HUMOR AND STIGMA: AN EXAMINATION OF VIEWER PERCEPTIONS OF
STIGMATIZED CHARACTERS ON SCREEN

Elise Marie Stevens

A dissertation submitted to the faculty at the University of North Carolina at Chapel Hill in
particial fulfillment of the requirements for the degree of Doctor of Philosophy of Mass
Communication in the School of Media and Journalism.

Chapel Hill
2016

Approved by

Francesca Dillman Carpentier

Rhonda Gibson

Nori Comello

Cynthia Hoffner

Ar Raney

ABSTRACT

Elise Marie Stevens: Humor and Stigma: An Examination of Viewer Perceptions of Stigmatized
Characters On Screen
(Under the direction of Francesca Dillman Carpentier)

Combining the literature on humor, affect, the parasocial contact hypothesis, and stigma,

this dissertation examines the relationship between humor and mental illness stigma in

entertainment programming. The model predicted that cognitive and affective humor would

predict positive affect and approach of the character with a mental illness. Positive affect and

approach were hypothesized to predict parasocial interaction. Parasocial interaction was

hypothesized to predict less social distance and less stigma. Study 1 examined this relationship

using the television program, *Enlightened*. Two conditions (one with more humor and one with

less humor) were presented to participants ($N = 106$). Results showed that more perceived

cognitive (surprise) and affective (dark) humor predicted positive affect. Those who perceived

less disparagement humor were more likely to want to approach the character. Approach

predicted PSI and PSI predicted less stigma towards those with mental illness and predicted less

social distance. As participants perceived more affective humor, they also felt more stigma

towards those with mental illnesses. Study 2 ($N = 82$) replicated much of these results with

different stimuli from the program, *Girls*. Specifically, affective and cognitive humor predicted

positive affect (*note*: cognitive humor approached significance). Disparagement humor predicted

approach tendency. Approach tendency predicted PSI and PSI predicted less social distance

between the viewer and a person with a specific mental illness. There was a direct relationship

between perceiving more affective humor and reporting more stigma towards those with mental illnesses. Implications for entertainment, theory, and health communication are discussed in addition to limitations and directions for future research.

To my parents, Mark and Laura Stevens, my first and most important teachers.

ACKNOWLEDGMENTS

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

CHAPTER 1: INTRODUCTION AND LITERATURE REVIEW

Introduction

Humor is an innate human quality (Martin, 2007). It is a powerful tool that can facilitate coping with stressful situations (e.g., Warner, 1991), enhance romantic relationships, and even increase our ability to learn new information (for review see Martin, 2007). Humor has been extensively studied in the realm of education, advertising, and health, all of which illuminate the copious positive benefits of humor, including reduction of anxiety and stress, encouragement to think (Martin, 2007) and increased liking of the person delivering the humor (Torok, McMorris, & Lin, 2004). Less research has focused on humorous entertainment and its potential effects in reducing stigma on particular groups. However, humor might be an effective means for reducing stigma of these groups if it can be used to facilitate connectedness with characters representing the stigmatized group on screen—without severely minimizing the group's struggles.

Generally, entertainment research has supported the fact that audiences learn from media, and therefore, media help shape audiences' views of reality (e.g., Rubin, 2009). As part of their "lessons," media present depictions of minority or marginalized groups that perpetuate and promote stigmatization of these groups, which are often defined according to race, ethnicity, and/or gender distinctions (e.g., Collins, 2011; Monk-Turner, Heiserman, Johnson, Cotton, & Jackson, 2010), but which can also be defined by mental health conditions (Daniel Yanklovich Group, 1990; Lopez, 1991; U.S. President's Commission on Mental Health, 1978). Humor may have the ability to reduce stigma for many marginalized groups; however this dissertation

focuses on an important group in America today. Whereas much research has focused on the stigmatization of race, ethnicity, and gender, less entertainment research exists about onscreen mental health depictions and the ways to combat the stigmas that media portray when representing mental disorders.

Nearly 17.6 million Americans of all ages have a mental disorder, yet despite their prevalence and detrimental effects, mental health conditions are under diagnosed and undertreated (Agency for Healthcare and Research Quality (AHRQ), 2000). This lack of treatment, given the prevalence, is possibly because negative perceptions about mental illness deter individuals from seeking treatment (AHRQ, 2000; Byrne, 2000) or deter others from helping those with a mental disorder. For example, popular beliefs about mental health conditions are that the conditions are self-inflicted and that people with a mental disorder are dangerous (Crisp, Gelder, Rix, Meltzer, & Rowlands, 2000). These stigmatizing beliefs are arguably being created and perpectuated, at least in part, by media representations (Daniel Yanklovich Group, 1990; Lopez, 1991; U.S. President's Commission on Mental Health, 1978).

Although the potential for detrimental effects of mediated mental health depictions are present in the current media landscape, entertainment media might also be used to develop positive perceptions of these individuals. For instance, an individual can indirectly experience what it is like to know a person with a mental health condition simply by spending time with a character with a mental disorder in a television program (Hoffner & Cohen, 2012, 2015; Schiappa, Gregg, & Hewes, 2005; see Allport's 1954 intergroup contact theory). In accordance with the parasocial contact hypothesis, this connection might allow the viewer to feel less of a barrier between his or her group and the one portrayed on the screen (Chung & Slater, 2013; Green & Brock, 2002). The breaking down of barriers in this way opens viewers up to not only

experience what it is like to be in other groups, but also helps viewers *understand* what it is like to be in other groups. As such, media can be used as a way to decrease stigma and facilitate a perceived relationship between viewers and stigmatized characters through parasocial contact with these characters (e.g., Hoffner & Cohen, 2012, 2015; Schiappa e. al., 2005).

Given the fact that entertainment writers have begun to make an effort to depict mental illness in a more humanizing way (Fawcett, 2015), coupled with research that suggests humor can enable people to open up more (Martin, 2007), this dissertation explores how the inclusion of humor in entertainment programming could actually help lessen stigmas associated with mental disorders when viewers feel positively and approach-oriented, which in turn may encourage parasocial bonds with characters identified as having a mental health condition.

This dissertation begins with a discussion of mental illness stigma and media. Next, I discuss ways to combat stigma by drawing from the parasocial contact hypothesis. Then, I discuss how viewers might connect with characters identified as having a mental disorder through parasocial interaction when a positive and approach-oriented feeling is felt, and I propose how that might result in mental health stigma reduction, especially when humor is involved. Finally, I discuss the definition and types of humor and hypothesize how they might result in stigma reduction.

Literature Review

Stigma

Media have the ability to create and perpetuate stigma, and since media serve as a primary source of information about mental illness (Daniel Yanklovich Group, 1990), they have the ability to further reinforce mental illness stigma. A plethora of relevant research supports this claim. In 1957, Nunnally found that mass media depictions mirrored the lay public's opinions

3

about those with mental illnesses. Domino (1983) surveyed people before and after seeing the film *One Flew Over the Cuckoo's Nest* and found that after viewing, respondents had a substantially greater negative view of those with mental illnesses. In 1989, Wahl and Lefkowits found that a made for TV movie, *Murder by Reason of Insanity*, caused those who watched the film to have more negative views of those with mental illnesses. Thornton and Wahl (1996) found exposing subjects to an article where a patient with mental illness committed a violent crime made subjects have more negative views towards the mentally ill individuals than did the control groups. Although portrayals of those with mental disorders are typically false and negative, audiences often believe the depictions and in turn develop stigma towards those individuals (Berlin & Malin, 1991; Gerbner, 1980; Nunnally, 1957; Wahl & Harman, 1989).

Stigma is defined as an attribute that is "deeply discrediting" (Goffman, 1963, p. 3) and devalued (Crocker et al., 1998), which causes the stigmatized person to be seen as tainted or discounted when the attribute is contrary to the social norm (Stafford & Scott, 1986). People label and distinguish human differences, oftentimes oversimplifying those differences. Labeling and oversimplification of this sort is how stigma is initiated. For instance, labeling an individual as either mentally ill or not mentally ill exhibits this oversimplification (Fullilove, 1998), as this labeling ignores the complexity and spectrum of mental disorder.

This oversimplification is also often exhibited in media. A study of children's animated Disney movies found that a majority of movies characterized mental health conditions according to individual thoughts, actions, traits, ideas, or clothing; 86% of the movies mentioned mental illness as a way to denigrate or set apart a character (Lawson & Fouts, 2004), or in other words, as a character's one distinguishing devalued or discrediting attribute. Even adult programming has this similar tendency to stigmatize in a way that focuses on a devalued attribute. Overall,

one-third of prime-time television programs depict mental illness in a way that stigmatizes a character's specific attribute (Wahl & Roth, 1982). In sum, this definition of stigma being a singular attribute is exhibited in media programming today.

As stigma can be defined as an attribute, stigmatization is explained as a process. According to Link and Phelan (2001), (1) people distinguish and label the human difference, (2) dominant societal beliefs deem that the label is undesirable and thus form a stereotype, (3) the person is labeled as being part of a group that is not their own, (4) labeled people experience status loss and discrimination. This process of stigmatization incorporates many different terms similar to it. For example, stereotype, prejudice, and discrimination are often seen as subcategories of the overarching process (Link & Phelan, 2001). As previously mentioned, stigma can be defined as a single dimension or attribute that goes against a social norm, and therefore is devalued, and discredited (e.g., Goffman, 1963; Crocker, Major, & Steele, 1998). That attribute is then linked to a negative belief—a stereotype – which is attributed to all people perceived to belong to the same group as the stigmatized individual. In other words, stigmas are the attributes and a stereotype is the linked generalized belief (Link & Phelan, 2001). When the generalization is linked to a negative belief, which can be automatic and preconscious, the stereotype leads to prejudice, which is the unfavorable opinion resulting from the negative stereotype. Prejudice creates an "us vs. them" mentality. Prejudice has also been seen as a tool for dominance meaning individuals can use it for social or political control (Link, Phelan, & Dovidio, 2008). As a result of prejudice, discrimination can ensue. Discrimination is the actual treatment of the stigmatized person, in which there is a loss of status and power for the person with the stigmatized attribute (Corrigan, 2004).

Link et al. (2008) have conceptualized stigmatization as *all* of those relating parts, not just the devalued attribute. In fact, they specifically related this conceptualization to mental health stigma. They describe the process of stigmatization as the oversimplification of an attribute, its link to a *stereotype*, the resulting *prejudice* of "us vs. them," and *discrimination* and status loss. For the remainder of this dissertation and in line with the shortcut term "stigma" used by Link et al. (2008), the process of stigmatization will be referred to as simply "stigma."

Stigma has been studied extensively in terms of race/ethnicity and gender on television, in motion pictures, and in advertising (e.g., Collins, 2011; Monk-Turner et al., 2010). Because media have a relatively short time span to explain a character, oversimplification of attributes can be quite prevalent. This can be alarming considering media are a primary source of information about mental illness (Daniel Yanklovich Group, 1990; Lopez, 1991; U.S. President's Commission on Mental Health, 1978).

Once an individual oversimplifies the attribute and perceives the difference as not fitting within typical social standards, individuals connect the difference to a negative stereotype about people who possess that characteristic. Stereotypes can be negative or positive, but often with the case of mental illness, the stereotypes are negative. For instance, people think that individuals with mental illnesses are dangerous (Crisp, Gelder, Rix, Meltzer, & Rowlands, 2000). Media characters with mental illnesses are portrayed as pathetic, which causes audiences to laugh at them (Byrne, 2000), or characters are shown as violent (Diefenbach, 1997; Signorielli, 1989). These depictions are also usually false and negative, compared to how real people with these disorders behave (Berlin & Malin, 1991; Gerbner, 1980; Nunnally, 1957; Wahl & Harman, 1989). Thus, these negative mischaracterizations perpetuate stigmatization of a mental disorder and encourage individuals to develop negative stereotypes about people with mental disorders.

Labeled persons who are set apart experience status loss and discrimination. Status loss and discrimination often lead to unequal outcomes such as reduced work opportunities, education, housing, and psychological well-being (Druss, Bradford, Rosenheck, Radford, Krumholz, 2000; Link 1987). Discrimination in this case includes outcomes such as rejecting a job application due to an individual having a mental illness. For instance, one study showed that those who watched more television that portrayed people with mental illnesses as negative and violent were less likely to support building a mental health facility in their neighborhood (Diefenbach & West, 2007). Examples such as this show that there are certain characteristics audiences take into account when making judgments about those with mental illness.

Specifically, there are six different dimensions that audiences might take into consideration when considering stigma (Jones Farina, Hastorf, Markus, Miller, & Scott, 1984). The first dimension, *concealability*, is how apparent the attribute is to others. For instance, some mental illness conditions can barely be recognizable to others, such as having depression. This element is particularly important in media when considering mental conditions that are relatively invisible in everyday life are made more visible in a character on television simply because the audience must understand the character quickly and thus see the condition in some way.

The second dimension, *course*, refers to how reversible a stigmatized condition might be. For example, a mental illness such as depression may be seen as reversible, while schizophrenia may not be seen as reversible. Thus, those with less reversible mental conditions can often experience more stigmatization. Although media research on the course of mental illness is limited, other stigmatized groups such as recovering drug addicts have been explored. In one study, participants had less social acceptance of a recovering drug addict who relapsed (i.e.,

trying to reverse the course of the condition) as compared to another stigmatized character who was a single mother (Chung & Slater, 2013).

Third, *disruptiveness* refers to whether the attribute strains interpersonal interactions. For instance, a media character dealing with depression may not answer calls or try to interact with other characters because of their depression. Programming containing humor can especially take advantage of mental condition's disruptiveness. For instance, *Monk* is a program that depicts a detective with Obsessive Compulsive Disorder (OCD). His condition can sometimes become disruptive when interacting with others he works with (i.e., stopping to touch the door knob eight times). In HBO's *Girls*, Hannah explains to her therapist how her OCD keeps her awake at night, referring to herself as a "zombie." Therefore, she is too tired to interact with people during the day, disrupting her interactions.

Fourth, *aesthetics* refers to how pleasing or attractive one's perceptions are about the defining attribute. For instance, aesthetics is how likely someone is to find the attribute "disgusting."

Fifth, *origin* of the attribute refers to how the condition came to be, where people who are seen as creating the attribute on their own (i.e., blaming the person for having depression) are more heavily stigmatized than people who are not believed to have created the attribute on their own. In one study, a recovering drug addict was less socially accepted than a single mother, although both are stigmatized groups (Chung & Slater, 2013). This difference may be because people believe being addicted to drugs is something to blame on the individual, while being a single mother could be because of other reasons out of the character's control. Additionally, some viewers may actually attribute the origin of something like a mental illness incorrectly especially because mental illness is not the fault of the individual.

Lastly, the sixth dimension is *peril*. Peril is how dangerous the stigmatized individual is seen to be because of the attribute they possess (Jones et al., 1984). This element is especially related to media depictions. Media characters with mental disorders are often depicted as violent and dangerous (e.g., Nunnally, 1957; Wahl & Roth, 1982), further stigmatizing the group.

Operational Definitions of Stigma

Stigma has been measured in different ways. Social distance (Link, 1987) refers to an individual's willingness to interact with a usually stigmatized individual in different relationships, such as a tenant, co-worker, neighbor, member of the same social circle, someone to be recommended for a job, in-law, or childcare provider (Bogardus, 1925). Stigma has also been operationalized as how much people believe in specific traits of a group of people (Angermeyer & Matschinger, 2005). For example, people might be asked to what extent they agree or disagree that a person with a mental health condition lacks willpower, chooses unfavorable courses of action, is dangerousness, and is unpredictable. Relatedly, people might also be asked about the attributes they believe a person with a mental health condition possesses, such as being "insincere or sincere" and "cold or warm" (Crisp et al., 2000; Nunnally, 1961; Olmstead & Durham, 1976). The target is more stigmatized when beliefs about that target are more negative rather than positive. Presence of certain emotional reactions to a person with a mental disorder can also signify endorsement of stigmatizing beliefs (Corrigan, Markowitz, Watson, Rowan, & Kubiak, 2003). For instance, feeling pity, fear, anger, or anxiety might account for behavioral tendencies toward people with mental disorders, such as prosocial behavior or segregation (Angermeyer & Matschinger, 1996; Corrigan et al., 2003).

For purposes of this study, stigma will be conceptualized as Link and Phelan's (2001) four-component process: (1) people distinguish and label a human difference, (2) dominant

9

societal beliefs deem that label is undesirable and thus form a stereotype, (3) the person is labeled as being part of a different group than their own, and (4) stigmatized individual experiences status loss. The first scale will signify how willing participants are to interact with those with mental illnesses using the social distance scale (Bogardus, 1925). The second scale will assess participants' stigmatizing views of mental illness (Griffiths, Christensen & Jorm, 2008), including questions pertaining to concealability, course, disruptiveness, aesthetics, and origin (Jones et al., 1984).

Participants in this study will be randomized into conditions of more humorous or less humorous television episodes with characters exhibiting a mental illness. After viewing the program, participants will be asked about social distance and stigma towards those with mental illnesses. This relationship will be testing with the inclusion of specific mediators that might explain the relationship between more humor and less stigma.

Parasocial Interaction

Past research has provided a guide to help combat the aforementioned types of stigma. According to intergroup contact theory (Allport, 1954), members of opposing groups can lessen intergroup hostility and increase positive attitudes towards each other if there is contact between groups. The optimal conditions for decreasing hostility and increasing positive attitudes are cooperation, common goals, equal social status, and institutional support. Numerous studies support contact theory. Meta-analyses of these studies found that most research testing intergroup contact theory resulted in a reduction of prejudice towards a stigmatized group in general, even across cultures (Pettigrew & Tropp, 2006; Pettigrew, Tropp, Wagner, Christ, 2011).

One of the biggest critiques of contact theory is that people who are segregated usually have no motivation to intermingle. Thus, the extended contact model (Wright, Aron, McLaughlin-Volpe, & Ropp, 1997) was created to account for the benefits of contact that could accrue from vicarious experiences. The model posits that if a person engages in a positive interaction with a member of a group that is not their own and shares that experience with members of their own group, positive perceptions of the group that is not their own may ensue for the member of their own group who just heard about the experience. The model even extended to vicarious contact through video stimuli, where seeing a character representing a different group resulted in improved attitudes toward that group (Mazziotta, Mummendey, & Wright, 2011).

Although the model received support, scholars critiqued it for the fact that people may not know anyone in their own group that has befriended someone in a different group. In order to take contact theory forward, imagined intergroup contact theory (Pettigrew, 1997, 1998, 2008) was developed. Imagined intergroup contact theory proposes that a mental simulation of a social interaction with a member or members of another group can substitute for face-to-face contact. Specifically, the simulation must be a positive encounter with the member of the different group that activates concepts normally associated with a successful interaction (e.g., smiles, politeness). Additionally, the participant must imagine an encounter and not just think about the other group. Simulating a *positive* experience further increases the chances that positive attitudes towards the other group will be conceived.

Barriers between two groups of people are softened in several ways as explained through contact theories. First, contact can help make the other group feel more part of the other group by projecting positive attributes of the other group (Stathi & Crisp, 2008; Turner et al., 2007).

Second, contact can reduce anxiety that occurs when meeting a person from another group by modeling or suggesting how to act during the encounter (Islam & Hewstone, 1993; Pettigrew & Tropp, 2008). Contact can also enhance knowledge about the other group and increase a person's ability to empathize or take the perspective of a member of another group (Pettigrew & Tropp, 2008).

Using contact theory as a guide, the parasocial contact hypothesis was proposed, which posits that if the barrier between two groups can be softened through face-to-face and vicarious interaction between the groups, then a mediated context of interaction should also work (Schiappa et al., 2005). In other words, if audiences have a parasocial bond with a media character in a different group than their own, the audiences may see that other group, in general, more positively.

The parasocial contact hypothesis has been tested and illuminates some positive effects that might result from viewing stigmatized characters on television. In one study, three different programs involving humorous instances, *Six Feet Under*, *Queer Eye for the Straight Guy*, and *Dress to Kill* all resulted in respondents feeling a parasocial bond with a gay character (part of a traditionally stigmatized group) and consequently, participants had more positive attitudes toward gay men in general (Schiappa et al., 2005). In another study, parasocial bonds increased and sexual prejudice decreased for those who watched *Will & Grace*, a program with leading gay characters (Schiappa, Gregg, & Hewes, 2006). Of particular interest, one study showed that those who felt a stronger parasocial bond with Monk, a character with obsessive-compulsive disorder (OCD) had less prejudice towards those with mental illnesses in general (Hoffner & Cohen, 2015). In each of these studies, it is important to note that parasocial bonds were operationalized in different ways ranging from "positive parasocial response" (Schiappa et al., 2005) to

parasocial relationships (Hoffner & Cohen, 2015). For that reason, I review the parasocial literature and propose the definition I will be using in the current study.

