

**BEYOND STIGMA: DEVELOPING AND TESTING A SCALE OF PERCEIVED  
TRIVIALIZATION OF MENTAL ILLNESS**

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This dissertation serves as an initial step in expanding research on perceptions of mental illnesses to better match the reality of what those with a trivialized condition experience daily in interpersonal and mediated interactions. In order to provide a foundation from which to study this form of social bias, as well as to study the ways in which media rely on trivialization tropes when portraying mental illness, a review of pertinent stigma research was first addressed prior to the conceptualization of a trivialization concept and subsequent operationalization of a reliable, validated measure.

Four studies were conducted to develop, validate, compare, and test a nuanced measure of this new concept. An exploratory factor analysis (EFA) served as the first study ( $N = 570$ ) and established four factors of trivialization: symptoms as benefit, overreacting, lessened severity, and cynicism. A confirmatory factor analysis (CFA) was then conducted to demonstrate the stability of the factor structure in a different sample ( $N = 505$ ). To analyze the construct validity of the newly developed trivialization scale, a third study ( $N = 187$ ) employed discriminant and convergent validity measures and compared them to the four established trivialization scales. The final study provided an empirical test of the trivialization measure in a media effects context using a 2 (type of mental illness: OCD vs. ADHD) by 2 (portrayal of symptoms in social media content: benefit vs. neutral) fully factorial, between subjects experimental design ( $N = 278$ ).

By providing the field with a valid and reliable measure of four different types of trivialization, researchers can now apply this measure in multiple contexts to see how varied mediums, character types, genres, and mental illnesses result in different types of perceived

disease trivialization. This measure can help expand the conceptual boundaries of research on mediated portrayals of mental illnesses by reminding researchers that biased portrayals of mental illnesses are not all purely negative.

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# **CHAPTER 1: THEORETICAL UNDERPINNINGS OF TRIVIALIZATION AS DISTINCT FROM STIGMATIZATION**

## **Introduction**

Mediated portrayals of mental illness have long provided researchers a bountiful platform from which to study stigma. Goffman's (1963) foundational research established that the permanent stigma attached to persons who had received mental healthcare treatment was so great that these individuals were disqualified by society from full humanness. Stigma, then, highlights a spoiled, tainted identity. Conceptualized as a deviation from the social norm, stigma can take shape as attributes across three dimensions: tribal (e.g., race or gender), abominations of the body (e.g., physical deformities), and blemishes on a person's character (e.g., mental illness) (Goffman, 1963). Having a stigmatized attribute such as a mental illness then allows for easy divorce between ingroup and outgroup membership (Allport, 1954).

Typical mediated portrayals of mental illness showcase violent, dangerous characters, or characters that are victimized and/or infantilized (Corrigan et al., 2005; Signorielli, 1989; Wahl, 2003). Individuals with schizophrenia or bipolar disorder, for example, are showcased as unstable, unpredictable, and aggressive – incapable of properly participating in and contributing to society. However, this archetypal mediated representation does not transfer seamlessly to all forms of mental illness. For instance, in the case of obsessive compulsive disorder (OCD), media coverage has routinely relied on one-dimensional caricatures engaging in frivolous behaviors – imagery that yields laughs rather than bringing awareness to the complexity and gravity of mental illness (Wahl, 2003). While stigmatization of a disease traditionally makes others desire more social distance from people with a seemingly severe condition, the present research posits that trivialization is the process of making a disease appear less complex, less severe, more

humorous, and as a potential benefit to those affected. Previous literature suggests the existence of trivialization, without necessarily defining it as such. As Sieff (2003) outlined, “Television comedies about mental health professionals produced in the USA, such as *Frasier* and *The Bob Newhart Show*, define characters with mental illnesses through amusing idiosyncrasies such as nervousness, a morose affect, or total obsession with some minute detail. Their symptoms generate humorous, deprecating situations” (p. 261). While these examples highlight the proposed components of oversimplification and mockery, Sieff (2003) additionally suggests that films like “*Harvey*, *Crazy People* and *The Dream Team* portray people with mental illnesses as cheerful, happy, and kind, even preferable to normal people with no evidence of their seriousness of their disease” (p.261), which directly speaks to the lessened severity component of trivialization, as well as the perception that certain symptoms attached to the disorder provide a benefit. Empirical evidence suggests that the use of such trivializing language to describe an illness like OCD can have equally negative outcomes in relation to the more traditional stigmatizing language (Pavelko & Myrick, 2015a; Pavelko & Myrick, 2015b).

The purpose of this dissertation is, therefore, to use scale development procedures to create a reliable and valid measure of disease trivialization and to assess if this measure conceptually overlaps with stigmatization or is distinct. Four different studies were conducted in order to achieve this aim. After an initial survey to collect data for an exploratory factor analysis (EFA), a second survey was tailored based on the findings and a confirmatory factor analysis (CFA) was run to evaluate if the same factor structure held using a different sample. To assess the construct validity of the trivialization measure, a third study surveyed a new sample and contained measures related to the discriminant and convergent validity of trivialization. Once the validity of the scale was assessed, an empirical test of the trivialization measure as an outcome of

different mediated portrayals of mental illness was conducted via an experimental design. What follows is a comprehensive review of these four, unique studies and a discussion of the resulting implications to the field and the relationship between trivialization and stigmatization processes.

### **Literature Review**

Prior to examining the proposed concept of perceived disease trivialization, I will review the theory on stigma and mental illness as a platform for understanding how the public may misperceive individuals with a mental illness. Additionally, the conceptual foundation of labeling theory is discussed as it relates to others' perceptions of individuals with a mental illness before connections between stigma and media are discussed. Finally, trivialization is explicated and presented as a potential additional biased perception of individuals with a mental illness.

### **How Is Stigma Conceptualized?**

The purpose of the present literature review is to provide a conceptual foundation for which to explore how the processes of trivialization and stigmatization might be associated *and* might be differentiated. The first part of this work will provide a review of how previous research has both conceptualized and operationalized stigma, functioning as a preliminary investigation into how to best operationalize the emerging concept of trivialization. Considering the historical underpinnings of stigma research allows for theory building within the understudied realm of trivialization, adding nuance to the field of health communication.

Goffman's (1963) sociological work on the study of deviance provided a foundation for the conceptualization and study of stigma. Stigma is defined as the relationship between "an attribute and a stereotype" (Goffman, 1963, p. 4). When individuals are disqualified from social acceptance, they experience stigma. The earliest conceptualizations of stigma made reference to variations from a specific norm (Goffman, 1963), which clearly delineates the existence of an in-

group and a contrasting out-group. Stigma serves as a sign of disgrace or discredit, essentially setting an individual apart from others (Bryne, 2000). Feelings of shame are often attached to the stigmatized, since they are made to feel at fault for their group membership.

Various researchers who sought to aid in the definition of stigma's complexities have extended the foundation set forth by Goffman (1963). Jones et al. (1984) introduced the idea of a marked relationship. The term "mark" is used as "a descriptor that encompasses the range of conditions considered deviant by a society," and stigma is therefore experienced when the mark directly links the identified person to undesirable traits (Link, Yang, Phelan, & Collins, 2004, p. 512).

More specifically, Jones and his colleagues (1984) proposed six components that comprise stigma: course, origin, concealability, disruptiveness, aesthetic qualities, and peril. Course refers to the progress or evolvement of the condition. Is this something that can become less stigmatizing over time? In the case of a severe burn (a potentially stigmatizing physical deformity), improvement to some degree is likely with proper treatment. Origin represents the initial cause of the stigmatizing attribute. In the case of mental illness, origin represents a largely polarized issue. For example, when the cause of a mental illness is attributed to the individual, blame falls to the person with the disorder because it is seen as a mark of weak character rather than an illness worthy of treatment. Concealability, the third noted component of stigma, is also imperative to the study of mental illness. A continuum exists within the concealability factor – from a condition that is not visible and can be hidden, to the very visible condition that places the individual on a constant stage. The level of discomfort and unease the stigmatizing attribute brings to interpersonal relationships is represented by the disruptiveness component. Persons with anxiety disorders, for instance, might feel their illness significantly impairs their ability to

participate in typical social life. The aesthetic component of stigma can additionally influence the disruptiveness a person experiences, although it often is most applicable to physical deformities. Peril, however, is best analyzed in the context of mental illness, as it relates to the amount of danger and/or threat associated with a stigmatizing attribute. A large body of empirical evidence shows the continued connection between mental illness and perceptions of violence and crime (Klin & Lemish, 2008; Murphy, Fatoye, & Wibberley, 2013; Pirkis, Blood, Francis, & McCallum, 2006).

### **Labeling and Modified Labeling Theory**

The origin and evolution of labeling theory aids the conceptualization of a comprehensive definition of stigma. Ideological disputes emerged in the 1970s between labeling theorists – those who considered chronic mental illness to be a social role – and researchers who endorsed the traditional psychiatric approach. The process of tagging (Tannenbaum, 1938) is integral to the construction of the social role, and Goffman’s (1963) initial conceptualization of deviance provided stability to the tagging narrative.

Tannenbaum’s (1938) work with deviant youth afforded him the perspective to observe that children who were tagged as deviant then became more likely to commit future acts of deviance. The tagging process triggered a self-fulfilling prophecy – those tagged as deviant would eventually become the label, allowing it to define their identity. Labeling theory therefore posits that the nature of identity is both subjective and intricately connected to social capital (Tannenbaum, 1938; Scheff 1963). Members of the in-group majority have the power and capability to label and shape the self-identity of others. The original labeling theory model proposed by Scheff (1963) outlines the progression from the initial tag and resulting consequences. The model originates with the understanding that social conceptions of mental

illness exist and can be used to label others. Once labeled, the tagged individual is forced to conform to the mental illness based on the responses of the in-group majority. Tagging and the resulting confirmation of that tag therefore serves as the catalyst for the internalization of the deviant role, and lastly, stable mental illness.

Work by Weinstein (1983) showcased the fact that much of traditional labeling theory centered on public opinion, but not on the attitudes of individuals with mental illness. Weinstein (1983) therefore decided to test labeling theory by analyzing persons diagnosed with mental illness. Results indicated that labeling theory was only partially supported, namely, there was validity to the idea that people with mental illness can both know and internalize stigma. However, labeling theory was not an adequate explanation for the complexities surrounding the stigmatization process.

Evidence from Weinstein's (1983) research served as a springboard for the modified labeling theory proposed by Link, Cullen, Struening, and Shrout (1989). The modified approach was offered as a response to the debate between labeling theorists and the critics who denounced such a theory stating that stigma did not have that much significance in the study of mental illness. Link and colleagues (1989), however, found error in both arguments, and ultimately proposed a model of negotiation. Using Scheff's (1963) original model as the foundation, the Link et al. model also originated with the social conceptions of mental illness that exist in society. These conceptions can again be used to label individuals, which, in the modified model, can result in secrecy, withdrawal, or education, depending on the context and individual differences. Labeled persons can then experience negative consequences, such as decreased self-esteem and social support, and are more vulnerable to repeat episodes in the future based on the nature of their condition. In sum, modified labeling theory suggests that individuals form

conceptions about mental illness through socialization and can apply these labels to others, however, there is individual agency in how the labeled person processes the mark.

### **Self Versus Public Stigma**

Modified labeling theory provides a natural segue to the research on self-stigma, one of two (self and public) possible ways stigma can be experienced.

*Self-stigma.* Work by Link (1987) and Link and Phelan (2001) on self, or “anticipated” stigma proposed a four-tiered process model that begins with stereotype awareness. Socialization introduces countless societal stereotypes, and while individuals may be aware of their existence, it does not mean they are necessarily accepted. Stereotype acceptance, the second step, refers to the process of assigning truth to this claim that exists in society. According to the model, self-stigma will not occur without acceptance. Once accepted, self-concurrence follows – meaning the stereotype is internalized by the individual and applied to the self. Self-concurrence ultimately results in broad psychological consequences (Corrigan et al., 2001), such as negative feelings about the self, loss of dignity, and self-esteem decrement (Latalova, Kamaradova, & Prasko, 2014; Van Brakel et al., 2006).

*Public stigma.* In contrast to the anticipated stigma that can be internalized by persons with mental illness, public stigma refers to the enacted, or felt stigma experienced within society. Previous research has established that people develop conceptions about mental illness, most often from media and an inner peer circle, and then form expectations about whether most people will reject a person with mental illness (Link, Struening, Neese-Todd, Asmussen, & Phelan, 2001). Public stigma is therefore the reaction the general public has to people with mental illness (Corrigan & Watson, 2002). For instance, the perception held by many that persons with schizophrenia are violent represents public stigma. Additionally, it is important to note that

public stigma can manifest through three different forms – as stereotypes, prejudice, and discrimination.

### **Manifestations of Public Stigma**

A review of the cognitive (stereotypes), affective (prejudice), and behavioral (discrimination) manifestations of public stigma and their nuanced conceptualizations is outlined below.

*Stereotypes.* Stereotypes, or “exaggerated beliefs” (Allport, 1954, p. 191) are cognitive schemas used to process information and social cues about others (Hilton & von Hippel, 1996). Stereotypes represent the archetypal, mainstream imagery – the sweeping generalization – that comes to mind when thinking about a particular group. In other words, stereotypes are composites of social categories available for classification (Goffman, 1963). These characteristic beliefs about group attributes can exist across race (African-Americans are superb basketball players), gender (women will likely not excel in math and science fields), and socio-economic status (impoverished people are often criminals), among countless other dimensions, including health. Stereotypes reflect the cognitive manifestation of stigma, stemming from the innate human need to classify group members based on trait characterizations and their prescriptive social role (Dovidio, Hewstone, Glick, & Esses, 2010).

Stereotypes serve a dyadic role. In order to conserve cognitive resources, individuals often engage in stereotype use to simplify complex environments (Dovidio et al., 2010). Stereotypes have the ability to whittle down the complex and intricate into a simple exemplar. Simplification represents only one function, however, as stereotypes can also constrain. Because stereotype usage promotes an eagerness to perceive traits that reaffirm the existing stereotype (Dovidio et al., 2010), there is little need to look beyond the formulaic information. Stereotypes



go beyond readily apparent external characteristics and help to fill in gaps with more substantial, though often exaggerated or inaccurate, information – a process referred to as “enriching” (Oakes & Turner, 1990).

*Prejudice.* Stereotypes can evolve into prejudice when people are exposed to pertinent information about a group and choose to ignore it (Allport, 1954). Allport’s (1954) seminal work on prejudice outlines this concept as an overgeneralized judgment about a person based solely on their group membership. Prejudice can be automatic and unintentional, as well as overt and malleable (Fiske, 2002). Because prejudice attaches an evaluative or favorability component to the classification process, it serves as an affective manifestation of stigma. All other category memberships and personal attributes are ignored, and the objectionable group membership becomes the single, salient identifier. In some instances, confirmation of group membership may not be known, and instead the evaluative component is based simply on perceived membership (Fiske, 2002).

