ABSTRACT

SCHNEIDER, ABIGAIL MARIE. Media and Health: Media Exposure’s Link to Beliefs about Mental Health (Under the direction of Dr. Ryan Hurley).

Every year mental illness affects 43.8 million adults in the United States. Of that 43.8 million, less than 41% will receive formal treatment for mental illness. Research indicates that lack of treatment for mental illness decreases an individual’s quality of life while exacerbating symptoms. Stigma plays an important role in treatment avoidance. While treatment avoidance can be due to a variety of factors, stigma is one of the leading causes. Stigmatized information about mental illness can come from a variety of places. One important way that stigmatized portrayals of mental illness are seen is through television. Various researchers have analyzed television content and their findings indicate that television stigmatizes mental illness, individuals with mental illness, and when shown, treatment for mental illness. Research also shows that mental illness is a popular topic within television content due to its dramatic quality. Despite this, there has not been an academic study that examines the relationships between television portrayals of treatment for mental illness and people’s attitudes towards mental illness treatments and, more specifically, psychiatric facilities. This study attempted to fill that gap in the literature using a quantitative survey assessing individual media consumption, mental health beliefs, and behavioral intentions. The study specifically looked at the link between television portrayals of mental illness and psychiatric facilities and individual beliefs and behavioral intentions to utilize or recommend psychiatric services and facilities. Cultivation theory offers a theoretical basis to examine television content and individual beliefs about mental illness and psychiatric facilities. Cultivation theory traditionally focuses on how television as a whole impacts individual beliefs about reality. Results from this study largely support Cultivation Theory effects. Currently, there is emerging research in Cultivation theory using genre-specific
content. This study generally did not find evidence to support genre-specific effects.

Furthermore, this study extends Cultivation theory to look at mental illness content. Findings from this study indicate a need for mental health literacy.
Media and Health: Media Exposure's Link to Beliefs about Mental Health

by
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To my family.
BIOGRAPHY

Abigail Marie Schneider grew up between Richmond, Virginia and Raleigh, North Carolina. She received a BA in Communication from North Carolina State University in 2017. Abigail is interested in mental health and media effects. She is planning on continuing her education at the University of Illinois Urbana-Champaign.
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CHAPTER 1

According to the National Alliance on Mental Illness, approximately 43.8 million adults develop or experience mental illness every year (National Alliance on Mental Illness, 2016). Despite such a high rate of mental illness, many individuals do not seek treatment. In fact, in 2016, less than 41% of individuals diagnosed with mental disorders received any form of treatment (National Institute of Mental Health, 2017). This is a serious problem—lack of treatment can severely decrease a person’s quality of life while at the same time exacerbating symptoms (Rusch, 2005). Treatment avoidance is due to a variety of factors; research shows that preexisting beliefs about those dealing with and treating mental illness play an important role in treatment seeking behavior and television might perpetuate problematic beliefs (Andrade, Alonso, Mneimneh, Wells, Al-Hamzawi, Borges, et al, 2014; Corrigan, Markowitz, Watson, Rowan & Kubiak, 2003).

Some have argued that media programming is responsible for perpetuating problematic images of mental illness, those who suffer from mental illness, and its treatment (Kimmerle & Cress, 2013). If so, TV might be partially responsible for mental health treatment avoidance. Although there have been efforts to examine how mental illness is portrayed within television programming (Kimmerle & Cress, 2013; Signorielli, 1989), there is a gap in academic conversation surrounding the portrayal of treatment of mental illness. To date there has been no rigorous academic inquiry conducted regarding the depiction of psychiatric facilities and its effects on attitude and behavioral intentions to utilize such resources. Given the prevalence of mental illness in the United States, data that suggests previous beliefs affect willingness to receive treatment (Corrigan et al., 2003), and that TV might problematically impact peoples’
beliefs about mental illness and its treatment, it seems imperative to examine TV exposure and its link to beliefs about mental health and treatment seeking intentions.

The Bureau of Labor Statistics (2018) found that, on average, individuals spend two hours a day consuming television content and mass media consumption has been linked to several health-related beliefs and behaviors (Brown & Walsh-Childers, 2002). When it comes to mental illness, academic studies have established that television shows include a high rate of depictions of mental illness (Kimmerle & Cress, 2013). Specifically, Signorielli (1989) found that one-fifth of primetime dramas since 1969 include some form of mental illness depiction. Moreover, mental illness is not confined to adult television; Wahl (2003) explored children’s programming and discovered how mental illness is woven into these programs as well. Taken together, these studies show that it is difficult, if not impossible, to avoid depictions of mental illness—no matter what televised content is examined and what age group selected. With the development of new technology such as Digital Video Recording (DVR) and online streaming services, television viewing has increased, thereby increasing exposure to content with mental illness (Morgan & Shanahan, 2010).

In order to examine television’s potential to impact beliefs and behavioral intentions about mental health issues, I first delve into the literature surrounding mental illness and its problematic media depictions. Next, to understand beliefs about mental health treatment, it is prudent look at beliefs about the illness itself. Finally, I look at cultivation theory as a theoretical basis for this study before presenting the method used to examine TV’s potential connection to mental health beliefs and behaviors.
**Mental Illness in Media**

Mental illness has a long history in the mass media, making it a place many Americans learn about those dealing with mental illness, mental health professionals, and treatments for mental illness. As a result, television serves as a primary information method about mental health and mental illness for many individuals (Stuart, 2006; Wahl & Roth, 1982). This can be problematic because, as Sancho-Aldridge and Gunter (1994) found, viewers might adopt negative opinions of individuals with mental illness after seeing negative portrayals on television. Oftentimes those suffering from mental illness are characterized as “violent” or “aggressive” (Kimmerle & Cress, 2013 p. 933). This characterization poses significant issues because, not only is it not true, but as Vogel, Gentile, and Kaplan (2008) uncovered, exposure to negative stereotypes of individuals with mental illness leads to less tolerance and outright hostility. Furthermore, Corrigan and colleagues (2003) found that community members are more likely to avoid hiring a person with mental illness as well as support the enforcement of mandatory treatment after being exposed to negative portrayals of individuals with mental illness. Corrigan’s research also displayed that individuals who are more educated about mental illness do not display these same negative opinions and are more likely to offer support.

As mentioned before, children’s programming is not immune to harmful depictions related to mental illness. Lawson and Fouts (2004) found that 85% of animated Disney films referred to mental illness in some way. Within that 85%, 21% of films specifically referenced individuals with mental illness. Lawson and Fouts (2004) found that with such a preponderance of mental illness in children’s programming, children may be unconsciously formulating stereotyped views of mental illness at younger and younger ages. Wilson, Nairn, Coverdale, and Panapa’s (2000) study supports this finding. The study found that within children’s cartoons,
46.1% of cartoons referred to mental illness in some way, and those references were primarily derogatory in nature. When a mentally ill character is introduced in a show, many times their mental illness is the only dimension of their character. Essentially, individuals with mental illnesses on TV lack depth and humanity, while carrying the label of ‘mentally ill’ (Sieff, 2003; Wahl & Roth, 1982).

Mental illness is also exaggerated on television. Symptoms of mental illnesses tend to be overly dramatic and exceedingly rare conditions are shown disproportionately with the illusion they are common diagnoses (Pirkis, Blood, Trancis & McCallum, 2006). It is important to note that television over-exaggeration of symptoms may not be done maliciously, or to further stigmatize. Rather, these exaggerations are often to add dramatic flair for viewers (Signorielli, 1989). As Byrne (2009) found, truth is not what entertainment producers are striving for; rather the point is to produce and market content that viewers will watch. When building stories from true events, only the most sensational stories are chosen in order to capture more viewers, further contributing to dramatized views of mental illness (Walker, Robinson, Duros, Henle, Caverly, et al., 2010). Next, this paper will briefly touch on how psychiatrists have been portrayed within mass media.