Horton and Wohl (1956) first coined the term "parasocial interaction" (PSI) to describe the intimate, one-sided, close relationship viewers feel with a media personality. Viewers feel as if they might seek guidance from the personality, see the personality as a friend, imagine being part of the personality's world, and/or have a desire to meet the personality (Rubin, Perse, & Powell, 1985). PSI specifically pertains to a viewer's emotional, cognitive, and behavioral responses to a media character (Schramm & Hartmann, 2008). According to the Two-Level Model of PSI (Klimmt, Hartmann, & Schramm, 2006), these responses happen immediately when encountering a media personality. Thus, a viewer will always respond to a personality, but may not necessarily interact. The intensity and breadth of the response equates to the underlying process of PSI.

Scholars suggest that PSI occurs due to the need for social interaction (McQuail, Blumler, & Brown, 1972) and is a form of social cognition (Giles, 2002). In other words, interactions with media characters serve similar purposes and are processed in the same way as face-to-face interactions. Preceding studies demonstrated that PSI can be perceived by audiences when the media characters are soap opera actors (Rubin & Perse, 1987), comedians (Auter, 1992), television shopping hosts (Grant, Guthrie, & Ball-Rokeach, 1991), and favorite television personalities of any type (R. B. Rubin, & McHugh, 1987; Turner, 1993).

PSI is different than a multitude of terms such as parasocial relationships (PSR), identification, psychological merger, wishful identification, and simple liking of a character. PSI is an interaction with a media personality that can involve attention allocation, comprehension and reconstruction, activation of prior media or life experiences, anticipatory observations,

evaluations, and finally construction of relations with the personality (Klimmt et al., 2006). Repeated exposure to the character leads to more of these PSI processes and further allows audiences to learn more about the media personality (Klimmt et al., 2006). Continued interactions with the personality leads the audience member to form a relationship schema, which includes information about the personality and how the audience member sees the quality of the relationship (Klimmt et al., 2006; Baldwin, 1992). Therefore, PSI is typically an initial interaction process, and PSR is a more fully formed relationship.

Identification is another concept that has been used to describe bonds with media characters. Identifying with the character can be conceptualized as wishful identification or as psychological merger. Whereas parasocial interaction is responding to the media personality as an interaction partner (Horton & Wohl, 1956), wishful identification is a desire to be like the media personality (Hoffner, 1996; Hoffner & Buchanan, 2005). Identification as psychological merger has been conceptualized as the viewers imagining themselves in the shoes of the media personality (Rosengren & Windahl, 1972) or as temporarily replacing their own identity with the media personality (Cohen, 2001). Although identification and PSI are conceptually different, literature has shown that just taking the perspective of the character or "being in their shoes" contributes to the formation of a bond (Brown, Basil, & Bocarnea, 2003; Cohen, 2006; Klimmt, et al., 2006). Thus, the terms are related, but still distinct.

Affinity and liking of a media personality has also been seen in the PSI literature. Affinity and liking of a media personality is when the audience feels a liking for the character but does not necessarily want to be their friend or identify with them. This can often apply to fantasy characters where PSI is too strong of a description for the bond (Giles, 2002). Affinity

and liking can lead to a stronger parasocial bond (A.M. Rubin, et al., 1985; A.M. Rubin & Step, 2000), yet should not be used interchangeably with the term PSI.

In terms of the present study, PSI is defined as interaction with a media character and not a relationship that has formed over a series of interactions (parasocial *relationship*). In this study, PSI is defined as cognitive, affective, and behavioral reactions to a media character. Using an adapted form of Rubin et al.'s (1985) scale participants will be asked about cognitive aspects of the interaction pertaining to understanding the main character. Affective elements of the scale will ask about feeling sorry for the character when the character makes a mistake. Behavioral elements of the scale demonstrate how much the participant would actually want to meet the person in the real world.

Using elements of the parasocial contact hypothesis, this study will examine PSI as an antecedent of reduced stigmatization of people with mental illnesses. Specifically, it will test whether greater PSI with a character with mental illness results in less stigma towards people with that mental illness and people with mental illnesses in general. Additionally, it explores perceived humor mechanisms that may contribute to the building of PSI.

Humor

Humor comes in many different forms. Typically, messages that are perceived as humorous involve puns, understatements, jokes, ridiculousness, satire, and/or irony (Kelly & Solomon, 1975). Responses to these messages can be categorized into three different types of humor mechanisms: cognitive, affective, disparagement (Keith-Spiegel, 1972; McGhee, 1974; Speck, 1991; Wicker, Barron, & Willis, 1981; Wyer & Collins, 1992).

Cognitive humor. The cognitive humor mechanism is focused predominately on the element of surprise. Specifically, cognitive humor is perceived as an incongruity of events,

which inevitably elicits a surprise response from the audience (Cho, 1995; Suls, 1972). Messages that contain this type of humor involve the audience predicting the outcome of an event, but then are caught off guard when an inconsistency takes place (Cho, 1995; Suls, 1972). This process is mainly psychological and explained through the incongruity resolution model (Suls, 1972; Vandaele, 2002). According to the model, a joke is set up in a way in which the audience can easily predict the ending of a story. When the punch line of the joke does not provide the predicted outcome, the audience is surprised. The audience members then try to find a cognitive rule concerning how the punch line fits with the setup of the joke. If a rule is found, laughter and amusement ensues (Suls, 1972).

Cognitive humor processing involves (1) the mental schema of the target audience, (2) the target audience's problem solving modes, and (3) the target audience's fantasy-reality distinction (Alden, Mukherjee, & Hoyer, 2000). A schema is a mental representation that describes the attributes of an object or event in a person's mind. This mental representation is used as a categorization tool or "library" where the mind keeps and stores its information. Schemas make everyday thinking easier. Every time people think about a specific object (for example a pencil), they do not need to go through all the thoughts regarding what the object looks like or is used for because they already have this information stored in a schema. Thus, schemas are automatic representations individuals use to make mental shortcuts.

With regard to the use of schemas in cognitive humor processing, imagine that someone mentions a bird in conversation. The person he or she is speaking with might think about a bird as an animal (e.g., wings, beak). This is a mental schema of how we think a bird should or would look, sound, and act, among other things. Unless the person hears otherwise, a bird will always hold that schema of bird characteristics. If a picture shows a bird with airplane propellers as

wings, this picture creates incongruity within the mental schema. Since it is probably not something a person thinks about often, this combination of objects (bird and propellers) is surprising, yet fits the mental schema of flight. This initial incongruity, which can easily be reconciled, makes the picture funny to a person viewing it (Martin, 2007).

The example above shows how perceived cognitive humor requires the activation of two different schemas simultaneously, between which the viewer must make a distinction. Yet, the viewer can use problem-solving skills to find a commonality or relationship between the two schemas. In the case of the prior example, the two schemas are how the bird looks (first schema) and propellers for an airplane (second schema). The mismatch is often found funny when the second schema (usually found in the punch line) is less important, trivial, or absurd so that the audience can make the fantasy-reality distinction (Wyer & Collins, 1992). For example, the audience knows that a bird with propeller wings is impossible, yet propellers may work in the same way as wings. Therefore, two schemas are activated and since the second schema made some sense but the audience could make the fantasy-reality distinction, the audience will find it funny. The following is another example of cognitive humor.

> *Two vultures board an airplane, each carrying two dead raccoons. The stewardess looks*
>
> *at them and says, "I'm sorry gentlemen, only one carrion allowed per passenger."*

The above example illustrates the three elements of perceived cognitive humor. With regards to the first element, mental schema of the target audience, the audience likely has a general schema of boarding an airplane and bringing baggage onboard. It is also likely that the audience has a mental schema of vultures. These two schemas activate simultaneously. The play-on-words further activate these two schemas. The second element, the audience's problem solving modes work to rectify this simultaneous activation of schemas. The audience considers

17

that a vulture boarding a plane may be similar to a person boarding a plane, but has a different "carry-on" (or carrion). Likely, the words carry-on and carrion have a large semantic distance in the audience's mind, although the two words sound the same. The fantasy-reality distinction is applied when the audience realizes this simultaneous activation and accepts that a vulture boarding a plane with a different type of "carry-on" is trivial, and thus a fantasy. The joke is then found as humorous.

Affective humor. The affective humor mechanism is explained in terms of psychological arousal from thematic content such as sex, aggression, or strong affective states. Audience members seek to regain homeostasis in a more pleasurable level of arousal, which results in the driving force behind humor. Strong emotions such as excitement, fear, and anger can cause an increase in audience arousal. The message inducing arousal is then followed up with a humorous message with arousal-relieving components. Those components bring the viewer back to the pleasurable level of arousal, which results in perceived affective humor (Cho, 1995). This type of humor essentially relieves the tension of the high arousal state. The processing of humor affectively occurs alongside the cognitive processing of humor, in that a person recognizes the humor via a dual triggering of two schema and uses fantasy to make the connection between these schemas, and the level of amusement the person derives from this reconciliation can be explained by the release in tension the joke theme or setup caused. Thus, the key differentiation between cognitive and affective humor mechanisms is that the former deals with mental processes in recognizing a stimulus as humorous, whereas the latter deals with emotional response to the stimulus.

Theories associated with affective humor include tension release (Eastman, 1936), arousal (Berlyne, 1969), psychodynamic theory (Freud, 1905/1960), and freedom theories

(Mindess, 1971). Tension release theory posits that humor results when psychological tension is reduced. It suggests that people laugh while getting tickled because of the built-up tension just before the tickler begins tickling (Eastman, 1936). In other words, tension is often built-up by strong emotions and laughter is used as a way to reduce that tension.

Arousal theory suggests that the setup of the joke can make the audience aversive to the stimulus because of the intense elevation in arousal. After the punch line ensues, the arousal level goes back to a pleasurable level resulting in perceived humor (Berlyne, 1969). One study examined through the scope of arousal theory found that those who were given arousal-inducing drugs were more likely to rate comedic performances as funnier than their less aroused counterparts (Schachter & Wheeler, 1962), exhibiting that individuals use humor to relieve high arousal states.

Psychodynamic theories hypothesize that the root of humor lies within the subconscious and allows the person to feel free to express thoughts that are usually seen as forbidden or against social norms, such as discussion of taboo topics that raise arousal levels (e.g., sex, illness, or death) (Freud, 1905/1960). For example, people may feel like the topic of death is not discussed frequently in society. Thus, when the topic is mentioned in the context of a joke, it is funny due in part to the fact that the topic is not entirely socially acceptable.

Freedom theory is an amplification of psychodynamics, in which the audience finds freedom when listening to or making jokes. In turn, this activity involves varying levels of arousal (Mindess, 1971). In other words, joking about taboo or serious topics results in feelings of freedom, which are pleasurable to the individual.

Tension release (Eastman, 1936), arousal (Berlyne, 1969), psychodynamic (Freud, 1905/1960), and freedom theories (Mindess, 1971) share common threads that explain affective

19

humor processing. When affective humor is employed, tension and arousal are initially increased, which causes audiences to feel the need to bring both back to optimal levels, which coincides with both tension release and arousal theories. Additionally, topics used in affective humor often are emotionally charged and sometimes taboo. These topics fit squarely into the topics discussed in both psychodynamic and freedom theories, in which audiences feel liberated by listening to or discussing topics contrary to social standards. In sum, affective humor describes a phenomenon where arousal and tension is increased with the mention of highly affective topics and the subsequent joke about that topic that returns tension and arousal to pleasurable levels (Cho, 1995).

Emotionally charged topics, such as death and illness, can often be the theme in affective humor, making this type of humor very popular in dark comedies. For example, when a television program simply mentions the idea of death or a feared illness, the audience can experience an increase in arousal. When the mention is followed up by a humorous message, the arousal level decreases back to an optimal level. The following is an example of affective humor:

Man in hospital bed says, "I saw a blinding light before I suddenly came back to life!"

Grim reaper holding a flashlight says, "Damn batteries."

The joke above gives an example of how affective humor is employed. The mention of a man in a hospital bed mentioning a blinding light is a reference to death, which is not a common discussion topic in society. Because of this reference to a taboo topic, levels of arousal and tension may increase, and the audience may need to bring their levels back to pleasurable levels, as explained in arousal and tension release theory; when the punch line of the joke ensues (grim reaper with flashlight), the built up arousal and tension return to more pleasurable levels. This joke might not be as funny if the theme of death were to be omitted, yet the triggering of two

20

schemas still existed. For example, imagine that the man is in a chiropractor's office waiting his turn to be treated and hears an oddly large amount of snapping and crackling coming from the treatment room just as someone says "It's your time now." It is also revealed that, on the other side of the door, the chiropractor is eating Rice Krispies. Now imagine the grim reaper is behind the door eating the cereal.

Another example that is less entangled with cognitive humor is part of a eulogy actor Tom Hanks gave about his friend Michael Clark Duncan.

> *Using a spot-on imitation of Duncan's voice, Hanks shared a story Duncan once shared about growing up in Chicago and wanting to join a gang. After approaching the gang and saying he wanted in, Duncan got beaten up, then was admitted to the gang – and went home with the gang's sign (a red spot) sprayed into his Afro. Duncan's mom did not take this well – and after meting out some punishment of her own, sent him back to tell the gang members, "My Mama says I can't be in your gang"* (Dawn, 2012).

The above example brings up strong emotional components about serious issues that are not typically talked about humorously. First, the context of the humor was a eulogy for Duncan. Second, the story was about joining a gang. Tension and arousal are already higher than normal conversations considering Hanks is speaking about a person who has passed away. Tension and arousal continue to increase as Hanks mentions joining a gang. Tension and arousal are released and brought back to optimal levels when Duncan tells the gang members that he cannot be in the gang because his mother said so. This joke differs a bit from the grim reaper joke in that the humor derived from the punch line (that his mother has sent Duncan back to tell the gang members) is not solely due to surprise at the introduction of a new schema and the subsequent merging of the two activated schemas.

Humor is an effective coping strategy when dealing with negative emotions (e.g., Freud, 1928; Martin & Lefcourt, 1983; Vaillant, 2000) and as a means of down-regulating negative emotions (e.g., Gross, 1998; Gross & Thompson, 2007). Coincidently, these negative emotions can be brought about by topics in affective humor and when a joke ensues, the topics can be coped with and the negative emotions can be down-regulated. Specifically, cognitive reappraisal refers to changing the meaning of a highly emotional topic so the impact is lessened (Samson, Glassco, Lee, & Gross, 2014). Thus, affective humor may be assisting in this type of cognitive reappraisal.

Relatedly, the affective humor mechanism is not mutually exclusive from the cognitive mechanism; people often derive humor through the affective mechanism while also deriving humor from the cognitive mechanism. Rather, cognitive humor is processed with regard to incompatible schemas in the mind (Suls, 1972), and affective humor is focused on audience arousal levels and emotions. Scales traditionally reserved for cognitive humor measurement, such as surprise, resolution, and originality tend to correlate highly with scales traditionally reserved for measuring the affective mechanism, namely anxiety, pain, and emotional involvement (Wicker et al., 1981). Some scholars have proposed that the emotions in affective humor brought on by serious topics produce stronger expectations, and thus result in greater surprise or shock when incongruity is present (Wicker, Thorelli, Barron, & Ponder, 1981). Others hypothesize that when tension is increased through affective themes, attention also increases (Suls, 1972), which in turn strengthens expectations and the resulting surprise (i.e., cognitive humor). However, it is important to note that these perceived humor types differ and can appear alone. Cognitive humor focuses on an element of surprise, while affective humor is based on a more affective experience.

Disparagement humor. Disparagement humor often involves elements of denigration, derogation, and belittlement (Ferguson & Ford, 2008; Zillmann, 1983). Perceived disparagement humor, therefore, differs from cognitive and affective humor mechanisms in that the disparagement mechanism requires a separation of groups as a salient characteristic of the processing that categorizes the target of the denigration.

The disparagement humor mechanism, also called the social/interpersonal humor mechanism or deprecating mechanism, involves two subcategories: (1) other-disparagement and (2) self-disparagement. Other-disparagement humor is a biased comparison of oneself with others. This type of humor is perceived as a socially justified form of hostility projected on a group that is not the speaker's own without any feelings of remorse (Chang & Gruner, 1981). Specifically in media, the character differentiates himself or herself from the target and those members of the audience who share the relevant characteristics with the target, as the character makes fun of that group (Meyer, 2000). Self-disparagement is the reverse of other-disparagement, in that the character is making fun of self (Chang & Gruner, 1981). In particular, self-disparagement invites the audience to have a shared laugh at the character's own expense (Stewart, 2011).

Disparagement humor can be explained through psychoanalytic theories and superiority theories (Berger, 1987), both of which highlight the antagonistic social relationship that exists between the speaker and the target (e.g., Berger, 1987; Zillmann, 1983). Psychoanalytic theories suggest that disparagement humor is used as a means to be hostile and attack an adversary by making the enemy feel unimportant or small (Ferguson & Ford, 2008; Freud, 1960/1905; Singer, 1968). The theory also suggests that releasing this type of negativity on a target is a way to experience the emotion without having to actually live the experience, which the audience feels

23

as well (Freud, 1960/1905). Superiority theories posit that individuals feel a triumph in other's misfortunes, which in turn causes self-enhancement in the audience. This enhancement comes by comparing oneself to unfortunate and disliked others (Wills, 1981).

Social identity theory also serves as an explanatory theory of disparagement humor (Ferguson & Ford, 2008). Specifically, social identity theory suggests that individuals are constantly competing for social recognition, and are eager for positive distinctiveness (Tajfel & Turner, 1986). To gain this feeling of distinctiveness and positive differentiation from another group, disparagement humor is used (Ferguson & Ford, 2008).

> *Other-disparagement: A student listens to a journalism professor trip over his words and says, "Is that why you never got into broadcasting?"*
>
> *Self-disparagement: A journalism professor trips over his words during a lecture and says, "That's why I never got into broadcasting."*

These above examples feature many elements of disparagement humor's explanatory theories. In the other-disparagement example, the student makes a joke in order to make the professor feel unimportant or small. In the self-disparagement joke, the professor makes a joke possibly to make up for the embarrassment of stumbling over his words. The other-disparagement joke also exhibits how disparagement humor can serve as self-enhancement for the audience. In other words, students in the audience may feel more self-enhancement (superiority theory) and positive distinctiveness (social identity theory) because they have not committed the error the professor has committed. In the self-disparagement humor joke, the professor is expressing self-enhancement and positive distinctiveness in another way. He is trying to be relatable and create one group with the students. Therefore, the students may not only feel positive about the professor but will feel positively distinct in their group. This

differentiation can be explained by understanding the different effects each type of disparagement humor can have.

Several factors affect the perception of disparagement humor. First, the person telling the joke must not be perceived as malicious in both self- and other-disparagement humor; otherwise the joke will be seen as more hostile as opposed to humorous (Gutman & Priest, 1969). Therefore, both types of disparagement require the media character to not be malevolent. Second, disparagement humor can be used to establish an equal relationship between the audience and the character (Meyer, 2000; Stewart, 2011), which can either be used as a defensive mechanism (Zillmann & Stocking, 1976) or a courtship behavior inviting the audience to join the character's group (Lundy, Tan, & Cunningham, 1998; Tajfel & Turner, 1979). However, disparagement humor is most known for encouraging audience members to distance themselves from the group or person being disparaged. Because of this, disparagement humor can sometimes offend audiences (Greengross & Miller, 2008).

Disparagement humor differs with regards to self and other. Specifically, self-disparagement may be used to help characters dissuade individuals from poking fun at them first (Zillmann & Stocking, 1976) and might help speakers establish a connection with the audience that shows they are on an equal level as opposed to other-disparaging humor which can come across as the speaker being superior to the audience (Meyer, 2000; Stewart, 2011). Additionally, other-disparagement can be more offensive than self-disparaging humor due to its ability to make fun of large groups of people (Greengross & Miller, 2008) and not just the speaker. Generally, disparagement humor can be quite hostile with regards to both self- and other-disparagement. For this reason, disparagement humor can be a difficult mechanism to employ when a positive connection with the target is sought.

Perceived disparagement humor can certainly be present in connection with both cognitive and affective humor processing, but disparagement can also stand on its own. For instance, when disparaging another group of people, the audience may be surprised (cognitive humor) that the speaker put that group of people together with another schema they may have never thought about (i.e., babies being compared to drunk people). Disparagement humor can also work with affective humor in that the audience may have increased attention or arousal because the disparagement target invokes a taboo subject or it might refer to a societal norm that people do not talk about. It is important to note that among the three types of humor, in persuasion literature, cognitive humor is most effective in yielding desired outcomes; affective mechanism involvement works second-best, and disparagement is least effective (Cho, 1995).

In summary, and in combining the theoretical frameworks explaining pleasure derived from disparagement, disparagement humor can be hostile and can make the target feel or seem small, and the audience feels superior to that target and possibly feels positively distinct from another group or target of the humor. Because disparagement humor has the ability to separating the audience and target, it has the ability to foster prejudice (Ford, Woodzicka, Petit, Richardson, & Lappi, 2015). Therefore, disparaging humor is likely not the most advantageous way to combat stigma. It is important to note that this dissertation focuses solely on *perceived* humor. In other words, it relies on audience perceptions of the types of humor mechanisms present.