*Discrimination.* The behavioral manifestation of stigma, discrimination, ensues as a result of stereotyping and prejudice. Discrimination is a process that involves denying people equal treatment based on their group membership (Allport, 1954). Intergroup relations and in-group favoritism are integral to the discussion of discrimination. The aim of discriminatory actions is often to designate one’s own group characteristics as superior to those of the out-group, and such a comparison naturally comes at the expense of minority members (Jones, 1972). According to Allport (1954), “in strict logic, an in-group always implies the existence of some corresponding out-group” (p. 41). When one’s loyalty to their group produces a negative response toward an out-group, Allport (1954) considers this to be discriminatory behavior. However, discrimination can also stem from a desire for in-group security. Feelings of hostility toward out-group

members can certainly strengthen in-group membership, but hostility is not a required component (Allport, 1954). Discrimination can therefore serve a two-part function in society: harm or disadvantage an out-group while also strengthening ties and promoting unity within the in-group (Dovidio, Hewstone, Glick, & Esses, 2010).

### **How Is Mental Illness Conceptualized?**

In addition to the complexity that exists in understanding stigma, researchers have long acknowledged the challenges associated with providing a succinct definition of mental illness. Based on Goffman's (1963) sociological perspective, mental illness has historically been attached to the notion of deviance – a person with mental illness is in some way deviant from the social norm. The challenge herein lies in determining where normality begins and ends (Hinshaw, 2007). Social norms are often evaluated on the basis of moral values, and great variance ensues. Cultural differences exacerbate the challenges. For instance, the westernized perception of mental health is not universally accepted within other cultures. Prior to the consequences of recent globalization trends, Japanese culture perceived depression as a remarkable personal attribute that highlighted the strength of an individual's character (Watters, 2010). Depression was therefore not something to be treated, but rather, revered.

The Diagnostic and Statistical Manual of Mental Illness (DSM) has attempted to overcome moral and cultural variance by providing a universal understanding of what constitutes mental illness. The DSM, however, does not fully account for the complexity and fluidity of such disorders (Hinshaw, 2007). Part of the difficulty in defining mental illness also stems from the frequent comparison to physical illness. Physical illnesses have biological symptoms (e.g., chest pain) that can be evaluated using objective markers (e.g., lab tests), but such a direct path unfortunately does not exist within issues of mental health (Hinshaw, 2007). Advancement in

brain imaging provides promise, but often a description and assessment of mental illness is very subjective. Research has additionally suggested using the name “brain disease” in lieu of mental illness to circumvent subjectivity and emphasize mental disorders as brain-based (Hinshaw, 2007). While the intention is positive – to dispel the notion that mental illness is imagined – changing the name does not provide an easy fix. Research suggests that this could actually cause increased stigmatization since the “brain disease” definition could incorrectly imply that treatment will not improve the condition and further solidify the “us versus them” segregation (Hinshaw, 2007; Link & Phelan, 2001).

### **How Is Mental Illness Portrayed in the Media?**

According to Wahl (1995), sources close to home such as family, friends, and the media are all responsible for shaping attitudes and beliefs about mental illness. A vast body of research has documented that mass media communicate misinformation and unfavorable stereotypes about people with mental illnesses (Wahl, 1995). Thorton and Wahl (1996) found that both mental health advocates and families of people with mental illness believe that the negative stereotypes depicted in media directly contribute to the stigma attached to issues of mental health. The words used by the mass media to define mental illness have incredible power, which is why distasteful or misused terminology has such a negative impact on the diagnosed (Wahl, 1995). The colloquial use of stigmatizing language (e.g., nuts, loon, psycho, etc.) occurs frequently, highlighting society’s preoccupation with issues of mental stability and control (Wahl, Hanrahan, Karl, Lasher, & Swaye, 2007).

Media have traditionally relied on frames of violence and danger when discussing persons with mental illness. In fact, the media’s reporting of violence and direct linkage to individuals with mental illness has successfully fueled the belief that dangerousness and

aggression are inevitable consequences of any mental disorder (Hewitt, 2008). Portrayals of people with mental illness as aggressive, unpredictable, and often affiliated with crime have cultivated a negative stereotype and resulted in real-world fear and a desire for social distance from persons with mental illness (Link, Phelan, Bresnahan, Stueve, & Pescosolido, 1999). Victimized portrayals of persons with mental illness contribute to additional negative stereotypes centered on unemployment, homelessness, lack of social support, and lack of education (Corrigan, 2004; Corrigan, Larson, & Rüsçh, 2013) – stereotypes that manifest as a reality for many suffering from mental illness. Furthermore, the stigma attached to their disease makes seeking treatment an undesirable option.

Much research has also been conducted on the use of *episodic* (individually focused) and *thematic* (societally focused) frames in mediated portrayals of mental illness and the resulting audience perceptions. One such framing tactic includes the attribution of statements to particular individuals, (e.g., an official or expert source versus a person with mental illness), to increase either the validity of a claim or the stigmatization through the use of pointed commentary (Sieff, 2003). Empirical evidence suggests that there is an overall lack of thematic coverage in news stories, and often individual cases of mental illness are showcased (Myrick, Major, & Jankowski, 2014). These individual cases tend to highlight the extreme, such as a person with schizophrenia committing a violent crime. In reality, persons with mental illness are rarely violent, and empirical data has determined socio-demographic and economic variables are more likely to predict violence than mental illness (Stuart, 2003). However, the use of episodic frames in news stories about mental health places the burden on the individual. An inclusion of more thematic frames in mental health reporting could help present mental illness as a societal issue that

communities need to come together to address through social support, policy change, and education.

### **Ties to Dehumanization**

Such negative representations of the mentally ill elicit ties to dehumanization – a process of denying full humanness to others (Haslam, 2006). Goffman (1963) initially addressed the dehumanizing agent of stigmatization, noting that stigmatized persons are reduced from a whole individual to a tainted one. In his explication of dehumanization, Haslam (2006) outlines two distinctive senses of humanness, one of which he refers to as uniquely human characteristics, and proves to be directly applicable to the long studied stereotypes of the mentally ill. For instance, uniquely human characteristics “define the boundary that separates humans from the related category of animals” (p. 256). The media often suggest people with mental illnesses are recognizably different, with their behaviors and appearance labeling them as deviant and bizarre (Wahl, 1995). It is not atypical for the mentally ill to be described as loners without family ties or an apparent social circle (Stuart, 2006). The belief that persons with mental illness are often volatile only helps to fuel the “monster” stereotype (Bernstein, 2010). In fact, a content analysis of Disney films established that characters with mental illness are portrayed as so bizarre and deviant that they need to be removed from society and locked away elsewhere (Lawson & Fouts, 2004).

Additionally, Harris and Fiske (2006) married the process of dehumanization with the stereotype content model (SCM) (Fiske, Cuddy, Glick, & Xu, 2002). The SCM offers a prediction about the emotional response the majority will feel toward minority members based on where their stereotyped group falls on the warmth and competence spectrums. Only the extreme outliers, those housed in the low-warmth and low-competence quadrant, “receive

unabashed disliking and disrespect” and fall privy to the “worst kind of prejudice – disgust and contempt” (Harris & Fiske, 2006, p. 848). This type of extreme prejudice classifies the response felt by members of society who experience dehumanization, such as the mentally ill.

### **Operationalizing Mental Illness Stigmatization**

Much research has focused on the development of a valid and reliable tool to properly analyze stigma and the stigmatized. It is the intent of the present work to use the foundational studies on stigma to address the potential for a measurement tool that targets trivialization more specifically.

Historically, research has largely employed the use of *vignettes* (short anecdotes describing a person who seemingly has a particular mental illness) in the study of stigma in the mental health context. Early stigma scales were often created with the intent to assess the opinions healthcare professionals held toward their patients (Day, Edgren, & Eshleman, 2007). With a general lack of tools available to measure the public’s opinion toward mental illness, Day, Edgren, and Eshleman (2007) created the Mental Illness Stigma Scale to better target public opinion toward various mental illnesses and the people who suffered from them. Day, Edgren, and Eshleman (2007) used the six components of stigma established by Jones et al. (1984) as the theoretical foundation for creating the Mental Illness Stigma Scale. After conducting an exploratory factor analysis (EFA), the authors were able to map five factors onto the six components (origin, course, concealability, disruptiveness, aesthetic qualities, and peril).

Dinos, Stevens, Serfaty, Weich, and King (2004) also contributed to the measurement of stigma through in-depth, qualitative interviews with persons with mental illness. Participants were asked the following: to describe their personal background and history of mental illness; provide comprehensive detail regarding treatment and the support, or lack thereof, from friends

and family; and discuss the impact their mental illness had on their professional life and interpersonal relationships. Dinos and colleagues (2004) parsed out three major themes: the negative mediated representations of mental illness; the anxiety associated with disclosure of mental illness to friends, family, and coworkers; and lastly, the discrimination they experienced – both actual discrimination and anticipated discrimination. These data were then used to develop the Stigma Scale, a standardized quantitative measure of felt and enacted stigma to be applied in various evaluations of mental health services and treatments (King et al., 2007).

### **Explication of Trivialization**

The aforementioned review of stigma literature serves as the foundation for which to begin conceptualizing a related but distinct concept of trivialization. While stigmatization makes the majority want to stay away from people with mental illness (Smith & Cashwell, 2011), the present research proposes an explication of trivialization as the process of making a disease appear less complex, less severe, and deserving of mockery. These components of trivialization have been empirically tested in previous exploratory studies, and were found to have equally negative outcomes in relation to the more traditional stigmatizing language (Pavelko & Myrick, 2015a; Pavelko & Myrick, 2015b). The addition of a fourth component, the perception that certain symptoms of trivialized mental illnesses may be perceived as a benefit, stems from a review of recent literature on advantageous traits related to mental disorders (Fennell & Boyd, 2014), as well as various anecdotal evidence found within discussions on social media. These four components of trivialization are reviewed below.

*Oversimplification.* Referencing a disease based on only one or a few core symptoms can yield detrimental results. For example, debate exists with regard to the possible renaming of Chronic Fatigue Symptom (CFS) – a name that many medical professionals believe does harm to

patients (Tucker, 2014). An emphasis on the “fatigue” has resulted in misleading conclusions and an oversimplified understanding of the illness. The fact that both CFS and depression share fatigue as a common denominator has perpetuated the misleading claim that psychological treatments are effective on CFS patients (Tucker, 2014). By defining CFS in terms of a psychological diagnosis, the physical aspect of the disorder is ignored, leading to limited medical treatment and a general misunderstanding about CFS and its patients.

Lack of prior knowledge about a particular disorder is a common theme when discussing the oversimplification process. In the case of OCD, there is a general lack of understanding that the disorder is twofold and consists of obsessive, intrusive thoughts that often drive the compulsive behaviors (National Alliance on Mental Illness, 2012). The anxiety accompanying the overbearing and usually graphic thoughts attached to this disorder are difficult to describe and exceedingly more challenging to portray in the media (Loving, 2013). Additionally, the variance within a disorder such as OCD contributes to the oversimplification process. For instance, it is possible to have only obsession-based or only compulsion-based symptoms, and thoughts and rituals carried out by individuals can differ greatly. It is not atypical to refer to the disorder as existing along a spectrum (Allen, King, & Hollander, 2003). Because of this, OCD is often reduced to a series of tangible, albeit frivolous, behaviors. In that same vein, attention deficit/hyperactivity disorder (ADHD) is frequently oversimplified by the colloquial use of the disorder to represent the scattered, disorganized, and unfocused (Peterson, 2016).

*Lessened severity.* Physical health concerns have long taken precedence over issues of mental wellness, a phenomenon known as the “Cinderella effect” (Üstün, 1999). Such indifference can trigger questions about the legitimacy and severity of mental illnesses. Significant effort has been put forth by the mental health community to address the concept of



perceived severity. For example, the American Psychiatric Foundation sponsored the “Depression is Real” public education campaign to dispel the notion that depression is not serious or imaginary (NAMI, 2006). To do so, science-based campaign messages were promoted to provide clarification about the significance of a depression diagnosis. The body of literature on invisible illness (e.g. Joachim & Acorn, 2000; Kundrat & Nussbaum, 2003) provides additional insight into questions of legitimacy when a disorder does not always generate tangible symptoms or effects. Without obvious indicators typically present in the case of physical illness to signal the existence of a particular disease, individuals suffering from mental illness may receive less social support (Vickers, 1997). Persons with mental illness may fall victim to the “damned if they do, damned if they do not” adage – meaning that disclosing an invisible illness could lead to labeling, stigmatization, discrimination, or trivialization, while choosing to not disclose could lead to continued lack of social support and self-esteem decrement (Vickers, 1997).

*Mockery.* When mediated content employs trite, repetitive behaviors to describe a disorder, resulting in perceptions of lessened severity, then laughing about the condition can become a socially accepted norm. Mediated characters diagnosed with OCD become the target of jokes, and colloquial language such as “I’m so OCD” or “that’s so OCD” perpetuates the idea that OCD is merely an adjective rather than an illness. The recent debate played out in the media regarding retailer Target carrying a Christmas sweater that read “OCD: Obsessive Christmas Disorder” highlights how colloquial, mocking language is taken seriously and can have real-world consequences (Knoll, 2015). Such mocking language has also been used to describe other illnesses such as breast cancer. For example, Milligan (2012) argues that clothing that has the juvenile message “save the ta-tas” printed on it harnesses more humor than support.

Previous work in the area of disparagement humor also relates to the use of mockery in mediated representations of trivialized mental illnesses. As defined by Parrott (2016), disparagement humor refers to the comedic ridicule of other people – often enjoyed by members of the audience. While specifically addressing physical appearance, Parrott (2016) determined that members of the audience were more likely to share the insulting jokes showcased in televised clips when there was a validating, positive reception of the disparagement humor from other viewers. This type of sharing is akin to the phenomenon seen on social media sites like Twitter where posts about the trivialized nature of OCD, often tagged with #OCD, are frequently liked and retweeted among users (Pavelko & Myrick, 2015a; Pavelko & Myrick, 2015b).

It is also important to note the literature that has addressed the varying media effects in comparisons of serious versus comedic media messages (Nabi, Moyer-Gusé, & Byrne, 2007). While initially discounted as a joke, research suggests that the memorable nature of a humorous message may encourage individuals to continue processing the content over time, therefore increasing the overall persuasiveness (Nabi, Moyer-Gusé, & Byrne, 2007). These findings in particular provide insight into the potential reach and effectiveness of mediated messages that contain mocking language about mental illnesses. It is reasonable to believe that this persuasiveness has the potential to translate into trivialization based on the possible desensitization and normalcy attached to messages that are perceived as jokes, but are actually mocking something far more serious.

*Symptoms as a benefit.* While the three aforementioned components of trivialization have previously been explicated (Pavelko & Myrick, 2015b), this dissertation suggests an additional component. This fourth component, perceiving symptoms as a benefit to the diagnosed, addresses one of the more discernable variations between the process of stigmatization and

trivialization. The attributes associated with the mental illness are shown to impact the individual in different ways. For instance, while stigmatization is associated with a disease being a disadvantage, symptoms in trivializing portrayals often show up as a benefit. Consider the example of *Monk*, where the lead character's perceived OCD symptoms (e.g., attention to detail, organization, perseverance, etc.) aided in his ability to thrive in his career as a detective, enhancing his overall quality of life. Additionally, the colloquial use of "that's so OCD" in pop culture has been equated to positive life practices regarding cleanliness and organization skills (Gonzalez, 2015). For example, Khloe Kardashian has taken to her personal website ([www.khloewithak.com](http://www.khloewithak.com)) and Instagram account (@khloekardashian) to share posts highlighting her self-declared "Khlo-C-D." One such post provides her fans with tips about how to organize their refrigerators to mirror her perfectly systematized shelves; another shows how to better arrange cookies in symmetrical rows within glass cookie jars. These practices equated with OCD are promoted as a way to better enrich one's daily life. Mediated representations present the "idea that OCD is akin to a personality trait or habit that anyone might engage in from time to time, versus a 'real' disorder" (Fennell & Boyd, 2014, p. 675).

