participated in Phase I. The information that you provide in this session will be linked to the data that you provided in Phase I.

As a volunteer participant in Phase II of this study, you will be asked to participate in two sessions, separated by approximately 7 days. In the first session (i.e., this one), you will be asked to watch one of four episodes of a TV drama and then complete a set of self-report questionnaires. The specific episode that you watch will be randomly determined. The questionnaire packet will include questions designed to assess your perceptions of and responses to the TV episode, and also mental health issues. It will take approximately 60 minutes to watch the episode and complete the questionnaires.

The second session of Phase II will take place either in-person and follow the same format as described above for the current session, or it will involve completing an on-line survey, similar to which you completed during Phase I of this study. Half of Phase II participants will be assigned to the in-person type of session, and the other half will be assigned to the on-line condition. You will be told which type of session you have been assigned to at the end of the present session.

Please note that there are no right or wrong answers to any of the questions. We are interested in your honest answers regarding your attitudes, beliefs, and experiences. While we ask that you try to answer all questions, if there are any questions that you do not feel comfortable answering, you are free to leave those questions blank.

You will not receive any financial compensation for your participation. However, given that you are registered in a psychology course, and you volunteered through SONA, you will receive up to 2 marks in an eligible psychology class for participating in Phase II of this study (i.e., 1 mark for participating this session; 1 mark for participating in the Session 2 (of Phase II)).

You should also know that none of the researchers conducting this study are involved in any related conflicts of interest.

Confidentiality: Your participation and all information you provide will be kept confidential. All completed questionnaires will be kept in a secure location that is accessible only to the researchers involved in this study. Information from the completed questionnaires will be transferred to password-protected computer files for the purpose of data analysis. Again, only individuals directly involved in this study will have access to these computerized files.

The information that you provide will not be anonymous. That is, the researchers will know who provided what information. However, we will not identify you, or connect your name with your responses, to anyone not directly involved in this project. Moreover, in all publications and presentations of the research findings, no information that would allow someone to identify specific participants will be released. In addition, your individual responses will not be released.

It is also important for you to know that "Survey Monkey", a web-survey company that is located in the USA, is the host of the on-line Session 2. This company is subject to U.S. laws; in particular, the US Patriot Act that allows authorities access to the records of internet service providers. Survey Monkey's servers record incoming IP addresses – including that of the computer that you use to access the survey. However, no connection is made between your data and your computer's IP address. If you choose to participate in the survey, you understand that your responses to the survey questions will be stored and accessed in the USA. The security and privacy policy for the Survey Monkey can be found at the following link: http://www.surveymonkey.com/Monkey_Privacy.aspx.

Risk and Benefits of Participating in this Study: There are minimal risks associated with participating in this project. All episodes being used in this study have been aired on TV during primetime. Given network requirements, it is unlikely that these episodes contain harmful content. However, it is important that you are aware that the episodes may include explicit scenes about sensitive emotional issues. Some individuals may find these scenes mildly distressing for a brief time. If you are concerned about viewing this type of content, please know that you do not have to participate in this study. You may leave now or at any time during the session, without penalty. While there are no direct benefits associated with your participation, it is possible that your awareness of issues related to health attitudes and media usage may be enhanced, leading to indirect health-related benefits.

Contact for information about the study: If you have any further questions about the study you may Carolyn Szostak at 250-807-8736 or by email at Carolyn.Szostak@ubc.ca.

Contact for the concerns of research participants: If you have any questions or concerns about your treatment or rights as a research participant, you may contact the Research Subject Information line in the UBC Office of Research Services at 604-822-8598 or if long distance e-mail to RSIL@ors.ubc.ca.

Consent: Your participation in this study is entirely voluntary and you may refuse to participate or withdraw from the study at any time without penalty.

Your signature below indicates that you have received a copy of this consent form for your own records.

Your signature indicates that you consent to participate in this study.