Humor, Positive Affect, & Approach Tendency

Humor consists of puns, jokes, understatements, satire, and irony (Andrews, 1943; Sternthal & Craig, 1973). Humor portrayals are stimuli designed to elicit positive affect as a result of the surprise connection between two or more stimuli (cognitive humor mechanism), the tension release from making light of a difficult subject (affective humor mechanism), and/or

26

having permission to perceive oneself as being superior to a less fortunate character (disparagement mechanism), for example (e.g., Cho, 1995). Prior literature has shown that no matter the type of humor, positive affect and laughter can ensue.

Emotion is a response to an external stimulus that contains both an affective (positive, negative feeling) component and an approach/avoidance tendency (e.g., Cacioppo, Gardner, & Berntson, 1999; Davidson, 1993; Lazarus, 1966; Scherer, 1999), both of which are theorized to be relatively automatic reactions that can explain secondary, more thought-out responses brought on by a stimulus (Duckworth, Bargh, Garcia, & Chaiken, 2002). According to appraisal theory of emotion (Roseman, 1996), positive affect often corresponds with approach behaviors (e.g., Cacioppo et al., 1999). The combination of positive affect and approach tendency, specifically, has been shown to facilitate acceptance of ideas and enable individuals to have a more open-mind (e.g., Fredrickson, 1998; Fredrickson, 2001). The broaden-and-build theory of positive emotion states that discrete positive emotions have the ability to broaden thought-action repertoires and build individuals' "enduring personal resources, ranging from physical to intellectual resources to social and psychological resources" (Fredrickson, 2001, p.219). This is opposed to negative emotion, which can narrow one's thought-action repertoire. Discrete positive emotions such as joy, contentment, pride, and love have the ability to lead to individuals being more creative, open-minded, and explorative (Fredrickson, 1998; Fredrickson, 2001). These effects are durable and enduring, and evidence supports this claim. Those who felt positive were reportedly shown to be more open to new information (Estrada, Isen, & Young, 1997) and show acceptance for behaviors unlike their own (Kahn & Isen, 1993).

The broaden-and-build theory of positive emotion suggests that people should be more accepting of stigmatized characters because of the doors positive emotions open (e.g.,

Fredrickson, 1998; Fredrickson, 2001). Characters with mental illnesses have traditionally been stigmatized leaving viewers more close-minded toward them (Berlin & Malin, 1991; Gerbner, 1980; Nunnally, 1957; Wahl & Harman, 1989). However, in this study positive affect and approach tendency might actually have the ability to help foster a stronger bond between the viewer and the character considering they will be more open and accepting to to new ideas, behaviors, and types of people. In other words, characters with a mental illness traditionally come in contact with viewers who have a closed mind toward them. In this study, positive emotions will actually open viewers' minds and facilitate a bond between the character and viewer.

This dissertation is testing whether humorous media constitute stimuli that elicit positive emotional responses that, through the resulting positive affect and approach tendency, facilitate perceptions of connecting with a stigmatized character and, in turn, reduce stigmatization of the group the character represents. In this instance, the interaction with the character is the novel and mind opening action we expect the viewer to approach considering he or she will be in a positive state. Based on this premise, this study examines whether positive affect has the ability for individuals to feel closer bonds with stigmatized characters through PSI.

Individual Differences

Empathy, individual behavioral approach systems (BAS), and level of contact with mental illness may all play a role in the relationships in this study. Empathy, which includes concern for others, has been shown to serve as a mediator in intergroup contact theory (e.g., Pettigrew et al., 2011) and viewers' attitudes towards a character (Gleich, 1997; Zillmann & Cantor, 1977). In the current study, empathy could play a role in how strong the viewer perceives the PSI. Thus, empathy will be measured as a trait and used as a covariate. An individual's BAS

is defined as a behavior believed to regulate appetitive motives, which can cause individuals to move toward a desired goal (Carver & White, 1994). This tendency may be important for understanding whether a natural tendency of approaching situations and people actually accentuates participants' want approach the stigmatized character. Thus, individuals' BAS will be placed in the model as a covariate to account for any personal approach tendency conflating the relationship between the viewers wanting to approach the character. Level of contact with mental illness may also play an important role in how the viewer perceives the character with mental illness. Specifically, those with higher levels of contact with mental illness have been shown to report less stigma toward those with mental illnesses (Corrigan, Green, Lundin, Kubiak, & Penn, 2001). Therefore, level of contact with mental illness will be placed in the model as a covariate due to its ability to conflate PSI (e.g., being similar to character with regards to mental illness may increase PSI), stigma, and social distance.

Purpose of Study

The purpose of this study is to combine literature in humor, positive affect, and the parasocial contact hypothesis to examine how humor can impact viewers' bonds with characters with mental illnesses, which in turn can impact viewers' stigma towards mental illness in general. The proposed model consists of two types of perceived humor (cognitive and affective), positive affect and approach motivation toward the character, PSI, and mental illness stigma. This model is based, in part, on Moyer-Gusé and Nabi's (2010) model on the effects of entertainment programming and its ability to persuade. This study will use the Moyer-Guse and Nabi (2010) model simply as a guide for how PSI can contribute to changed attitudes. In this study, the proposed model hypothesizes that greater perceived amounts of cognitive and affective humor will lead to more positive affect and greater approach motivation, which will

29

lead to greater parasocial interaction, and lead to lesser stigma and closer social distance with those with mental illness. This study questions how disparagement humor may play a role as well.

Perceived humor types. Cognitive humor is humor that elicits surprise through incongruity, which often results in perceptions of humor (e.g., Martin, 2007). Affective humor is humor that is often dark or containing mixed emotions often resulting in perceptions of humor (e.g., Mindess, 1971). These perceptions of humor result in positive affect. According to the humor literature, as well as literature on positive affect (Roseman, 1996), positive affect often corresponds with approach behaviors (Cacioppo et al., 1999; Davidson, 1993; Fredrickson, 2001; Watson, Wiese, Vaidya, & Tellegen, 1999). This association between positive affect and approach orientation is also predicted in the broaden-and-build theory of positive emotions, which proposes that individuals who feel positive affect will be more motivated to engage in novel objects, people, or situations (Fredrickson, 2001).

In this study, the situation, object, or event that will be appraised will be a specific episode of television. There will be two conditions: one with more humor and one with less humor. Coupling what we know about humor with literature on positive affect, those who watch the episode with more humor should appraise it positively and respond with more positive affect that coincides with approach tendency toward the character with mental illness. In other words, the stimulus that is more humorous is likely to induce positive affect and the approach tendency because of the broadening of the viewer's mind. Those who view the less humor condition will likely feel less positive affect and less approach tendency toward the character with mental illness. Thus, the stimuli serve as an inducer for both positive affect and approach tendency

depending on how much cognitive and affective humor the viewer perceives. Therefore, I propose the following hypotheses:

H1: As viewers perceive greater cognitive humor, they will also feel (a) greater positive affect and (b) greater approach motivation.

H2: As viewers perceive greater affective humor, they will also feel (a) greater positive affect and (b) greater approach motivation.

Whereas cognitive and affective humor often result in positive affect, recall that other-disparagement and self-disparagement humor can have the opposite effect since it can separate the audience and the target of the joke, which in turn creates hostility and fosters prejudice (Ford et al., 2015). However, it can sometimes result in positive affect if the viewer feels superior to the target on screen (Meyer, 2000; Stewart, 2011). Thus, the following research question is proposed:

RQ1: What is the relationship between perceived disparagement humor and (a) positive affect and (b) approach motivation?

Positive affect and approach motivation. The combination of positive affect and approach motivation can lead individuals to have an urge to play, even in a social way (e.g., Ellsworth & Smith, 1988), urge to take in new information and expand the self in the process (e.g., Csikszentmihalyi, 1990), urge to integrate circumstances into new views of the self and of the world (Izard, 1977), urge to share new information (Lewis, 1993), and urge to play with loved ones (Izard, 1977). According to the broaden-and-build theory, these thought-action tendencies allow individuals to create, explore, and play more when they are experiencing positivity (e.g., Fredrickson, 2001; Fredrickson & Branigan, 2001). I hypothesize that approach motivation and positive affect will have associations with stronger PSI with the character towards the characters

with mental illnesses because the viewer is feeling this motivational tendency to broaden his or her mind in this novel context of viewing a stigmatized character, while the humorous context (a context that is quite novel for characters with mental illness) provides levity for approaching this difficult subject. Additionally, PSI has elements of approach in it. Specifically, the PSI measure asks the viewer explicitly about attitudinal and emotional responses to the character and also asks about future behavioral projections about interacting with the character. Therefore, the following hypotheses are examined:

> H3: As viewers experience greater positive affect, they will also feel stronger PSI with the character with mental illness.

> H4: As viewers experience greater approach motivation, they will also feel stronger PSI with the character with mental illness.

> *PSI.* Lastly, using the parasocial contact hypothesis as a guideline, I propose that those

who feel a stronger parasocial interaction with the character will feel lesser stigma toward people with mental illness in general. Recall that intergroup contact theory (Allport, 1954) states that members of opposing groups can lessen intergroup hostility and increase positive attitudes towards each other if there is contact between groups. Contact in this case is mediated. Therefore I propose the following:

> H5: As PSI increases, there will be an increase in acceptance at a (a) social distance and an increase in (b) stigma.

CHAPTER 2: METHOD STUDY 1

Method Overview

Overview

This dissertation consists of two studies, each testing a different program: *Enlightened* and *Girls*. Each program focuses on a character with mental illness. *Enlightened's* main character, Amy, struggles with anxiety/depression, and *Girls'* main character, Hannah, struggles with obsessive-compulsive disorder (OCD). Selected episodes provided a clear identification of the character as having a mental illness.

In these post-test only experiments, one episode from each series was chosen and manipulated into two conditions: *more humor* or *less humor*. Episodes and specific manipulated conditions were chosen based on a pre-test. These two conditions were created to increase variation in perceived humor. Participants were emailed a link and were asked to answer questions pertaining to empathy and approach tendencies. They then watched the episode corresponding with their randomly assigned condition. After viewing, they answered questions pertaining to level of contact with mental illness and the perceived humor types they witnessed in the episode. Type of humor was not manipulated in these studies due to the fact that real world programming did not offer the quantity, quality, or amount of researcher control needed to produce such specific conditions. Rather, participants' perception of humor was considered the more important measure for this study. Next, participants answered questions pertaining to positive affect and approach motivation towards the character with the mental illness. Then,

participants answered questions about PSI and stigma toward those with mental illnesses. Participants were then debriefed and thanked.

Study 1 – Enlightened

Participants

Participants were retrieved from the participant pool at a large southeastern university. A total of 106 students began the study, but 11 of these were excluded due to not remaining in the survey long enough to watch the program or incorrectly answering one or both of the questions about the plot. Thus, a total of 95 participants were included in the study. Ages ranged from 18 to 27 years old ($M = 20.41$, $SD = 1.35$) and were 23.2% male and 76.8% female. This age demographic is also the most likely to stream television programming (Nielsen, 2014). The sample was 81.1% White/Caucasian, 7.4% African American, 3.2% Asian/Pacific Islander, 1.1% American Indian/Native American, and 7.4% who identified as "other." The majority of participants were moderate users of media with regards to using it to watch television programming (48.4%). Only one person reported having seen the program and the episode before and was kept in the analysis. Participants were randomly assigned to either the more humor condition ($n = 46$) or the less humor condition ($n = 49$). However, condition did not predict general humor level (e.g., how humorous did you find this program?), $t(93) = .06$, $p > .05$, therefore the conditions were collapsed into one.

Stimuli

Stimuli was obtained from the real world television program, *Enlightened*. Since *Enlightened* revolves heavily on the character's mental illness in every episode, the pilot episode was chosen. The pilot episode gives the audience greater detail about the situation and the

character using more background information. This makes the pilot episode more informative for audiences as opposed to providing an episode in the middle of the series that is more difficult to follow because of a lack of background information.

Enlightened (pilot episode, "Pilot") is a thirty-minute television program on HBO that depicts a self-destructive executive, who, after a nervous breakdown and a philosophical awakening in rehabilitation, returns to her professional life. In this episode, she returns to work while trying to keep herself in a calm and peaceful state. The program was manipulated to create a more humorous version (jokes in the episode were intact) and a less humorous version (jokes were removed) as identified by the researcher and a co-viewer. This resulted in twenty instances that were removed for the less humor condition.

The more humorous version of *Enlightened* contained all three types of humor. The episode opens with Amy crying while sitting in a stall in her bathroom at work. At certain points, the camera shows an angle from the top of the stall exacerbating the ridiculousness of how she looks at the moment. Because of the surprise element of this angle and comical nature, just that angle shot was removed for the less humor version. When she suddenly hears co-workers talking about her in the bathroom, she calls them a suggestive name as she barges out. The suggestive name-calling was removed for the less humorous version. Amy then walks quickly through her office to find a co-worker who is also an ex-lover that has deliberately ousted her at work. She argues with him about the affair and how he has moved her to another department. In the more humor version, she sits and whines repeatedly "health and beauty is my department" like a child. It was removed for the less humor version.

The scene suddenly changes to a peaceful and calm forest with pleasant music. Amy's voiceover explains how she "woke up to her higher self." It shows her receiving help at a facility

35

and leaving feeling happy. Both versions kept this segment. Amy arrives at her mother's house feeling energized and positive. As she hugs her mother in a positive and loving way, her mother asks, "What is wrong? You're going to spill my coffee." This humor was removed from the less humor condition. Similarly, Amy says "it's so nice to see you" and her mom responds, "why." Her mother also tells her "she looks like a hippie" which was also removed in the less humor version.

Amy makes her way to her old company to see about restarting work. Before getting out of her car, she slurps loudly on a soda in a childish and humorous way. This humor was removed in the less humor condition. In the next scenes, when talking to human resources at her company, Amy says sheepishly that one product is "really shitty" and the human resources team all look at one another oddly. This was taken out for the less humor version. She goes on to say that the company is "raping people," which is also inappropriate but humorous, thus was taken out of the less humor condition. The people in human resources tell her to come back tomorrow to find out about her new position since her old one was filled. She then has lunch with an old co-worker and finds out her old co-worker is pregnant. Amy inappropriately asks loudly in a public place, "Your eggs worked out?" This was removed for the less humor condition.

The next scene is Amy with her mother at her mother's house. Amy reads her a letter she wrote to her mother in her therapy. As Amy reads the letter with tears in her eyes, her mother responds, "I don't know what that means." It is a surprising and dry way to react to the heartfelt moment, but also is dark because her mother is responding in a way that breaks the intense emotions Amy is having, thus was removed for the less humor condition. Next, Amy visits her ex-husband's apartment to bring him self-help books from her treatment center. He responds to the book drop off by saying, "You came over to give me some self help spiritual shit." It was

taken out for the less humor condition. Similarly, her husband reads a line from the book in a funny way. That was also removed. Amy then has dinner with her ex-husband and she explains her awakening from depression. Her husband jokingly says he had that same feeling at Red Rocks. This was also removed for the less humor condition. Next, Amy talks about how nice it is to be together without fighting and her ex-husband agrees as he takes out cocaine. This humorous part was removed for the less humor version.

Amy leaves her ex-husband abruptly and goes over to her ex-lover's house where she sits outside in her car calling him. Her ex-lover comes out yelling and falls down the hill in his front yard. This is followed by Amy trying to get out of the car with her seatbelt on and is stuck. Both instances were removed for the less humor condition. The ex-lover yells at her and she yells back slamming accidently into a parked car. While trying to recover from it, she tries to back up and leave again, but accidently hits the car a second time. This second time was removed due to its humorous nature. Unexpectedly, her bumper falls off the car and a random dog in the neighborhood responds with a bark. This was also removed. Lastly, she asks her ex-lover if he "wants her insurance," which was removed due to the funny nature of yelling and fighting and then asking about liability for the car she hit. As Amy arrives home, she sees her mom fell asleep reading her letter. The episode ends with Amy's voiceover while she is meditating on becoming a better person. It then shows her walking into her first day back to work. The more humorous condition with credits ran 30 minutes and 19 seconds. The less humorous condition with credits ran 28 minutes and 14 seconds.

Procedure

Participants were obtained through a participant pool at a large southeastern university. Participants were emailed a link where they virtually signed a consent form and answered

37

questions about empathy and personal approach tendencies. Next, they were randomly assigned to watch one of the two conditions of *Enlightened*. After viewing, participants were asked about their affective state, familiarity with mental illness, and familiarity with the television show. Next, participants were asked questions about perceived humor types that were depicted in the show including: cognitive humor, affective humor, and disparagement humor. Next, participants were asked about their approach motivations towards the main character, Amy. Next, they answered questions pertaining to PSI with Amy, social distance, and stigma toward those with mental illnesses in general.

Measures

  Multiple choice questions about plot. Multiple-choice questions about the plot were used to ensure that the participant watched the program in full. The multiple choice questions for *Enlightened* included "In the episode you just watched, which of the following was shown?" and "In the episode you just watched, Amy lives with…" and gave three choices for each. If participants answered both questions correctly, they were included in the analysis. This eliminated eleven participants.

  Familiarity with the show. Participants answered one question on how often they watch *Enlightened* on a scale from 1 *never* to 5 *all of the time* ($M = 1.02$, $SD = .21$, $Mdn = 1.00$). Since only one participant answered to having seen the show at all, this covariate was eliminated from analysis. The rest of the participants reported being new to the show.

  Humor. To assess humor level, participants were asked to rate the statement "I thought this program was humorous" on a scale from 1 *strongly disagree* to 5 *strongly agree* ($M = 2.12$, $SD = .87$, $Mdn = 2.00$). The original model included humor, however, it did not explain any associations so was dropped from the model for parsimony.

38

Level of contact with mental illness (covariate). To assess familiarity with mental illness in participants' own lives, The Level of Contact Report was used. It lists ten situations of varying degrees of intimacy with people who have mental illnesses, including the participants themselves (adapted from Corrigan, Edwards, Green, Diwan, Penn, 2001). Participants checked all instances in which the situations apply to their own lives. Participants were then assigned a number according to their highest degree of intimacy. For instance, if a participant checked "I have observed persons with a severe mental illness on a frequent basis" (level of intimacy = 3) and "I have a relative who has a serious mental illness" (level of intimacy = 8), the participant was assigned an eight. Level of contact had a possible range of 1 to 10 ($M = 6.61$, $SD = 2.84$, $Mdn = 8.00$).

Two items asking about media were removed because they asked whether the participant had seen a television show or movie with a character with a mental illness. This was eliminated since all participants would have reported that they had because of the stimuli.

Empathy (covariate). Empathy was assessed by seven questions pertaining to empathic concern. Participants rated statements such as "I am the type of person who is concerned when other people are unhappy" and "I often have tender, concerned feelings for people less fortunate than myself" on a scale from 1 *strongly disagree* to 5 *strongly agree*. ($M = 3.99$, $SD = .49$, $Mdn = 4.00$, $\alpha = .76$) (Tamborini & Mettler, 1990).

BAS Sensitivity (covariate). Natural or inherent approach was assessed using the behavioral activation system (BAS) measure in which participants rated four statements such as "I go out of my way to get what I want" and "If I see a chance to get something I want I move on it right away" from 1 *strongly disagree* to 5 *strongly agree* ($M = 3.32$, $SD = .62$, $Mdn = 3.25$, $\alpha = .71$) (Carver & White, 1994).

Perceived humor mechanisms. Perceived humor mechanisms were measured using an adapted version of Cho's (1995) humor mechanism scale. It consisted of three dimensions, cognitive, affective, and disparagement. Participants rated each statement on a 5-point Likert scale ranging from 1 *strongly disagree* to 5 *strongly agree* for each statement pertaining to the perceived humor mechanisms depicted in the stimuli.

The cognitive items were as follows: The program was original and novel; I was surprised by punch lines or some parts of the content; When I thought about it, the unexpected parts in the program made sense to me; Parts of the content I initially thought of as unrelated suddenly fell into place ($M = 3.36$, $SD = .63$, $Mdn = 3.50$, $\alpha = 71$).

The affective items were as follows: Viewing this episode made me feel free or 'above it all'; I felt stimulated while watching the episode; Viewing this episode made me feel emotionally released; At times, I felt anxious or nervous while watching the show, but then the content made me feel OK again; The episode stimulated my imagery, fantasy, or daydreaming; I felt sympathy or identification with the main character in the episode ($M = 2.87$, $SD = .71$, $Mdn = 2.83$, $\alpha = .78$).

The social/interpersonal items were as follows: I felt hostile toward the main character while viewing the show; I felt superior to the main character in the episode; I experienced incompatible emotions or conflicting feelings at the same time when I was watching the main character in this show; At least some of the content of this episode was intended to make fun of the main character; I do not think viewers are supposed to like the main character ($M = 2.69$, $SD = .75$, $Mdn = 2.80$, $\alpha = .73$).

Positive affect (mediator). Affective state was measured using the Positive and Negative Affect Schedule (PANAS). Participants were asked the extent to which they felt each of twenty

feelings assessed on a 5-point Likert scale ranging from 1 *strongly disagree* to 5 *strongly agree* (Watson, Clark, & Tellegen, 1988). Positive affect subscale items included: interested, alert, attentive, excited, enthusiastic, inspired, proud, determined, strong, and active ($M = 2.41$, $SD = .86$, $Mdn = 2.40$, $\alpha = .92$).