Because the vast body of mental health communication centers on the stigmatization of persons with mental illness, there is a lack of empirical evidence for the potential negative effects of glamourizing symptoms associated with a mental disorder by implying they serve as a benefit to one's life. However, literature on the effects of stressful life events may provide foundational support that could be translated and applied to the process of trivialization. This research suggests that individuals specifically benefit from stressful life events in three ways: enhanced social resources (such as better relationships with friends), enhanced personal resources (such as improved self-esteem), and enhanced coping skills (Schaefer & Moos, 1992). These gains,

enhancements to one's quality of life, or perceived superpowers, could also hold true for the representation of trivialized mental illness, especially with regard to the enhancement of skills. Depicting symptoms in such a way, however, could have numerous deleterious effects, especially if it leads to lack of diagnosis or treatment for the individual.

### **Previous Work on Mediated Disease Trivialization**

Previous research has conducted an initial investigation into the process of mediated disease trivialization by conducting an online experiment that exposed participants to mock tweets about OCD (Pavelko & Myrick, 2015a; Pavelko & Myrick, 2015b). More specifically, the study design manipulated the frame of the content (trivial language to describe OCD, clinical language, or mixed), the gender of the Twitter avatar (male or female), and the self-identification of the Twitter avatar (the individual tweeting did or did not identify as having a personal diagnosis of OCD). While the nature of the mediated content did not significantly influence participants' perceptions (i.e., preferred social distance between participants and people with OCD), findings suggest that gender and personal experience with the disorder or other mental illness shaped reactions toward OCD (Pavelko & Myrick 2015a). For instance, female participants and those with personal experience with OCD or other mental illnesses were more likely to rate the disease as severe and to hold less negative stereotypes toward people with OCD (Pavelko & Myrick, 2015b).

However, the framing of OCD-related social media content as well as self-identification with the disease did influence liking of and identification with the featured Twitter users (Pavelko & Myrick, 2015a). Those using trivialized language to describe OCD were less liked by the participants in the experiment, and participants were also less likely to identify with the trivializing user. Additionally, the use of trivial language actually annoyed observers and

decreased sympathy, whereas the use of clinical language decreased annoyance and increased sympathy (Pavelko & Myrick, 2015b). Results also suggested that those who self-identified as having OCD (e.g., included a statement about their diagnosis in their profile bio) were actually admired based on higher participant reports of liking and identification (Pavelko & Myrick, 2015a).

Although this preliminary research provides support for different types of media portrayals of mental illness and the resulting effect, we are unable to conclude how the media specifically trivializes mental illness without a valid and reliable scale to measure perceived trivialization as a dependent variable. It is the aim of this dissertation to try to fill this current void in the literature.

## **CHAPTER 2: OPERATIONALIZING PERCEIVED MENTAL ILLNESS**

### **TRIVIALIZATION**

#### **The Stigmatization and Trivialization Family Tree**

The purpose of the present research is to provide a comprehensive overview of the impressive body of stigma literature in the context of mental health communication from which to build a foundation for the explication of trivialization. Although mental illness has long been stigmatized, it is suggested that some conditions, such as OCD and ADHD, do not fully fit the traditional frame of a stigmatized disease. The present work posits that a newer form of social bias, trivialization, may be occurring in tandem with stigmatization processes.

Reviewing the work done by previous researchers such as Day, Edgren, and Eshleman (2007) and Dinos et al. (2004) to empirically measure stigma provides the initial groundwork from which to develop a separate scale to assess the process of trivialization. Just as Day and colleagues (2007) relied on theory to develop the mental illness stigma measure, specifically, the six components of stigma outlined by Jones et al. (1984), the present research suggests using the proposed explication of trivialization (including the components of oversimplification, lessened severity, mockery, and symptoms as benefits) to develop a trivialization measure. Once exploratory and confirmatory factor analyses are conducted and the measure's validity is assessed, the trivialization scale will then be applied to an experimental design to empirically test the measure in a mediated context. The application of this tool would help to build theory in the currently understudied arena of trivialization in mental health communication, while also

showcasing the potential relationship, or lack thereof, with the traditional stigmatization processes.

### **Methodology**

One feature of the health sciences literature devoted to measuring subjective states (depression, pain, patient satisfaction, etc.) is the daunting array of available scales (Streiner & Norman, 2008, p. 5). However, there are concepts, such as mental illness trivialization, that do not align with these existing instruments. The desire to develop a new scale in social science manifests when “off the shelf” measurement tools are either unsuitable or unavailable (DeVellis, 2012). More specifically, researchers may develop new scales when a particular phenomenon is believed to exist based on a theoretical understanding, but is unable to be directly assessed. As the aforementioned review of the literature suggests, there is a need for the systematic measurement of mental illness trivialization. It is important to develop the scale based on the literature, rather than simply assembling it, to ensure a thorough understanding of the latent construct intended for measurement (Devellis, 2012).

The latent construct is a critical component of measurement theory (Noar, 2003). Historically defined as a “postulated attribute of people, assumed to be reflected in test performance,” (Cronbach & Meehl, 1955, p. 283), the complexity of the latent construct is often not readily observable (as is the case for trivialization), meaning that multiple items are needed for assessment. Although single items are used to measure variables in some cases, it is largely believed that multiple item scales better assess constructs’ complexity (DeVellis, 1991; Noar, 2003). In this same vein, the scale’s unidimensionality (all items measuring one dimension of the latent construct) or multidimensionality (assessment of different dimensions based on the context) must also be considered (Noar, 2003). Multidimensional scaling is an attempt to bridge

the two historical traditions of categorical and dimensional scaling, as it allows for a variety of attributes “to be measured dimensionally in such a way that the results can be used to both categorize and determine the extent to which these categories are present” (Streiner & Norman, 2008, p. 14). More specifically, it begins with some index of how close each item is to every other object and then tries to determine the precise number of dimensions underlying these evaluations of proximity (Streiner & Norman, 2008).

Constructing a multidimensional measure of mediated mental illness trivialization will provide a comprehensive understanding and serve to extend the literature on this phenomenon. Examples of multidimensional scales developed in previous social science research will guide this process. For instance, the Comprehensive Indoor Tanning Expectations (CITE) Scale is a multidimensional, theory-based instrument created to examine the positive and negative consequences that young women attribute to indoor tanning, and includes measures such as indoor tanning attitudes, appearance motivation, and indoor tanner types and frequency (Noar, Myrick, Morales-Pico, & Thomas, 2014). Additionally, Peifer (2015) created a multidimensional scale for Perceived News Media Importance (PNMI) to address the audience’s nuanced attitudes toward media, and it was grounded in literature highlighting the six primary functions of news media. Previous literature on the Multidimensional Scale of Perceived Social Support (MSPSS) will also serve as a model for the development of a trivialization assessment tool (Zimet, Dahlem, Zimet, & Farley, 1988). In creating a scale to assess the numerous intricacies associated with social support, the researchers relied on three subscales, each addressing a different type of social support: family, friends, and significant other. These particular subscales reflect how the proposed internal components of trivialization (oversimplification, lessened severity, mockery,



and perceived symptoms as a benefit) can add to a comprehensive understanding of the latent construct.

### **Developing an Initial Item Pool**

The first step in developing a new scale to measure mediated trivialization of mental illness is devising the items to be used in the survey. Previous research suggests that the larger the original item pool, the better, as no amount of statistical manipulation after the fact can compensate for poorly worded, ambiguous, or irrelevant questions (Devellis, 2012; Streiner & Norman, 2008). Good items are those that are clear and concise; specifically target and have high correlation with the true score of the latent variable; avoid double negatives and double-barreled phrasing; and are inclusive without too much overlap (DeVellis, 2012). Additionally, a set of scale items should be highly intercorrelated, meaning the coefficient alpha falls into the .80 to .90 range (DeVellis, 2012). There are various qualitative and quantitative techniques that can be employed to develop the item pool, including conducting focus groups, in-depth interviews, participant observation, expert opinion, theory, and previous empirical research. The present work posits using prior participant survey responses addressing the variance between stigmatizing and trivializing mediated portrayals, as well as additional studies on mediated portrayals of mental illness, to aid in the development of the initial item pool.

There is no predetermined or set amount of items to include in the item pool, as represented by the variance in pool size across the three aforementioned multidimensional scale examples. For instance, the MSPSS (dealing with the measurement of perceived social support) was constructed with 24 items addressing relationships with family, friends, and a significant other in the areas of social popularity, respect, and items directly related to social support (Zimet, Dahlem, Zimet, & Farley, 1988). The PNMI (used to assess the perceived importance of news

media) was developed with 35 preliminary items, all centered on the primary functions of news media (information, investigation, analysis, social empathy, public forum, and mobilization) (Peifer, 2015). The CITE scale (regarding tanning expectations) had the largest initial item pool of the three. In the early stages of development, researchers included items to cover content related to appearance, health, social, and self-evaluation, while also taking the valence and outcome expectations into consideration (Noar, Myrick, Morales-Pico, & Thomas, 2014). This led to an initial pool consisting of 70 items. More specifically, the stem presented before the measure stated, “If I went indoor tanning...” and participants could respond using a five-point Likert-type scale.

The present work employed a similar stem and response format. Likert-type questions use a declarative sentence (the stem), followed by response options that allow for the participant to indicate varying degrees of agreement (DeVellis, 2008). The present study used a 7-point Likert-type response scale ranging from the anchor words of strongly disagree to strongly agree. With regard to the item pool, three stems were used: (1) “This mental illness is...” (2) “People with this mental illness are...” and (3) “This mental illness allows for...” While the stems are crafted to address participant opinion about mental illness as a whole, rather than one particular disorder, the hypothesized components of trivialization (oversimplification, lessened severity, mockery, and perceived symptoms as a benefit) served as a foundation for the item categories. Prior research has shown the applicability of categories to successful item pool development. For instance, the Patient-Reported Outcomes Measurement Information System (PROMIS) assesses patient reported outcomes across six areas: pain, fatigue, emotional distress, physical functioning, social role participations, and general health perception (Streiner & Norman, 2008). These specific areas guided the categories within the item pool development, just as the present

work relied on oversimplification, lessened severity, mockery, and perceived symptoms as a benefit to categorize relevant items.

To generate items for the initial pool outlined below, an extensive review of previous literature was conducted. Although not explicitly defined as trivialization, prior research on perceptions of mental illnesses addressed themes related to the four hypothesized components in the explication of trivialization. Additionally, a preceding experiment that asked participants to recall either a media portrayal where mental illness was stigmatized or a portrayal where it was trivialized provided empirical support for different patterns of word use between the two processes, and that content provided several of the items listed in the pool (Myrick & Pavelko, 2016). To help fill any potential gaps in the pool, a thesaurus was also used to expand upon the original statements shared by participants in the stigmatization versus trivialization experiment. The item pool is listed below by component.

*Items relevant to oversimplification.* Oversimplification suggests that the complexity of the disorder is not properly understood or represented. Although there are multifaceted components to the mental illness, only specific traits are used to describe it. The lack of intricacy used to define the disease results in a generalization of the disorder that can easily be communicated and represented. The oversimplification of the mental illness means that a pared-down, diluted version of the clinical definition is understood. Table 1 highlights the stem, response, and source for all items representative of oversimplification.

**Table 1. Oversimplification Item Pool**

<b>Stem</b>	<b>Response</b>	<b>Source</b>
[This mental illness is]	Underestimated	Thesaurus
[This mental illness is]	Exaggerated (reverse coded)	Thesaurus
[This mental illness is]	Complex (reverse coded)	Thesaurus
[This mental illness is]	Complicated (reverse coded)	Thesaurus
[This mental illness is]	Discounted	Thesaurus
[This mental illness is]	Easily resolved	Myrick & Pavelko, 2016
[This mental illness is]	Downplayed	Myrick & Pavelko, 2016
[This mental illness is]	Glossed over	Myrick & Pavelko, 2016
[People with this mental illness are]	Self-diagnosed	Myrick & Pavelko, 2016
[People with this mental illness are]	Associated with stereotypical behaviors	Myrick & Pavelko, 2016

*Items relevant to lessened severity.* Oversimplification of the mental illness can lead to severity decrement. Lessened severity means that the mental illness is often represented in a far more lighthearted manner than it warrants based on the clinical definition. The lessened severity associated with the illness may also impact empathy and perceptions of treatment for persons with the disorder. Highlighting petty traits showcased in a comedic light reduces the seriousness associated with the disorder. Items related to lessened severity are shown in Table 2.

**Table 2. Lessened Severity Item Pool**

<b>Stem</b>	<b>Response</b>	<b>Source</b>
[This mental illness is]	Insignificant	Myrick & Pavelko, 2016
[This mental illness is]	Unimportant	Myrick & Pavelko, 2016
[This mental illness is]	Open to interpretation	Myrick & Pavelko, 2016
[This mental illness is]	Inconsequential	Myrick & Pavelko, 2016
[This mental illness is]	Fake	Myrick & Pavelko, 2016
[This mental illness is]	Serious (reverse coded)	Thesaurus
[This mental illness is]	Severe (reverse coded)	Thesaurus
[This mental illness is]	Grave (reverse coded)	Thesaurus
[This mental illness allows for]	Skepticism	Myrick, Major, & Jankowski, 2014
[This mental illness allows for]	Cynicism	Myrick & Pavelko, 2016
[This mental illness allows for]	Doubt	Myrick & Pavelko, 2016
[This mental illness allows for]	Scrutiny	Myrick & Pavelko, 2016
[People with this mental illness are]	Dramatic	Myrick & Pavelko, 2016
[People with this mental illness are]	Not taken seriously	Myrick & Pavelko, 2016
[People with this mental illness are]	Making excuses	Myrick & Pavelko, 2016
[People with this mental illness are]	Disregarded	Myrick & Pavelko, 2016

*Items relevant to mockery.* Table 3 shows items in the pool relevant to the mockery component. Because of the lighthearted perception surrounding the disorder, both the illness and people with the illness are targeted for easy laughs. Stereotypical behaviors associated with the mental illness are highlighted in a comedic way to showcase the irrational and/or erratic nature of the disorder. The severity of the disorder is downplayed while the silliness is emphasized.