**Psychiatrists in media.** Depictions of treatment facilities for mental illness have been grossly understudied; however, there has been research regarding medical professionals on television. As seen with other topics related to mental illness, oftentimes psychiatrists are cast to entertain and lure people into viewing desired content (Pirkis, Blood, Trancis & McCallum, 2006). Cialdini (1997) found that media depictions of scientists (and the scientific association as a whole) are foundational in forming opinions and knowledge. In fact, the media is so powerful that, when faced with facts contradicting the media, most individuals believe the media (Cialdini,
Moreover, McDonald, Wantz, and Firmin (2014) found that individual’s gleaned information about psychologists from movies (54% of the time) and television shows (33% of the time).

While medical professionals do not encompass the entire psychiatric care institution or mental health professionals, it is an important area of research to address. Schneider (1987) identified three major character tropes mass media uses to depict psychiatrists. Commonly used characters are: Dr. Dippy (seen as unwise, fanatic, and irrational), Dr. Wonderful (overly compassionate with virtually no time constraints or personal life), and finally Dr. Evil (neurotic, demented, and power hungry). Later, these types were expanded to encompass two more archetypes. Dr. Sexy (an oversexualized and sexually driven doctor) and the “rationalist foil” (psychologists who offer “scientific” explanations and are later proven wrong) have been added to the major tropes (Pirkis, et al, 2006 p. 532). Even if the psychiatrist does not fall into one of these categories, problems are found with their representation. As these tropes highlight, many psychiatrists are painted as violating boundaries, either verbally or sexually (Walter, 2004).

Finally, depictions of physicians often give the impression of an imbalanced power relationship where the doctor controls the patient (Sancho-Aldridge & Gunter, 1994), a relationship that those in need of treatment might not find welcoming.

**Treatment of mental illness in media.** When treatments for those dealing with mental illness are depicted, they rarely are shown in a realistic manner. One prominent issue that has been identified is the “cure-all” or instant fix for mental illness. Oftentimes television portrays mental illness as immediately treatable or even curable. This immediacy has been attributed to entertainment issues; prolonged treatment is not entertaining for viewers (Sancho-Aldridge & Gunter 1994). Another treatment, electroconvulsive therapy (ECT) is continually shown both
negatively and inaccurately (Pirkis, et al., 2006), with patients appearing to be painfully and dangerously shocked. Finally, “talk therapy” is another treatment depicted on television shows. Research shows talk therapy portrayed in two different lights: first, with a psychologist who uncovers the patient’s ‘actual’ issue, or second, with outdated talk treatments that are no longer commonly practiced (Furlonger, Papadopoulos, Chow & Zhu, 2015). Each of these depictions might serve to dissuade would-be patients from seeking treatment.

Wahl, Reiss, and Thompson (2018) looked at psychotherapy as portrayed in film and found that psychotherapy in movies is consistently distorted, and many films underrepresent “major important therapeutic approaches” such as cognitive and behavioral therapy (p. 244). Lack of representation, and therefore knowledge about available resources, can impede individual’s treatment attempts. The one major consistency across studies seems to be that mental health treatment is an uncomfortable, scary, and potentially even dangerous to the patient. Links between exposure to these types of messages and treatment seeking behaviors seem highly warranted.

Overall, mental illness and characters suffering from mental illness are painted in a problematically negative light in most media programming, including television, and the limited research that has examined a small proportion of treatments for mental illness and disorders suggests that mental health treatment is portrayed negatively as well (Goodwin, 2014; Pirkis, et al., 2006). According to cultivation theory, television depictions of reality (in this case, mental health issues) shape what viewers’ beliefs about reality. Given this information, I will now explore cultivation theory as a theoretical basis for this study.
**Cultivation Theory**

Though a number of mass communication theories might offer insight into mental health media effects, perhaps Gerbner’s cultivation theory most directly speculates about the translation of media content to “real-world” beliefs (Gerbner & Gross, 1976). Originated by George Gerbner, cultivation theory was a response to the creation and the mass popularization of television (Gerbner, 1998). At a time when it was dominated by 3 or 4 total channels, Gerbner (1986) argued that television served as the US’s primary storyteller; and, that, heavy television viewers might adopt beliefs consistent with television programming. In other words, cultivation theory’s primary premise asserts that individuals who watch more television are more likely to believe TV depictions of reality as true (Morgan & Shanahan, 2010). Gerbner and Gross (1976) found that viewers, even when knowing that television is fictionalized, give answers to questions that are more consistent with TV statistics than real-world ones (e.g., likelihood to be a victim of a violent crime).

Moreover, cultivation theory argues that it is the volume of television that impacts viewers, not specific content (Gerbner, 1998). Gerbner posited that TV depictions presented a consistent view of the world regardless of what programs were actually being consumed. Essentially, selectively viewing certain types of content is irrelevant; it is the amount of content viewed that results in ‘cultivation’ effects. This is in part due to Gerbner and colleagues (1986) assertion that television is a “centralized system of storytelling” that cuts across both educational (or literacy) boundaries and geographical location to serve a homogenous message to the broad population (p.18). When originally debuted, cultivation theory faced criticism from many scholars. Researchers rightfully took issue with the fact that the initial theory ignored differences in television content (Cohen & Weimann, 2000).
Gerbner’s research argues that watching television and incorporating that information into understandings of reality is not linear, but rather a dynamic ongoing process (Gerbner, Gross, Morgan & Signorielli 1986). The dynamic process can happen due to an individual’s use of “mental shortcuts” when processing information. Mental shortcuts can lead individuals to believe that television portrayals are accurate representations (Morgan & Shanahan, 2010). This is stereotyping; and, if depictions of a particular issues or groups of people are consistent and wrong, the effects of these portrayals could severely damage opinions of those depicted.

It is important to note that cultivation theory does not attempt to reflect behavior, rather, it is only predicting attitudinal change within individuals. Revisions to the theory have included the distinction between first-order effects and second-order effects. First order effects are defined as generalized ideas about reality. Second order effects are the actual views or attitudes that individuals hold. Direct, or personal experience, are often influential in the formation of second order effects (Minnebo & Van Acker, 2004). Although these effects are related, Potter (1991) established that first and second order effects are not substitutable; they are distinct entities. Researchers discovered that direct experience with a subject that contradicts television’s portrayal decreases the likelihood that cultivation effects will manifest (Pfau, Mullen & Garrow, 1995). In other words, if a viewer has real life experience and that experience is different than what is shown on television, the viewer is more likely to rely on their experience for information as opposed to what is shown on television. In the case that real-life experience and television match, resonance will occur in the viewer (Gerbner, Morgan & Signorielli, 1981). Resonance serves to magnify cultivation effects since the viewer is confirming their external reality with television programming.
Various academic studies have been conducted using cultivation theory. Jamieson and Romer (2014) found evidence supporting cultivation theory’s effects when they examined gun violence on television; however, it is important to note that while the study did confirm cultivation theory predicts emotional reaction (second order effects), it did not support first order effects, or individuals making assumptions about the broader world based on television (Jamieson & Romer, 2014). Stout, Villega, and Jennings (2004) found that the more television consumed, the more negative views towards individuals with mental illness were expressed. This finding is significant given that, as stated before, Morgan and Shanahan (2010) established that, with technological development, television viewing time is increasing. These findings are supported by other research suggesting that television consumption correlates with negative perceptions of mental illness (Garnello & Pauley, 2000).

Currently, there are no studies that examine television depictions of psychiatric treatment facilities and what effect that has on treatment seeking behavior. A small amount of research has examined building effects on patient satisfaction, suggesting that buildings might be able to cultivate opinions and impressions (Rogers, Edwards, Hudman, & Perera, 2016; Verderber, 1986; Ware, Snyder, Wright, & Davies, 1983). Using cultivation theory to frame this study will serve to expand the theoretical understanding of television cultivation from purely character related content and effects, to impressions of healthcare, treatments for mental illness alongside more conventional cultivation effects targets like healthcare workers and individual’s dealing with mental illness.