Approach toward the character (mediator). Approach motivation toward the target, or main character, was assessed using three items inspired by measures of approach orientation and behavioral distance in Gable (2006) and Labroo and Nielsen (2010). Participants were given three scenarios that involve meeting the main character in a lunch room. Participants indicated their tendency to approach or avoid the main character by choosing whether to step toward or away from the character, engage with the character, or by their comfort level with sitting next to the character. If the participant answered that they would approach the character in a scenario, they were assigned a 1. If he or she answered that they would not approach the character in a scenario, they were assigned a zero. Participants could only choose one of the answers. Scores for the three scenarios were summed and ranged from a possible score of 0 to 3.

Specifically, in the first scenario, participants were asked to imagine that they go to a lunch room, and the main character from the episode they just watched is in the middle of the lunch room. The main character (whom they have not met personally) acknowledges their presence with a smile and head nod. Participants were asked to select one of the following choices to represent what they would likely do when the main character greets them: stay where they are and do the same smile and head nod (approach = 0), walk closer to the main character and say hello (approach = 1), or walk up to the main character and shake hands, exchanging hellos and names (approach = 1).

In the second scenario, participants were asked to now imagine that they and the main character are standing in the lunch room, facing each other, about 10 feet (two arms' length) apart. Just as the main character says "Hello" to them, they are asked by someone to move briefly to let some people through. Participants were asked to choose which of the following actions they will take: move 2 steps closer to the main character (approach = 1), move 2 steps farther away from the main character (approach = 0), or go to the other side of the room farthest away from the main character (approach = 0).

Finally, participants were asked to imagine that the main character has decided to sit at their lunch table and eat across from them. Participants were asked to categorize how they feel by selecting: uncomfortable (approach = 0), neutral (do not care) (approach = 0), or good (approach = 1). Participants were given 1 point for each approach tendency and 0 points for each avoidance tendency. Scores were summed with higher scores reflecting higher approach motivation towards the character ($M = 1.16$, $SD = .91$, $Mdn = 1.00$).

PSI (mediator). PSI was measured using the 10-item measure by Rubin and Perse (1987), adapted to replace "favorite soap opera character" with "main character in the episode, Amy." Items were as follows: The main character in the episode makes me feel comfortable, as if I am with a friend; I see the main character in the episode as a natural, down-to-earth person; I will be looking forward to watching this main character in another episode; If this main character appeared on another TV program, I would watch that program; The main character in the episode seems to understand the kinds of things I want to know; If I saw a story about this character in a newspaper or magazine, I would read it; I will miss seeing this main character if I am never able to see this show again; I would like to meet this main character in person; I felt sorry for the main character when the character made a mistake in the show; I find this main character to be

attractive. Participants rated each statement on a 5-point Likert scale ranging from 1 *strongly disagree* to 5 *strongly agree* regarding different interactions they feel with the character. All items were averaged together to create an index of PSI (*M* = 2.76, *SD* = .71, *Mdn* = 2.70, ɑ = .90).

Social distance (DV). Participants were asked on a 5-point Likert scale ranging from 1 *strongly disagree* to 5 *strongly agree* their willingness to interact with a person with a mental health condition in different relationships including tenant, co-worker, neighbor, member of same social circle, someone to be recommended for a job, in-law, or child care provider (Link, Cullen, Frank, Wozniak, 1987). Answers were averaged (*M* = 3.52, *SD* = .74, *Mdn* = 3.57, ɑ = .90). Higher scores reflect less social distance.

Mental health stigma (DV). Endorsement of stigmatizing views of mental health conditions were measured using a version of the Depression Stigma Scale (Griffiths et al., 2008). The scale included 10 items. Participants indicated the extent to which they agree or disagree with statements such as "People with mental illnesses are unpredictable," and "Mental health illness is a sign of personal weakness." Response options ranged on a 5-point Likert scale ranging from 1 *strongly disagree* to 5 *strongly agree* (*M* = 2.78, *SD* = .48, *Mdn* = 2.20, ɑ = .74). Higher scores reflect higher levels of reported stigma.

CHAPTER 3: STUDY 1 RESULTS AND DISCUSSION

Overview

The first analysis consisted of first order correlations. Table 1 shows these relationships. Specifically, level of contact was associated inversely with positive affect and stigma. Empathy was positively associated with approach towards character and social distance. Approach tendency of the individual was associated with perceived humor in general and perceived affective humor. Positive affect was positively associated with perceived cognitive humor, affective humor, and PSI and negatively correlated with disparagement humor. Perceived humor was associated positively with PSI. Cognitive humor was positively associated with affective humor and PSI, but negatively correlated with disparagement humor. Perceived disparagement humor was negatively correlated with approach toward the character, PSI, and social distance and positively correlated with stigma. Approach towards the character was positively associated with PSI and social distance but negatively correlated with stigma. PSI was positively correlated with social distance and negatively associated with stigma. Social distance and stigma were negatively correlated.

Given the results of the correlation analysis, structural equation modeling was employed using Mplus7 (Byrne, 2013). To test the hypothesized model cognitive, affective, and disparagement perceived humor were used as exogenous variables. Paths were then tested from each type of perceived humor (cognitive, affective, disparagement) to positive affect and approach of the character. Paths from positive affect and approach of the character were tested to PSI. Paths from PSI were tested to stigma and social distance. Direct pathways from types of

44

perceived humor to PSI, social distance, and stigma were also tested. Controls included

empathetic concern with PSI, natural approach tendency with approach of the character, and

level of contact mental illness with PSI, stigma, and social distance. The control variables were

nonsignificant and did not offer explanatory power to the first model, thus a second model was

tested. The second model was exactly the same as the first, but excluded all the control variables.

See Table 2. The second model resulted in a more parsimonious model and a better model fit. No

variable relationships changed from the first model to the second. Thus, hypotheses and research

questions were tested using the second model. See Figure 1.

Hypothesis and RQ Testing

H1 predicted that as more cognitive humor was perceived, (a) more positive affect and

(b) approach toward the character would result. H1 was partially supported. Perceiving more

cognitive humor predicted more positive affect, $\beta_{positiveaffect} = .30$, $p < .01$. In other words, those

who perceived more cognitive humor were also more likely to be feeling more positively.

However, cognitive humor did not predict approach, $\beta_{approach} = .10$, $p > .05$.

H2 predicted that as more affective humor was perceived, (a) more positive affect and (b)

approach of the character would result. H2 was partially supported. Perceiving more affective

humor predicted more positive affect, $\beta_{positiveaffect} = .66$, $p < .001$. Those who reported that they

perceived more affective humor resulted in them feeling more positively. However, affective

humor did not predict approach, $\beta_{approach} = .07$, $p > .05$.

RQ1 regarded the relationship between perceived disparagement humor, positive affect,

and approach motivation. Results revealed no significant relationship between disparagement

humor and positive affect, $\beta_{positiveaffect} = -.11$, $p > .05$. However, there was a significant inverse

relationship between disparagement humor and approach, $\beta_{approach} = -.39$, $p < .01$. In other words,

as participants perceived less disparagement humor, they were more likely to want to approach the character. Conversely, as participants perceived more disparagement humor, they were less likely to want to approach the character.

H3 predicted that as viewers have greater positive affect, they would perceive a stronger PSI with the character. H4 was not supported, $\beta = .10$, $p > .05$. In other words, positive affective state did not coincide with feeling a stronger PSI with the character.

H4 predicted that as viewers have greater approach towards the character, they would perceive a stronger PSI with the character. H3 was supported, $\beta = .16$, $p < .01$. Viewers who were more likely to report wanting to approach the character were more likely to feel a stronger PSI with the character.

H5 predicted that as PSI increased, reported stigma would decrease and participants would report higher likelihood of accepting closer social distance of themselves and a person with a mental illness. H5 was supported, $\beta_{socialdistance} = .56$, $p < .001$, $\beta_{stigma} = -.32$, $p < .01$. This means that as participants felt a stronger PSI with the character, they were more likely to accept those with mental illness at a closer social distance.

Supplementary Analysis

As explained in the overview, cognitive, affective, and disparagement humor were also examined through direct paths to PSI, social distance, and stigma. Results revealed a significant direct relationship between affective humor and PSI, $\beta_{affective} = .51$, $p < .001$ and disparagement humor and PSI, $\beta_{disparagement} = -.30$, $p < .001$. The relationship between cognitive humor and PSI was not significant, $\beta_{cognitive} = .10$, $p > .05$.

Cognitive and disparagement humor approached significance when directly predicting social distance, $\beta_{\text{cognitive}} = -.19$, $p = .09$, $\beta_{\text{disparagement}} = -.19$, $p = .06$. The relationship between affective humor and social distance was not significant, $\beta_{\text{affective}} = -.21$ $p > .05$.

However, affective humor significantly predicted stigma in a direct relationship, $\beta_{\text{affective}} = .23$ $p < .05$. Cognitive humor approached significance when directly predicting stigma, $\beta_{\text{cognitive}} = .13$, $p = .09$. Disparagement humor did not predict stigma, $\beta_{\text{disparagement}} = .08$, $p > .05$.

Discussion Study 1

Using theoretical guides such as the parasocial contact hypothesis (Hoffner & Cohen, 2012; 2015; Schiappa et al., 2005; see Allport's 1954 intergroup contact theory), broaden-and-build theory of positive emotions (e.g., Fredrickson, 2001; Fredrickson & Branigan, 2001), and literature about humor (e.g., Martin, 2007), Study 1 explored how humor may assist in stigma reduction when a media character has a mental illness. An experiment using the television program *Enlightened* as stimuli, revealed close similarities to the hypothesized model.

Specifically, after viewing the stimuli, as cognitive and affective perceived humor types increased, so did positive affect. Thus, in this study, as participants perceived more of these types of humor, they felt more positively than those who did not perceive these types of humor. However, disparagement humor did not have any significant association with positive affect. This makes sense considering other-disparagement humor often creates feelings of hostility and superiority, two types of affect not traditionally attributed to positive affect (Watson et al., 1988).

Interestingly, cognitive and affective humor did not predict approach behavior with regards to the character. However, disparagement humor did. The less disparagement humor reported, the more likely the participant was willing to approach the character. This aligns with

47

research that shows that more disparagement humor can draw larger gaps between two people (Chang & Gruner, 1981).

PSI was only predicted by approach of the character and not positive affect. This was especially interesting because the broaden-and-build theory of positive emotions states that when an individual is in a positive state they are more open and willing (e.g., Fredrickson, 2001; Fredrickson & Branigan, 2001). However, this study showed the exact opposite. Those who felt positively did not necessarily feel a strong PSI with the character with a mental illness. Those who were more inclined to approach the character did feel a stronger PSI with the character with mental illness. This suggests that the approach tendency of emotion might be the driving force behind the "broadening" of the mind. Study 1 also tells us that one element of emotion can happen without the other. Approach tendency does not necessarily have to be accompanied by positive affect. As seen in this study, those who perceived less disparagement humor felt more approach but not necessarily positive affect. As such, this might lead to potentially new information about how we process humor and how it affects the broadening of the mind.

PSI predicted social distance in that those who felt a stronger PSI were also more willing to accept a person with a mental illness in another interaction setting. Additionally, PSI predicted stigma too in that those who felt a stronger PSI also felt less stigma towards those with mental illnesses, in general. Since the character in *Enlightened* had experienced a mental breakdown and bouts with anxiety and depression, the questionnaire for social distance and stigma both asked about mental illness in general.

Although Study 1 showed interesting results, it was a single message design. Additionally, it dealt with only one type of mental illness, which was just categorized as "mental illness" in the questionnaire. In order to replicate and rectify these issues, Study 2 was run with a

different program, a different mental illness, and a measure of social distance that directly related to Obsessive Compulsive Disorder (OCD). The measure of stigma measured attitudes of mental illness in general.

CHAPTER 4: METHOD STUDY 2

Participants

Participants ($N = 82$) were retrieved from the participant pool at a large southeastern

university. Three participants were excluded due to incorrectly answering one or both of the

questions about the plot or not watching the program in full ($N = 79$). The demographics closely

mirrored Study 1 due to the use of the same participant pool. Ages ranged from 19 to 28 years

old ($M = 20.29$, $SD = 1.50$) and 23.1% male and 76.9% female. The sample was 83.3%

White/Caucasian, 7.7% African American, 2.6% Asian/Pacific Islander, 1.3% American

Indian/Native American, and 5.1% who identified as "other." The majority of participants were

moderate users of media to watch television programming (35.9%). Twelve participants reported

having seen the program and seven reported having seen episode before. However, the majority

(84.6%) reported that they watch the show "Never." Thus, all participants who reported seeing

the episode and the show were kept in the analysis. Participants were randomly assigned to the

more humor condition ($n = 37$) or the less humor condition ($n = 41$). Condition did not predict

overall perceived humor, $t(76) = -1.31$, $p > .05$, thus conditions were collapsed for analysis.

Overview

Stimuli

Stimuli were obtained from the television program, *Girls*. The program was manipulated

to create a more humorous version (jokes were intact) and a less humorous version (jokes were

removed). Two conditions, one with more humor and variation in the humor types, just as in

Study 1. This chosen episode of *Girls* appears in the middle of the series and was chosen because it heavily focused on the main character's OCD; other episodes in this particular series do not typically revolve around the character's mental health. Because this chosen episode is also introducing the character's mental disorder in the episode, the episode provides background information similar to the pilot episode of *Enlightened*.

Girls (Season 2, Episode 8, "It's Back") is a thirty-minute television program on HBO about twenty-somethings navigating life in New York City. In this episode, the main character has OCD. In this episode, the main character Hannah feels a lot of stress in her life because of her looming book deal, a recent break-up, and a visit from her parents. After trying to hide her symptoms of OCD, Hannah's parents convince her to visit a doctor to help her cope with OCD. The episode was made into two versions: a more humor version and a less humor version as determined by the researcher and a co-viewer. This resulted in forty-four instances that were removed for the less humor version.

This episode involves three storylines with characters Hannah, Marnie, Shoshanna, Adam, and Ray. The episode opens with Adam drinking milk but spitting it back into the cup because it is sour. This humorous part was removed from the less humorous condition. The next scene shows Hannah experiencing symptoms of OCD: counting as she buys potato chips, opening and closing the door. Then, she is shown counting her chips. Next she takes them all at once and puts them in her mouth. Her eating all eight potato chips at once was humorous, thus it was removed. The next scene includes Shoshanna, Marnie, and Ray. Various comments are made such as, "I hope Jessa is warm enough [during her travels]," "She blames all her problems on stupid things like her failed marriage and her relationship with her dad," and "Charlie has become a bourgeois-y nightmare." The scene sums up with Marnie leaving to see her ex-

boyfriend's new company and Shoshanna and Ray fighting over whether they will go to a college party.

The next scene shows Adam at an Alcoholics Anonymous meeting. He gives a monologue about his problem and how he does not feel great lately because of his breakup with Hannah. Parts of this were taken out due to the humorous nature of the comments such as when he explains that he taught Hannah things like "how to use soap." After the meeting, Adam meets a woman who wants to set him up with her daughter. Certain remarks she makes were taken out of the less humor version such as "goddammit if you're not cuter than a dimple on a bug's ass." Other scenes that follow include Marnie awkwardly walking through her ex-boyfriend's new company and Adam leaving a message on a girl's voicemail. Marnie walking awkwardly and Adam saying, "I'm a creep" were removed from the less humorous condition.

The next scene shows Hannah's parents waiting for her outside a New York City hotel. She starts showing signs of her OCD. Her dad makes a joke about her tardiness, which was removed from the less humorous condition. At dinner, Hannah's parents offer for her to come back home to Michigan and see her doctor about OCD. Hannah responds by saying that the doctor is a pediatrician and not appropriate for her. This was said in a sarcastic manner and was removed from the less humor condition. The next scene shows Adam waiting for his date playing with his napkin with his mouth. This part was removed due to the humorous nature. Next, the scene goes back to Hannah and her parents where she is counting while waiting for dinner. Hannah leaves the table and bumps a person accidently. Due to the OCD, she bumps the man seven more times. This is shown in a humorous way and was removed from the less humor version.

The following scenes include Marnie and Ray talking about Marnie's passion for singing. Various jokes are made during this time and were edited out for the less humor condition. Shoshanna goes to a party and says humorous things about her relationship with Ray and those were edited out from the less humor version.

Hannah then goes to a New York City doctor with her parents to get help with OCD. Her parents remark that this doctor helped another person they know and Hannah responds by saying he was an "unreachable arsonist." This humor was edited out of the less humor version. Hannah then sarcastically jokes that she is not hungry so she "must be anorexic." This darkly humorous joke was removed for the less humor condition. While meeting with the doctor, Hannah gets upset that the doctor says she has a "classical representation" of OCD. She responds in a sarcastic monologue about how she has been dealing with OCD. This was removed for the less humor condition, but Hannah's facial expression was kept which showed her disagreement for his "classical representation" comment. Additionally, Hannah says she has a looming book deal in which the stress may be causing OCD. She asks the doctor if he has written a book and he responds that he has. She then says that he probably has more willpower than she does. He asks how that is so. She replies by saying "well I'm not going to give you a compliment now," which was edited out of the less humorous version. Lastly, the doctor reveals his book was not about therapy but about a bionic dog. This is humorous and was taken out of the less humor condition. The episode ends with Hannah riding the subway with her parents while she holds her prescribed medication in hand. The more humorous version with credits ran 30 minutes and 29 seconds. The less humorous version with credits ran 23 minutes and 4 seconds.

Procedure

Study 2's procedure mirrored Study 1 exactly. Participants were emailed a link, asked questions about empathy and approach tendency, watched one of the two conditions, answered questions about humor type, affect, approach of the character, PSI, social distance, and stigma. They were then debriefed and thanked.

Measures

Multiple choice questions about plot. Multiple-choice questions about the plot were used to ensure that the participant watched the program in full. The multiple choice questions for *Girls* included "In the episode you just watched, which character's parents were shown" and "In the episode you just watched, which of the following happened?" and gave three choices for each. If participants answered both questions correctly, they were included in the analysis. This eliminated three participants.

Familiarity with the show. Participants answered one question on how often they watch HBO's *Girls* on a scale from 1 *never* to 5 *all of the time* (*M* = 1.31, *SD* = .81, *Mdn* = 1.00).

Humor. To assess humor level, participants were asked to rate the statement "I thought this program was humorous" on a scale from 1 *strongly disagree* to 5 *strongly agree* (*M* = 2.83, *SD* = 1.06, *Mdn* = 3.00). The original model included humor, however, it did not explain any associations so was dropped from the model for parsimony.

Level of contact with mental illness (covariate). To assess familiarity with mental illness in participants' own lives, The Level of Contact Report was used (adapted from Corrigan, Edwards, Green, Diwan, Penn, 2001). Level of contact had a possible range of 1 to 10 (*M* = 5.78, *SD* = 3.05, *Mdn* = 7.00).

Empathy (covariate). Empathy was assessed by a series of questions pertaining to empathic concern (*M* = 3.97, *SD* = .44, *Mdn* = 4.00, α = .68) (Tamborini & Mettler, 1990).

54

BAS Sensitivity (covariate). Natural or inherent approach was assessed using the behavioral activation system (BAS) measure ($M = 3.37$, $SD = .55$, $Mdn = 3.50$, $\alpha = .68$) (Carver & White, 1994).

Perceived humor mechanisms. Perceived humor mechanisms were measured using an adapted version of Cho's (1995) humor mechanism scale. It consists of three dimensions, cognitive, affective, and disparagement. Participants rated each statement on a 5-point Likert scale ranging from 1 *strongly disagree* to 5 *strongly agree* for each statement pertaining to the perceived humor mechanisms depicted in the stimuli.

Cognitive humor asked questions about novelty and surprise ($M = 3.45$, $SD = .63$, $Mdn = 3.50$, $\alpha = 65$). Affective humor asked questions about emotional release and dark humor ($M = 2.69$, $SD = .62$, $Mdn = 2.83$, $\alpha = .70$). Disparagement humor asked questions about feeling superior ($M = 2.43$, $SD = .63$, $Mdn = 2.40$, $\alpha = .62$).

Positive affect (mediator). Affective state was measured using the Positive and Negative Affect Schedule (PANAS). Participants were asked the extent to which they feel each of 20 feelings assessed on a 5-point Likert scale ranging from 1 *strongly disagree* to 5 *strongly agree* (Watson et al., 1988). Positive affect subscale items include: interested, alert, attentive, excited, enthusiastic, inspired, proud, determined, strong, and active ($M = 2.19$, $SD = .75$, $Mdn = 2.05$, $\alpha = .90$).