**Table 3. Mockery Item Pool**

<b>Stem</b>	<b>Response</b>	<b>Source</b>
[This mental illness allows for]	Mockery	Cefula, 2009
[This mental illness allows for]	Ridicule	Sieff, 2003
[This mental illness allows for]	Comedy	Cefula, 2009
[This mental illness allows for]	Sarcasm	Cefula, 2009
[This mental illness allows for]	Parody	Cefula, 2009
[This mental illness allows for]	Laughter	Cefula, 2009
[This mental illness allows for]	Insensitivity	Myrick & Pavelko, 2016
[This mental illness allows for]	Jokes	Myrick & Pavelko, 2016
[This mental illness allows for]	Jest	Thesaurus
[This mental illness allows for]	Jeers	Thesaurus
[This mental illness is]	Belittled	Karp & Tanarugsachock, 2000
[This mental illness is]	a farce	Thesaurus
[This mental illness is]	Humorous	Myrick & Pavelko, 2016
[People with this mental illness are]	Foolish	Myrick & Pavelko, 2016
[People with this mental illness are]	Caricatures	Thesaurus

*Items relevant to symptoms as benefit.* The last component of trivialization addresses how others perceive the mental illness to be a benefit to one’s life based on the stereotypical characteristics that define it. The traits associated with having the illness are seen as an improvement to a “typical” or “normal” life – there is some sort of heightened behavior attached to the disorder (e.g.; having more energy and getting more accomplished with ADHD or being organized with OCD). People diagnosed with the mental illness may be referred to as “lucky” based on the misconceptions surrounding these stereotypical behavioral traits; sometimes going so far as attributing prodigious qualities to these individuals.

**Table 4. Symptoms as Benefit Item Pool**

<b>Stem</b>	<b>Response</b>	<b>Source</b>
[People with this mental illness are]	Detail-oriented	(Hoffner & Cohen, 2012)
[People with this mental illness are]	Focused	(Hoffner & Cohen, 2012)
[People with this mental illness are]	Motivated	(Hoffner & Cohen, 2012)
[People with this mental illness are]	Talented	(Hoffner & Cohen, 2012)
[People with this mental illness are]	Capable	(Hoffner & Cohen, 2012)
[People with this mental illness are]	Proactive	(Oh, Lauckner, Boehmer, Bliss, & Li, 2013)
[People with this mental illness are]	Friendly	(Wahl, 1995)
[People with this mental illness are]	Honest	(Wahl, 1995)
[People with this mental illness are]	Brilliant	(Hoffner & Cohen, 2012)
[People with this mental illness are]	Gifted	(Hoffner & Cohen, 2012)
[People with this mental illness are]	Skilled	Thesaurus
[People with this mental illness are]	Accomplished	Thesaurus
[People with this mental illness are]	Lucky	Thesaurus
[People with this mental illness are]	Fortunate	Thesaurus

[People with this mental illness are]	Creative	Thesaurus
[People with this mental illness are]	Clever	Thesaurus
[People with this mental illness are]	Masterly	Thesaurus
[People with this mental illness are]	Ingenious	Thesaurus
[People with this mental illness are]	Inept (reverse coded)	Thesaurus
[People with this mental illness are]	Incompetent (reverse coded)	Thesaurus
[People with this mental illness are]	Dull (reverse coded)	Thesaurus
[People with this mental illness are]	Bland (reverse coded)	Thesaurus
[People with this mental illness are]	Eccentric	(Myrick & Pavelko, 2016)
[People with this mental illness are]	Special	(Myrick & Pavelko, 2016)
[People with this mental illness are]	Indulged	(Myrick & Pavelko, 2016)
[People with this mental illness are]	Pampered	(Myrick & Pavelko, 2016)
[People with this mental illness are]	Favored	Thesaurus

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Now that the items for the initial study have been determined and differentiated by category, the next chapter presents an overview of the exploratory factor analysis (EFA) used in the development of the trivialization measure.



### **CHAPTER 3: CONDUCTING THE EXPLORATORY FACTOR ANALYSIS**

The present study utilized exploratory factor analysis (EFA) to establish patterns of correlations among the four proposed components of perceived trivialization of mental illness. The purpose of conducting an EFA is to examine a single set of variables to assess their structure and discover which variables form subsets that are relatively independent of one another (Tabachnick & Fidell, 2013). Additionally, the aim of an EFA is to reveal any latent variables that cause the manifest variables to vary (DeVellis, 2012). More specifically, the EFA will address whether the phenomenon of trivialization is better understood as a single factor, or if it is comprised of several, multifaceted dimensions. EFA is critical to the early stages of scale development because it reduces the initial large number of observed variables to a smaller number of factors.

For instance, in Peifer's (2015) construction of the Perceived News Media Importance (PNMI) scale, EFA was used to provide a preliminary assessment of the dimensionality of the original 35 items included in the survey. Zimet et al. (1998) similarly employed EFA to reduce the 24-item Multidimensional Scale of Perceived Social Support (MSPSS) scale to a final sum of 12. The items that were removed were shown to not directly address perceived social support and therefore did not form conceptually clear factors (Zimet et al., 1998). The process of using repeated factor analyses was able to eliminate items better aligned with popularity than social support, such as "I receive invitations to be with others."

In the same vein, it is important to address the issue of crossloading. Strong data in EFA are represented by high communalities without cross loadings, meaning that items do not cluster on multiple factors (Costello & Osborne, 2005). Previous research cites .32 as a good rule of

thumb for the minimum loading of an item, which represents approximately 10% shared variance with the other items comprising a factor (Costello & Osborne, 2005; Tabachnick & Fidell, 2013). Therefore, if an item loads at .32 or higher onto more than one factor, the researcher must determine whether to omit the item from analysis (Costello & Osborne, 2005). This procedure has been followed in the development in other health-related scales (Noar, Myrick, Morales-Pico, & Thomas, 2014) and served as the barometer for removing crossloading items in the present study. Conducting EFA therefore establishes which items cluster together, highlighting *which* factors as well as *how many* factors should be retained for subsequent analysis.

## **Method**

### **Procedure**

Appendix I details the exact wording of the questionnaire that was used to conduct the EFA study on Amazon's Mechanical Turk (Mturk). Two mental illnesses, obsessive compulsive disorder (OCD) and attention deficit/hyperactive disorder (ADHD), were tested using the same questionnaire. OCD and ADHD were chosen based on the misconceptions surrounding these disorders. For instance, the colloquial use of "I'm so OCD" by celebrities such as Khloe Kardashian has placed emphasis on the systematic organization of items in a pantry or closet, instead of highlighting the more typical symptoms that sufferers experience. In the same vein, referring to oneself as acting "so ADHD today" serves as a common excuse for an overall lack of drive or focus rather than an accurate definition of the disorder (Marshall, 2013). Additionally, the frequency in which OCD and ADHD are depicted in the media, as well as the overlap between the hypothesized components of trivialization and the mediated portrayals of persons with OCD and ADHD made these two disorders of particular interest and importance to analyze.

Data collection for the EFA was conducted online via Mturk, and, prior to recruitment, a University Institutional Review Board (IRB) approved all procedures. Mturk was chosen as a platform for participant recruitment based on empirical evidence suggesting it offers greater demographic diversity than traditional campus participants pools, specifically with regard to age, gender, and income (Buhrmester, Kwang, & Gosling, 2011; Ross, Zaldivar, Irani, & Tomlinson, 2008). Because Mturk provides access to a sample that represents a distinctly different population from more traditional pools, it allows for data to be cross-validated with other samples in order to enhance the generalizability of findings (Rouse, 2015). Additionally, previous research shows that Mturk has been used in other studies relating to perceptions of mental illness (e.g., Corrigan, Bink, Fokuo, & Schmidt, 2015; Lebowitz & Ahn, 2012), making it a relevant platform for this work on the trivialization of mental illness.

Respondents were invited to take a survey about audience perceptions of mental illness and were provided with a URL to an online questionnaire hosted by Qualtrics. Qualtrics randomly chose the order in which respondents viewed either the OCD or ADHD questionnaire, however, all respondents completed questions related to both mental illnesses. Upon completion of this (approximately) 15-minute questionnaire, respondents were paid \$0.76 USD for their participation. Because factor analyses are highly sensitive to the sizes of correlations, previous research recommends there be a minimum of 300 cases (Tabachnick & Fidell, 2013). Therefore, the benchmark of 500 respondents was set within the Mturk platform for the present study.

## **Participants**

Out of the total 570 Mturk respondents, slightly more than half reported their gender as female ( $n = 287$ ) and the average age of the sample was 35.36 years ( $SD = 11.14$ , range = 18-74). The racial make-up of the sample was as follows: 448 (78.6%) Caucasian; 52 (9.1%) African–

American; 39 (6.8%) Asian; 1 (.2%) Arab; 5 (.9%) Native American; and 8 (1.4%) other (respondents could select more than one racial category). Another 30 (5.3%) respondents identified as Hispanic/Latino(a). Additionally, the respondents were fairly well educated with nearly 86% (n = 486) reporting having earned at least a bachelor's degree.

## **Measures**

*Experience with Mental Illness.* In order to control for respondents' familiarity with mental illnesses, two questions related to personal experience were asked. First, respondents were asked if they had ever been personally diagnosed with a mental illness or psychiatric disorder. If a respondent answered yes, they were then asked to specifically list the illness(es) in an open-ended format. Second, respondents were asked if they had any close family members or friends (such as a parent, child, partner, roommate, etc.) that had ever been diagnosed with a mental illness or psychiatric disorder. Again, if they selected yes, respondents were asked to list the specific illness(es) in an open-ended format.

*Trivialization.* Trivialization was measured using all 53 items developed in the initial item pool (10 items related to oversimplification, 16 items related to lessened severity, 15 items related to mockery, and 27 items related to symptoms as benefit). Respondents were asked to rate their agreement on a 7-point Likert-type scale ranging from 1 (strongly disagree) to 7 (strongly agree) with statements such as "This mental illness is underestimated," "This mental illness allows for skepticism," "People with this mental illness are making excuses," and "People with this mental illness are creative" (refer to Appendix I for the full list of items).

## **Choosing a Factor Extraction Method**

Once the data were collected via Mturk, a factor extraction method was chosen. If the data appear relatively normally distributed, the maximum likelihood approach is suggested

(Costello & Osborne, 2005). This extraction method also allows for the assessment of the goodness of fit model, statistical significance testing of factor loadings and correlations among factors, as well as the computation of confidence intervals (Costello & Osborne, 2005). If the assumption of multivariate normality (i.e.; each variable and all linear combinations of the variables are normally distributed) is severely violated (e.g.; lack of linearity, violations of homoscedasticity; skewness or kurtosis that is not normal, etc.), the principal axis approach is the recommended extraction method (Costello & Osborne, 2005; Tabachnick & Fidell, 2013). Although there are several different options for extraction, maximum likelihood and principal axis are frequently used (Costello & Osbourne, 2005). Because the data from the current EFA proved to be normally distributed without violations of multivariate normality, principle component axis was selected as the factor extraction method.

### **Factor Rotation**

After factor extraction is complete, there are a seemingly infinite number of rotations available (Tabachnick & Fidell, 2013). While the researcher has the discretion to determine what rotation method is best, orthogonal and oblique rotation are largely used in analyses. Orthogonal rotation (i.e., Varimax, Quartimax, Equamax) is employed when factors are believed to be statistically independent of one another. Conversely, oblique rotation (i.e., Direct Oblimin, Promax) is used when variables are assumed to correlate with each other. While orthogonal rotation can produce more easily interpretable results, it is often expected that variables will correlate with one another since human behavior is complex and related concepts are rarely truly independent (DeVellis, 2012). Oblique rotation should, therefore, render a more accurate and reproducible solution, while orthogonal rotation can lead to a loss of valuable information (Costello & Osborne, 2005). To check the adequacy of rotation method, it is recommended to

assess the pairwise plots of factor loadings; more specifically, the distance, clustering, and direction of the points representing variables relative to the factor axes (Tabachnick & Fidell, 2013). The current work used Promax rotation, a form oblique rotation, during the EFA. Additionally, Kaiser Normalization was selected in SPSS, which normalized the data prior to rotation and denormalized it upon completion.

### **Number of Factors to Retain**

The underlying intent of an EFA is to know more about the few, most influential sources of variation underlying a set of items. Zimet et al.'s (1998) development of the MSPSS scale provides a clear model for understanding the process of factor retention. The researchers noted that items not directly relevant to social support were eliminated in order to improve the conceptual clarity of the factors in the analysis. More specifically, when determining how many factors to retain, the emphasis is placed on marker variables – those that represent a pure measure of a factor, meaning, it is highly correlated with one and only one factor (Tabachnick & Fidell, 2013). Additionally, marker variables should load onto the factor regardless of the extraction method. In selecting factors to retain, both under extraction and over extraction can have negative effects on the data (Costello & Osborne, 2005). While the default in most statistical analysis software packages is retain all factors with eigenvalues greater than 1.0, this often leads to significant over extraction (Costello & Osborne, 2005). An oft-cited and widely practiced method of factor retention is to utilize the screeplot. A screeplot represents a graphed plot of factors along the X axis and the corresponding eigenvalues along the Y axis (Tabachnick & Fidell, 2013).

When assessing the screeplot, it is generally recommended to look for the natural bend or breaking point in the data where the curves flattens out, and the number of data points above the

break is often the suggested number of factors to retain (Costello & Osborne, 2005). Typically a noticeable break between the steep slope of the large factors and the gradual trailing of the rest exists, and it is recommended to drop the factors starting from the different slope (Tabachnick & Fidell, 2013). The items with the highest loadings are the ones most similar to the latent variable (DeVellis, 2012). Both the scree plot and eigenvalues served as determinants for the total number of factors to retain in the current study (see data analysis below).

The four factors expected to emerge from the EFA are as follows: oversimplification, lessened severity, mockery, and perceived symptoms as a benefit. The process of oversimplification involves reducing a complex and nuanced disorder such as OCD to a series of tangible, albeit frivolous behaviors. Similarly, ADHD is frequently oversimplified by the colloquial use of the disorder to represent the scattered, distracted, and unfocused (Peterson, 2016). Lessened severity references the phenomenon of considering mental illnesses to be less important and/or less dire than physical illnesses, often due to the lack of obvious indicators typically present in physical illness to signal the existence of a particular disease (Vickers, 1997). Mockery is then a logical result of illnesses that are whittle down to one or two stereotypical behaviors – especially when the behaviors do not carry a sense of graveness. Mockery is related to previous literature on disparagement humor, a process that normalizes the comedic ridicule of members of an out-group by those in a shared in-group (Parrott, 2016). The last anticipated factor refers to the perception that symptoms of a mental illness like OCD or ADHD can serve to improve the quality of one’s life. For instance, the undiagnosed might feel a sense of envy toward those with OCD because they believe the illness is defined by organization and cleanliness. Previous research related to the phenomenon of trivialization, as well as the previous

exploratory experiment regarding the trivialization of OCD in the media, serves as the theoretical foundation for hypothesizing the existence of these specific components.

## **Results**

EFA was conducted separately on the data relevant to OCD and the data relevant to ADHD. Within SPSS, listwise deletion was selected to account for any missing cases in the data. Additionally, several variables were reverse coded and transformed into new variables. These variables included: exaggerated, complex, and complicated (positive items within the oversimplification component); serious, severe, and grave (positive items within the lessened severity component); and inept, incompetent, dull, and bland (negative items within the symptoms as benefit component).