____

Participant Signature Date

____

Printed Name of Participant

Appendix F

Phase II, Session 2 (Online) Consent Form

THE UNIVERSITY OF BRITISH COLUMBIA

OKANAGAN

Irving K. Barber School of Arts and Sciences
Psychology and Computer Science
3333 University Way
Kelowna, BC Canada V1V 1V7

Consent Form

The Drama of Television Study – Phase II, Session 2 (on-line)

Principal Investigator: Carolyn Szostak, Associate Professor of Psychology, UBCO, 250-807-8736.
Co-investigators: Carson Kivari, Undergraduate Student (Psychology), UBCO
Stephanie Smithson, Undergraduate Student (Psychology), UBCO
Ashley Whidden, Undergraduate Student (Psychology), UBCO

Purpose: The purpose of "The Drama of Television" study is to evaluate the relationships between TV viewing habits and experiences, psychosocial characteristics, and attitudes and beliefs about mental health-related issues. As you know, this study consists of two phases. You have already participated in Phase I, and the first session of Phase II.

This study is the basis of two undergraduate Honours Theses (Carson Kivari and Stephanie Smithson) and one undergraduate Directed Study (Ashley Whidden). It is anticipated that the final results will be submitted for publication in a peer-reviewed psychology journal.

Study Procedures: To participate in Session 2 of Phase II of "The Drama of Television" study, you must have already participated in Session 1 of Phase II. The information that you provide in the present session will be linked to the data that you provided previously (i.e., Phase I, Session 1 of Phase II).

As a volunteer participant in Session 2 of Phase II of this study, you will be asked to complete a series of on-line questionnaires designed to assess attitudes and beliefs about mental health/disorders and treatment. In addition, there will be some questions regarding various psychosocial trait-like characteristics and your personal TV viewing habits. You will also be asked some general questions about your personal mental health and that of your family and acquaintances. Please note that there are no right or wrong answers to any of these questions. We are interested in your honest answers regarding your attitudes, beliefs, and experiences. While we ask that you try to answer all questions, if there are any questions that you do not feel comfortable answering, you are free to leave those questions blank. To help us know about our

research sample (e.g., the average age, number of males/females, etc.), you will also be asked to provide some information about your personal demographics. It will take you approximately 60 minutes to complete these questionnaires.

You will not receive any financial compensation for your participation. However, given that you are registered in a psychology course, and you volunteered through SONA, you will receive 1 mark in an eligible psychology class for participating in Session 2 of Phase II of this study.

You should also know that none of the researchers conducting this study are involved in any related conflicts of interest.

Confidentiality: Your participation and all information you provide will be kept confidential. All completed questionnaires will be kept in a secure location that is accessible only to the researchers involved in this study. Information from the completed questionnaires will be transferred to password-protected computer files for the purpose of data analysis. Again, only individuals directly involved in this study will have access to these computerized fil
The information that you provide will not be anonymous. That is, the researchers will know who provided what information. However, we will not identify you, or connect your name with your responses, to anyone not directly involved in this project. Moreover, in all publications and presentations of the research findings, no information that would allow someone to identify specific participants will be released. In addition, your individual responses will not be released.

It is also important for you to know that "Survey Monkey", a web-survey company that is located in the USA, is the host of this on-line session. This company is subject to U.S. laws; in particular, the US Patriot Act that allows authorities access to the records of internet service providers. Survey Monkey's servers record incoming IP addresses – including that of the computer that you use to access the survey. However, no connection is made between your data and your computer's IP address. If you choose to participate in the survey, you understand that your responses to the survey questions will be stored and accessed in the USA. The security and privacy policy for the Survey Monkey can be found at the following link: http://www.surveymonkey.com/Monkey_Privacy.aspx.

Risk and Benefits of Participating in this Study: There are no known risks or direct, personal benefits associated with participating in this study.

Contact for information about the study: If you have any further questions about the study you may Carolyn Szostak at 250-807-8736 or by email at Carolyn.Szostak@ubc.ca.

Contact for the concerns of research participants: If you have any questions or concerns about your treatment or rights as a research participant, you may contact the Research Subject Information line in the UBC Office of Research Services at 604-822-8598 or if long distance e-mail to RSIL@ors.ubc.ca.

Consent: Your participation in this study is entirely voluntary and you may refuse to participate or withdraw from the study at any time without penalty.

Consent: Your participation in this study is strictly voluntary. At any time during the study, you are free to stop your participation without penalty by clicking on the "exit this survey" button. If you wish to stop your participation after you have submitted the questionnaires, you may email Carolyn Szostak (Carolyn.Szostak@ubc.ca) and indicate that you would like to withdraw from the Drama of Television study. All data that belongs to you will then be destroyed.

Please print a copy of this consent form for your records by clicking on the “print” button.