Approach toward the character (mediator). Approach motivation toward the target, or main character, was assessed using three items inspired by measures of approach orientation and behavioral distance in Gable (2006) and Labroo and Nielsen (2010). Participants were given three scenarios that involve meeting the main character in a lunch room. Participants indicated their tendency to approach or avoid the main character by choosing whether to step toward or

away from the character, engage with the character, or by their comfort level with sitting next to the character. Participants were given 1 point for approach tendencies and 0 points for avoidance tendencies. Scores were summed (*M* = 1.18, *SD* = .85, *Mdn* = 1.00).

PSI (mediator). PSI was measured using the 10-item measure by Rubin and Perse (1987), adapted to replace "favorite soap opera character" with "main character in the episode." Participants rated each statement on a 5-point Likert scale ranging from 1 *strongly disagree* to 5 *strongly agree* regarding different interactions they feel with the character. All items were averaged together to create an index of PSI (*M* = 2.90, *SD* = .54, *Mdn* = 3.00, α = .84).

Social distance (DV). Participants were asked on a 5-point Likert scale ranging from 1 *strongly disagree* to 5 *strongly agree* their willingness to interact with a person with OCD in different relationships including tenant, co-worker, neighbor, member of same social circle, someone to be recommended for a job, in-law, or child care provider (Link et al., 1987). Answers were averaged (*M* = 3.71, *SD* = .75, *Mdn* = 3.71, α = .89). Higher scores reflect higher willingness to interact with an individual with OCD.

Mental health stigma (DV). Endorsement of stigmatizing views of mental health conditions were measured using a version of the Depression Stigma Scale (Griffith et al., 2008). The scale includes 10 items. Participants indicated the extent to which they agree or disagree with statements. Response options ranged on 7-point Likert scale from 1 *strongly disagree* to 5 *strongly agree* (*M* = 2.78, *SD* = .48, *Mdn* = 2.20, α = .74). Higher scores reflect higher stigma.

CHAPTER 5: STUDY 2 RESULTS AND DISCUSSION

Overview

The first analysis consisted of first-order correlations. Table 3 shows these relationships. Level of contact with mental illness was positively correlated with familiarity with show. Empathy was negatively associated with perceived disparagement humor. Familiarity with the show was positively correlated with perceived affective and disparagement humor. Positive affect was positively correlated with perceived humor, cognitive humor, and affective humor, PSI, and stigma. Perceived humor was positively associated with perceived cognitive and affective humor as well as stigma. Perceived cognitive humor was associated with perceiving more affective humor and more PSI. Perceived affective humor was positively associated with PSI and stigma and negatively associated with social distance. Approach towards the character was positively correlated with PSI. Social distance was negatively correlated with stigma.

Given the results of the correlation analysis, structural equation modeling was employed using Mplus7 (Byrne, 2013). To test the hypothesized model, cognitive, affective, and disparagement perceived humor were used as exogenous variables. Paths were then tested from each type of perceived humor (cognitive, affective, disparagement) to positive affect and approach of the character. Paths from positive affect and approach of the character were tested to PSI. Paths from PSI were tested to stigma and social distance. Direct pathways from types of perceived humor to PSI, social distance, and stigma were also tested. Controls included empathetic concern with PSI, natural approach tendency with approach of the character, and level of contact with mental illness with PSI, stigma, and social distance. The control variables

57

were nonsignificant and did not offer explanatory power to the first model, thus a second model was tested. The second model was exactly the same as the first, but excluded all the control variables. See Table 4. The second model resulted in a more parsimonious model and was able to show whether the results from Study 1 replicated. No main variable relationships changed from the first model to the second. Thus, hypotheses and research questions were tested using the second model. See Figure 2.

Hypothesis and RQ Testing

H1 predicted that as more cognitive humor was perceived, more positive affect and approach of the character would also be reported. H1 was not supported. The relationship between cognitive humor and positive affect approached significance, $\beta_{positiveaffect} = .24$, $p = .08$; however it did follow the same pattern as Study 1. In other words, as more cognitive humor was perceived, more positive affect was reported. Cognitive humor did not predict approach, $\beta_{approach} = .02$, $p > .05$.

H2 predicted that as more affective humor was perceived, more positive affect and approach of the character would result. H2 was partially supported. As more affective humor was perceived, more positive affect was reported, $\beta_{positiveaffect} = .51$, $p < .001$. Participants who perceived more affective humor were more likely to report being in a positive affective state. However, affective humor did not predict approach, $\beta_{approach} = .28$, $p > .05$. These results mirrored the results of Study 1.

RQ1 regarded the relationship between perceived disparagement humor, positive affect, and approach motivation. Results revealed no significant relationship between disparagement humor and positive affect, $\beta_{positiveaffect} = .06$, $p > .05$. However, there was a significant inverse relationship between disparagement humor and approach, $\beta_{approach} = -.31$, $p < .05$. As participants

rated less disparagement humor, they wanted to approach the character more. Inversely, as participants reported more disparagement humor, they were more likely to not want to approach the character. These results also mirrored Study 1.

H3 predicted that as viewers have greater approach towards the character, they would perceive a stronger PSI with the character. H3 was supported, $\beta = .16$, $p < .01$. Participants who wanted to approach the character more also reported feeling a stronger PSI with the character. Again, this result mirrored Study 1.

H4 predicted that as viewers have greater positive affect, they would perceive a stronger PSI with the character. H4 was not supported, $\beta = .09$, $p > .05$. In other words, participants' positive feeling did coincide with a stronger PSI with the character. This was also found in Study 1.

H5 predicted that as PSI increased, reported stigma would decrease and participants would report higher likelihood of accepting a closer social distance to a person with a mental illness. H5 was partially supported, $\beta_{socialdistance} = .42$, $p < .05$, $\beta_{stigma} = -.09$, $p > .05$. In other words, those who felt a strong PSI were more likely to accept those with OCD at a closer social distance. However, PSI did not have a significant association with feelings of stigma for mental illnesses, *in general*.

Supplementary Analysis

As explained in the overview, cognitive, affective, and disparagement humor were also examined through direct paths to PSI, social distance, and stigma. Results revealed that a direct relationship cognitive humor and PSI was not significant, $\beta_{cognitive} = .31$, $p > .05$. Affective humor and PSI, $\beta_{affective} = .07$, $p > .05$ and disparagement humor and PSI, $\beta_{disparagement} = -.14$, $p > .05$ were not significant. This differs from Study 1.

Cognitive and disparagement humor were not significant when directly predicting social distance, $\beta_{cognitive} = -.15\ p > .05$, $\beta_{disparagement} = -.12$, $p > .05$. The direct relationship between affective humor and social distance was significant though, $\beta_{affective} = -.43\ p < .01$. This also differed from Study 1.

However, affective humor significantly predicted stigma in a direct relationship, $\beta_{affective} = .26\ p < .01$, which mirrored Study 1. Cognitive humor and disparagement humor did not directly predict stigma, $\beta_{cognitive} = .01$, $p > .05$, $\beta_{disparagement} = .10$, $p > .05$.

Discussion Study 2

Using theoretical guides such as the parasocial contact hypothesis (Hoffner & Cohen, 2012; 2015; Schiappa et al., 2005; see Allport's 1954 intergroup contact theory), broaden-and-build theory of positive emotions (e.g., Fredrickson, 2001; Fredrickson & Branigan, 2001), and literature about humor (e.g., Martin, 2007), Study 2 explored if Study 1 was replicable. An experiment using the television program *Girls* as stimuli, revealed close similarities to the model in Study 1.

Specifically, after viewing the stimuli, as cognitive and affective perceived humor types increased, so did positive affect. Although it is important to note that perceived cognitive humor only approached significance in its relationship with positive affect. Thus, just as in Study 1, as participants perceived more of these types of humor, they felt more positively than those who did not perceive these types of humor. Just as in Study 1, disparagement humor did not have any significant association with positive affect.

Cognitive and affective humor was not associated with approach behavior toward the character. However, disparagement humor did. The less disparagement humor reported, the more

likely the participant was willing to approach the character. This not only aligns with previous research (Chang & Gruner, 1981), but also replicates the findings in Study 1.

Similar to Study 1, PSI was only predicted by approach of the character and not positive affect. This again calls into question how the broaden-and-build theory of positive emotions plays into this process. Specifically, Study 2 found that those who felt positively did not necessarily feel a strong PSI with the character with a mental illness. Those who were more inclined to approach the character did feel a stronger PSI with the character with mental illness, just as in Study 1. This further suggests that the approach tendency might be the driving force behind the "broadening" of the mind. Study 2 also supports the notion that positive affect and approach tendency can exist without an association. As seen in this study, those who perceived less disparagement humor felt more approach but not necessarily positive affect. As such, this might lead to potentially new information about how we process humor and how it affects the broadening of the mind.

PSI predicted social distance in that those who felt a stronger PSI were also more willing to accept a person with a mental illness in another interaction setting. However, PSI did not have a significant association with stigma. This might be because social distance was tested regarding a person with OCD, while stigma was for mental illnesses in general.

CHAPTER 5: GENERAL DISCUSSION

This dissertation focused on a large problem in American society today; mental illness stigma (Daniel Yanklovich Group, 1990; Lopez, 1991; U.S. President's Commission on Mental Health, 1978). Because of stigma, individuals might avoid seeking diagnosis, treatment, and/or hold back from encouraging others to get help. One of the main sources for information about mental illness is media, specifically television (Daniel Yanklovich Group, 1990; Lopez, 1991; U.S. President's Commission on Mental Health, 1978). This dissertation hypothesized a model that would decrease stigma when humor was present in a television program. Using two different television programs and two different versions of each program, hypotheses were tested that asked how different types of perceived humor could lead to positive affect, approach tendencies, PSI, and finally reduction of stigma and social distance. Whereas both sets of stimuli focused on different characters, different settings, and different mental illnesses, results mirrored each other in various ways.

Specifically, I hypothesized that those who perceived more cognitive and affective humor would also report higher positive affect and approach towards the character. I questioned the relationship disparagement humor would have with positive affect and approach. Results in both studies showed cognitive and affective humor (*note*: cognitive humor only approached significance in Study 2) both predicted positive affect. However, perceived disparagement humor did not. Based on humor literature, this aligns squarely with humor effects. When surprise humor (cognitive) is perceived, it often leads to positive affect due to the activation of two separate and often unrelated concepts in the brain (Cho, 1995; Suls, 1972). When dark (affective) humor is

perceived, it is also predictive of positive affect due to its ability to release tension caused by the mention of an arousal-inducing topic (Cho, 1995). Both studies showed that this was the case and cognitive and affective humor in both studies had instances when the humor was solely about, partially about, or had nothing to do with the mental illness portrayed.

I also hypothesized that cognitive and affective humor would predict approach towards the character. However, there was no significant relationship between these variables. This was particularly interesting because these two types of humor did create positive affect, but that did not correlate with individuals approach tendency towards the character. Additionally, the broaden-and-build theory of positive emotions (e.g., Fredrickson, 2001; Fredrickson & Branigan, 2001) would also predict that when an individual is experiencing positive affect they would be more likely to be open to novel topics because of the positivity. In this case, individuals who were feeling more positive from cognitive and affective humor did not show any relationship with approaching a character that had a mental illness (which can be a taboo topic). There could be various reasons for this. First, it may be that the approach of the character measure was not a good way to assess the amount of approach orientation the viewer had toward the character. Second, some of the humor causing the positive affect might not have had anything to do with the character with mental illness. For instance, in *Enlightened*, cognitive humor and affective humor are present in scenes that are not entirely about Amy. In *Girls*, there are entire scenes that involve cognitive and affective humor that Hannah, the main character, is not in. However, this also might suggest that in the present study, approach tendency might be the driving force behind the broadening of one's mind. In other words, this study showed that those who felt more approach oriented were more likely to be open minded about stigma towards those with mental

illnesses. These findings help researchers question what is the explanatory mechanism behind less stigmatizing attitudes.

Differently from cognitive and affective humor, disparagement humor did predict approach of the character. Specifically, when disparagement humor was lower, approach tendency was higher. Literature would suggest that disparagement humor can be hostile and encourage the splitting of groups (Ferguson & Ford, 2008; Singer, 1968; Freud, 1960/1905); so perceiving less of that may increase an individual's motivation to approach a person who was not treated in a deprecating way. In this case, it was the character with mental illness. This supports studies in the past that have shown that disparagement humor fosters stigma (e.g., Westin & Thomsen, 1993; Ford, 1997), which supports the hypothesis that disparagement humor fosters negative dispositions towards a targeted group.

In both studies, approach of the character predicted PSI. In other words, as participants scored higher on approaching the character, they also scored higher on PSI with the character with mental illness. Because PSI has elements of wanting to meet the character and talk to the character, this relationship makes sense. PSI predicted lower social distance between the participant and individuals with mental illness. These findings further exhibit the parasocial contact hypothesis and intergroup contact theory in that those who had a positive interaction with a person from a group that is traditionally stigmatized was more likely to rate lower social distance with regards to *all* people within that group (Schiappa et al., 2005).

Interestingly, PSI only predicted lower stigma in Study 1 (*Enlightened*) but not in Study 2 (*Girls*). This may be due to the fact that Study 1 asked about mental illness in general for both social distance and stigma whereas Study 2 asked about OCD pertaining to social distance and mental illness in general pertaining to stigma. According to the parasocial contact hypothesis and

intergroup contact theory, contact with a person in another group must be positive in order to effectively change attitudes about stigma (e.g., Allport, 1954). Since that is the case, it might actually mean that although cognitive and affective humor caused positive affect, it might not have actually been an environment that facilitated positive contact with the character with mental illness. Rather, it may have facilitated negative contact that the audience felt they could laugh. If this is the case, it is important to understand what exactly was being portrayed in each of the studies.

The most interesting and possibly perplexing replicated finding was the direct relationship between perceived affective humor and stigma. Specifically, as individuals rated perceived affective humor higher, they also rated stigma higher. This would suggest that affective humor actually caused stigma levels to rise. This might suggest that humorous portrayals, at least the ones in these studies, may be making light of the subject of mental illness and therefore sending the message that it is acceptable to not take mental illness seriously. In other words, affective humor in this study might be a form of disparagement humor due to its ability to minimize those with mental illness' struggles. However, this may not be the case with *all* humor about mental illness. For instance, one study about the program, *Monk*, a show categorized as a comedy-drama, showed that higher parasocial bonds related to lower stereotypes about OCD (a condition the main character had). However, different from this study, Monk's phobias and OCD tendencies are "treated in a light-hearted manner" (Hoffner & Cohen, 2012, p. 651), which may suggest that the humor in that program is predominately cognitive humor, and affective humor, as in this study, may paint a darker picture of the mental illness experience.

Another possible speculation for the relationship between affective humor and increased stigma may be that affective humor serves as an intensifier so audiences may notice the negative

characteristics of a mental illness more than they would otherwise. Because affective humor has an element of anxiety-inducing topics, those instances could also mean that audiences are being exposed to more negative characteristics associated with the mental illness. For example, in *Girls*, the main character Hannah visits her doctor and gives a darkly humorous monologue about her struggles with OCD. Her doctor says she seems to have a classical presentation of OCD. Hannah responds,

> "Well, OK. Then I guess it's classic to have to masturbate eight or sixteen times a night until your legs shake and you're crying and you're trying to make sure that your parents didn't hear you so you check their door eight times. Then you move your toothbrush sixty-four times, then you move your dad's toothbrush sixty-four times, then you go back and forth between the two moving each one eight times until you've reach sixty-four times and then you realize that that doesn't feel quite right either. And, suddenly it's three in the morning and you're fucking exhausted and you go to school the next day looking like a zombie. It's classical."

This quote demonstrates just how affective humor might be intensifying the negative characteristics of OCD, while still retaining a humor element. This could reinforce the negative stigmas audiences already may have about OCD. Additionally, affective humor such as the above quote might actually be enforcing stigma-supporting action, in which case the less humor versions actually might have reduced the amount of stigmatizing portrayals. For instance, the above quote was not included in the less humor condition, and therefore audiences did not hear about her experience.

The source of the humor may also play a role in the relationship between affective humor and increased stigma. For instance, it would be interesting to know if the affective humor

perpetuates increased stigma when it comes from the person struggling with the mental illness or if it comes from another character without a mental illness. Future studies should examine this relationship.

The own viewer's humor style may also play a role in how affective humor relates to increased stigma. One recent study found that comics who disclosed having a mental illness and were perceived as more aggressive led to less changes in stigma (Corrigan, Powell, Fokuo, Kosyluk, 2014). In the current two studies, affective humor could have been seen as more aggressive and caused individuals to report increased stigma, especially because they spent more time with the character than in the Corrigan et al. (2014) study. This increased time could have increased viewers' perceptions of aggression and caused an actual increase in stigma.

Humor may also be a distraction that keeps audiences from seriously considering how we are responding to questions about stigma but not necessarily thinking about it carefully. In other words, in this study, humor may have taken away from the seriousness of the matter and therefore did not cause individuals to think carefully about mental illness stigma. These studies were the first dives into how entertainment education (E-E) may have positive outcomes when humor is used as a mechanism in the message. Past research does support that E-E is effective in changing attitudes (e.g., for review see Singhal, Cody, Rogers, & Sabido, 2004), although the current studies may shed light on what *not* to do when creating E-E programming. Specifically, the current studies could be offering support for the notion that dark humor does not decrease stigma for the better.

Whereas humor did not effectively change stigma for the better in these studies, there might be instances where humor could work more effectively. First, the portrayals may have to be counter-stereotypical and emphasize positive qualities of the character to constitute more

positive affect that was not facilitated by negative humor. This may increase the likelihood of positive affect translating into PSI. Additionally, more time spent with the character overall might also allow the viewer to understand their humor more and be able to decipher between humor derived from negativity and humor derived from positivity. Recall that almost all the participants in the current study had never seen either of the programs in the studies.

It may also be plausible that content in these studies resulted in a state of acceptance offered by positive emotion from humor that actually helps viewers accept their own negative attitudes. If this is so, the current studies are consistent with broaden-and-build theory of positive emotions (e.g., Fredrickson, 2001; Fredrickson & Branigan, 2001). In other words, positivity may actually be cause for individuals to *accept* their true negative feelings toward mental illness and be less likely to correct for social desirability. Future researchers should explore this relationship in light of the broaden-and-build theory.

Limitations

Although these studies showed promise for information about the future of the use of humor, they also had some limitations. First, the stimuli conditions did not predict the level of how funny the participants found it. This suggests that although participants perceived types of humor, they did not necessarily have to think the program was also funny. Additionally, the two conditions might not have been different enough in that the researcher took out jokes but not necessarily situations. Second, perceptions of cognitive, affective, and disparagement humor only reflect participant perceptions and may not actually be present in the content. For example, disparagement humor was perceived much by the participants yet the episodes showed little of this type of humor. Third, researcher control was limited. That is, jokes were removed from the episodes for the less humor versions but also could mean that participants in different conditions

68

did not always get the exact same message. Stimuli also involved two white women struggling with mental illness, which may not translate to others dealing with a mental illness. Fourth, the sample in this study was not very diverse consisting primarily of young, white women. Fifth, this dissertation only examined two shows with characters dealing with mental illnesses. Finally, the approach measure could have also been the reason there was not an association between approach toward the character and positive affect.

Conclusion

This study showed some important information in studying humor. It showed that perceived humor may have significant associations with affect, approach towards characters, PSI, stigma, and social distance. Specifically, perceived cognitive and affective humor is associated with positive affect but not approach towards the character with mental illness. It also showed that perceived disparagement humor has a negative association with approach toward the character. Approach towards the character had a positive association with PSI and acceptance of those with mental illnesses at closer social distances.

Future research should continue to probe the effects of humor. Specifically, researchers should continue to analyze how type of humor plays a role in mental illness stigma as well as other groups of individuals who are frequently stigmatized. An additional measure of sense of humor (Corrigan et al., 2014) could also help in deciphering which individual differences contribute to perceived humor and eventual stigma reduction. Validating and testing the perceived humor scale in the context of entertainment would also be useful. A larger scale pre-test/post-test of stigma will allow researchers a more accurate view of reduction. Additionally, studying the parasocial relationship (as in prior studies) over a period of time may shed even

more light on the reasons for the effects. Lastly, future researchers should continue to develop

and test stimuli to examine humor messages with the goal to test these effects more effectively.

Table 1
Zero-Order Correlations – Study 1

Variable	1	2	3	4	5	6	7	8	9	10	11	12	13
1. Level of Contact with mental illness		.01	-.08	-.05	-.26*	-.11	-.16	-.08	-.02	.07	-.05	.08	-.13
2. Empathy Concern			.00	.03	.07	-.18	.07	-.00	-.17	.23*	.14	.25*	-.21
3. BAS Drive				.01	.12	.27**	.06	.26*	-.07	.09	.19	.01	.04
4. Familiar with show					.05	-.18	-.02	.08	.18	.02	.07	.01	.04
5. Positive affect						.10	.43**	.64**	-.23*	.13	.55**	.13	.10
6. Perceived humor							.11	.22*	-.08	-.00	.22*	.15	.06
7. Cognitive humor								.35**	-.21*	.15	.35**	-.00	.10
8. Affective humor									-.16	.13	.67**	.13	.07
9. Disparagement humor										-.34**	-.50**	-.40**	.27**
10. Approach of character											.390**	.26*	-.21*
11. PSI												.44**	-.24**
12. Social Distance													-.61**
13. Stigma													

* Correlation is significant at the .05 level. **Correlation is significant at or below the .01 level.