The EFA began with a total of 53 items in the pool. The breakdown of items within each of the four proposed components of trivialization is as follows: 10 items related to oversimplification, 16 items related to lessened severity, 15 items related to mockery, and 27 items related to symptoms as benefit. First, EFA was run on the data relevant to OCD. In the initial round of analysis (see Table 5), 11 items were removed from the original 53 items; one item was removed because it did not load onto its own factor ( $< .4$ ) and 10 items were removed because they crossloaded onto another factor ( $> .3$ ). In this first round, nine components emerged with an eigenvalue  $> 1$ . This process was repeated with the remaining 42 items, and the second round of analysis removed six more items, all of which due to crossloading ( $> .3$ ). This brought the total to 36 items, and six components emerged with an eigenvalue  $> 1$ . A third and fourth round of analysis was completed, each removing one item, respectively, due to crossloading. This brought the total number of items to 34, and six components still emerged with an



eigenvalue >1. The fifth and final round of analysis yielded clean data containing 34 items and six components.

**Table 5. Items Removed During EFA of OCD Data**

<b>First round</b>	<b>Second round</b>	<b>Third round</b>	<b>Fourth round</b>
Ingenious	Inept	Detail oriented	Special
Capable	Motivated		
Proactive	Grave		
Gifted	Dull		
Incompetent	Friendly		
Complex	Focused		
Self-diagnosed			
Complicated			
Stereotypical behaviors			
Favored			
Indulged			

These six rounds of EFA converged in six distinct factors. Table 6 outlines the independent items that clustered together to form each factor.

**Table 6. EFA Results of OCD Data**

<b>Factor 1</b>	<b>Factor 2</b>	<b>Factor 3</b>	<b>Factor 4</b>	<b>Factor 5</b>	<b>Factor 6</b>
Lucky	Talented	Discounted	Skepticism	Severe	Dramatic
Fake	Brilliant	Glossed over	Doubt	Serious	Eccentric
Inconsequential	Creative	Not taken seriously	Cynicism		
Unimportant	Accomplished	Downplayed	Scrutiny		
Fortunate	Skilled	Disregarded	Open to interpretation		
Pampered	Clever	Underestimated			
Easily resolved	Honest				
Insignificant	Masterly				
Making excuses					
Bland					
Exaggerated					

This same EFA procedure was repeated for the ADHD data (see Table 7). The first round of analysis again included all 53 items from the four proposed components comprising trivialization. A total of 13 items were removed, 12 of which based on crossloading onto other factors ( $> .3$ ), and one based on not loading onto its own factor ( $< .4$ ). A total of nine components emerged with an eigenvalue  $> 1$ . The second round of analysis was completed with the remaining 40 items, which resulted in the removal of five additional items, three based on crossloading ( $> .3$ ) and two for not loading onto their own factor ( $< .4$ ). Additionally, the nine components with an eigenvalue  $> 1$  were reduced to seven. The third round of analysis was run with 35 items, and one more item was marked for removal due to crossloading ( $> .3$ ). A total of

seven components still remained. The fourth and final round resulted in clean data; 34 total items free from crossloading, and seven components remained.

**Table 7. Items Removed During EFA of ADHD Data**

<b>First round</b>	<b>Second round</b>	<b>Third round</b>
Motivated	Masterly	Gifted
Proactive	Easily resolved	
Bland	Favored	
Dull	Self-diagnosed	
Inconsequential	Detail oriented	
Exaggerated		
Indulged		
Stereotypical behaviors		
Disregarded		
Not taken seriously		
Special		
Dramatic		
Open to interpretation		

In sum, seven distinct factors emerged after these four rounds of EFA. Table 8 outlines the individual items that form each factor.

**Table 8. EFA Results of ADHD Data**

<b>Factor 1</b>	<b>Factor 2</b>	<b>Factor 3</b>	<b>Factor 4</b>	<b>Factor 5</b>	<b>Factor 6</b>	<b>Factor 7</b>
Talented	Incompetent	Severe	Skepticism	Glossed over	Fortunate	Eccentric
Accomplished	Inept	Grave	Doubt	Discounted	Lucky	
Skilled	Pampered	Serious	Cynicism	Downplayed		
Brilliant	Unimportant	Complex	Scrutiny	Under-estimated		
Clever	Fake	Complicated				
Creative	Insignificant					
Capable	Making excuses					
Honest						
Friendly						
Focused						
Ingenious						

After an EFA was conducted on the OCD and ADHD data separately, the two data sets were averaged together and a third EFA was run. The results and the factors retained from the two distinct illness were very similar and included a great deal of overlap. Additionally, the decision to average the OCD and ADHD data stemmed from the desire to develop a trivialization scale with greater applicability to mental illnesses beyond just the two highlighted in the present work. A review of the final EFA procedure and the resulting factors that provide a foundation for the subsequent Confirmatory Factor Analysis (CFA) is outlined below.

Beginning with the initial 53 items, the first round of analysis on the averaged OCD and ADHD data eliminated 16 items, all of which based on crossloading ( $> .3$ ). A total of seven

components emerged with an eigenvalue > 1. Using the remaining 37 items, this process was repeated and removed four more items, one for not loading onto its own factor (< .4) and three for crossloading onto another factor (> .3). In this second round, five components emerged with an eigenvalue > 1. The third round of analysis provided clean data, as the remaining 33 items were free from crossloading (> .3). A total of four final components (eigenvalue > 1) emerged.

**Table 9. Items Removed During EFA of Averaged OCD and ADHD Data**

<b>First round</b>	<b>Second round</b>
Special	Eccentric
Stereotypical behaviors	Serious
Dramatic	Inept
Complicated	Incompetent
Complex	
Grave	
Ingenious	
Detailed oriented	
Gifted	
Focused	
Self-diagnosed	
Indulged	
Fortunate	
Lucky	
Dull	
Bland	

Table 10 provides a breakdown of the final four factors and the 33 items.

**Table 10. EFA Results of OCD and ADHD Averaged Data**

<b>Factor 1</b>	<b>Factor 2</b>	<b>Factor 3</b>	<b>Factor 4</b>
<b>Symptoms as benefit</b>	<b>Overreacting</b>	<b>Lack of severity</b>	<b>Cynicism</b>
Talented	Unimportant	Glossed over	Skepticism
Accomplished	Insignificant	Downplayed	Doubt
Brilliant	Fake	Discounted	Cynicism
Skilled	Inconsequential	Disregarded	Scrutiny
Creative	Pampered	Not taken seriously	Open to interpretation
Clever	Making excuses	Underestimated	
Motivated	Easily resolved	Severe	
Friendly	Favored		
Proactive	Exaggerated		
Honest			
Capable			
Masterly			

### **Discussion**

The results of this EFA, combining items from both perceptions of OCD and ADHD, suggest that perceived disease trivialization is a concept comprised of four distinct factors. While the initial 4 factors, hypothesized based on previous literature and exploratory studies, suggested that the trivialization process included oversimplification, lessened severity, mockery, and

perceiving symptoms as benefits, the results of the EFA suggested slightly different categorizations of the components of perceived disease trivialization.

The first factor listed in Table 10, however, remains identical to the hypothesized factor of symptoms as benefit. This factor highlights the perception that people with these two forms of mental illness somehow benefit or experience an improved quality of life due to their diagnosis based on the super-human traits it affords. This finding relates to previous literature that suggests creative individuals, such as writers, have a substantially higher rate of mental illness in comparison to their control subject counterparts (Andreasen, 1987). The symptoms as benefit factor represents a quality or characteristic that those not diagnosed with a mental illness could potentially covet (i.e., intelligence, energy, efficiency, etc.). This is a common ideal perpetuated within popular culture media, such as an article appearing on Health.com that asks readers if they are “hooked on hand sanitizer” or have closets “organized to a T,” because those could be signs of OCD (Storrs, 2016). The implication that being cleanly and organized accurately represents OCD, conveys that this illness may not be such of an “illness” after all – perhaps more of a blessing than a curse.

Although the items in the perceived symptoms as benefits factor remained very similar to those suggested under that label in the initial item pool, the results of the EFA suggest that some of the other factors can be conceptualized differently than originally suggested. The second factor has been adjusted based on the EFA findings to represent overreaction, namely, *that people with OCD and ADHD are overreacting to their illness and its symptoms*. Originally hypothesized as oversimplification, overreaction better encapsulates the overarching sentiment of the items forming the second factor, such as “exaggerated,” “fake,” “insignificant,” and “easily resolved.” Support for this factor is easily found in recent news event, such as the Target sweater

with the message, “OCD: Obsessive Christmas Disorder,” that came under fire during the 2015 holiday season. After an outcry on blog posts and social media sites where users posted visuals of the sweater with messages condemning the retailer for trivializing mental illness, Target stood by their product and refused to pull it from shelves. The controversy made headlines across mainstream news media, inviting commentary from readers, some of whom made light of the debate. For instance, a comment from Facebook user Mike Smith of Lexington, Ohio that appeared under the *USA Today* coverage of the story read: “It’s a joke. It’s funny and designed to be. If you don’t like it, don’t buy it. If it offends and upsets you, seek counseling because you are the problem” (Knoll, 2015).

While anecdotal, this commentary demonstrates how easy it can be to attack those suffering from mental illness and frame them as the “problem” based on their reactions to offensive content that others deem non-offensive. A recent tweet from user @BrittneyCasson further exemplifies the notion of overreacting as a component of trivialization. On January 18, 2017, Casson tweeted: “Me: I think I’m OCD about losing stuff. Hubby: The only OCD you have is Often Creating Drama. (I’m refraining from being dramatic about that).” Referencing OCD as “Often Creating Drama” correlates with the items forming the second factor, especially “exaggerated” and “making excuses.”

The results of the EFA revealed that the third factor of decreased severity mirrors the initial hypothesized factor of lessened severity. OCD and ADHD sufferers are often overlooked as having a severe condition, and the symptoms of both illnesses are commonly downplayed. The items comprising this factor, such as “underestimated,” “disregarded,” and “not taken seriously,” highlight how easy it can be to trivialize mental illness when you believe that those diagnosed are fortunate to have the symptoms associated with the disease, or that the symptoms



do not warrant concern or treatment. Forum website ukbusinessforums.co.uk contains a 2012 thread titled, “OCD – Not a real illness??” and includes the following commentary: “Anyone else think this whole OCD thing is just an excuse for people to pretend they have something wrong with them; is it just a made up condition for attention seekers to clog up doctors’ waiting rooms and pretend to be ill?” (Clyon, 2012). Content such as this that exists on social, online spaces directly highlights how the first two factors of perceiving symptoms as beneficial and assuming overreaction can lead to the perceived lessened severity of mental illnesses such as OCD or ADHD. Questioning the legitimacy of a mental illness further reinforces the concern that there is a general lack of understanding and education regarding mental illness (Loving, 2013).

Lastly, the fourth factor, initially hypothesized as mockery, has been reconceptualized as cynicism based on the results of the EFA. Although related to mockery, cynicism better represents the judgment and incredulous attitude the non-diagnosed may hold against those with these mental illnesses and the illness itself, as noted above in the forum that questions whether OCD is a real disease. While mockery implies more of a jesting approach to discussing mental illness, cynicism indicates that there is also suspicion, or skepticism, related to the understanding of OCD or ADHD. This finding relates to the previous literature on invisible physical illnesses, such as chronic fatigue syndrome (CFS), and the constant seeking of validation to be considered a legitimate illness (Japp & Japp, 2005). The cynicism factor is again readily available in popular culture examples, such as in neurologist-turned-author Richard Saul’s book, *ADHD Does Not Exist: The Truth about Attention Deficit and Hyperactivity Disorder* (2014). According to Saul, “ADHD makes a great excuse, the diagnosis can be an easy-to-reach-for crutch. Moreover, there’s an attractive element to an ADHD diagnosis, especially in adults. It can be exciting to

think of oneself as involved in many things at once, rather than stuck in a boring rut” (p. 23). This commentary successfully highlights all three of the preceding factors of trivialization to show how, when working in tandem, they can yield cynicism.

In sum, these four factors – symptoms as benefit, overreaction, lessened severity, and cynicism – provide the foundation to conduct the subsequent studies in the development of the trivialization scale. What follows is a confirmatory factor analysis (CFA), which is necessary to determine whether the four factors established in the present EFA replicate in future work. The CFA will effectively test whether the current conceptualization of the trivialization construct holds true while utilizing a different sample.

## **CHAPTER 4: CONDUCTING THE CONFIRMATORY FACTOR ANALYSIS**

After conducting an exploratory factor analysis, confirmatory factor analysis (CFA), a multivariate statistical technique, can verify the validity of the factor structure of an observed set of variables (Noar et al., 2015; Tabachnick & Fidell, 2013). One of several uses for CFA is in the development of new measures (Harrington, 2009), which is applicable to the present development of a perceived mental illness trivialization scale. In the first study of this dissertation, the EFA established the number (four) and nature (symptoms as benefit, overreacting, lessened severity, and cynicism) of trivialization factors, and a follow-up CFA can evaluate if the same factor structure holds with a different sample. In sum, CFA is used to test whether measures of a factor are consistent with the researcher's understanding of said factor. The present work therefore employed CFA during the second study to confirm whether the factor structure of the trivialization measure is indeed multidimensional.

### **Method**

#### **Procedure**

Because CFA can improve confidence in the structure and psychometric properties of the newly designed measure through a variety of conceptualizations about the data (Noar, 2003), CFA was used to test whether the four observed factors established in the EFA predict the underlying latent construct of trivialization. At the conclusion of the EFA, 33 factors best aligning with the trivialization construct were extracted and set aside for use in the CFA. To run the CFA, a survey was administered via Qualtrics. Appendix II highlights the survey in its totality. The CFA questionnaire was identical to the EFA questionnaire minus the 20 superfluous items that were omitted during the repeated EFA procedures. The CFA questionnaire asked

respondents about the same mental illnesses (OCD and ADHD), but included fewer items (33, down from the original 53 in the EFA).

## **Participants**

Respondents for the CFA were recruited through Amazon's Mechanical Turk (Mturk) platform, and the minimum number of respondents was set to 500, mirroring the EFA, to account for the high sensitivity to the sizes of correlations in factor analyses (Tabachnick & Fidell, 2013). Mturk workers were invited to participate via a recruitment message explaining that their participation would help media scholars understand how audiences react to illnesses that are traditionally stigmatized or trivialized in the media. After the respondents completed the CFA questionnaire in Qualtrics, they were then directed back to the Mturk platform to receive \$0.76 USD for their participation.

Out of the total 505 Mturk respondents, slightly more than half reported their gender as female ( $n = 258$ ) and the average age of the sample was 36.13 years ( $SD = 12.08$ , range = 18-72). The racial make-up of the sample was as follows: 398 (78.8%) Caucasian; 36 (7.1%) African-American; 49 (9.7%) Asian; 7 (1.4%) Native American; and 2 (.4%) other (respondents could select more than one racial category). Another 30 (5.9%) respondents identified as Hispanic/Latino(a). Also similar to the respondents in the EFA study, the 505 respondents of the present study were fairly well educated with over 83% ( $n = 421$ ) reporting having earned at least a bachelor's degree.