Television paints a vivid picture of mental illness that is highly negative and stigmatized; often scaring, or shaming individuals away from pursuing treatment. Some evidence on the portrayal of psychiatrists and psychologists reveal that those professions are ripe for
misinterpretation (Sancho-Aldridge & Gunter, 1994; Walter, 2004); also resulting in a decrease in willingness to utilize treatment services. Without any academic literature surrounding treatment of mental illness as depicted in television programming, no firm conclusions can be made about television’s potential impact on mental illness treatment-related beliefs. Therefore, exploration into this topic is important to help expand current literature and potentially, provide guidance toward a more responsible and accurate portrayal of mental illness and its treatment. These studies, taken in combination with content analyses of television content which show negative portrayals of individual’s with mental illness and mental illness professionals (Lawson & Fouts, 1994; Signorelli, 1989; Wahl, 2003), including the need for information regarding beliefs about mental health facilities, lead to the first research question:

**RQ1a:** Will heavy viewers of television shows significantly differ from light viewers in terms of how they rate mental health facilities, medical professionals, and individuals with mental illness?

While traditional cultivation theory does not distinguish between genre selection in television, I am interested in mental health-related television content. Emerging research using cultivation theory suggests that heavy viewing of a particular genre of television might matter (Cohen & Weimann, 2000; Morgan & Shanahan, 2010). Given this information, I pose the following research question:

**RQ1b:** Will heavy viewers of mental health images in television shows significantly differ from light viewers in terms of how they rate mental health facilities, medical professionals, and individuals with mental illness?

There is much research on seeking treatment for health conditions; but, research specifically on mental health issues suggests that fear is one important barrier to help-seeking
behavior (Kushner & Sher, 1991). Specifically, it is suggested that fears surrounding mental illness treatment and services could stem from misconceptions and stereotypes of treatments (Kushner & Sher, 1991, p. 197). Vogel, Wester, and Larson (2007) identified fear and anticipated risks of treatment as barrier to treatment seeking behavior. Research indicates that treatment for mental illness significantly improves quality of life (Rusch, Angermeyer, & Corrigan, 2005) yet many individuals do not receive treatment for mental illness likely due to fear resultant from negative attitudes (Wang, Lane, Olfson, Pincus, Wells, & Kessler, 2005). As discussed above, television depictions of mental illness are generally negative. Taking this research together, this leads to my first hypothesis and next research questions:

**H1: Negative attitudes towards mental illness will decrease treatment seeking intentions.**

**RQ2a: Will heavy viewers of television shows significantly differ from light viewers in terms of likelihood to seek professional mental health assistance?**

**RQ2b: Will heavy viewers of mental health images in television shows significantly differ from light viewers in terms of likelihood to seek professional mental health assistance?**

Research surrounding treatment-seeking behavior has identified social support as a primary source individual’s reach out to when experiencing mental and emotional problems (Lindsey, Joe, & Nebbitt, 2010; Rickwood & Braithwaite, 1994). Social support can be understood as an individual’s belief that they are loved and cared for, held in esteem, and integrated into a “network of communication and mutual obligation” (Cobb, 1976 p. 300). Social support groups are comprised of and individual’s family, friends, and outside community members (many of whom are service providers or professionals) (Pernice-Duca & Onaga, 2009).
When faced with mental illness, an individual is likely to consult with people in their social support group (Bilican, 2013), and from there, decide if more formal help is necessary (Angermeyer, Matschinger, & Riedel-Heller, 1999). Religious social support, in the form of clergy members and other faith leaders, also represent a group that is commonly consulted for help (Larson, Hohmann, Kessler, Meador, Boyd, & McSherry, 1988; Tepper, Rogers, Coleman, & Malony, 2001; Wang, Berglund, & Kessler 2003) and can either lead individuals to professional help or serve as a barrier to professional help (Neighbors, Musick, & Williams, 1998). For these reasons, it seems important to better understand TV’s ability to impact seeking or recommending mental health treatment. Based on this information, I propose the following research questions aimed at an individual’s social support:

**RQ3a:** Will heavy viewers of television shows significantly differ from light viewers in terms of likelihood to recommend seeking professional mental health assistance?

**RQ3b:** Will heavy viewers of mental health images in television shows significantly differ from light viewers in terms of likelihood to recommend seeking professional mental health assistance?

Cultivation theory is based on the argument that viewers believe television depictions are true and accurate reflections of reality (Gerbner & Gross, 1976). The following research question is posed to explore the relationship between individual beliefs about veracity of television depictions and mental illness variables:

**RQ4:** Do individual’s belief about veracity of television mental health depictions relate to beliefs about mental illness treatment, beliefs about mental health providers, and stigma towards mental illness?
Research indicates that familiarity with mental illness decreases both stigma and individual misbeliefs surrounding mental illness (Corrigan et. al, 2001; Holmes et. al, 1999). Critics of cultivation theory have also noted that real-life experience decreases cultivation effects in viewers (Cohen & Weimann, 2000; Morgan & Shanahan, 1997). In examine the relationship between familiarity and various mental illness variables, the following research question is proposed:

RQ5: Do individual’s familiarity with mental illness relate to beliefs about mental illness treatment, beliefs about mental health providers, and attitudes toward mental illness?
CHAPTER 2

Mental health issues are at the forefront of today’s media landscape and exposure might have a consequential impact on a person’s health decisions. A better understanding of the link between media exposure to mental health issues and their impact on beliefs and behaviors about mental health is imperative. Therefore, a survey was developed to assess these potential connections.

Sample

Respondents were recruited online via social media posts on Facebook and in person recruitment on a college campus. The survey was monitored until a sufficient sample size was reached \((N = 257)\). Researchers attempted to achieve representative proportions of sex/gender and race/ethnicity of respondents. Of the 257 respondents, 52.9% identified as male \((n = 136)\), 46.3% identified as female \((n = 119)\), and two respondents did not indicate sex. Respondents were 80.2% white \((n = 206)\), 8.6% Asian or Pacific Islander \((n = 22)\), 4.7% African American \((n = 12)\), 1.6% Hispanic or Latino \((n = 4)\), and 3.9% of respondents \((n = 10)\) identified as “other”. The average respondent age was 22.2 with a range from 18 to 77. Respondents were asked what religion, if any, they practiced. Responses were coded across broad categories including Christianity \((n = 130)\), Islam \((n = 2)\), Hindu \((n = 3)\), Jewish \((n = 5)\), no religion \((n = 60)\), and other \((n = 7)\).

Procedure

This study used a survey to answer the proposed research questions and hypothesis. The survey was distributed online using the software, Qualtrics. Respondents were first prompted to read and accept a consent from describing the survey. Next, respondents were asked a variety of questions regarding the amount of time they spent watching television content, perceptions of
television reality, and their familiarity with mental illness. After answering those questions, respondents were then asked questions regarding their beliefs and emotions towards various mental illness topics (treatment, facility/facility location). Next, respondents were prompted to answer questions regarding mental illness beliefs. Respondents were then asked questions regarding behavioral intentions. Finally, respondents answered a series of basic demographic questions.

**Independent Variables**

**Demographics.** Respondents were asked basic demographic questions. These questions include sex/gender, age, education level, annual household income, religious affiliation, occupation, and race/ethnicity.

**Time spent watching television.** Cultivation theory has distinguished between light viewers and heavy viewers (Gerbner, 1998). Respondents were asked how many hours a week they watch television (including content they watch using mediums other than a television set, like smartphones, laptops, etc). To reduce social desirability bias, the response option was a free response blank. The mean time was 9.83 hours, with a range from 0 to 40 hours. Responses were then split into two groups—one above the mean time and one below to present heavy viewers and light viewers respectively. The heavy viewer group contained 123 respondents and the light viewer group contained 121 respondents. While 257 respondents completed the survey, 13 did not provide an answer for time spent watching television, and their data was excluded from the study.

**Exposure to mental health media images.** Mental illness has a long history with media; oftentimes mental illness is used to introduce drama and excitement in television programming (Bryce, 2009; Signorielli, 1989). Studies have found mental illness to be a popular dramatic
theme within television content (Wahl & Lefkowits, 1989). Some research suggests (Wahl and Roth, 1982) exposure to images featuring individuals who have mental illness might impact attitudes, beliefs, and behaviors about mental illness and mental health. In order to measure exposure to these images, a scale was modeled after Harrison’s (2000) media exposure scale. Respondents were asked to indicate how frequently they watch sixteen television shows, rating each show between 0 (never) and 4 (regularly). Shows were selected by cross referencing rankings of current popular television shows (found on IMDb) and IMDb keyword search for shows including mental illness. Keywords included “psychiatric hospital”, “mental hospital”, “psychiatric institution” and “psychiatric facility” (IMDb, 2018). Of the sixteen shows, eleven contained depictions of psychiatric facilities and five did not.