Table 2

Fit Statistics for Study 1: Enlightened

Model Name	Model Description	Chi2	Dfs	N	p-value	CFI	TLI	RMSEA
Model 1	With Controls	12.474	15	95	0.6428	1.000	1.029	0.000
Model 2	Without Controls	2.327	5	95	0.8022	1.000	1.057	0.000

Note: Controls include empathetic concern, natural approach tendency, and level of contact with mental illness

Table 3

Zero-Order Correlations – Study 2

Variable	1	2	3	4	5	6	7	8	9	10	11	12	13
1. Level of Contact with mental illness		.01	-.08	-.05	-.26*	-.11	-.16	-.08	-.02	.07	-.05	.08	-.13
2. Empathy Concern			.00	.03	.07	-.18	.07	-.00	-.17	.23*	.14	.25*	-.21
3. BAS Drive				.01	.12	.27**	.06	.26*	-.07	.09	.19	.01	.04
4. Familiar with show					.05	-.18	-.02	.08	.18	.02	.07	.01	.04
5. Positive affect						.10	.43**	.64**	-.23*	.13	.55**	.13	.10
6. Perceived humor							.11	.22*	-.08	-.00	.22*	.15	.06
7. Cognitive humor								.35**	-.21*	.15	.35**	-.00	.10
8. Affective humor									-.16	.13	.67**	.13	.07
9. Disparagement humor										-.34**	-.50**	-.40**	.27**
10. Approach of character											.390**	.26*	-.21*
11. PSI												.44**	-.24**
12. Social Distance													-.61**
13. Stigma													

*Correlation is significant at the .05 level. **Correlation is significant at or below the .01 level.

Table 4

Fit Statistics for Study 2: Girls

Model Name	Model Description	Chi2	Dfs	N	p-value	CFI	TLI	RMSEA
Model 1	With Controls	13.806	15	78	0.5403	1.000	1.040	0.000
Model 2	Without Controls	6.660	5	78	0.2472	.981	.903	0.066

Note: Controls include empathetic concern, natural approach tendency, and level of contact with mental illness

Table 5

Descriptive Statistics for Study 1 – Enlightened

Variable	All *M/SD*	Less Humor *M/SD*	More Humor *M/SD*
Level of Contact with mental illness	6.61/2.84	6.49/2.91	6.74/2.78
Empathy Concern	3.99/.49	4.06/.52	3.90/.44
BAS Drive	3.32/.62	3.27/.61	.3.38/64
Familiar with show	1.02/.21	2.00/.00	1.98/.15
Positive affect	2.41/.86	2.34/.82	2.48/.90
Perceived humor	2.12/.87	2.12/.90	2.11/.85
Cognitive humor	3.36/.63	3.30/.64	3.42/.61
Affective humor	2.87/.71	2.79/.69	2.96/.73
Disparagement humor	2.69/.75	2.71/.76	2.68/.74
Approach of character	1.16/.91	1.31/.94	1.00/.87
PSI	2.76/.71	2.78/.65	2.73/.77
Social Distance	3.52/.74	3.62/.68	3.41/.78
Stigma	2.78/.48	2.19/.53	2.16/.43

Note: There were no significant differences between variables in the less humor and more humor conditions.

Table 6

Descriptive Statistics for Study 2 - Girls

Variable	All *M/SD*	Less Humor *M/SD*	More Humor *M/SD*
Level of Contact with mental illness	5.78/3.05	5.51/3.18	6.08/2.92
Empathy Concern	3.97/.44	3.90/.43	4.04/.44
BAS Drive	3.37/.55	3.29/.59	3.46/.49
Familiar with show	1.31/.81	1.83/.38	1.86/.35
Positive affect	2.19/.75	2.22/.75	2.16/.77
Perceived humor	3.01/.89	2.73/1.07	2.95/1.05
Cognitive humor	3.45/.63	3.35/.62	3.55/.63
Affective humor	2.69/.62	2.55/.70[a]	2.57/.52[a]
Disparagement humor	2.43/.63	2.31/.70	2.57/.52
Approach of character	1.18/.85	1.20/.90	1.17/.81
PSI	2.90/.54	2.94/.48	2.85/.62
Social Distance	3.71/.75	3.89/.72[b]	3.51/.75[b]
Stigma	2.78/.48	1.97/.46	1.97/.49

Note: Superscripts indicate a significant difference between the variables in each condition

Table 7

Relationship Comparisons between Study 1 and Study 2

Variable	Enlightened B	Girls B
Predicting Positive Affect		
Cognitive humor	.30**	.24+
Affective humor	.66***	.51***
Disparagement humor	-.11	.06
Predicting Approach of Character		
Cognitive humor	.10	.02
Affective humor	.07	.28
Disparagement humor	-.39**	-.31*
Predicting PSI		
Positive affect	.10	.10
Approach of character	.16**	.16**
Cognitive humor	.03	.31**
Affective humor	.51***	.07
Disparagement humor	-.30***	-.14+
Predicting Social Distance		
PSI	.56***	.42*
Cognitive humor	-.18+	-.15
Affective humor	-.21	-.43**
Disparagement humor	-.19+	-.12
Predicting Stigma		
PSI	-.32**	-.09
Cognitive humor	.13+	.01
Affective humor	.23**	.26**
Disparagement humor	.08	.10

+ Correlation is significant at the .10 level. * Correlation is significant at the .05 level. **Correlation is significant at the .01 level. ***Correlation is significant at the .001 level.

FIGURES
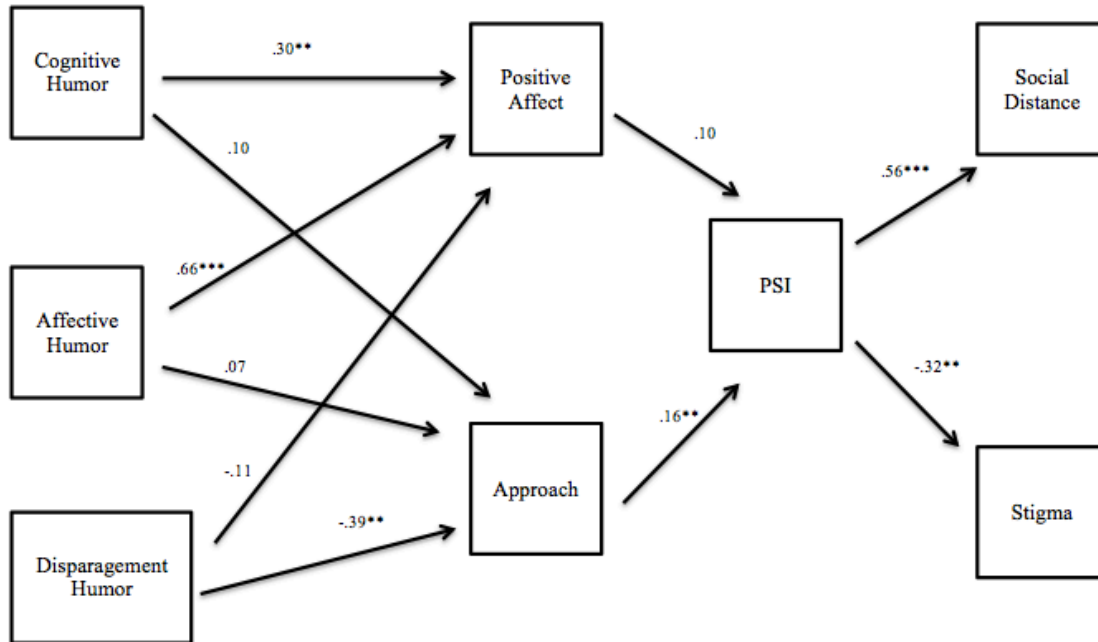
Figure 1. Study 1 Structural Equation Model. This figure illustrates the relationships in the model. + Correlation is significant at the .10 level. * Correlation is significant at the .05 level. **Correlation is significant at the .01 level. ***Correlation is significant at the .001 level.
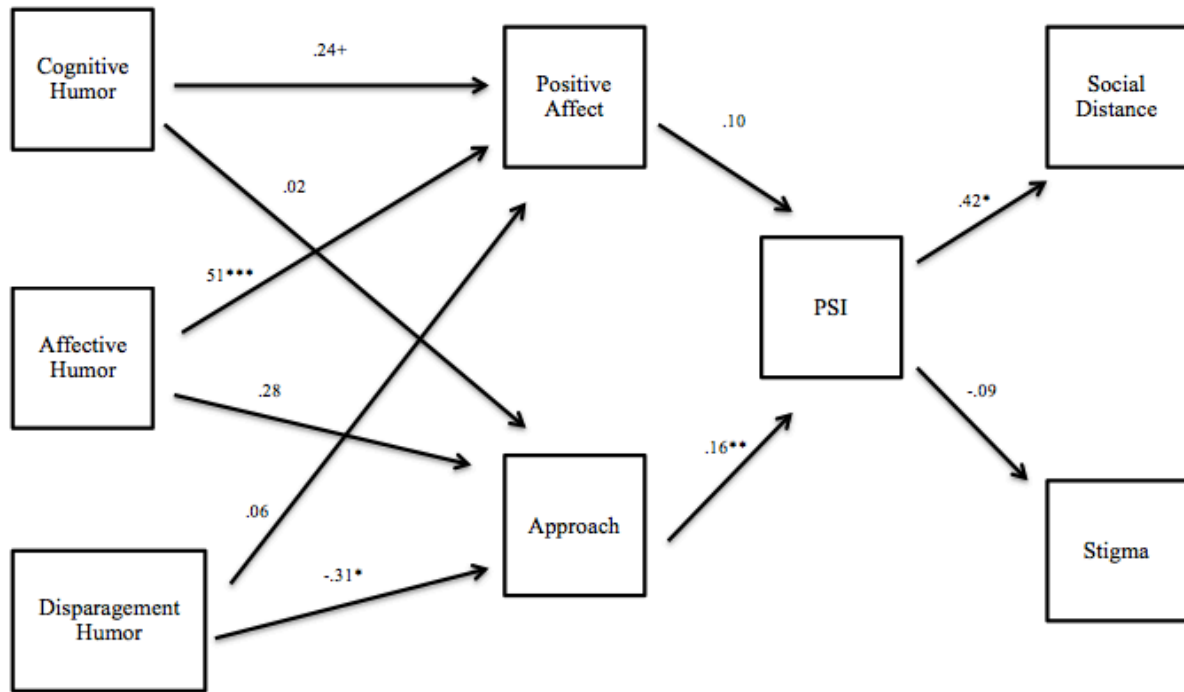
Figure 2. Study 2 Structural Equation Model. This figure illustrates the relationships in the model. + Correlation is significant at the .10 level. * Correlation is significant at the .05 level. **Correlation is significant at the .01 level. ***Correlation is significant at the .001 level.

Study 1 Questionnaire

Please rate the following statements from 1 "strongly disagree" to 5 "strongly agree."

	Strongly Disagree (1)	Disagree (2)	Neither agree nor disagree (3)	Agree (4)	Strongly agree (5)
I cannot continue to feel OK if others around me are feeling depressed. (1)	○	○	○	○	○
I don't become upset because a friend is acting upset. (2)	○	○	○	○	○
I become nervous if others around me seem nervous. (3)	○	○	○	○	○
The people around me have a great influence on my moods. (4)	○	○	○	○	○
Before criticizing someone, I try to imagine how I would feel in their place. (5)	○	○	○	○	○
I sometimes try to	○	○	○	○	○

understand my friends better by imagining things from their perspective. (6)					
I try to look at everyone's side of a disagreement before I make a decision. (7)	○	○	○	○	○
When I am upset, I usually try to put myself in his or her shoes for a while. (8)	○	○	○	○	○
I am the type of person who is concerned when other people are unhappy. (9)	○	○	○	○	○
When I see someone being taken advantage of, I feel kind of protective toward them. (10)	○	○	○	○	○
I often have tender, concerned feelings for people less fortunate	○	○	○	○	○

81

than myself. (11)					
I would describe myself as a pretty soft-hearted person. (12)	○	○	○	○	○
I sometimes don't feel very sorry for people when they are having problems. (13)	○	○	○	○	○
Other people's misfortunes do not usually disturb me a great deal. (14)	○	○	○	○	○
I am often touched by the things I see happen. (15)	○	○	○	○	○
I am the type of person that can say the right thing at the right time. (16)	○	○	○	○	○
Even though I often try to console someone who is feeling bad, I never	○	○	○	○	○

seem to be able to say the right thing. (17)					
I usually respond appropriately to the feelings of others. (18)	○	○	○	○	○
Others think of me as an empathic person. (19)	○	○	○	○	○
My friends come to me with their problems because I am a good listener. (20)	○	○	○	○	○

Please rate the following statements according to how you feel at this very moment on a scale from 1 "strongly disagree" to 5 "strongly agree."

	Strongly disagree (1)	Disagree (2)	Neither agree nor disagree (3)	Agree (4)	Strongly agree (5)
A person's family is the most important thing in life. (1)	○	○	○	○	○
Even if something bad is about to happen to me, I rarely experience fear or nervousness. (2)	○	○	○	○	○
I go out of my way to get things I want. (3)	○	○	○	○	○
When I'm doing well at something I love to keep at it. (4)	○	○	○	○	○
I'm always willing to try something new if I think it will be fun. (5)	○	○	○	○	○
How I dress is important to me. (6)	○	○	○	○	○
When I get something I want, I feel excited and	○	○	○	○	○

energized. (7)				
Criticism or scolding hurts me quite a bit. (8)	○	○	○	○	○
When I want something I usually go all-out to get it. (9)	○	○	○	○	○
I will often do things for no other reason than that they might be fun. (10)	○	○	○	○	○
It's hard for me to find the time to do things such as get a haircut. (11)	○	○	○	○	○
If I see a chance to get something I want I move on it right away. (12)	○	○	○	○	○
I feel pretty worried or upset when I think or know somebody is angry at me. (13)	○	○	○	○	○
When I see an opportunity for something I like I get	○	○	○	○	○

excited right away. (14)					
I often act on the spur of the moment. (15)	○	○	○	○	○
If I think something unpleasant is going to happen I usually get pretty "worked up." (16)	○	○	○	○	○
I often wonder why people act the way they do. (17)	○	○	○	○	○
When good things happen to me, it affects me strongly. (18)	○	○	○	○	○
I feel worried when I think I have done poorly at something important. (19)	○	○	○	○	○
I crave excitement and new sensations. (20)	○	○	○	○	○
When I go after something I	○	○	○	○	○

use a "no holds barred" approach. (21)					
I have very few fears compared to my friends. (22)	○	○	○	○	○
It would excite me to win a contest. (23)	○	○	○	○	○
I worry about making mistakes. (24)	○	○	○	○	○

Please watch the following episode IN FULL. When the episode is over, press the arrows below to continue the survey.

In the episode you just watched, which of the following was shown?
- ○ A woman was reunited with her child. (1)
- ○ A woman swam with a sea turtle. (2)
- ○ A woman went skiing with an old friend. (3)

In the episode you just watched, Amy lives with…

- ◯ Her aunt (1)
- ◯ Her estranged husband (2)
- ◯ Her mother (3)

Please indicate how much you feel each emotion at this moment on a scale from 1 "not at all" to 5 "very much."

	Not at all (1)	(2)	(3)	(4)	Very much (5)
Interested (1)	○	○	○	○	○
Distressed (2)	○	○	○	○	○
Excited (3)	○	○	○	○	○
Upset (4)	○	○	○	○	○
Strong (5)	○	○	○	○	○
Guilty (6)	○	○	○	○	○
Scared (7)	○	○	○	○	○
Hostile (8)	○	○	○	○	○
Enthusiastic (9)	○	○	○	○	○
Proud (10)	○	○	○	○	○
Irritable (11)	○	○	○	○	○
Alert (12)	○	○	○	○	○
Ashamed (13)	○	○	○	○	○
Inspired (14)	○	○	○	○	○
Nervous (15)	○	○	○	○	○
Determined (16)	○	○	○	○	○
Attentive (17)	○	○	○	○	○
Jittery (18)	○	○	○	○	○
Active (19)	○	○	○	○	○
Afraid (20)	○	○	○	○	○

Think about how you feel. Look at the pictures below, and please check all that apply to how you feel at the moment.

- ❏ 1 (1)
- ❏ 2 (2)
- ❏ 3 (3)
- ❏ 4 (4)
- ❏ 5 (5)
- ❏ 6 (6)
- ❏ 7 (7)
- ❏ 8 (8)
- ❏ 9 (9)
- ❏ 10 (10)
- ❏ 11 (11)
- ❏ 12 (12)
- ❏ 13 (13)
- ❏ 14 (14)

Please read the following statements and check all that apply to you.

- ❑   I have never observed a person with mental illness. (1)
- ❑   I have observed, in passing, a person I believe had a mental illness. (2)
- ❑   I have observed persons with a severe mental illness on a frequent basis. (3)
- ❑   I worked with a person with mental illness at my place of employment. (4)
- ❑   My job includes services for persons with mental illness. (5)
- ❑   I provide services to persons with mental illness. (6)
- ❑   A friend of the family has a serious mental illness. (7)
- ❑   I have a relative who has a serious mental illness. (8)
- ❑   I live with a person who has a serious mental illness. (9)
- ❑   I have a serious mental illness. (10)

Please indicate how much you 1 "strongly disagree" to 5 "strongly agree" with each statement.

	Strongly disagree (1)	Disagree (2)	Neither agree nor disagree (3)	Agree (4)	Strongly agree (5)
This program was intended to be funny. (1)	❍	❍	❍	❍	❍
I was amused by at least some of the content in this program. (2)	❍	❍	❍	❍	❍
I think this program was humorous. (3)	❍	❍	❍	❍	❍
This program made me laugh or want to laugh. (4)	❍	❍	❍	❍	❍

Please indicate how much you 1 "strongly disagree" to 5 "strongly agree" with each statement.

	Strongly disagree (1)	Disagree (2)	Neither agree nor disagree (3)	Agree (4)	Strongly agree (5)
The program was original and novel. (1)	❍	❍	❍	❍	❍
I was surprised by punch lines or some parts of the content. (2)	❍	❍	❍	❍	❍
When I thought about it, the unexpected parts in the program made sense to me. (3)	❍	❍	❍	❍	❍
Parts of the content I initially thought of as unrelated suddenly fell into place. (4)	❍	❍	❍	❍	❍
Viewing this episode made me feel free or 'above it all.' (5)	❍	❍	❍	❍	❍
I felt stimulated while watching the episode. (6)	❍	❍	❍	❍	❍
Viewing this episode made me feel emotionally	❍	❍	❍	❍	❍

released. (7)					
At times, I felt anxious or nervous while watching the show, but then the content made me feel OK again. (8)	○	○	○	○	○
The episode stimulated my imagery, fantasy, or daydreaming. (9)	○	○	○	○	○
I felt sympathy or identification with the main character, Amy in the episode. (10)	○	○	○	○	○
I felt hostile toward the main character, Amy while viewing the show. (11)	○	○	○	○	○
I felt superior to the main character, Amy in the episode. (12)	○	○	○	○	○
I experienced incompatible emotions or conflicting feelings at the same	○	○	○	○	○

time when I was watching the main character, Amy in this show. (13)					
At least some of the content of this episode was intended to make fun of the main character, Amy. (14)	○	○	○	○	○
I do not think viewers are supposed to like the main character, Amy. (15)	○	○	○	○	○

Have you seen this television program before?

○ Yes (1)

○ No (2)

Have you seen this specific episode before?

○ Yes (1)

○ No (2)

On a scale from 1 "never" to 5 "all the time," how often have you watched this program?

○ Never (1)

○ Rarely (2)

○ Sometimes (3)

○ Often (4)

○ All of the time (5)

Imagine you go to a lunch room, and Amy from the episode you just watched is in the middle of the lunch room. Amy (whom you haven't met personally) acknowledges your presence with a smile and head nod. What do you do when she greets you?

❍ Stay where you are and do the same smile and head nod. (1)

❍ Walk closer to Amy and say hello. (2)

❍ Walk up to Amy and shake hands, exchanging hellos and names. (3)

Now imagine that you and Amy are standing in the lunch room, facing each other, about 10 feet (two arms' length) apart. Just as Amy says "Hello" to you, you are asked by someone to move briefly to let some people through. Which of the following do you do?

○ Move 2 steps closer to Amy. (1)

○ Move 2 steps farther away from Amy. (2)

○ Go to the other side of the room farthest away from Amy. (3)

Finally, imagine that Amy has decided to sit at your lunch table and eat across from you. How do you feel?

❍ Uncomfortable (1)
❍ Neutral (don't care) (2)
❍ Good (3)

Look at the diagram below. Please choose the pair of circles that you feel best represents your own level of identification with people like Amy who have mental illnesses.