## **Measures**

*Personal Experience with Mental Illness.* In order to control for respondents' familiarity with mental illnesses, questions related to personal experience were asked. First, respondents were asked if they had ever been personally diagnosed with a mental illness or psychiatric

disorder. If a respondent answered yes, they were then asked to specifically list the illness(es) in an open-ended format. Second, respondents were asked if they had any close family members or friends (such as a parent, child, partner, roommate, etc.) that had ever been diagnosed with a mental illness of psychiatric disorder. Again, if they selected yes, respondents were asked to list the specific illness(es) in an open-ended format.

*Trivialization.* Trivialization was measured using the remaining 33 items, down from a total 53 items in the initial item pool, which were established as a result of the EFA. A total of 12 items were related to the symptoms as benefit factor, nine items representing the factor of overreaction, seven factors related to lessened severity, and lastly, five items related to cynicism. Just as in the EFA, respondents were asked to rate their agreement on a 7-point Likert-type scale ranging from 1 (*strongly disagree*) to 7 (*strongly agree*) with statements such as “People with this mental illness are talented,” “This mental illness is unimportant,” “This mental illness is downplayed,” and “This mental illness allows for doubt.”

## **Results**

The overarching goal of the study was to test the psychometric structure of the perceived trivialization scale using CFA. The dimensionality of the scale was examined by comparing single-factor and four-factor models against the null model; the null model serving as a baseline as it assumes that all constructs are unrelated. Model fit refers to how well the proposed model, which, in the present study, would represent the four, separate components of trivialization, accounts for the correlations between variables in the dataset. All factor models were created using the Analysis of Moment Structures (AMOS) software.

Using the single-factor model, each measure (or indicator) loads on only one factor, signifying that double loadings are absent and that all factors are measuring the same general

concept (Noar et al., 2015). Because the current study hypothesizes that four, unique components comprise trivialization (symptoms as benefit, overreacting, lessened severity, and cynicism), the ideal result would be to determine that the single-factor model does not provide a good fit. Results, displayed in Table 11, indicate that both the null and one-factor models provide a poor fit to the data. Fit was determined by analyzing the one-factor model's comparative fit index (CFI), the root mean square error of approximation (RMSEA), and the standardized root mean square residual (SRMR) against established cut-off standards. According to Hu and Bentler (1999), CFI values range from 0-1, with 1 representing the best fit, and values greater than or equal to .95 indicating a good fit. The goodness of fit criteria for the RMSEA states that the closer the value is to 0 the better the fit, with values less than .10 representing a good fit; ideal values for the SRMR are less than or equal to .08 (Hu & Bentler, 1999). The one-factor model had a CFI of .44, a RMSEA of .15 (CI = .151, .158,  $p$ -CLOSE = .000), and a SRMR of .21, meeting none of the established cut-off criteria and therefore representing a bad model fit.

**Table 11. Confirmatory Factor Analysis of the Trivialization Scale (N = 505)**

<b>Model</b>	<b><math>\chi^2</math></b>	<b><i>df</i></b>	<b>CFI</b>	<b><i>Fit Indexes</i></b>	
				<b>RMSEA</b>	<b>SRMR</b>
Null	11183.68	528	.00	.20 (.197-.203)	–
Single-factor	6428.53	495	.44	.15 (.151-.158)	.21
Four-factor	1217.76	489	.93	.05 (.051-.058)	.07

*Note.* CFI = comparative fit index; RMSEA = root mean square error of approximation; SRMR = standardized root mean square residual.

Next, the four-factor model tested the trivialization scale as having separate subscales, with each of the subscales correlated with one another. The four-factor model had a CFI of .93, a RMSEA of .05 (CI = .051, .058,  $p$ -CLOSE = .03), and a SRMR of .07, meeting all of the established cut-off criteria used to determine fit. The four-factor model therefore represents a much stronger model fit than the one-factor, which aligns with the theoretical understanding of the trivialization measure, as well as the results of the EFA. In this model, the four latent factors were each significantly correlated with each other, but some positively and some negatively. Symptoms as benefits correlated positively with lack of severity ( $r = .28, p < .001$ ) and cynicism ( $r = .17, p < .001$ ) but negatively with overreacting ( $r = -.22, p < .001$ ). Overreacting was positively correlated with cynicism ( $r = .43, p < .001$ ) but negatively correlated with lack of severity ( $r = -.15, p < .01$ ). Finally, lack of severity was positively correlated with cynicism ( $r = .22, p < .001$ ).

**Table 12. Four-Factor Confirmatory Factor Analysis Model (all parameter estimates are standardized; N = 505)**

<b>Factor 1: Symptoms as benefit</b>	<b>Factor 2: Overreacting</b>	<b>Factor 3: Lessened severity</b>	<b>Factor 4: Cynicism</b>
Talented (.90)	Unimportant (.85)	Glossed over (.74)	Skepticism (.82)
Accomplished (.86)	Insignificant (.83)	Downplayed (.82)	Doubt (.77)
Brilliant (.81)	Fake (.80)	Discounted (.74)	Scrutiny (.78)
Skilled (.88)	Inconsequential (.76)	Disregarded (.76)	Cynicism (.64)
Creative (.83)	Pampered (.76)	Not taken seriously (.73)	Open to interpretation (.79)
Clever (.84)	Making excuses (.83)	Underestimated (.68)	
Motivated (.73)	Easily resolved (.62)	Severe (-.34)	
Friendly (.74)	Favored (.58)		
Proactive (.64)	Exaggerated (-.81)		
Honest (.66)			
Capable (.68)			
Masterly (.66)			

Lastly, a hierarchical model tested the factor structure as having four subscales that predicted a single higher-order construct of perceived trivialization. The AMOS software was unable to run this model due to the contrasting valences of the relationships between the four subfactors. That is, the lessened severity of the mental illness, judging the diagnosed as overreacting, and addressing both the disorder and its sufferers with cynicism all positively correlated with each other in the four-factor model, while the symptoms as benefits factor negatively correlated with the other factors. This pattern of correlations between the four factors suggested that they do not all contribute to a single higher-order factor.



## Discussion

The results of the present CFA established that the four factor model fit the data well, verifying that there are four distinct aspects to perceptions of mental illness trivialization: perceiving the symptoms of the disorder as a benefit, perceiving those diagnosed as overreacting to their illness, lessening or downplaying the severity of the illness, and, lastly, using cynicism when referencing both the illness and those diagnosed. The valence of these four subfactors provides further rationale for the lack of an established single higher-order factor in the CFA results. The perceived symptoms as benefit subfactor negatively correlates with the other three factors, as it represents a positive outcome with regard to the mental illness. Items that form this subfactor, such as, “People with this mental illness are brilliant” and “People with this mental illness are creative” are in stark contrast to items forming the other three factors, such as, “People with this mental illness are making excuses,” “This mental illness is discounted,” and, lastly, “This mental illness allows for scrutiny.” The variance in the valence of these subfactors provides justification for why a hierarchical structure of the trivialization construct could not be established using AMOS, and mirrors the complexity of previously established measures related to perceptions of mental illness (King et al., 2007). For instance, the Stigma Scale developed by King et al. (2007) included discrimination and disclosure subscales representing negative valence items, while the positive aspects subscale highlighted items appealing to the more optimistic traits of mental illness.

The subscales that emerged in both King et al.’s Stigma Scale and the present trivialization measure underscore the intricacies of all mental illness – disorders that are more traditionally stigmatized, those that are trivialized, and those, like OCD, that can experience both. Previous researchers have long acknowledged the challenges associated with proving a

succinct definition of mental illness (Hinshaw, 2007). And while the *Diagnostic and Statistical Manual of Mental Illness (DSM)* has attempted to provide a universal understanding of what constitutes mental illness, it does not fully account for the fluidity of mental health issues, and instead suggests a static conceptualization (Hinshaw, 2007). Evidence of both positive and negative valence subscales within stigmatization and trivialization measures not only help to hone in on integral components of mental illness, but also highlight similarity between these two processes.

Because the present study determined that the conceptual understanding of trivialization established in the EFA held true under different a context and while utilizing a different sample, what follows is a test of the measure's internal, or construct validity. Ascertaining sufficient construct validity of the measure will ensure that the theoretical subfactors of perceived symptoms as benefits, overreacting, lessened severity, and cynicism are indeed the components being measured when employing the trivialization scale.

## **CHAPTER 5: ANALYZING DISCRIMINANT AND CONVERGENT VALIDITY OF THE MEASURE**

The next step after the CFA is often to test the discriminant and convergent validity, two subtypes of construct validity, of the newly designed measure. As historically outlined by Campbell and Fiske (1959), discriminant validity tests whether concepts that are not supposed to be related are, indeed, unrelated – in this case, stigma and trivialization. In contrast to discriminant validity, convergent validity represents the degree to which two measures of constructs that should theoretically be similar, are actually related (Campbell & Fiske, 1959). The function of this third study is, therefore, to provide evidence of construct validity, which will be assessed by examining the discriminant and convergent validity of the trivialization measure against relevant individual-difference variables (Oliver & Raney, 2011).

Because the intent of the current study is to delineate the variance between stigma and trivialization, it is worth mentioning the theoretical foundations behind the assumption that these two processes are dissimilar. A seminal work in the stigma literature by Jones and his colleagues (1984) established six major components thought to comprise stigma: course, origin, concealability, disruptiveness, aesthetic qualities, and peril. Several of these components help to highlight the complexities and contrasts between diseases typically stigmatized and those typically trivialized. For instance, with regard to disruptiveness, Jones et al. (1984) suggests that this component of stigma represents the potential for an impaired social life, including interpersonal relationships, due to the discomfort and unease attached to the mental illness. However, research by Fennell and Boyd (2014) argues that mediated portrayals of OCD – an oft-trivialized illness – rarely include a disruptive component. In fact, a content analysis of film and television shows portraying a character with OCD found that the majority were not only in

romantic relationships, but were also gainfully employed (Fennell & Boyd, 2014). Instead of being contained in an institution, these characters were moving freely about in, and even contributing to, society. This is in direct opposition to more classical portrayals of mediated mental illness, where the affected character is deemed so unfit and unstable that they cannot participate in society (Lawson & Fouts, 2004). Therefore the component of disruptiveness, as it relates to stigma, is not applicable to trivialized portrayals of mental illness in the same manner.

In the same vein, Hinshaw's (2007) conceptualization of stigma as a mark of shame provides further example of the dissimilarity between the stigmatization and trivialization processes. While traditional representations of stigmatized mental illness like bipolar disorder and schizophrenia often attach disgrace and indignity to the disease, initial research into the portrayal of OCD does not include this component. Fennell and Boyd (2014) found that characters with OCD could be perceived as more intelligent than those without, which aligns well with the prominent portrayal of OCD by detective Adrian Monk. The trivialized characteristics of OCD innate to his character help him to operate at a higher level than most – he is a sharper and more successful detective because of his disorder, which does not lend itself to feelings of guilt and shame attached to stigmatized portrayals.

One way to test whether perceptions of mediated mental illness trivialization differ from those of stigmatization is to analyze the construct validity of the newly developed trivialization measure. To establish discriminant validity of the trivialization measure, specific subscales within King et al.'s Stigma Scale (2007) were used with the intent to highlight the variance between the theoretical constructs of stigma and trivialization with regard to perceptions of individuals with a mental illness. King et al. (2007) used qualitative data from interviews with mental health service users to develop the initial measure. Within this specific stigma scale,

researchers relied on the use of 28 final items and three sub-components, two of which are of interest and value to the discriminant validity test: discrimination and disclosure. More specifically, the discrimination factor was highlighted by 13 statements that focused on perceived hostility by others or lack of opportunity based on prejudice (King et al., 2007). Additionally, the disclosure factor included 10 statements that loaded at the 0.4 level or above, all dealing with the process of disclosing one's diagnosis of mental illness to others (King et al., 2007). Using these two subscales, the present work will ideally showcase the variance between the theoretical constructs of stigmatization and trivialization through the use of discriminant validity assessment, highlighting small correlations (i.e., less than .20). Items were adapted to specifically target the obsessive compulsive disorder (OCD) and attention deficit/hyperactivity disorder (ADHD).

To summarize, the following hypothesis is posed regarding discriminant validity:

**H1:** The variables of discrimination and disclosure will not be significantly associated with any of the four types of disease trivialization.

Equally as important is the assessment of convergent validity, which was conducted using a combination of several previously conceived and tested measures. The present work used the third subscale established in the Stigma Scale (King et al., 2007), positive aspects relevant to mental illness, to test the convergent validity of the four trivialization measures. This subscale contained five statements regarding the positive aspects of mental illness, such as becoming a more understanding or accepting person (King et al., 2007). While King and his colleagues initially conceptualized this as a component as stigma, the explication of trivialization would argue that it better represents a type of trivialization. For instance, the positive aspects factor theoretically aligns with the perceived symptoms as benefit factor of trivialization, meaning that

not all components of mental illness may have the traditional stigmatized effect of creating more desired social distance. If there are positive aspects to be gained through a diagnosis of an illness such as OCD, and these positive aspects produce such a perceived benefit to one's life that the undiagnosed experience envy, it is reasonable to believe that gains attached to this component could yield other types of trivialization. For instance, perceiving symptoms as a benefit would likely decrease the perceived severity of the disorder, and it could potentially also create an environment for mocking, skeptical humor to be used in discussion about the disorder.

Therefore, to specifically address potential benefits associated with perceptions of trivialized mental illness, two of the sub-scales (increased compassion and enhanced self-efficacy) contained within McMillen and Fisher's Perceived Benefit Scale (1998) were also used to test convergent validity. Items were adapted to target the perceived positive benefits of an OCD or ADHD diagnosis, such as becoming a stronger person or becoming more sensitive of others' needs.

To address the cynicism component of trivialization, previously developed scales on disparagement humor were adapted. Nabi, Moyer-Guse', and Byrne (2007) measured perceived humor using a bipolar funny/not funny measure and asked participants to report the appropriate level of perceived comedy. A measure from Parrott (2016) was also used to analyze the third-person effect with regard to disparagement humor, namely, "Other people would find this mental illness funny."

Lastly, the Extended Parallel Process Model (Witte, Cameron, McKeon, & Berkowitz, 1996) measure related to perceived severity was adapted and used as a convergent validity measure to assess the severity component of trivialization. The measures asked participants to

report their level of agreement with OCD and ADHD as severe, serious, and significant conditions.

To summarize, it is predicted that increased compassion, enhanced self-efficacy, positive aspects, third-person mockery, humor, and severity will be significantly related to some or all of the four established types of trivialization. More specifically, the following hypotheses are offered:

**H2:** Increased compassion, enhanced self-efficacy, and positive aspects will be significantly and positively correlated with the perceived symptoms as benefit measure.

**H3:** Third-person mockery and humor will be significantly and positively correlated with the cynicism measure of trivialization.

**H4:** Perceived severity will be significantly but negatively correlated with the lessened severity trivialization measure.

**H5:** Perceived severity will be significantly but negatively correlated with the overreacting trivialization measure.

## **Method**

### **Procedure**

Respondents for this survey were recruited via the undergraduate research subject pool maintained via the Institute of Communication Research (ICR) through the Media School at Indiana University. The research subject pool is comprised of both male and female undergraduate students enrolled in a Media School course, and the size of the pool varies on a semester basis dependent upon the amount of instructors who submit their course to be selected for possible recruitment. Two sections of a media ethics course were selected for inclusion in the

present study, and the researcher recruited respondents by attending classes and inviting students to participate in a study about portrayals of mental illness in the media.