Respondents were split into two groups—one above the mean time and one below to present heavy viewers and light viewers of mental health content respectively. The heavy viewer group contained 123 respondents and the light viewer group contained 109 respondents for a total of 236 responses. A total of 21 respondents did not provide sufficient data regarding mental health television content, and their data was excluded from the study.

**Familiarity with mental illness.** Research has found that familiarity with mental illness both decreases stigma of mental illness and works to dispel myths surrounding mental illness (Corrigan et. al, 2001; Holmes et. al, 1999). For the purposes of this study familiarity is understood as “knowledge and experience with mental illness” (Corrigan et. al, 2001 p. 220). Familiarity with mental illness was measured using the Level of Contact Report (Holmes et. al, 1999). The Level of Contact Report is comprised of twelve statements, each differing in situations regarding individuals with mental illness. For example, some statements assess personal experience with mental illness (“Family friend with mental illness”; “Relative has
mental illness”; “Lives with person who has mental illness”). Other statements look at mass media and mental illness (“Watched movie about mental illness”; “Watched television documentary about mental illness”). Answers were measured using check boxes for respondents to check all answer options applicable to themselves. Chronbach’s alpha of 0.64.

**Veracity of TV depictions.** Santo-Aldridge and Gunter (1994) developed a scale to measure public perception of psychiatric doctors with the influence of television depictions. Sancho-Aldridge and Gunter’s scale focused on a specific television program, however, this survey asked about television broadly. A version of their survey was used to measure respondent’s perceptions and beliefs about the accuracy of television portrayal of mental health practitioner. Items were changed to reflect generalized television content. For example, the item “I would imagine that real psychiatrists are similar to the characters portrayed in Shrinks” was changed to “I would imagine that real psychiatrists are similar to the characters on television shows”.

Responses were measured on a Likert-Type scale with five answer options across three choices (agree, not sure, and disagree). Respondents were asked to select one of the three answer options to nine statements. Statements include items examining respondent’s perception of television reality, respondent’s perceptions of psychiatrists on television, respondent’s perceptions of psychiatric problems in general, and respondent’s perceptions of educational value of mental illness portrayals on television. The scale had a Chronbach’s alpha of 0.80.

**Dependent Variables: Beliefs**

**Beliefs about mental health facilities.** Respondent beliefs regarding mental health facilities were measured using part of Angermeyer, Matschinger, and Schomerus’s (2013) scale. Seven items from the scale were included in this study. These items range in topic from
measuring beliefs about psychiatric hospitals (“Psychiatric hospitals are just like others”, “Psychiatric hospitals have more in common with prison than with other hospitals”), usefulness of psychiatric hospitals (“At a psychiatric hospital, you do not get treatment, but only sedation”, “Psychiatric hospitals offer the necessary protection to get over a mental crisis”), and outcomes from using psychiatric services (“If you are admitted to a psychiatric hospital, it is very difficult to get out again, no matter whether anything is wrong with you”). Responses were measured using a Likert Scale (0 = strongly disagree and 5 = strongly agree; Chronbach’s α = 0.71)

**Beliefs about mental health professionals.** Respondent’s beliefs regarding mental health practitioners were assessed using portions of Stuart, Sartorius, and Liinamaa’s (2015) scale. Stuart and colleagues examined media images of both psychiatry and psychiatrists to understand effects of media images. As part of their study, the researchers developed a scale to assess beliefs about psychiatry; the scale is divided into six different categories measuring perceptions of psychiatry in general to perceptions of psychiatric patients. This study used fifteen items aimed at opinions about psychiatrists and mental health practitioners. Responses were measured on a Likert Scale with answer options ranging from strongly disagree (1) to strongly agree (5) and had a Chronbach’s alpha of 0.86.

**Beliefs about treatment.** To assess respondent beliefs about treatment effect, a semantic differential scale was used. This scale, taken from Kim (2016), is a seven-point scale, designed to elicit participant beliefs. Respondents will answer the question “Seeing a psychiatrist for depression would…” for seven different word pairings. These word pairings range from “Foolish…wise” to “Helpful…useless” and “valuable…worthless” and had a Chronbach’s alpha of 0.81.
Attitudes. Negative attitudes toward mental illness was measured using a version of the Community Attitudes of Mental Illness Scale (CAMI), developed by Taylor and Dear (1981). The entire scale was included within this survey, totaling 40 items. Items ranged from topics like beliefs about location of mental facilities (“Mental health facilities should be kept out of residential neighborhoods”) to beliefs about individuals with mental illness (“Individuals with mental illness are a burden on society”). The original CAMI scale utilized identity-fist language (i.e. mentally ill individual) within statements. The language was changed to reflect person-first language for this survey (individual with mental illness). Responses were recorded using a Likert scale (0 = strongly disagree and 5 = strongly agree) and had a Chronbach’s alpha of 0.93.

Attitudes about treatment. An adaptation of Turner’s (2012) Parental Attitude Toward Psychological Service Inventory was used to assess respondent attitudes about treatment for mental illness. Items were changed to reflect friends and family relationship instead of a child/parent relationship. Statements from the original inventory were split to reflect statements about friends and family separately. For example, the item “If my child were to experience a psychological behavior problem, I would get professional help if I wanted to” was adapted to two separate statements; one using ‘family member’ in the place of ‘child’ and the other statement using ‘friend’. The full inventory is twenty-one items; fifteen were used in this survey, ranging from statements like “It would be relatively easy for me to take a family member to see a professional for help” to “I would not want to take a family member to a professional because what people may think”. Response options were measured on a Likert-scale with bases strongly disagree (1) to strongly agree (5) with Chronbach’s alpha of 0.85.


**Dependent Variables: Behavioral Intent**

**Likeliness to seek professional help.** To assess how likely individuals are to seek help for mental illness, this survey included a question based on Sheffield, Fiorenza, and Sofronoff’s (2004) scale, “In the next twelve months if you were to experience a mental illness, how likely are you to seek help from the following?”. The answer options included: psychologist, psychiatrist, doctor, hospital, clergy, or other. Each answer had response options ranging from one (1) to five (5) and had a Chronbach’s alpha of 0.75.

**Likeliness to recommend professional help.** Research shows that individuals are more likely to first seek opinions from their social support networks about mental health issues before reaching out to professionals (Bilican, 2013). Furthermore, individuals are more likely to seek professional help if referred by friends or family members (Angermeyer, Matschinger, & Riedel-Heller, 1999). To measure an individual’s likelihood to recommend other’s seek professional help for mental health problems or issues, this survey adapted Sheffield, Fiorenza, and Sofronoff’s (2004) scale. The following question was asked ("In the next twelve months how likely are you to recommend others seek help from the following?") with answer options: psychologist, psychiatrist, doctor, hospital, clergy, or other. Each answer had response options ranging from one (1) to five (5) and had a Chronbach’s alpha of 0.72.

**Data Analysis**

The main research questions answered include how exposure to health media-related content relate to both individual beliefs and behaviors and beliefs and behaviors individuals have regarding their social groups. In order to answer research questions 1-3, a series of independent samples t-tests were completed to test for a significant relationship between exposure to mental health media and beliefs about mental health facilities. In order to answer H1, a bivariate
correlation was run (Pearson’s R) to test for a significant relationship between perceptions of


television reality and beliefs about mental health facilities. Finally, research questions 4 and 5


were tested using bivariate correlations (Pearson’s r).
CHAPTER 3

Research question 1a explored the relationship between two groups (heavy viewers and light viewers) and ratings about mental health facilities, medical professionals, and individuals with mental illness. RQ1a was measured using multiple independent samples t-tests. Results indicate that heavy viewers ($M = 24.64$, $SD = 4.61$) were significantly different than light viewers ($M = 23.39$, $SD = 3.97$) rating of mental health facilities such that heavy viewers held more favorable beliefs about mental health facilities, $t(240) = -2.26$, $p = .025$, $d = -0.29$. Heavy viewers ($M = 58.45$, $SD = 8.60$) also rated medical professionals significantly different than light viewers ($M = 56.07$, $SD = 8.55$), such that heavy viewers held more favorable beliefs about mental health professionals, $t(238) = -2.16$, $p = 0.03$, $d = -0.28$. Finally, heavy viewers ($M = 56.77$, $SD = 8.87$) did not rate individuals with mental illness significantly different than light viewers ($M = 54.63$, $SD = 9.07$), $t(239) = -1.85$, $p = 0.07$, $d = -0.24$.