- ○ A (1)
- ○ B (2)
- ○ C (3)
- ○ D (4)
- ○ E (5)
- ○ F (6)
- ○ G (7)

Please rate each statement from 1 "strongly disagree" to 5 "strongly agree" about how you feel about Amy in the episode you just watched.

	Strongly disagree (1)	Disagree (2)	Neither agree nor disagree (3)	Agree (4)	Strongly agree (5)
Amy makes me feel comfortable, as if I am with a friend. (1)	○	○	○	○	○
I see Amy as a natural, down-to-earth person. (2)	○	○	○	○	○
I will be looking forward to watching Amy in another episode. (3)	○	○	○	○	○
If Amy appeared on another TV program, I would watch that program. (4)	○	○	○	○	○
Amy seems to understand the kinds of things I want to know. (5)	○	○	○	○	○
If I saw a story about Amy in a newspaper or magazine, I would read it. (6)	○	○	○	○	○

I will miss seeing Amy if I am never able to see this show again. (7)	○	○	○	○	○
I would like to meet Amy in person. (8)	○	○	○	○	○
I felt sorry for Amy when she made a mistake in the show. (9)	○	○	○	○	○
I find Amy to be attractive. (10)	○	○	○	○	○

If you met a person with a mental illness, how willing would you be to accept that person in the following relationships? Rate your answer from 1 "no case at all" to 5 "in any case."

	In no case at all (1)	(2)	(3)	(4)	In any case (5)
Tenant (1)	○	○	○	○	○
Co-worker (2)	○	○	○	○	○
Neighbor (3)	○	○	○	○	○
Member of same social circle (4)	○	○	○	○	○
Someone to be recommended for a job (5)	○	○	○	○	○
In-law (6)	○	○	○	○	○
Childcare provider (7)	○	○	○	○	○

Please rate how much you disagree or agree with each statement on a scale ranging from 1 "strongly disagree" to 5 "strongly agree."

	Strongly disagree (1)	Disagree (2)	Neither agree nor disagree (3)	Agree (4)	Strongly agree (5)
People who have mental illnesses could snap out of it if they wanted. (1)	○	○	○	○	○
Mental illnesses are a sign of personal weakness. (2)	○	○	○	○	○
Mental illnesses are not a real medical illnesses. (3)	○	○	○	○	○
People with mental illnesses are dangerous. (4)	○	○	○	○	○
It is best to avoid people who have mental illnesses so that you don't become mentally ill yourself. (5)	○	○	○	○	○
People who have mental illnesses are unpredictable. (6)	○	○	○	○	○
If I had a problem with mental illness,	○	○	○	○	○

I would not tell anyone. (7)					
I would not employ someone if I knew they had a mental illness. (8)	○	○	○	○	○
I would not vote for a politician if I knew they had a mental illness. (9)	○	○	○	○	○
Most people think that people who have mental illnesses could snap out of it if they wanted to. (10)	○	○	○	○	○

Please answer the following demographic questions.

What is your age? (in numerals)

What is your sex?
○ Male (1)
○ Female (2)

What is your race or ethnic identity?
○ White/Caucasian (1)
○ Black/African-American (2)
○ Asian/Pacific Islander (3)
○ American Indian/ Native American (4)
○ Other (5)

Please indicate how much you use media in a typical week to watch television programs on all devices (including television set, computer, smartphone, tablet etc.)
○ Rare user (1)
○ Light user (2)
○ Moderate user (3)
○ Heavy user (4)

Study 2 Questionnaire

Please rate the following statements from 1 "strongly disagree" to 5 "strongly agree."

	Strongly Disagree (1)	Disagree (2)	Neither agree nor disagree (3)	Agree (4)	Strongly agree (5)
I cannot continue to feel OK if others around me are feeling depressed. (1)	○	○	○	○	○
I don't become upset because a friend is acting upset. (2)	○	○	○	○	○
I become nervous if others around me seem nervous. (3)	○	○	○	○	○
The people around me have a great influence on my moods. (4)	○	○	○	○	○
Before criticizing someone, I try to imagine how I would feel in their place. (5)	○	○	○	○	○
I sometimes try to understand	○	○	○	○	○

my friends better by imagining things from their perspective. (6)					
I try to look at everyone's side of a disagreement before I make a decision. (7)	○	○	○	○	○
When I am upset, I usually try to put myself in his or her shoes for a while. (8)	○	○	○	○	○
I am the type of person who is concerned when other people are unhappy. (9)	○	○	○	○	○
When I see someone being taken advantage of, I feel kind of protective toward them. (10)	○	○	○	○	○
I often have tender, concerned feelings for people less fortunate than myself.	○	○	○	○	○

I would describe myself as a pretty soft-hearted person. (12)	○	○	○	○	○
I sometimes don't feel very sorry for people when they are having problems. (13)	○	○	○	○	○
Other people's misfortunes do not usually disturb me a great deal. (14)	○	○	○	○	○
I am often touched by the things I see happen. (15)	○	○	○	○	○
I am the type of person that can say the right thing at the right time. (16)	○	○	○	○	○
Even though I often try to console someone who is feeling bad, I never seem to be	○	○	○	○	○

able to say the right thing. (17)					
I usually respond appropriately to the feelings of others. (18)	○	○	○	○	○
Others think of me as an empathic person. (19)	○	○	○	○	○
My friends come to me with their problems because I am a good listener. (20)	○	○	○	○	○

Please rate the following statements according to how you feel at this very moment on a scale from 1 "strongly disagree" to 5 "strongly agree."

	Strongly disagree (1)	Disagree (2)	Neither agree nor disagree (3)	Agree (4)	Strongly agree (5)
A person's family is the most important thing in life. (1)	○	○	○	○	○
Even if something bad is about to happen to me, I rarely experience fear or nervousness. (2)	○	○	○	○	○
I go out of my way to get things I want. (3)	○	○	○	○	○
When I'm doing well at something I love to keep at it. (4)	○	○	○	○	○
I'm always willing to try something new if I think it will be fun. (5)	○	○	○	○	○
How I dress is important to me. (6)	○	○	○	○	○
When I get something I want, I feel excited and	○	○	○	○	○

energized. (7)					
Criticism or scolding hurts me quite a bit. (8)	○	○	○	○	○
When I want something I usually go all-out to get it. (9)	○	○	○	○	○
I will often do things for no other reason than that they might be fun. (10)	○	○	○	○	○
It's hard for me to find the time to do things such as get a haircut. (11)	○	○	○	○	○
If I see a chance to get something I want I move on it right away. (12)	○	○	○	○	○
I feel pretty worried or upset when I think or know somebody is angry at me. (13)	○	○	○	○	○
When I see an opportunity for something I like I get	○	○	○	○	○

excited right away. (14)					
I often act on the spur of the moment. (15)	○	○	○	○	○
If I think something unpleasant is going to happen I usually get pretty "worked up." (16)	○	○	○	○	○
I often wonder why people act the way they do. (17)	○	○	○	○	○
When good things happen to me, it affects me strongly. (18)	○	○	○	○	○
I feel worried when I think I have done poorly at something important. (19)	○	○	○	○	○
I crave excitement and new sensations. (20)	○	○	○	○	○
When I go after something I	○	○	○	○	○

use a "no holds barred" approach. (21)					
I have very few fears compared to my friends. (22)	○	○	○	○	○
It would excite me to win a contest. (23)	○	○	○	○	○
I worry about making mistakes. (24)	○	○	○	○	○

Please watch the following episode IN FULL. When the episode is over, press the arrows below to continue the survey.

In the episode you just watched, which character's parents were shown?
- ○ Hannah (1)
- ○ Ray (2)
- ○ Joe (3)

In the episode you just watched, which of the following happened?

○ A character went skydiving (1)

○ A character saw a doctor (2)

○ A character became a teacher (3)

Please indicate how much you feel each emotion at this moment on a scale from 1 "not at all" to 5 "very much."

	Not at all (1)	(2)	(3)	(4)	Very much (5)
Interested (1)	○	○	○	○	○
Distressed (2)	○	○	○	○	○
Excited (3)	○	○	○	○	○
Upset (4)	○	○	○	○	○
Strong (5)	○	○	○	○	○
Guilty (6)	○	○	○	○	○
Scared (7)	○	○	○	○	○
Hostile (8)	○	○	○	○	○
Enthusiastic (9)	○	○	○	○	○
Proud (10)	○	○	○	○	○
Irritable (11)	○	○	○	○	○
Alert (12)	○	○	○	○	○
Ashamed (13)	○	○	○	○	○
Inspired (14)	○	○	○	○	○
Nervous (15)	○	○	○	○	○
Determined (16)	○	○	○	○	○
Attentive (17)	○	○	○	○	○
Jittery (18)	○	○	○	○	○
Active (19)	○	○	○	○	○
Afraid (20)	○	○	○	○	○

Think about how you feel. Look at the pictures below and please check all that apply to how you feel at the moment.

- ❑ 1 (1)
- ❑ 2 (2)
- ❑ 3 (3)
- ❑ 4 (4)
- ❑ 5 (5)
- ❑ 6 (6)
- ❑ 7 (7)
- ❑ 8 (8)
- ❑ 9 (9)
- ❑ 10 (10)
- ❑ 11 (11)
- ❑ 12 (12)
- ❑ 13 (13)
- ❑ 14 (14)

Please read the following statements and check all that apply to you.

- ❑ I have never observed a person with mental illness. (1)
- ❑ I have observed, in passing, a person I believe had a mental illness. (2)
- ❑ I have observed persons with a severe mental illness on a frequent basis. (3)
- ❑ I worked with a person with mental illness at my place of employment. (4)
- ❑ My job includes services for persons with mental illness. (5)
- ❑ I provide services to persons with mental illness. (6)
- ❑ A friend of the family has a serious mental illness. (7)
- ❑ I have a relative who has a serious mental illness. (8)
- ❑ I live with a person who has a serious mental illness. (9)
- ❑ I have a serious mental illness. (10)

Please indicate how much you 1 "strongly disagree" to 5 "strongly agree" with each statement.

	Strongly disagree (1)	Disagree (2)	Neither agree nor disagree (3)	Agree (4)	Strongly agree (5)
This program was intended to be funny. (1)	❍	❍	❍	❍	❍
I was amused by at least some of the content in this program. (2)	❍	❍	❍	❍	❍
I think this program was humorous. (3)	❍	❍	❍	❍	❍
This program made me laugh or want to laugh. (4)	❍	❍	❍	❍	❍

Please indicate how much you 1 "strongly disagree" to 5 "strongly agree" with each statement.

	Strongly disagree (1)	Disagree (2)	Neither agree nor disagree (3)	Agree (4)	Strongly agree (5)
The program was original and novel. (1)	○	○	○	○	○
I was surprised by punch lines or some parts of the content. (2)	○	○	○	○	○
When I thought about it, the unexpected parts in the program made sense to me. (3)	○	○	○	○	○
Parts of the content I initially thought of as unrelated suddenly fell into place. (4)	○	○	○	○	○
Viewing this episode made me feel free or 'above it all.' (5)	○	○	○	○	○
I felt stimulated while watching the episode. (6)	○	○	○	○	○
Viewing this episode made me feel emotionally	○	○	○	○	○

released. (7)					
At times, I felt anxious or nervous while watching the show, but then the content made me feel OK again. (8)	○	○	○	○	○
The episode stimulated my imagery, fantasy, or daydreaming. (9)	○	○	○	○	○
I felt sympathy or identification with the main character, Hannah in the episode. (10)	○	○	○	○	○
I felt hostile toward the main character, Hannah while viewing the show. (11)	○	○	○	○	○
I felt superior to the main character, Hannah in the episode. (12)	○	○	○	○	○
I experienced incompatible emotions or conflicting	○	○	○	○	○

feelings at the same time when I was watching the main character, Hannah in this show. (13)					
At least some of the content of this episode was intended to make fun of the main character, Hannah. (14)	○	○	○	○	○
I do not think viewers are supposed to like the main character, Hannah. (15)	○	○	○	○	○

Have you seen this television program before?
○ Yes (1)
○ No (2)

Have you seen this specific episode before?
○ Yes (1)
○ No (2)

On a scale from 1 "never" to 5 "all the time," how often have you watched this program?
○ Never (1)
○ Rarely (2)
○ Sometimes (3)
○ Often (4)
○ All of the time (5)

Imagine you go to a lunch room, and Hannah from the episode you just watched is in the middle of the lunch room. Hannah (whom you haven't met personally) acknowledges your presence with a smile and head nod. What do you do when she greets you?

❍ Stay where you are and do the same smile and head nod. (1)

❍ Walk closer to Hannah and say hello. (2)

❍ Walk up to Hannah and shake hands, exchanging hellos and names. (3)

Now imagine that you and Hannah are standing in the lunch room, facing each other, about 10 feet (two arms' length) apart. Just as Hannah says "Hello" to you, you are asked by someone to move briefly to let some people through. Which of the following do you do?

○ Move 2 steps closer to Hannah. (1)

○ Move 2 steps farther away from Hannah. (2)

○ Go to the other side of the room farthest away from Hannah. (3)

Finally, imagine that Hannah has decided to sit at your lunch table and eat across from you. How do you feel?

○ Uncomfortable (1)
○ Neutral (don't care) (2)
○ Good (3)

Look at the diagram below. Please choose the pair of circles that you feel best represents your own level of identification with people like Hannah with Obsessive Compulsive Disorder (OCD).

- ○ A (1)
- ○ B (2)
- ○ C (3)
- ○ D (4)
- ○ E (5)
- ○ F (6)
- ○ G (7)

Please rate each statement from 1 "strongly disagree" to 5 "strongly agree" about how you feel about Hannah in the episode you just watched.

	Strongly disagree (1)	Disagree (2)	Neither agree nor disagree (3)	Agree (4)	Strongly agree (5)
Hannah makes me feel comfortable, as if I am with a friend. (1)	○	○	○	○	○
I see Hannah as a natural, down-to-earth person. (2)	○	○	○	○	○
I will be looking forward to watching Hannah in another episode. (3)	○	○	○	○	○
If Hannah appeared on another TV program, I would watch that program. (4)	○	○	○	○	○
Hannah seems to understand the kinds of things I want to know. (5)	○	○	○	○	○
If I saw a story about Hannah in a newspaper or magazine, I would read it.	○	○	○	○	○

(6)					
I will miss seeing Hannah if I am never able to see this show again. (7)	○	○	○	○	○
I would like to meet Hannah in person. (8)	○	○	○	○	○
I felt sorry for Hannah when she made a mistake in the show. (9)	○	○	○	○	○
I find Hannah to be attractive. (10)	○	○	○	○	○

If you met a person with a mental illness, how willing would you be to accept that person in the following relationships? Rate your answer from 1 "no case at all" to 5 "in any case."

	In no case at all (1)	(2)	(3)	(4)	In any case (5)
Tenant (1)	○	○	○	○	○
Co-worker (2)	○	○	○	○	○
Neighbor (3)	○	○	○	○	○
Member of same social circle (4)	○	○	○	○	○
Someone to be recommended for a job (5)	○	○	○	○	○
In-law (6)	○	○	○	○	○
Childcare provider (7)	○	○	○	○	○

Please rate how much you disagree or agree with each statement on a scale ranging from 1 "strongly disagree" to 5 "strongly agree."

	Strongly disagree (1)	Disagree (2)	Neither agree nor disagree (3)	Agree (4)	Strongly agree (5)
People with Obsessive Compulsive Disorder (OCD) could snap out of it if they wanted. (1)	○	○	○	○	○
OCD is a sign of personal weakness. (2)	○	○	○	○	○
OCD is not a real medical illness. (3)	○	○	○	○	○
People with OCD are dangerous. (4)	○	○	○	○	○
It is best to avoid people with OCD so that you don't become mentally ill yourself. (5)	○	○	○	○	○
People with OCD are unpredictable. (6)	○	○	○	○	○
If I had a problem with OCD, I would not tell anyone. (7)	○	○	○	○	○
I would not employ someone if I	○	○	○	○	○

knew they had OCD. (8)					
I would not vote for a politician if I knew they had a OCD. (9)	○	○	○	○	○
Most people think that people with a OCD could snap out of it if they wanted to. (10)	○	○	○	○	○

Please answer the following demographic questions.

What is your age? (in numerals)

What is your sex?
○ Male (1)
○ Female (2)

What is your race or ethnic identity?
○ White/Caucasian (1)
○ Black/African-American (2)
○ Asian/Pacific Islander (3)
○ American Indian/ Native American (4)
○ Other (5)

Please indicate how much you use media in a typical week to watch television programs on all devices (including television set, computer, smartphone, tablet etc.)
○ Rare user (1)
○ Light user (2)
○ Moderate user (3)
○ Heavy user (4)

REFERENCES

Alden, D. L., Mukherjee, A., & Hoyer, W. D. (2000). The effects of incongruity, surprise and positive moderators on perceived humor in television advertising. *Journal of Advertising*, *29*(2), 1-15.

Allport, G. W. (1954). *The nature of prejudice*. Reading, MA: Addison-Wesley.

Angermeyer, M. C., & Matschinger, H. (2005). Causal beliefs and attitudes to people with schizophrenia Trend analysis based on data from two population surveys in Germany. *The British Journal of Psychiatry*, *186*(4), 331-334.

Auter, P. J. (1992). Psychometric: TV that talks back: An experimental validation of a parasocial interaction scale. *Journal of Broadcasting & Electronic Media*, *36*(2), 173-181.

Baldwin, M. W. (1992). Relational schemas and the processing of social information. *Psychological Bulletin, 112,* 461-484.

Berger, A. A. (1987). Humor: An introduction. *American Behavioral Scientist, 30*, 6-15.

Berlin, F. S. & Malin, H. M. (1991). Media distortion of the public's perception of recidivism and psychiatric rehabilitation. *American Journal of Psychiatry, 148*(11), 1572-1576.

Berlyne, D. E. (1969). Laughter, humor and play. In G. Lindzey & E. Aronson (Eds.), Handbook of social psychology (2nd ed., Vol. 3, pp. 795–852). Reading, MA: Addison-Wesley.

Bogardus, E. S. (1925). Measuring social distance. *Journal of Applied Sociology*, *9*(2), 299-308.

Brown, W. J., Basil, M. D. & Bocarnea, M. C. (2003). The influence of famous athletes on health beliefs and practices: Mark McGwire, child abuse prevention, and Androstenedione. *Journal of Health Communication, 8*, 41-47.

Bryant, J., Thompson, S., & Finklea, B. W. (2013). *Fundamentals of media effects* (2nd ed.). Long Grove, IL: Waveland Press.

Byrne, B. M. (2013). *Structural equation modeling with Mplus: Basic concepts, applications, and programming*. Routledge.

Byrne, P. (2000). Stigma of mental illness and ways of diminishing it. *Advances in Psychiatric Treatment*, *6*(1), 65-72.

Cacioppo, J. T., Gardner, W. L., & Berntson, G. G. (1999). The affect system has parallel

and integrative processing components: Form follows function. *Journal of Personality and Social Psychology*, 76, 839-855.

Chang, M. J., & Gruner, C. R. (1981). Audience reaction to self-disparaging humor. *Southern Journal of Communication*, *46*(4), 419-426.

Cho, H. (1995). Humor mechanisms, perceived humor and their relationships to various executionals in advertising. *Advances in Consumer Research*, *22*(1), 191-197.

Chung, A. H., & Slater, M. D. (2013). Reducing stigma and out-group distinctions through perspective-taking in narratives. *Journal of Communication*, *63*(5), 894-911.

Cohen, J. (2001). Defining identification: A theoretical look at the identification of audiences with media characters. *Mass Communication & Society*, *4*(3), 245-264.

Cohen, J. (2006). Audience identification with media characters. In J. Bryant & P. Vorderer (Eds.), *Psychology of entertainment*, (pp. 183-197). Mahwa, NJ: Lawrence Erlbaum Associates, Inc.

Collins, R. L. (2011). Content analysis of gender roles in media: Where are we now and where should we go?. *Sex Roles*, *64*(3-4), 290-298.

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

Corrigan, P. W., Edwards, A. B., Green, A., Diwan, S. L., & Penn, D. L. (2001). Prejudice, social distance, and familiarity with mental illness. *Schizophrenia Bulletin*, *27*(2), 219.

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., Markowitz, F. E., Watson, A., Rowan, D., & Kubiak, M. A. (2003). An attribution model of public discrimination towards persons with mental illness. *Journal of Health and Social Behavior*, *44*(2), 162-179.

Corrigan, P. W., Powell, K. J., Fokuo, J. K., & Kosyluk, K. A. (2014). Does humor influence the stigma of mental illnesses?. *The Journal of Nervous and Mental Disease*, *202*(5), 397-401.

Crisp, A. H., Gelder, M. G., Rix, S. Meltzer, H. I., & Rowlands, O. J. (2000). Stigmatisation of people with mental illnesses. *The British Journal of Psychiatry, 177*, 4-7.

Crocker, J., Major, B., & Steele, C. (1998). Social stigma. In D. T. Gilbert, S. T. Fiske (Eds.), *The handbook of social psychology*, (pp. 504-553). Boston, MA: McGraw-Hill.