After recruitment, the course instructor distributed the link to the online Qualtrics questionnaire via the university content management system. After completing questions related to demographics, respondents were asked about their experience with mental illness prior to the dependent measures, including: trivialization, discrimination, disclosure, severity, disparagement humor, and positive aspects related to mental illness. While Qualtrics randomly assigned the order in which respondents answered questions related to OCD and ADHD, all respondents answered the questionnaires for both mental illnesses. Students that completed the approximately 15-minute survey received extra credit from the course instructor for their participation.

### **Participants**

Out of the total 193 participant pool respondents, six cases were deleted due to missing data. The majority of the remaining 187 respondents reported their gender as female ( $n = 131$ ) and the average age of the sample was 20.24 years ( $SD = 2.73$ , range = 18-48). The racial make-up of the sample was as follows: 147 (78.6%) Caucasian; 15 (8.0%) African–American; 21 (11.2%) Asian; 1 (.5%) Arab; 3 (1.6%) Native Alaskan/Pacific Islander; 2 (1.1%) Native American; and 8 (4.3%) other (respondents could select more than one racial category). Another 6 (3.2%) respondents identified as Hispanic/Latino(a).

### **Measures**

An overview of the measures used in this study is highlighted below. Additionally, means, standard deviations, and reliabilities for each measure can be found in Table 14. See Appendix III for the questionnaire in its entirety.



*Experience with Mental Illness.* In order to control for respondents' familiarity with mental illnesses, two questions related to personal experience were asked. First, respondents were asked if they had ever been personally diagnosed with a mental illness or psychiatric disorder. If a respondent responded yes, they were then asked to specifically list the illness(es) in an open-ended format. Second, respondents were asked if they had any close family members or friends (such as a parent, child, partner, roommate, etc.) that had ever been diagnosed with a mental illness or psychiatric disorder. Again, if they selected yes, respondents were asked to list the specific illness(es) in an open-ended format.

*Discrimination.* A shortened adaption of the discrimination subscale from the King et al. Stigma Scale (2007) was used and included a total of seven items. Using a Likert-type scale ranging from 1 (*strongly disagree*) to 7 (*strongly agree*), respondents reported levels of agreement with statements such as, "People with OCD/ADHD have likely been discriminated against by employers because of their mental health problems" and "People with OCD/ADHD have likely been avoided because of their mental health problems." The seven items formed a single factor and were averaged ( $\alpha = .86$ ,  $M = 3.80$ ,  $SD = .95$ ).

*Disclosure.* Similar to the discrimination measure, a shortened adaption of the disclosure subscale from the King et al. Stigma Scale (2007) was used and included a total of eight items, including statements such as, "People with OCD/ADHD likely worry about telling people that they take medicines/tablets for mental health problems." Respondents reported agreement using a Likert-type scale ranging from 1 (*strongly disagree*) to 7 (*strongly agree*). The items formed a single factor and were averaged ( $\alpha = .83$ ,  $M = 4.06$ ,  $SD = .90$ ).

*Increased compassion.* Four items related to increased compassion were derived from the compassion subscale from the Perceived Benefit Scale (McMillen & Fisher, 1998). Respondents

reported agreement using a Likert-type scale ranging from 1 (*strongly disagree*) to 7 (*strongly agree*) with statements such as, “Having OCD/ADHD could make you more sensitive to the needs of others.” The four items from the increased compassion subscale formed a single factor and were averaged ( $\alpha = .96$ ,  $M = 4.58$ ,  $SD = 1.38$ ).

*Enhanced self-efficacy.* Five items were also adapted from the self-efficacy subscale within the Perceived Benefit Scale (McMillen & Fisher, 1998). Statements included, “OCD/ADHD could make you a more effective person,” and “OCD/ADHD could make you a more capable person.” Respondents reported agreement using a Likert-type scale ranging from 1 (*strongly disagree*) to 7 (*strongly agree*). The items formed a single factor and were averaged ( $\alpha = .96$ ,  $M = 4.14$ ,  $SD = 1.36$ ).

*Positive aspects.* A total of five items were adapted from the positive aspects subscale of the Stigma Scale (King et al., 2007) Respondents were asked to rate their agreement on a 7-point Likert-type scale ranging from 1 (*strongly disagree*) to 7 (*strongly agree*) with statements such as, “OCD/ADHD could make you a more understanding person.” These five items formed a single factor and were averaged ( $\alpha = .92$ ,  $M = 4.19$ ,  $SD = 1.30$ ).

*Third-Person Mockery.* Four items from Parrott (2016) were adapted to analyze the third-person effect with regard to disparagement humor. Respondents were asked to rate their agreement on a 7-point Likert-type scale ranging from 1 (*strongly disagree*) to 7 (*strongly agree*) with statements such as, “Other people would find this mental illness funny.” These items formed a single factor and were averaged ( $\alpha = .98$ ,  $M = 3.41$ ,  $SD = 1.59$ ).

*Humor.* Four items adapted from Nabi, Moyer-Gusé, and Byrne (2007) measured perceived humor using a bipolar funny/not funny measure, and included the terms “funny,”

“amusing,” “laughable, and “entertaining,” (i.e., “This mental illness is funny/not funny.”). These four items formed a single factor and were averaged ( $\alpha = .98$ ,  $M = 6.28$ ,  $SD = 1.25$ ).

*Severity.* Three items adopted from Witte, Cameron, McKeon, and Berkowitz, (1996) were used to assess how severe of a health condition participants judged OCD and ADHD to be, with regard to establishing convergent validity. Respondents answered, on a scale of 1 (strongly disagree) to 7 (strongly agree), the following statements: “I believe that OCD/ADHD is a severe condition,” “I believe that OCD/ADHD is a serious condition,” and “I believe that OCD/ADHD is a significant condition.” The items formed a single factor and were averaged ( $\alpha = .95$ ,  $M = 11.19$ ,  $SD = 3.23$ ).

*Four types of trivialization.* Trivialization was measured using the remaining 33 items established in the CFA in order to form the four separate trivialization scales. Twelve items assessed the symptoms as benefit factor, nine items measured overreaction, seven items were used to address lessened severity, and lastly, five items measured cynicism. Respondents were asked to rate their agreement on a 7-point Likert-type scale ranging from 1 (*strongly disagree*) to 7 (*strongly agree*) with statements such as, “People with this mental illness are talented,” “This mental illness is unimportant,” “This mental illness is downplayed,” and “This mental illness allows for doubt.” The 12 items related to the symptoms as benefit factor formed a single factor and were averaged ( $\alpha = .96$ ,  $M = 4.55$ ,  $SD = .97$ ); nine items representing overreaction formed a single factor and were averaged ( $\alpha = .80$ ,  $M = 3.11$ ,  $SD = .57$ ); seven items related to lessened severity formed a single factor and were averaged ( $\alpha = .70$ ,  $M = 3.98$ ,  $SD = .74$ ); and the five remaining items related to cynicism formed a single factor and were averaged ( $\alpha = .80$ ,  $M = 3.77$ ,  $SD = .87$ ).

## Results

To assess the discriminant and convergent validity of the trivialization measure, correlation analysis was employed to describe the strength and direction of the relationships between the aforementioned measures (refer to Table 13 for the predicted relationships). The discrimination and disclosure subscales from King et al.'s Stigma Scale (1984) were used to test discriminant validity, and H1 posited that these two measures would not correlate with the four measures related to trivialization. While the discrimination measure did not correlate with the overreacting measure of trivialization ( $r = -.13, p = .09$ ), it was found to correlate with perceived symptoms as benefit ( $r = .17, p = .03$ ), lessened severity ( $r = .35, p < .001$ ), and cynicism ( $r = .17, p = .02$ ). And while the disclosure measure did not correlate with cynicism ( $r = .15, p = .05$ ), statistically significant positive correlations were found between perceived symptoms as benefits ( $r = .34, p < .001$ ) and lessened severity ( $r = .33, p = .001$ ), and a statistically significant negative correlation was established with overreaction ( $r = -.20, p = .01$ ). Therefore, H1 was not supported.

To assess convergent validity, the positive aspect subscale from the Stigma Scale (King et al., 1984) was employed, as were there increased compassion and enhanced self-efficacy subscales from the Perceived Benefits Scale (McMillen & Fisher, 1998). Because these measures were selected with convergent validity in mind, it was hypothesized that they would correlate with the perceived symptoms as benefit factor of trivialization. Positive and statistically significant correlations were found between these three convergent validity measures – increased compassion ( $r = .50, p < .001$ ); enhanced self- efficacy ( $r = .48, p < .001$ ); positive aspects ( $r = .41, p < .001$ ) – and the perceived symptoms as benefit trivialization factor, providing support for H2.

Previously established measures of disparagement humor were also used to assess convergent validity, with the assumption that statistically significant correlations would exist between humor and third-person mockery measures and the cynicism factor of trivialization. While a statistically significant correlation was found between third-person mockery and cynicism ( $r = .19, p = .01$ ), it was found that the humor measure did not significantly correlate with cynicism ( $r = -.003, p = .97$ ). Support for H3 was therefore not established.

Lastly, established measures addressing disease severity were used to assess convergent validity relevant to the lessened severity and overreacting measures of trivialization. First, H4 theorized that a statistically significant, yet negative correlation would exist between the severity measure related to convergent validity and the lessened severity measure of trivialization. Results of the correlation analysis determined although significant, the correlation was positive in valence ( $r = .20, p = .01$ ). Support for H4 was not found. H5 also predicted a statistically significant, negative correlation between disease severity and the overreacting measure of trivialization. Findings provided support for this final hypothesis ( $r = -.37, p = .001$ ). The results of the correlation analyses can be found in Table 15.

**Table 13. Predicted Valence of Correlations between Measures Relevant to Assessing Discriminant and Convergent Validity of the Perceived Trivialization Measures**

	1	2	3	4	5	6	7	8	9	10	11
Discrimination											
Disclosure											
Compassion											
Self-efficacy											
Positive Aspects											
Mockery											
Humor											
Severity											
Symptoms as Benefits	-	-	+	+	+						
Overreaction	-	-						-			
Lessened Severity	-	-						-			
Cynicism	-	-				+	+				

*Note: A predicted significant negative relationship is represented by “-“and a predicted positive relationship is represented by “+.”Where no symbol occurs there is no prediction as to the nature of the relationship between those two variables.*

**Table 14. Measures Relevant to Assessing Discriminant and Convergent Validity of the Perceived Trivialization Measures**

	<i>M</i>	<i>SD</i>	<i>α</i>	Range	Items
1. Discrimination	3.80	.95	.86	1-7	8
2. Disclosure	4.06	.90	.83	1-7	7
3. Compassion	4.58	1.38	.96	1-7	4
4. Self-efficacy	4.14	1.36	.96	1-7	5
5. Positive Aspects	4.19	1.30	.92	1-7	5
6. Mockery	3.41	1.59	.98	1-7	4
7. Humor	6.28	1.25	.98	1-7	4
8. Severity	11.19	3.23	.95	1-7	3
9. Symptoms as Benefits	4.55	.97	.96	1-7	12
10. Overreaction	3.11	.57	.80	1-7	9
11. Lessened Severity	3.98	.74	.70	1-7	7
12. Cynicism	3.77	.87	.80	1-7	5

**Table 15. Pearson Product-Moment Correlations between Measures Relevant to Assessing Discriminant and Convergent Validity of the Perceived Trivialization Measures**

	1	2	3	4	5	6	7	8	9	10	11
Discrimination	-										
Disclosure	.80**	-									
Compassion	.45**	.56**	-								
Self-efficacy	.42**	.48**	.86**	-							
Positive Aspects	.50**	.51**	.78**	.75**	-						
Mockery	.26**	.22**	.22**	.20**	.18	-					
Humor	.17*	.23**	.06	.04	.03	-.19*	-				
Severity	.42**	.46**	.43**	.38**	.48**	.23**	.35**	-			
Symptoms as Benefits	.17**	.34**	.50**	.48**	.41**	.09	.23**	.42**	-		
Overreaction	-.13	-.20**	-.21**	-.12	-.16*	.01	-.17*	-.37**	-.20**	-	
Lessened Severity	.35**	.33**	.27**	.26**	.26**	.25**	.20**	.21**	.31**	.04	-
Cynicism	.17*	.15	.12	.09	.10	.19**	-.003	-.01	.19**	.17*	.35**

*Note:* \*  $p < .05$ ; \*\*  $p < .01$ ; \*\*\*  $p < .001$ ; All items in the indices were measured on 1-7 Likert-type scales.



## Discussion

The present study employed a survey of undergraduate students to assess relationships between additional concepts found in the mental illness perceptions and communication literature and the four types of perceived disease trivialization established via exploratory and confirmatory factor analysis. While not all hypotheses were supported, the findings presented here provide additional evidence that the four identified types of trivialization can add depth and nuance to our understanding of how individuals view people with mental illnesses.

The findings that both the discrimination and disclosure subscales from King et al.'s Stigma Scale (2007) correlated with certain trivialization measures suggests that the relationship between stigmatization and trivialization is not black and white, and perhaps elements of these processes are indeed interrelated. While the intent behind assessing the discriminant validity was to ascertain the distinction between stigma and trivialization measures, results from the correlation findings show there were statistically significant correlations between discrimination and perceived symptoms as benefit, lessened severity, and cynicism. This suggests that though a disorder such as OCD may be perceived to be less severe and advantageous in certain respects, those diagnosed can still experience the more traditional behavioral reaction to mental illness – discrimination. Perhaps the correlation between discrimination and cynicism further suggests that when a mental illness is perceived as trivial, the resulting behavioral response is to react with cynicism and question the severity of the disease and the impact the symptoms have on those diagnosed. Instead of the negative labeling (e.g., dangerous, criminal, crazy) and segregation from society endured by those with traditionally stigmatized mental illnesses (Link, Phelan, Bresnahan, Stueve, & Pescosolido, 1999), the discrimination felt by those with trivialized illnesses could be of the cynical nature – they are met with incredulousness that could

take shape as insensitive jokes, mockery, and/or ridicule. Related to stigmatization, this process of engaging in cynicism could be similar to the “othering” of the minority group presented within classical stigma studies (Deacon, 2006).

The disclosure subscale also correlated with three of the trivialization measures, counterintuitive to the discriminant validity assumptions. Statistically significant positive correlations were found between perceived symptoms as benefits and lessened severity, suggesting that perceptions of decreased severity and beneficial symptoms may not influence people’s assumptions about whether a person with a mental illness would disclose, even if it is a trivialized one. Previous research has established that there are costs and benefits of exposing a stigmatizing condition (Corrigan & Matthews, 2009), and the correlation findings here suggest that people may still perceive similar costs to be attached to a trivialized condition.