Research question 1b explored the relationship between two groups (heavy viewers of mental health content and light viewers of mental health content) and ratings about mental health facilities, medical professionals, and individuals with mental illness. RQ1a was measured using multiple $t$-tests. Results indicate that heavy viewers of mental health content ($M = 24.28$, $SD = 4.76$) did not rate mental health facilities differently than light viewers of mental health content ($M = 23.64$, $SD = 3.86$), $t(228) = -1.12$, $p = 0.26$, $d = -0.15$. Heavy viewers of mental health content ($M = 58.50$, $SD = 8.78$) rated medical professionals significantly different than light viewers of mental health content ($M = 55.53$, $SD = 8.41$) such that heavy viewers held more favorable beliefs about mental health professionals, $t(226) = -2.6$, $p = .01$, $d = -0.34$. Heavy viewers of mental health content ($M = 56.24$, $SD = 8.62$) did not rate individuals with mental
illness differently than light viewers of mental health content ($M = 55.01, SD = 9.26$), $t(227) = -1.04, p = 0.30, d = -0.14$.

Hypothesis 1 asserted that negative attitudes towards mental illness will decrease treatment seeking intentions. H1 was supported with Pearson’s r. There was a weak negative correlation between attitudes and treatment seeking behavior, $r = -0.18, p = .006$.

Research question 2a examined the difference between two groups (light viewers and heavy viewers) and likelihood to seek professional mental health assistance. RQ2a was tested with an independent t-test. Heavy viewers ($M = 17.65, SD = 5.02$) did not significantly differ from light viewers ($M = 18.57, SD = 5.10$) in likeliness to seek professional mental health assistance, $t(233) = .761, p = 0.16, d = 0.10$.

Research question 2b examined the difference between two groups (light mental health content viewers and heavy mental health content viewers) and likelihood to seek professional mental health assistance. RQ2b was tested with an individual t-test. Heavy viewers of mental health content ($M = 18.44, SD = 4.94$) did not significantly differ from light mental health content viewers ($M = 17.88, SD = 5.29$) in likeliness to seek professional mental health assistance, $t(222) = -0.82, p = 0.41, d = -0.11$.

Research question 3a questioned the difference between light viewers and heavy viewers and how likely individuals are to recommend others seek professional mental health assistance. RQ3a was tested using an independent samples t-test. Heavy viewers ($M = 18.18 SD = 4.63$) did not significantly differ from light viewers ($M = 17.48, SD = 4.97$) in likeliness to recommend others seek mental health assistance, $t(231) = -1.12, p = 0.26, d = -0.15$.

Research question 3b questioned the difference between light viewers of mental health content and heavy viewers of mental health content and likelihood to recommend others seek
professional mental health assistance. RQ3b was tested using an independent samples $t$-test. Heavy viewers of mental health content ($M = 17.74, SD = 5.02$) did not significantly differ from light mental health content viewers ($M = 17.78, SD = 4.57$) in likeliness to recommend others seek mental health assistance, $t(219) = 0.07, p = 0.95, d = 0.13$.

Research question 4 examined the relationship between individual familiarity with mental illness and beliefs about treatment for mental illness, beliefs about medical professionals, and stigma towards mental illness. RQ4 was tested using Pearson’s $r$ to find significant relationships between variables (see Table 1). Several correlations were significant. For example, familiarity with mental health issues was positively related to beliefs about mental health professional ($r = 0.19, p = .002$) and also positively related to beliefs about mental health facilities, $r = 0.20, p = .001$.

Research question 5 examined the relationship between individual beliefs about veracity of mental health television content and beliefs regarding treatment for mental illness, beliefs about medical professionals, and stigma towards mental illness. RQ4 was tested using Pearson’s $R$ to find significant relationships between variables (see Table 1). Several significant correlations were found. For example, veracity with mental health issues was negatively related to beliefs about mental health facilities ($r = -.26, p = .00$) and also negatively related to beliefs about mental health professionals, $r = -.15, p = .02$. 
CHAPTER 4

The results of the survey moderately cultivate theory’s primary premises regarding differences between light viewers and heavy viewers of television content in some cases, but not in others. While results indicated significant differences between light viewers and heavy viewers across RQ1, the differences were unexpected. Previous research indicated a strong negative bias towards mental illness in media content (Stout, Villegas, & Jennings, 2004; Stuart, 2006). Interestingly, results of this study indicated that heavy viewers of media content held significantly higher mean ratings of mental health facilities and medical professionals than light viewers on several variables. These results are contrary to cultivation theory’s premise that heavy viewers are more likely to espouse the same views and beliefs as seen on television programming if in fact television programming is generally negative.

These findings could indicate the need to study mental illness and media effects using contact theory. Respondents may respond more positively to mental health facilities simply because they have been exposed to them via television content. Individuals may have no real-life experience with mental health facilities otherwise. Sink and Mastro’s (2018) study about exposure to gay characters on television and individual beliefs about homosexuality supports this idea. Researchers found that exposure alone to gay characters on television lead to more positive attitudes towards homosexuality, even if individuals had no real-life contact.

Contrary to recent research, this study largely found no difference between light and heavy viewers when divided into genre specific content (Kahlor & Eastin, 2011; Potter & Chang, 1990). These results may be due to the television shows selected to measure health content and poor measurement. Future research is needed to establish valid and reliable measurement scales.
The results could also indicate a limitation of cultivation theory. Cultivation theory does present an issue in dividing viewers into light and heavy groups; respondents are divided based on mean viewing time resulting in viewers with similar viewing habits are counted as two different viewer types. The mean television viewing time for this study was 9.83 hours per week. Arguably, this time is low compared to other data (Bureau of Labor Statistics, 2018). Therefore, respondents were divided into light and heavy groups for the purposed of cultivation theory when respondents may all realistically fall into a light viewing category compared to the general public.

Results support the literature surrounding negative attitudes about mental illness; negative attitudes were found have a weak negative relationship to treatment seeking behavior. Given the importance of treatment for mental illness, this is a significant issue. What remains unknown is how television content is related to the formation of negative attitudes, especially given the findings that heavy viewers of television content held more positive beliefs about mental health facilities and medical professionals (psychologists and psychiatrists).

Extant research has identified other attitudes as barriers to treatment seeking behavior, such as perception of treatment as ineffective and a desire to deal with mental illness or emotional problems alone (Andrade, et al., 2014). These other factors might contribute to the phenomena observed in the results. Self-reliance and perceived lack of need for treatment has been found in previous research to interact with negative attitudes and potentially produce an individual reluctance to utilize mental health services (Jennings, Cheung, Britt, Goguen, Jeffirs, et al., 2015). If media depictions of mental illness are severe and negative; this could lead individuals to believe that treatment is only needed in severe cases and not a viable option. Wong and colleagues (2018) found that once and individual accepts the need for treatment, perceptions
of treatment and treatment seeking behavior dramatically increase. Perception of need may be an important factor that warrants future study.

Beliefs about mental health professionals, mental health facilities, and stigma towards mental health treatment were all significantly negatively related to individuals’ beliefs about the veracity of mental health television content. This finding indicates that as individuals saw mental health television content as portraying more accurate and true content, the mean rating of mental health professionals and mental health facilities decreased, indicating more negative perceptions. A similar phenomena was documented in Garnello and Pauley’s (2000) study.