If you agree to participate, please click on the Survey Monkey icon to begin the study session. This will indicate that you have read and understood the above information and have consented to participate in this study. If you do not wish to participate, please exit the Drama of Television study website.

Appendix G

ANOVA Tables for the Effects of Viewing Two Related Episodes

Table G1

Analysis of Variance for the IASMHS Help Seeking Propensity Subscale

Source	df	*F*	η	*p*
		Between subjects		
Character	1	.30	.01	.59
Error	34			
		Within subjects		
Time	2	5.40**	.25	.01
Time × Character	2	1.29	.07	.29
Error	33			

Table G2

Analysis of Variance for the IASMHS Psychological Openness Subscale

Source	df	*F*	η	*p*
		Between subjects		
Character	1	.22	.01	.64
Error	34			
		Within subjects		
Time	2	.60	.02	.55
Time × Character	2	.33	.01	.72
Error	68			

Table G3

Analysis of Variance for the IASMHS Indifference to Stigma Subscale

Source	df	*F*	η	*p*
		Between subjects		
Character	1	1.51	.04	.23
Error	34			
		Within subjects		
Time	2	.34	.01	.71
Time × Character	2	.14	.004	.87
Error	68			

Table G4

Analysis of Variance for the DES Anticipated Utility Subscale

Source	df	*F*	η	*p*
		Between subjects		
Character	1	.20	.01	.66
Error	34			
Time	2	7.26**	.18	.01
Time × Character	2	.22	.01	.80
Error	68			

Table G5

Analysis of Variance for the DES Anticipated Risk Subscale

Source	df	*F*	η	*p*
		Between subjects		
Character	1	.23	.01	.64
Error	34			
		Within subjects		
Time	2	.86	.03	.43
Time × Character	2	1.16	.03	.32
Error	68			

Appendix H

ANOVA Tables for Comparisons between the "Late" Episodes

Table H1

Analysis of Variance for the IASMHS Help Seeking Propensity Subscale

Source	df	*F*	η	*p*
		Between subjects		
Number of Episodes (E)	1	.02	.00	.89
Character (C)	1	.38	.01	.54
E × C	1	.25	.003	.62
Error	70			
		Within subjects		
Time	1	.06	.001	.81
Time × Episode	1	4.62**	.06	.04
Time × Character	1	.01	.00	.94
Time × Episode × Character	1	.01	.00	.91
Error	70			

Table H2

Analysis of Variance for the IASMHS Psychological Openness Subscale

Source	df	*F*	η	*p*
		Between subjects		
Number of Episodes (E)	1	.76	.01	.39
Character (C)	1	.08	.08	.78
E × C	1	.05	.001	.82
Error	70			
		Within subjects		
Time	1	5.15**	.07	.03
Time × Episode	1	.29	.004	.59
Time × Character	1	.23	.003	.64
Time × Episode × Character	1	.74	.01	.39
Error	70			

Table H3

Analysis of Variance for the IASMHS Indifference to Stigma Subscale

Source	df	*F*	η	*p*
		Between subjects		
Number of Episodes (E)	1	.003	.00	.95
Character (C)	1	2.46	.03	.12
E × C	1	.002	.00	.97
Error	70			
		Within subjects		
Time	1	.05	.001	.83
Time × Episode	1	.28	.004	.60
Time × Character	1	.04	.001	.84
Time × Episode × Character	1	.06	.001	.81
Error	70			

Table H4

Analysis of Variance for the DES Anticipated Utility Subscale

Source	df	*F*	η	*p*
		Between subjects		
Number of Episodes (E)	1	.52	.01	.48
Character (C)	1	.002	.00	.96
E × C	1	.14	.002	.71
Error	71			
		Within subjects		
Time	1	5.76**	.08	.02
Time × Episode	1	6.99**	.09	.01
Time × Character	1	.02	.00	.88
Time × Episode × Character	1	.28	.004	.60
Error	71			

Table H5

Analysis of Variance for the DES Anticipated Risk Subscale

Source	df	*F*	η	*p*
		Between subjects		
Number of Episodes (E)	1	2.28	.03	.14
Character (C)	1	1.66	.02	.20
E × C	1	.63	.01	.43
Error	71			
		Within subjects		
Time	1	.18	.002	.68
Time × Episode	1	.75	.001	.39
Time × Character	1	.36	.01	.55
Time × Episode × Character	1	1.84	.03	.18
Error	71			