Csikszentmihalyi, M. (1990). *Flow: The psychology of optimal experience*. New York: Harper Perennial.

Daniel Yanklovich Group, Inc. (1990). *Public attitudes toward people with chronic mental illness*. Boston, MA: Author.

Davidson, R. J. (1993). The neuropsychology of emotion and affective style. In M. Lewis & J. M. Haviland (Eds.), *Handbook of emotion* (pp.143-154). New York, NY: Guilford Press.

Dawn, R. (2012, Sept. 13). Tom Hanks offers touching, humorous eulogy at Michael Clarke Duncan's funeral. *Today.com*. Retrieved from http://www.today.com/news/tom-hanks-offers-touching-humorous-eulogy-michael-clarke-duncans-funeral-996962

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 toward mental health issues: Cultivation analysis and the third-person effect. *Journal of Community Psychology*, *35*(2), 181-195.

Domino, G. (1983). Impact of the film," One Flew Over the Cuckoo's Nest," on attitudes towards mental illness. *Psychological Reports*, *53*(1), 179-182.

Druss, B. G., Bradford, D. W., Rosenheck, R. A., Radford, M. J., & Krumholz, H. M. (2000). Mental disorders and the use of cardiovascular procedures after myocardial infarction. *Journal of American Medical Association, 283*, 506-511.

Duckworth, K. L., Bargh, J. A., Garcia, M., & Chaiken, S. (2002). The automatic evaluation of novel stimuli. *Psychological Science*, *13*(6), 513-519.

Eastman, M. (1936). *Enjoyment of laughter*. New York, NY: Simon and Schuster.

Ellsworth, P. C., & Smith, C. A. (1988). Shades of joy: Patterns of appraisal differentiating pleasant emotions. *Cognition and Emotion*, *2*, 301–331.

Estrada, C. A., Isen, A. M., & Young, M. J. (1997). Positive affect facilitates integration of information and decreases anchoring in reasoning among physicians. *Organizational Behavior and Human Decision Processes*, *72*, 117–135.

Fawcett, K. (2015, April 16). How mental illness is misrepresented in the media. *U.S.*

News and World Report. Retrieved from http://health.usnews.com/health
news/health-wellness/articles/2015/04/16/how-mental-illness-is-misrepresented-in-the-
media

Ferguson, M. A., & Ford, T. E. (2008). Disparagement humor: A theoretical and
empirical review of psychoanalytic, superiority, and social identity theories. *Humor-
International Journal of Humor Research*, *21*(3), 283-312.

Ford, T. E. (1997). Effects of stereotypical television portrayals of African
Americans on person perception. *Social Psychology Quarterly*, 60. 266–278.

Ford, T. E., Woodzicka, J. A., Petit, W. E., Richardson, K., & Lappi, S. K. (2015). Sexist
humor as a trigger of state self-objectification in women. *Humor*, *28*(2), 253-269.

Fredrickson, B. L. (1998). What good are positive emotions? *Review of
General Psychology*, 2, 300-319.

Fredrickson, B. L. (2001). The role of positive emotions in positive psychology: The
broaden-and-build theory of positive emotions. *American psychologist*, *56*(3), 218-226.

Fredrickson, B. L., & Branigan, C. (2001). Positive emotions. In T. J. Mayne & G. A.
Bonnano (Eds.), *Emotion: Current issues and future directions* (pp. 123-151). New York:
Guilford Press.

Freud, S. (1928). Humour. *International Journal of Psychoanalysis, 9*, 1-6.

Freud, S. (1960). *Jokes and their relation to the unconscious*. New York, NY: Norton
(First German ed., 1905).

Fullilove, M. T. (1998). Abandoning race as a variable in public health research: An idea
whose time has come. *American Journal of Public Health, 88*, 1297-1298.

Gerbner, G. (1980). Dreams that hurt: Mental illness in the mass media. In R. C. Baron,
I. D. Rutman, & B. Klaczynska (Eds.), *The community imperative* (pp. 19-23).
Philadelphia, PA: Horizon House Institute.

Giles, D. C. (2002). Parasocial interaction: A review of the literature and a model for
future research. *Media Psychology*, *4*(3), 279-305.

Gleich, U. (1997). Parasocial interaction with people on the screen. In P. Winterhoff
Spurk & T. H. A. van der Voort (Eds). *New horizons in media psychology,* (pp. 35-55).
VS Verlag für Sozialwissenschaften.

Goffman, E. (1963). *Stigma: Notes on management of spoiled identity.* Englewood Cliffs,
NJ: Prentice Hall.

Grant, A. E., Guthrie, K. K., & Ball-Rokeach, S. J. (1991). Television shopping a media system dependency perspective. *Communication Research*, *18*(6), 773-798.

Green, M. C., & Brock, T. C. In the mind's eye: Transportation-imagery model of narrative persuasion. In M. C. Green, J. J. Strange, & T. C. Brock (Eds.), *Narrative impact: Social and cognitive foundation* (pp. 315-441). Mahwah, NJ: Lawrence Erlbaum Associates.

Greengross, G., & Miller, G. F. (2008). Dissing oneself versus dissing rivals: Effects of status, personality, and sex on the short-term and long-term attractiveness of self-deprecating and other-deprecating humor. *Evolutionary Psychology*, *6*(3), 393-408.

Griffiths, K. M., Christensen, H., & Jorm, A. F. (2008). Predictors of depression stigma. *BMC Psychiatry*, *8*(1), 25-37.

Gross, J. J. (1998). The emerging field of emotion regulation: an integrative review. *Review of General Psychology*, *2*(3), 271-299.

Gross, J. J., & Thompson, R. A. (2007). Emotion regulation: Conceptual foundations. In J. J. Gross (Eds.), *Handbook of emotion regulation* (pp. 3–24). New York, NY: Guilford Press.

Gutman, J. & Priest, R. F. (1969). When is aggression funny? *Journal of Personality and Social Psychology, 12*, 60-65.

Hoffner, C. (1996). Children's wishful identification and parasocial interaction with favorite television characters. *Journal of Broadcasting & Electronic Media, 40*, 389-402.

Hoffner, C., & Buchanan, M. (2005). Young adults' wishful identification with television characters: The role of perceived similarity and character attributes. *Media Psychology*, *7*(4), 325-351.

Hoffner, C. A., & Cohen, E. L. (2015). Portrayal of mental illness on the TV series *Monk*: Presumed influence and consequences of exposure, *Health Communication, 30*, 1046-1054.

Hoffner, C. A., & Cohen, E. (2012). Responses to obsessive compulsive disorder on Monk among series fans: Parasocial relations, presumed media influence, and behavioral outcomes. *Journal of Broadcasting & Electronic Media, 56,* 650-668.

Horton, D., & Wohl, R. (1956). Mass communication and parasocial interaction: Observations on intimacy at a distance. *Psychiatry, 19,* 215-229.

Islam, M. R., & Hewstone, M. (1993). Dimensions of contact as predictors of intergroup

anxiety, perceived out-group variability, and out-group attitude: An integrative model. *Personality and Social Psychology Bulletin*, *19*(6), 700-710.

Izard, C. E. (1977). *Human emotions*. New York: Plenum Press.

Jones, E., Farina, A., Hastorf, A., Markus, H., Miller, D. T., & Scott, R. (1984). *Social stigma: The psychology of marked relationships*. New York, NY: Freeman.

Kahn, B. E., & Isen, A. M. (1993). The influence of positive affect on variety-seeking among safe, enjoyable products. *Journal of Consumer Research*, *20*, 257–270.

Keith-Spiegel, P. (1972). Early conceptions of humor: Varieties and issues. In J. H. Goldstein & P. E. McGhee (Eds.), *Psychology of humor* (pp. 3-39). New York, NY: Academic Press.

Kelly, J. P., & Solomon, P. J. (1975). Humor in television advertising. *Journal of Advertising*, *4*(3), 31-35.

Klimmt, C., Hartmann, T., & Schramm, H. (2006). Parasocial interactions and relationships. In J. Bryant & P. Vorderer (Eds.), *Psychology of entertainment* (pp. 292-313). Mahwah, NJ: Lawrence Erlbaum Associates.

Kurzban, R., & Leary, M. R. (2001). Evolutionary origins of stigmatization: the functions of social exclusion. *Psychological Bulletin, 127*(2), 187.

Agency for Healthcare Research and Quality, (2000). Rockville, MD. Improving quality of care for people with depression: Translating research into practice. http://www.ahrq.gov/research/findings/factsheets/mental/depression/index.html

Lawson, A., & Fouts, G. (2004). Mental illness in Disney animated films. *Canadian Journal of Psychiatry*, *49*(5), 310-314.

Lazarus, R. S. (1966). *Psychological stress and the coping process*. New York, NY: McGraw-Hill.

Link, B. G. (1987). Understanding labeling effects in the area of mental disorders: An assessment of the effects of expectations and rejection. *American Sociological Review, 52*, 96-112.

Link, B. G., Cullen, F. T., Frank, J., & Wozniak, J. F. (1987). The social rejection of former mental patients: Understanding why labels matter. *American journal of Sociology*, 1461-1500.

Link, B. G., & Phelan, J. C. (2001). Conceptualizing stigma. *Annual Review of Sociology*, *27,* 363-385.

Phelan, J. C., Link, B. G., & Dovidio, J. F. (2008). Stigma and prejudice: one animal or two?. *Social Science & Medicine, 67*(3), 358-367.

Lewis, M. (1993). Self-conscious emotions: Embarassment, pride, shame, and guilt. In M. Lewis & J. M. Haviland (Eds.), *Handbook of emotions* (pp. 563–573). New York: Guilford Press.

Lopez, L. R. (1991). Adolescent's attitudes toward mental illness and perceived sources of their attitudes: An examination of pilot data. *Archives of Psychiatric Nursing, 5,* 271-280.

Lundy, D. E., Tan, J., & Cunningham, M. R. (1998). Heterosexual romantic preferences: The importance of humor and physical attractiveness for different types of relationships. *Personal Relationships*, *5*(3), 311-325.

Martin, R. A. (2007). *The psychology of humor*. Burlington, MA: Elsevier Academic Press.

Martin, R. A. & Lefcourt, H. M. (1983). Sense of humor as a moderator of the relationship between stressors and moods. *Journal of Personality and Social Psychology, 45*, 1313-1324.

Mazziotta, A., Mummendey, A., & Wright, S. C. (2011). Vicarious intergroup contact effects Applying social-cognitive theory to intergroup contact research. *Group Processes & Intergroup Relations*, *14*(2), 255-274.

McGhee, P. E. (1974). Cognitive mastery and children's humor. *Psychological Bulletin, 81*(10), 721-730.

McQuail, D., Blumler, J. G., & Brown, J. R. (1972). The television audience: A revised perspective. In P. Marris & S. Thornham (Eds.) *Media studies: A reader*, (pp. 437- 454). New York, NY: New York University Press.

Meyer, J. C. (2000). Humor as a double-edged sword: Four functions of humor in communication. *Communication Theory, 10*(3), 310-331.

Mindess, H. (1971). *Laughter and liberation*. Los Angeles, CA: Nash.

Monk-Turner, E., Heiserman, M., Johnson, C., Cotton, V., & Jackson, M. (2010). The portrayal of racial minorities on prime time television: A replication of the Mastro and Greenberg study a decade later. *Studies in Popular Culture*, *32*(2), 101-114.

Moyer-Gusé, E., & Nabi, R. L. (2010). Explaining the effects of narrative in an entertainment television program: Overcoming resistance to persuasion. *Human Communication Research*, *36*(1), 26-52.

Nielsen. (2014, February). Millennials – breaking the myths. *An Uncommon Sense of the Consumer Report*. New York: Nielsen. Retrieved from http://www.exploremidtown.org/wp-content/uploads/2015/04/nielsen-millennial-report-feb-2014.pdf

Nunnally, J. (1957). The communication of mental health information: A comparison of the opinions of experts and the public with mass media presentations. *Behavioral Science*, *2*(3), 222-230.

Pettigrew, T. F. (1997). Generalized intergroup contact effects on prejudice. *Personality and Social Psychology Bulletin, 23*, 173-185.

Pettigrew, T. F. (1998). Intergroup contact: Theory, research and new perspectives. *Annual Review of Psychology, 49*, 65-85.

Pettigrew, T. F. (2008). Future directions for intergroup contact theory and research. *International Journal of Intercultural Relations, 32*, 187-199.

Pettigrew, T. F., & Tropp, L. R. (2006). A meta-analytic test of intergroup contact theory. *Journal of Personality and Social Psychology*, *90*(5), 751-783.

Pettigrew, T. F., & Tropp, L. R. (2008). How does intergroup contact reduce prejudice? Meta-analytic tests of three mediators. *European Journal of Social Psychology*, *38*(6), 922-934.

Pettigrew, T. F., Tropp, L. R., Wagner, U., & Christ, O. (2011). Recent advances in intergroup contact theory. *International Journal of Intercultural Relations, 35*, 271-280.

Phelan, J. C., Link, B. G., & Dovidio, J. F. (2008). Stigma and prejudice: One animal or two?. *Social Science & Medicine*, *67*(3), 358-367.

Roseman, I. J. (1996). Appraisal determinants of emotions: Constructing a more accurate and comprehensive theory. *Cognition & Emotion*, *10*(3), 241-278.

Rosengren, K. E., & Windahl, S. (1972). Mass media consumption as a functional alternative. In D. McQuail (Ed.), *Sociology of mass communications* (pp. 166 194). Middlesex, England: Penguin.

Rubin, A. M. (2009). Uses-and-gratifications perspective on media effects. In J. Bryant & M.B. Oliver (Eds.), *Media effects: Advances in theory and research*. (pp. 165-184). New York, NY: Routledge.

Rubin, A. M., & Perse, E. M. (1987). Audience activity and soap opera involvement a uses and effects investigation. *Human Communication Research*, *14*(2), 246-268.

Rubin, A. M., Perse, E. M., & Powell, R.A. (1985). Loneliness, parasocial interaction, and local television news viewing. *Human Communication Research*, *12*, 155–180.

143

Rubin, A. M., & Step, M. M. (2000). Impact of motivation, attraction, and parasocial interaction on talk radio listening. *Journal of Broadcasting & Electronic Media*, *44*(4), 635-654.

Rubin, R. B., & McHugh, M. P. (1987). Development of parasocial interaction relationships. *Journal of Broadcasting & Electronic Media, 31*(3), 279-292.

Samson, A. C., Glassco, A. L., Lee, I. A., & Gross, J. J. (2014). Humorous coping and serious reappraisal: Short-term and longer-term effects. *Europe's Journal of Psychology*, *10*(3), 571-581.

Schachter, S. & Wheeler, L. (1962). Epinephrine, chlorpromazine, and amusement. *Journal of Abnormal Psychology, 65*(2), 121-128.

Scherer, K. R. (1999). Appraisal theory. In T. Dalgleish & M. Power (Eds.) *Handbook of cognition and emotion*, (pp. 637-663). West Sussex, England: John Wiley & Sons Ltd.

Schiappa, E., Gregg, P. B., & Hewes, D. E. (2005). The parasocial contact hypothesis. *Communication Monographs, 72*, 92-115.

Schiappa, E., Gregg, P. B., & Hewes, D. E. (2006). Can one TV show make a difference? Will & Grace and the parasocial contact hypothesis. *Journal of Homosexuality, 51,* 15-37.

Schramm, H., & Hartmann, T. (2008). The PSI-Process Scales. A new measure to assess the intensity and breadth of parasocial processes. *Communications*, *33*(4), 385-401.

Signorielli, N. (1989). The stigma of mental illness on television. *Journal of Broadcasting & Electronic Media*, *33*(3), 325-331.

Singer, D. L. (1968). Aggression arousal, hostile humor, catharsis. *Journal of Personality and Social Psychology Monograph Supplement, 8*, 1-14.

Singhal, A., Cody, M. J., Rogers, E. M., & Sabido, M. (Eds.) (2004). *Entertainment education and social change: History, research, and practice*. Mahwah, NJ: Lawrence Erlbaum Associates.

Speck, P. (1991). The humorous message taxonomy: A framework for the study of humorous ads. *Issues and Research in Advertising, 13*, 1-44.

Stathi, S., & Crisp, R. J. (2008). Imagining intergroup contact promotes projection to outgroups. *Journal of Experimental Social Psychology*, *44*(4), 943-957.

Stafford, M. C. & Scott, R. R. (1986). Stigma, deviance and social control: Some conceptual issues. In S. C. Ainlay, G. Becker, & L. M. Coleman (Eds.),

The Dilemma Difference. New York, NY: Plenum.

Stewart, P. A. (2011). The influence of self-and other-deprecatory humor on presidential candidate evaluation during the 2008 US election. *Social Science Information*, *50*(2), 201-222.

Struening, E. L., & Cohen, J. (1963). Factorial invariance and other psychometric characteristics of five opinions about mental illness factors. *Educational and Psychological Measurement, 23*(2), 289-298.

Suls, J. M. (1972). A two-stage model for the appreciation of jokes and cartoons: An information-processing analysis. In J. H. Goldstein & P. E. McGhee (Eds.), *The psychology of humor: Theoretical perspectives and empirical issues*. (pp. 81-100). New York, NY: Academic Press.

Tajfel, H., & Turner, J. C. (1979). An integrative theory of intergroup conflict. *The Social Psychology of Intergroup Relations*, *33*(47), 74.

Tajfel, H. & Turner, J. C. (1986). The social identity of intergroup behavior. In S. Worchel & W. G. Austin (Eds.), *Psychology of intergroup relations*. (pp. 7-24). Chicago, IL: Nelson-Hall.

Tamborini, R., & Mettler, J. (1990, November). Emotional reactions to film: A model of empathic processes. Paper presented at the annual convention of the Speech Communication Association, Chicago, IL.

Torok, S. E., McMorris, R. F., & Lin, W. C. (2004). Is humor an appreciated tool? Perceptions of professors' teaching styles and use of humor. *College Teaching, 52*(1), 14-20.

Turner, J. R. (1993). Interpersonal and psychological predictors of parasocial interaction with different television performers. *Communication Quarterly*, *41*(4), 443-453.

Turner, R. N., Crisp, R. J., & Lambert, E. (2007). Imagining intergroup contact can improve intergroup attitudes. *Group Processes & Intergroup Relations*, *10*(4), 427-441.

United States President's Commission on Mental Health. (1978). *Report to the President From the President's Commission on Mental Health.* Washington, DC: U.S. Government Printing Office.

Vaillant, G. E. (2000). Adaptive mental mechanisms: Their role in a positive psychology. *American Psychologist*, *55*(1), 89-98.

Vandaele, J. (2002). Humor mechanisms in film comedy: Incongruity and superiority. *Poetics Today, 23*(2), 221-249.

Wahl, O. F., & Harman, C. R. (1989). Family views of stigma. *Schizophrenia Bulletin*, *15*(1), 131-139.

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.

Wahl, O. F., & Roth, R. (1982). Television images of mental illness: Results of a metropolitan Washington media watch. *Journal of Broadcasting & Electronic Media*, *26*(2), 599-605.

Warner, S. L. (1991). Humor: A coping response for student nurses. *Archives of Psychiatric Nursing, 1*, 10-16.

Watson, D., Clark, L. A., & Tellegen, A. (1988). Development and validation of brief measures of positive and negative affect: the PANAS scales. *Journal of Personality and Social Psychology*, *54*(6), 1063-1070.

Watson, D., Wiese, D., Vaidya, J., & Tellegen, A. (1999). The two general activation systems of affect: Structural findings, evolutionary considerations, and psychobiological evidence. *Journal of Personality and Social Psychology*, *76*(5), 820.

Wicker, F. W., Barron, W. L., & Willis, A. C. (1980). Disparagement humor: Dispositions and resolutions. *Journal of Personality and Social Psychology, 39*(4), 701-709.

Wicker, F. W., Thorelli, I. M., Barron, W. L., & Ponder, M. R. (1981). Relationships among affective and cognitive factors in humor. *Journal of Research in Personality*, *15*(3), 359-370.

Wills, T. A. (1981). Downward comparison principles in social psychology. *Psychological Bulletin, 90*, 245-271.

Wright, S. C., Aron, A., McLaughlin-Volpe, T., & Ropp, S. A. (1997). The extended contact effect: Knowledge of cross-group friendships and prejudice. *Journal of Personality and Social Psychology*, *73*(1), 73-90.

Wyer, R. S. & Collins, J. E. (1992). A theory of humor elicitation. *Psychological Review, 99*(4), 663-688.

Zhang, Y. (1996). Responses to humorous advertising: The moderating effect of need for cognition. *Journal of Advertising, 25*(1), 15-32.

Zillmann, D. (1983). Disparagement humor. In P. E. McGhee & J. H. Goldstein (Eds.), *Handbook of humor research* (pp. 85-107). New York, NY: Springer.

Zillman, D., & Cantor, J. R. (1977). Affective responses to the emotions of a protagonist.

Journal of Experimental Social Psychology, *13*(2), 155-165.

Zillmann, D., & Stocking, S. H. (1976). Putdown humor. *Journal of Communication*, *26*(3), 154-163.