Conversely, as respondents were more familiar with mental illness, the mean ratings of stigma towards mental illness went down. Finally, the strongest correlation was found between beliefs about mental health facilities and mental health professionals. Results from a bivariate correlation reveal a strong positive relationship between positive beliefs about mental health professionals and positive beliefs about mental health facilities. All together, these results show the importance of mental health literacy. Stout and colleagues (2004) used a meta-analysis to illustrate the power mass media has to shape perceptions of mental illness and propose educating journalists about mental illness to help change portrayals. Other studies have also established the importance of mental health literacy (Hökby, Mkrchian, Carli, & Wasserman, 2014; Kitchener & Jorm, 2002), and this study adds to that body of literature.
CHAPTER 5

While this study sheds light on a relatively understudied topic, there are limitations. First, the mean time that respondents spend watching television per week was low ($M = 9.83$) compared to national data trends (Bureau of Labor Statistics, 2018). Average consumption time is typically around 2 hours per day (or 14 hours per week), but for our sample heavy viewers were labeled such if they viewed more than 7 hours per week. The implications of this could be that our heavy viewers are more representative of light viewers in the broad public. Future research needs to do a better job of determining a true threshold for heavy viewing. This would benefit not only researchers interested in issues of mental health, but all researchers interested in cultivation and other similar effects theories. It is possible that the sample either spent less time watching television than the national average, or social desirability was a biasing factor. Whatever the case, without a clear threshold heavy viewers are left poorly defined in much of this type of research.

Third, the sample for this survey was gathered by convenience sampling, and therefore, may not be generalizable to the broad public. It is likely that convenience sampling captured a higher rate of college students which explains the young mean age ($M = 22.2$), and therefore biasing the sample towards a younger generation. Recruitment methods included posts on Facebook; thereby biasing the sample to friends of both the researcher and individuals who shared the post. Future studies using random sampling methods would help clarify the generalizability of this study.

Also, measuring exposure to mental health imagery is very challenging. Exposure was measured herein using self-report of exposure to shows with known mental health content; but, the nature and amount of mental health content in the shows selected varies greatly. Moreover,
the salience of the mental health content is highly variable. A measurement tool that can more accurately assess exposure to mental health content would be greatly useful for future work in this area.

Perhaps the most important limitation is that the majority of this work assumes that the minimal content analytic work that exists is correct, and that mental illness is presented extremely negatively the majority of the time it is presented in the media. Perhaps this image is less pervasive than it once was and media images about mental health have become more positive. Only detailed content analyses can answer that question and form a firmer base for future effects research.

Furthermore, this study is built on the assumption that depictions of mental health institutions are negative. Mental illness in the media has been studied (see (Kimmerle & Cress, 2013), however, no content analysis has examined mental health institutions. Future researchers need to conduct thorough content analyses to fully understand what mental health institutions look like in media. Clearly, based on the results of this study, there is some relationship between media content and individual beliefs about mental health institutions. A content analysis will help clarify and identify what the relationships are.

Despite the limitations, this study adds to the academic research body surrounding media effects and mental illness. Clear differences were found between heavy and light viewers and beliefs, as well as a moderate relationship between beliefs about mental health facilities and mental health professionals. Further research is needed to understand how individuals are interacting with mediated images and how to counteract stigmatized or inaccurate media messages.
Table 1.1
Summary of correlations, Means, and Standard Deviations for familiarity, Veracity, & other variables

<table>
<thead>
<tr>
<th></th>
<th>M(SD)</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>11</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Familiarity</td>
<td>4.38(2.10)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Veracity</td>
<td>24.75(6.06)</td>
<td>-.23**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Time watching TV</td>
<td>9.83(8.12)</td>
<td>.02</td>
<td>-.01</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Exposure Mntl Hlth media images</td>
<td>4.57(1.64)</td>
<td>-.04</td>
<td>-.07</td>
<td>-.07</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Beliefs about Mntl Hlth Professionals</td>
<td>57.20(8.60)</td>
<td>.19**</td>
<td>-.15*</td>
<td>.14*</td>
<td>-.01</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Likeliness to Seek Help</td>
<td>18.28(5.01)</td>
<td>.03</td>
<td>.08</td>
<td>-.10</td>
<td>-.02</td>
<td>.11</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Likeliness to Rec. others seek help</td>
<td>17.91(4.80)</td>
<td>.00</td>
<td>.05</td>
<td>.03</td>
<td>.02</td>
<td>.03</td>
<td>.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Attitudes</td>
<td>149.16(20.70)</td>
<td>.35**</td>
<td>-.36**</td>
<td>.15*</td>
<td>.04</td>
<td>.42**</td>
<td>-.18**</td>
<td>.07</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. Beliefs about Treatment</td>
<td>29.50(3.31)</td>
<td>.09</td>
<td>-.03</td>
<td>.12</td>
<td>-.63</td>
<td>.35**</td>
<td>.27**</td>
<td>.02</td>
<td>.11</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. Beliefs about Mntl Hlth Facilities</td>
<td>23.98(4.26)</td>
<td>.20**</td>
<td>-.26**</td>
<td>.15*</td>
<td>.09</td>
<td>.55**</td>
<td>.03</td>
<td>.00</td>
<td>.49*</td>
<td>.20**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11. Attitudes about Treatment</td>
<td>55.91(9.35)</td>
<td>.26**</td>
<td>-.21**</td>
<td>.16*</td>
<td>.04</td>
<td>.42**</td>
<td>.21**</td>
<td>.05</td>
<td>.42**</td>
<td>.35**</td>
<td>.37**</td>
<td></td>
</tr>
</tbody>
</table>

**. Correlation is significant at the 0.01 level (2-tailed).
*. Correlation is significant at the 0.05 level (2-tailed).
REFERENCES


Byrne, P. (2009). Why psychiatrists should watch films (or What has cinema ever done for psychiatry?). *Advances in psychiatric treatment, 15*, 286-296.


doi:10.1177/0095798409355796


APPENDIX
APPENDIX A

Questionnaire about Health and Media

North Carolina State University

INFORMED CONSENT FORM for RESEARCH

Title of Study: Media and Health
Principal Investigator: Abigail Schneider
Faculty Sponsor: Dr. Ryan Hurley

**What are some general things you should know about research studies?** You are being asked to take part in a research study. Your participation in this study is voluntary. You have the right to be a part of this study, to choose not to participate or to stop participating at any time without penalty. The purpose of this research study is to gain a better understanding of media and health beliefs. You are not guaranteed any personal benefits from being in a study. Research studies also may pose risks to those who participate. In this consent form you will find specific details about the research in which you are being asked to participate. If you do not understand something in this form it is your right to ask the researcher for clarification or more information. A copy of this consent form will be provided to you. If at any time you have questions about your participation, do not hesitate to contact the researcher(s) named above or the NC State IRB office as noted below.

**What is the purpose of this study?** The purpose of the study is to examine television media and health.

**Am I eligible to be a participant in this study?** In order to be a participant in this study you must be at least 18 years old. You cannot participate in this study if you are under 18 years old.

**What will happen if you take part in the study?** If you agree to participate in this study, you will be asked to answer a series of questions on a survey regarding media and mental health. It is suggested that you take this survey in a private location and use a web browser in incognito/private mode.

**Risks and Benefits** There are minimal risks associated with participation in this research. The study is focused on mental health and images of mental health. This could potentially be upsetting to individuals with experience related to mental health issues. Should you feel upset by the study, you can reach out to the NC State Counseling Center (919-515-2423). You can also get support from the National Suicide Prevention Lifeline (1-800-273-8255). There are no direct benefits to your participation in the research. Your participation may result in the indirect benefit of gaining self-understanding.

**Confidentiality** The information in the study records will be kept confidential to the full extent allowed by law. Data will be stored securely on the researcher’s password protected computer.
No reference will be made in oral or written reports which could link you to the study.

**Compensation** You will not receive anything for participating.

**What if you are a NCSU student?** Participation in this study is not a course requirement and your participation or lack thereof, will not affect your class standing or grades at NC State.

**What if you are a NCSU employee?** Participation in this study is not a requirement of your employment at NCSU, and your participation or lack thereof, will not affect your job.

**What if you have questions about this study?** If you have questions at any time about the study itself or the procedures implemented in this study, you may contact the researcher, Abigail Schneider at amschnei@ncsu.edu or Dr. Ryan Hurley at rjhurley@ncsu.edu or (919)-513-7403.

**What if you have questions about your rights as a research participant?** If you feel you have not been treated according to the descriptions in this form, or your rights as a participant in research have been violated during the course of this project, you may contact the NC State IRB Office via email at irb-director@ncsu.edu or via phone at 1.919.515.4514. You can also find out more information about research, why you would or would not want to be in research, questions to ask as a research participant, and more information about your rights by going to this website: http://go.ncsu.edu/research-participant

**Consent To Participate** “I have read and understand the above information. I have received a copy of this form. I agree to participate in this study with the understanding that I may choose not to participate or to stop participating at any time without penalty or loss of benefits to which I am otherwise entitled.”

- [ ] Consent (1)
- [ ] Do not consent (2)

This first set of questions asks you to reflect on your media use.

In the average week, how many hours do you spend watching television (on any device)?
Thinking of the entire run of the following TV shows, please indicate how many episodes have you seen.
<table>
<thead>
<tr>
<th>Show</th>
<th>Every episode (1)</th>
<th>Most of the episodes (2)</th>
<th>About half of the episodes (3)</th>
<th>Few episodes (4)</th>
<th>None (5)</th>
</tr>
</thead>
<tbody>
<tr>
<td>House (House)</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>New Girl (New Girl)</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Grey's Anatomy (GA)</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>The Sinner (Sinner)</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Game of Thrones (GoT)</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>American Horror Story (AHS)</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Orange is the New Black (Orange)</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Supernatural (Supernatural)</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Jane the Virgin (Jane)</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Law and Order: Special Victims Unit (SVU)</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
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<tr>
<td>Criminal Minds (Criminal)</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Television Show</td>
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<td>--</td>
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</tr>
<tr>
<td>Riverdale (Riverdale)</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>13 Reasons Why (13RW)</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>The X-Files (X-Files)</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>Gossip Girl (GG)</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>Legion (Legion)</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
</tbody>
</table>

The following section will ask you about your perceptions regarding television programming.
Please indicate the extent to which you agree or disagree with the following statements about television reality and mental illness.
<table>
<thead>
<tr>
<th></th>
<th>Disagree (1)</th>
<th>(2)</th>
<th>Not Sure (3)</th>
<th>(4)</th>
<th>Agree (5)</th>
</tr>
</thead>
<tbody>
<tr>
<td>I would imagine that real psychiatrists are similar to the characters on television shows. (Q18_1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I would imagine that real psychiatrists deal with patients' problems in similar ways to those shown on television shows. (Q18_2)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I would imagine that real psychiatric patients are similar to the characters portrayed on television shows. (Q18_3)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Television deals realistically with psychiatric problems. (Q18_4)</td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>
The characters of psychiatric patients on television shows are believable. (Q18_5)

I would imagine that real psychiatric patients present with similar problems to those shown on television shows. (Q18_6)

Television shows contribute to greater understanding of psychiatric problems. (Q18_7)

I would imagine that many people suffer or share some of the same mental health problems presented on television shows. (Q18_8)
I learnt something about a particular psychiatric or emotional problem that I didn't know before through television shows.
(Q18_9)

End of Block: Media Questions

Start of Block: Mental Health Familiarity Questions

This set of questions will ask you about your knowledge and experiences, if any, with mental health and mental illness.
Please read each of the following statements carefully. After you have read all the statements below, place a check by any of the statements that describe your exposure to persons with a mental illness.

☐ I have watched a movie or television show in which a character depicted a person with mental illness. (1)

☐ My job involves providing services/treatment for persons with a severe mental illness. (2)

☐ I have observed, in passing, a person I believe may have had a severe mental illness. (3)

☐ I have observed persons with severe mental illness on a frequent basis. (4)

☐ I have a mental illness. (5)

☐ I have worked with a person who had mental illness at my place of employment. (6)

☐ I have never observed a person that I was aware had a severe mental illness. (7)

☐ My job includes providing services to persons with a severe mental illness. (8)

☐ A friend of the family has mental illness. (9)

☐ I have a relative who has mental illness. (10)

☐ I have watched a documentary about mental illness. (11)

☐ I live with a person who has mental illness. (12)

End of Block: Mental Health Familiarity Questions

Start of Block: Mental Health Attitudes

This set of questions will ask you about your attitudes and beliefs regarding individuals with mental illness, mental illness, and treatment.
For the following question please answer if seeking treatment for mental illness would be:

<table>
<thead>
<tr>
<th></th>
<th>1 (1)</th>
<th>2 (2)</th>
<th>3 (3)</th>
<th>4 (4)</th>
<th>5 (5)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Foolish</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Wise</td>
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<tr>
<td>Harmful</td>
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<td></td>
<td>Beneficial</td>
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<tr>
<td>Good</td>
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<td></td>
<td></td>
<td></td>
<td>Bad</td>
</tr>
<tr>
<td>Helpful</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Useless</td>
</tr>
<tr>
<td>Valuable</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Worthless</td>
</tr>
<tr>
<td>Pleasant</td>
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<td></td>
<td></td>
<td></td>
<td>Unpleasant</td>
</tr>
<tr>
<td>Enjoyable</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Unenjoyable</td>
</tr>
</tbody>
</table>
In the next twelve months if you were to experience a mental illness, how likely are you to seek help from the following:

<table>
<thead>
<tr>
<th></th>
<th>Extremely likely (5)</th>
<th>Somewhat likely (4)</th>
<th>Neither likely nor unlikely (3)</th>
<th>Somewhat unlikely (2)</th>
<th>Extremely unlikely (1)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Psychologist (1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Psychiatrist (2)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Doctor (3)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hospital (4)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Clergy (5)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other (6)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
In the next twelve months how likely are you to recommend others seek help from the following:

<table>
<thead>
<tr>
<th></th>
<th>Extremely unlikely (1)</th>
<th>Somewhat unlikely (2)</th>
<th>Neither likely nor unlikely (3)</th>
<th>Somewhat likely (4)</th>
<th>Extremely likely (5)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Psychologist (1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Psychiatrist (2)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Doctor (3)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hospital (4)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Clergy (5)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other (6)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Please indicate the extent to which you agree or disagree with the following statements about mental illness treatment.
<table>
<thead>
<tr>
<th>Strongly agree (5)</th>
<th>Somewhat agree (4)</th>
<th>Neither agree nor disagree (3)</th>
<th>Somewhat disagree (2)</th>
<th>Strongly disagree (1)</th>
</tr>
</thead>
<tbody>
<tr>
<td>It would be relatively easy for me to recommend a family member see a mental health professional for help. (1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><img src="." alt="Circle" /></td>
<td><img src="." alt="Circle" /></td>
<td><img src="." alt="Circle" /></td>
<td><img src="." alt="Circle" /></td>
<td><img src="." alt="Circle" /></td>
</tr>
<tr>
<td>It would be relatively easy for me to recommend a friend see a mental health professional for help. (2)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><img src="." alt="Circle" /></td>
<td><img src="." alt="Circle" /></td>
<td><img src="." alt="Circle" /></td>
<td><img src="." alt="Circle" /></td>
<td><img src="." alt="Circle" /></td>
</tr>
<tr>
<td>I would want a family member to get professional help if they were worried or upset for long periods of time. (3)</td>
<td></td>
<td></td>
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</tr>
<tr>
<td><img src="." alt="Circle" /></td>
<td><img src="." alt="Circle" /></td>
<td><img src="." alt="Circle" /></td>
<td><img src="." alt="Circle" /></td>
<td><img src="." alt="Circle" /></td>
</tr>
<tr>
<td>I would want a friend to get professional help if they were worried or upset for long periods of time. (4)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><img src="." alt="Circle" /></td>
<td><img src="." alt="Circle" /></td>
<td><img src="." alt="Circle" /></td>
<td><img src="." alt="Circle" /></td>
<td><img src="." alt="Circle" /></td>
</tr>
</tbody>
</table>
If I believed a family member was having a mental breakdown, my first decision would be to get professional help. (5)

If I believed a friend was having a mental breakdown, my first decision would be to get professional help. (6)

Had a family member received treatment for a psychological or behavioral problem, I would feel that it should be "kept secret". (7)
Had a friend received treatment for a psychological or behavioral problem, I would feel that it should be "kept secret". (8)

I would be uncomfortable seeking professional help for a family member because people (friends, family, coworkers, etc.) might find out about it. (9)

I would be uncomfortable seeking professional help for a friend because people (friends, family, coworkers, etc.) might find out about it. (10)
There is something admirable in the attitude of people who are willing to cope with their conflicts and fears without seeking professional help. (11)

I would feel uneasy going to a professional because of what some people would think. (12)

I would be embarrassed if my neighbor saw me going into the office of a professional who deals with mental health concerns. (13)

People should work out their own problems instead of getting professional help. (14)

Seeking professional help is a sign of weakness. (15)
Please indicate the extent to which you agree or disagree with the following statements about mental illness treatment.
<table>
<thead>
<tr>
<th>Psychiatry is not a genuine, valid branch of medicine. (1)</th>
<th>Strongly agree (5)</th>
<th>Somewhat agree (4)</th>
<th>Neither agree nor disagree (3)</th>
<th>Somewhat disagree (2)</th>
<th>Strongly disagree (1)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Psychiatry is not evidence-based. (2)</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Psychiatrists have too much power over their patients. (3)</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Psychiatrists can do very little for patients. (4)</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Psychiatrists are difficult to talk to. (5)</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Psychiatry is filled with people whose medical skills are of low quality. (6)</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Psychiatry is unscientific. (7)</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Psychiatric patients should be treated in specialized facilities. (8)</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
</tbody>
</table>
Psychiatric patients should not be treated in general hospitals. (9)

Psychiatric treatments are not as effective as in other branches of medicine. (10)

Most who receive psychiatric treatments do not find them helpful. (11)

Psychiatric hospitals are little more than prisons. (12)

Psychiatrists can do very little for their patients. (13)

Most psychiatrists are not attentive enough to physiology. (14)

Psychiatrists are difficult to talk to. (15)
Please indicate the extent to which you agree or disagree with the following statements about treatment for mental illness.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Disagree (1)</th>
<th>Neutral (2)</th>
<th>Agree (3)</th>
</tr>
</thead>
<tbody>
<tr>
<td>I would obtain professional help if having mental breakdown</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Talking about psychological problems is a poor way to solve emotional problems.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I would find relief in psychotherapy if in emotional crisis</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A person coping without professional help is admirable</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I would obtain psychological help if upset for a long time.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I might want counseling in the future.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A person with an emotional problem is likely to solve it with professional help.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Psychotherapy would not have value for me.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A person should work out his/her problems without counseling.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Emotional problems resolve by themselves</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
This set of questions will ask you about your attitudes and beliefs regarding mental health treatment facilities.

Please indicate the extent to which you agree or disagree with the following statements about mental health facilities.
<table>
<thead>
<tr>
<th>Strongly agree (5)</th>
<th>Somewhat agree (4)</th>
<th>Neither agree nor disagree (3)</th>
<th>Somewhat disagree (2)</th>
<th>Strongly disagree (1)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Psychiatric hospitals are hospitals just like others. (1)</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Psychiatric hospitals offer anything but treatment. On the contrary, they make you positively ill. (2)</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>At a psychiatric hospital, you do not get treatment, but only sedation. (3)</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Psychiatric hospitals offer the necessary protection to get over a mental health crisis. (4)</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Psychiatric hospitals have more in common with prisons than with other hospitals. (5)</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>
If you are admitted to a psychiatric hospital, it is very difficult to get out again, no matter whether anything is wrong with you. (6)

Psychiatric hospitals are necessary to protect society from persons with mental illness. (7)
Please indicate the extent to which you agree or disagree with the following statements about mental health facilities and their location.
<table>
<thead>
<tr>
<th></th>
<th>Strongly agree (5)</th>
<th>Somewhat agree (4)</th>
<th>Neither agree nor disagree (3)</th>
<th>Somewhat disagree (2)</th>
<th>Strongly disagree (1)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Individuals with mental illness should be isolated from the rest of the community. (1)</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Locating mental health facilities in a residential area downgrades the neighborhood. (2)</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>No one has the right to exclude individuals with mental illness from their neighborhood. (3)</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Having individuals under psychiatric care within residential neighborhoods might be good therapy, but the risks to residents are too great. (4)</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
</tbody>
</table>
I would not want to live next door to someone who has been mentally ill. (5)

Residents should accept the location of mental health facilities in their neighborhood to serve the needs of the local community. (6)

Local residents have good reason to resist the location of mental health services in their neighborhood. (7)

Locating mental health services in residential neighborhoods does not endanger local residents. (8)

Mental health facilities should be kept out of residential neighborhoods. (9)
Residents have nothing to fear from people coming into their neighborhood to obtain mental health services. (10)

Mental hospitals are outdated means of treating the mentally ill. (11)

It is frightening to think of people with mental problems living in residential neighborhoods. (12)

As soon as a person shows signs of mental disturbance, they should be hospitalized. (13)

More tax money should be spent on the care and treatment of the mentally ill. (14)
The best therapy for many individuals under psychiatric care is to be part of a normal community. (15)

Mental illness is an illness like any other. (16)

Individuals with mental illness are a burden on society. (17)

Individuals with mental illness are far less of a danger than most people suppose. (18)

There is something about individuals with mental illness that makes it easy to tell them from normal people. (19)

Individuals with mental illness have for too long been the subject of ridicule. (20)
A woman would be foolish to marry a man who has suffered from mental illness, even though he seems fully recovered. (21)

As much as possible, mental health services should be provided through community-based facilities. (22)

Less emphasis should be placed on protecting the public from individuals with mental illness. (23)

Increased spending on mental health services is a waste of tax dollars. (24)

Individuals under psychiatric care need the same kind of control and discipline as young children. (25)
We need to adopt a far more tolerant attitude toward individuals with mental illness in our society. (26)

Individuals with mental illness should not be treated as outcasts of society. (27)

There are sufficient existing services for individuals with mental illness. (28)

Individuals under psychiatric care should be encouraged to assume the responsibilities of normal life. (29)

The best way to handle the individuals with mental illness is to keep them behind locked doors. (30)
Our mental hospitals seem more like prisons than like places where individuals with mental illness can be cared for. (31)

Anyone with a history of mental problems should be excluded from taking public office. (32)

Individuals with mental illness do not deserve our sympathy. (33)

Individuals with mental illness should not be denied their individual rights. (34)

One of the main causes of mental illness is a lack of self-discipline and will power. (35)
We have the responsibility to provide the best possible care for individuals with mental illness. (36)

Individuals with mental illness should not be given any responsibility. (37)

Virtually anyone can have mentally illness. (38)

It is best to avoid anyone who has mental problems. (39)

Most women who were once patients in a mental hospital can be trusted as babysitters. (40)

End of Block: Mental Health Facility Attitudes

Start of Block: This final set of questions is designed to gather more information about you.

What is your age in years?
What is your race/ethnicity? Mark all that apply

○ Black/African American (1)
○ Hispanic/Latino (2)
○ Asian/Pacific Islander (3)
○ Native American (4)
○ White/Caucasian (5)
○ Other (6)

What is your highest level of education?

○ Some high school (1)
○ High school graduate/GED (2)
○ Some college or tech/trade school (3)
○ Associates' degree (4)
○ Bachelors' degree (5)
○ Masters’ or Doctoral degree (6)

What is your present religion, if any?

______________________________________________________________________________
What is your biological sex?

- Male (1)
- Female (2)
- Other (3)

What is your current relationship status?

- Single (1)
- In a Committed Relationship (2)
- Married (3)
- Widowed (4)
- Divorced (5)
- Separated (6)

End of Block: This final set of questions is designed to gather more information about you.