Additionally, a statistically significant negative correlation was found between disclosure and perceived overreaction, suggesting that people who think individuals with OCD or ADHD are overreacting, also feel those with these mental illnesses are less likely to tell others about their diagnosis. Although it was hypothesized that disclosure and the trivialization measures would not correlate, the aforementioned findings regarding disclosure and the perceived symptoms as benefits and lessened severity measures suggest that this is perhaps an idealized assumption. The finding that there is positive correlation between disclosure and perceptions of persons of OCD and/or ADHD as overreacting to their diagnosis suggests that trivialization can yield similar repercussions as stigmatization. While the perceptions of others may define trivialized mental illnesses as more dramatized than those that are stigmatized, those diagnosed may experience comparable challenges with regard to disclosure.

With regard to the tests of convergent validity, statistically significant, positive correlations were found between the perceived symptoms as benefit measure of trivialization and the positive aspects subscale of the King et al. Stigma Scale (2007), as well as the increased compassion and enhanced self-efficacy subscales of McMillen and Fisher's Perceived Benefits Scale (1998). These results align with the assumption that the perceived symptoms as benefit measure of trivialization is conceptually similar to previously established measures addressing advantageous qualities. This finding also suggests that the positive aspects component of stigma could better align with trivialization processes than with stigmatization processes, as originally conceptualized via the Stigma Scale (King et al., 2007).

Previously established measures of disparagement humor were also used to assess convergent validity, and a positive correlation was found between the measure of third-person mockery and cynicism, but no statistically significant correlation was found between humor and cynicism. The third-person mockery measure asked respondents to answer to statements such as, "Other people would find this mental illness funny." This measure situates itself within a third-person narrative, highlighting the beliefs others hold regard to the mockery associated with mental illness, instead of their own personal beliefs. The third-person component, that "others" perhaps feel this way but not me, provides justification for the positive and statistically significant correlation with cynicism. This rationale could also explain, at least partially, why the humor measure did not correlate with cynicism. Because the humor measure asked specifically for a first-person account (e.g., "This mental illness is funny/not funny), it is possible that responder bias was at play; more specifically, that respondents were hesitant to respond affirmatively that they attach humor or entertainment to OCD or ADHD based on the societal norms surrounding perceptions of mental illness.

The finding regarding the significant yet positive correlation between the established measure of severity and the perception of lessened severity measure of trivialization was counterintuitive to the prediction that the relationship would be negative in valence. Again, responder bias could have factored into this finding; perhaps respondents were more cautious about depreciating the severity of these two mental illnesses than hypothesized. However, this positive correlation could also represent another potential overlap between stigmatization and trivialization processes – more explicitly, that the severity of the illness does not necessarily need to be called into question in order for negative effects to result. The vast body of stigma literature has established that stigmatization can occur when disease severity is lessened – for example, when manic depression is considered nothing more than a weakness of character (Cook & Wang, 2011) – but stigmatization also persists when a case of schizophrenia is perceived as an extremely severe condition (Penn, Kommana, Mansfield, & Link, 1999). Perhaps then the relationship between severity and the resulting trivialization of mental illnesses like OCD and ADHD is better represented by a continuum similar to that of stigmatization, dependent on various perceptions about the disorder and variant on a case-to-case basis.

Although possible justifications for measures resulting in unpredicted correlation have been suggested, it should also be noted that the varying sample between the confirmatory factor analysis (CFA) and the present sample used for assessment of discriminant and convergent validity could also impact these results. The sample of 505 respondents in the CFA were recruited through Amazon's Mechanical Turk (Mturk), while the 193 respondents in the present sample were recruited through the Indiana University Media School participant pool. Although different samples were selected for these two studies with the intent to highlight the trivialization measure's construct validity and potential as an empirical measure, it is also possible that the

variance in respondents' beliefs and about experience with mental illness could have impacted correlation findings.

Following the construct validity analysis is an empirical test of the trivialization measure as an outcome of different mediated portrayals of mental illness. Future work can employ all four of the trivialization subscales in experimental tests to see if perceived trivialization varies based on different types of media exposure.

## CHAPTER 6: APPLYING THE MEASURE IN MEDIA EFFECTS RESEARCH

To empirically test the trivialization measure developed in the previous EFA and CFA studies, the current study employed an experimental design that highlighted user-generated content discussing mental illness that exists on the social networking site Reddit. Of the four subscales comprising the trivialization measure that emerged during the EFA and CFA, this experiment sought to explicitly manipulate the perceived symptoms as benefit factor within two oft-trivialized mental illnesses: obsessive compulsive disorder (OCD) and attention deficit/hyperactivity disorder (ADHD).

The present study manipulated the perceived symptoms as benefit factor in part due to its frequency in colloquial discussions about OCD and ADHD on popular social networks. For example, YikYak, a social media app that allows for users to remain anonymous while posting, hosts discussions among college students about ADHD medication and the misguided assumption that those diagnosed are fortunate because they have easy access to an Adderall prescription (Santina, 2014). In the case of OCD, Khloe Kardashian's postings about her "Khlo-C-D" tendencies are framed as positive character traits – in fact, she frequently comments about how irritating it is that her family members copy her organizational skills in their own homes, and popular culture articles run headlines such as "Get Khloe Kardashian's genius jewelry organization secret" (2016).

A second reason that symptoms as benefit was chosen as a conceptually interesting variable to manipulate in media content is the current void in literature addressing its relationship to the trivialization phenomenon. Earlier hypothesized components of trivialization, prior to the empirical development of the trivialization measure, were manipulated in exploratory studies

(Pavelko & Myrick, 2015a; Pavelko & Myrick, 2015b), and the addition of the perceived symptoms as benefit factor seeks to build upon that foundational work.

Perceived symptoms as benefit is also an important factor of trivialization to study because it is largely different from portrayals of stigmatized mental illnesses. That is, stigmatizing portrayals typically show mental illnesses as damaging and untreatable, making those who have them social outcasts through dehumanization (Haslam, 2006). However, when the symptoms of a mental illness are portrayed as a benefit, those with the condition may be envied, even thought to be lucky. For example, previous literature suggests creative individuals, such as writers, have a substantially higher rate of mental illness in comparison to their control subject counterparts (Andreasen, 1987), establishing a connection between mental illness and desirable traits. Also related is Barnes' (1992) definition of the "super-cripple" – a stereotype that attributes magical, superhuman traits to people with disability – such as holding paralympians in high regard for their physical achievements despite physical disadvantages. Relative to mental illness, the super-cripple trope would represent the admirable qualities, such as creativity or high levels of intelligence, which a person with a trivialized mental illness may exhibit, despite their mental health being compromised.

Since this "beneficial" portrayal of the disease is inaccurate given there are still plenty of barriers those with the conditions have to overcome, enjoying any potential advantage or silver lining of a mental illness does not alleviate the struggles faced by individuals with a mental illness. This experiment will therefore address if this particular portrayal of one type of disease trivialization can change social media users' perceptions of mental illness and individuals with them by positing the following hypothesis:

**H6:** Content that portrays the symptoms of mental illness as beneficial will be associated with higher levels of perceived symptoms as benefits trivialization than will be content that portrays the mental illness neutrally.

Additionally, the following two research questions are posed:

**RQ1:** How will content portraying the symptoms of mental illness as beneficial impact the other three forms of trivialization (overreaction, lessened severity, and cynicism) toward people with OCD/ADHD?

**RQ2:** How will content portraying the symptoms of mental illness as beneficial influence desired social distance, attitudes, and behavioral intentions toward people with OCD/ADHD?

### **Method**

The experimental design represents a 2 (type of mental illness: OCD vs. ADHD) by 2 (portrayal of symptoms in content: benefit vs. neutral) fully factorial between-subjects design. The experiment was conducted online using Amazon's Mechanical Turk (MTurk) platform and Qualtrics software.

### **Stimulus Materials**

Reddit, a popular submission-based entertainment, news, and social networking community forum, houses several subreddits, or threads, dedicated to mental illness. Reddit members have created various subreddits about specific mental illnesses and discussed in detail everything from diagnosis, to best prescription medications, to how to manage symptoms. OCD and ADHD provide a strong foundation to study the trivialization processes based on the colloquial uses of phrases such as "That's so OCD" and "I'm a little ADHD" and general misconceptions surrounding a true clinical case. Because there is overlap between tendencies the general population can understand and experience without having a clinical diagnosis of the



illness (e.g., feeling anxious or the inability to focus), this can lead to the belief that such symptoms form the crux of these mental illnesses. Coupled with the media's attention on petty behaviors (e.g., Monk's need to cut pancakes into squares to represent OCD; Dug, the golden retriever from Pixar's animated film *UP*, and his comedic shouting of "Squirrel!" to represent ADHD), these mental illnesses become more sanitized and less realistic than that of a typical case.

Several subreddits exist that specifically address OCD and ADHD. A recent subreddit posting titled, "When did you tell your family about your OCD and how did it go?" served as the realistic muse for the mock subreddit page and posts created (using Adobe InDesign and Photoshop) and employed across all conditions in the experimental design. Although the subreddits were framed with the same catalyst – how did your family react to the news of an OCD or ADHD diagnosis – the conditions varied based on how the resulting posts (three user posts were included across all conditions) within the thread addressed the symptoms of the particular mental illness. The neutral condition portrayed the symptoms of these two illnesses in a realistic, non-trivialized manner that better reflects a typical case of OCD or ADHD and does not reference the symptoms of the disorder as a benefit. In order to specifically target the perceived symptoms as benefit factor, and not the other three factors of trivialization, the message design was created to highlight text related to envy or jealousy based on the OCD or ADHD diagnosis.

To ensure that severity, specifically, was not manipulated, the perceived symptoms as benefit condition (see Figure 1) included the same language as the neutral condition (see Figure 2), with the addition of an extra sentence that highlights the trivialized and stereotypical symptoms of OCD and ADHD in a positive, complimentary light (e.g., OCD results in


cleanliness and perfect organization while ADHD yields creativity, spontaneity, and a bounty of energy). The language used across all stimuli was based on the real-life commentary that appeared on the original OCD subreddit. Content was therefore only manipulated (with regard to the original, user-generated content) to account for the inclusion of ADHD in addition to OCD and the inclusion of the perceived symptoms as benefit statement. Based on the 2 by 2 nature of this experimental design, a total of four mock subreddit pages were created.

### **Procedure**

Data collection was conducted online via MTurk, and, prior to recruitment, a University Institutional Review Board (IRB) approved all procedures. Previous researchers have successfully used MTurk to study public perceptions of stigma related to mental illness (e.g. Corrigan, Bink, & Schmidt, 2015), which suggests it is a suitable platform for the present experimental design related to trivialization. Participants were invited to complete a survey lasting approximately 20 minutes about audience perceptions of mental illness (see Appendix IV for the full cover story presented to participants), and were provided with a URL to an online questionnaire hosted by Qualtrics. After providing consent, participants were asked to provide demographic information, as well as their personal experience with mental illnesses. Qualtrics then randomly assigned participants to view one of the four mock subreddit pages. After viewing the stimulus, participants advanced to the remainder of the questionnaire, which included the dependent measures. Qualtrics randomly chose the order in which participants viewed questions related to either OCD or ADHD, but all participants completed the questionnaire related to both mental illnesses. Upon conclusion of the Qualtrics questionnaire, participants were directed back to MTurk and were paid \$0.51 USD for their involvement.

**Figure 1. Mock OCD Subreddit Page Representing the Symptoms as Benefit Condition**

my subreddits ▾ front - all - random

 /r/**ocd**

Welcome to /r/OCD! Please consider subscribing to be able to downvote.

↑ When did you tell your family about your OCD and how did it go?  
5 submitted 1 day ago by meggymonster1  
11 comments share

---

all 11 comments

sorted by: **best** ▾


↑ [-] Jacksonspace 3 points 1 day ago  
My mom looked up all the symptoms and said they described me to a tee, that I was constantly sharing these intense thoughts about something bad happening to my family that I couldn't control or turn off. My sister said she always thought I had OCD, too, because of how I once told her I did things in patterns of four to make me feel less anxious.  
  
Pretty much everyone tells me how jealous they are that my apartment is so clean and organized because they hate doing those things.  
permalink embed

↑ [-] LegendLary 3 points 1 day ago  
My mom is pretty understanding, or at least as understanding as you can get about this sort of thing. She doesn't berate me for having OCD, which is nice.  
  
She does think I should be the most creative person in our family though, and is constantly expecting me to excel.  
permalink embed

↑ [-] Smashley 3 points 1 day ago  
My dad and his girlfriend said, "Oh yeah, we all have OCD!" I felt like they didn't really care and then my dad kept trying to be relatable by saying "I'm so OCD!"  
  
They both say that having OCD makes you more likely to be clever and talented.  
permalink embed

**Figure 2. Mock ADHD Subreddit Page Representing the Neutral Condition**

my subreddits ▾ front - all - random

 **/r/adhd**

Welcome to /r/ADHD! Please consider subscribing to be able to downvote.

↑ [When did you tell your family about your ADHD and how did it go?](#)  
5 submitted 1 day ago by [meggymonster1](#)  
11 comments share

---

all 11 comments

sorted by: best ▾

↑ [-] [Jacksonspace](#) 3 points 1 day ago  
My mom looked up all the symptoms and said they described me to a tee, that I was constantly falling behind in school because I couldn't focus on the subject matter or the classroom rules. My sister agreed that she always thought I had ADHD based on how often I would forget where I was supposed to be and how messy and care-less my schoolwork was compared to hers.  
  
My dad and brothers don't know about my ADHD diagnosis though, and I'm sure even if they did they wouldn't be as understanding.  
permalink embed

↑ [-] [LegendLary](#) 3 points 1 day ago  
My mom is pretty understanding, or at least as understanding as you can get about this sort of thing. She doesn't berate me for having ADHD, which is nice.  
  
My mom and I didn't even know I had ADHD until I was in middle school, around age 12 or 13.  
permalink embed

↑ [-] [Smashley](#) 3 points 1 day ago  
My dad and his girlfriend said, "Oh yeah, we all have ADHD!" I felt like they didn't really care and then my dad kept trying to be relatable by saying "I'm so ADHD!"  
  
They don't really listen when I try to describe what ADHD is in more detail.  
permalink embed

## Participants

While a total of 280 MTurk participants began the study, two cases were removed from the final dataset due to missing data. Out of the remaining 278 MTurk participants, more than half reported their gender as male ( $n = 165$ ) and the average age of the sample was 35.66 years ( $SD = 11.10$ , range = 19-71). The racial make-up of the sample was as follows (respondents could select more than one racial category): 223 (80.2%) Caucasian; 23 (8.3%) African-American; 21 (7.6%) Asian; 7 (2.5%) Native American; and 20 (7.2%) Hispanic/Latino(a). Additionally, the respondents were fairly well educated with 80% ( $n = 100$ ) reporting having earned at least a bachelor's degree.

## Measures

An overview of the measures used in this experiment is highlighted below. See Appendix IV for the questionnaire in its entirety.

*Four types of trivialization.* Trivialization was measured using the remaining 33 items established in the CFA in order to form the four separate trivialization scales. Twelve items assessed the symptoms as benefit factor, nine items overreaction, seven items lessened severity, and lastly, five items were used to measure cynicism. Respondents were asked to rate their agreement on a 7-point Likert-type scale ranging from 1 (*strongly disagree*) to 7 (*strongly agree*) with statements such as “People with this mental illness are talented,” “This mental illness is unimportant,” “This mental illness is downplayed,” and “This mental illness allows for doubt.” The 12 items related to the symptoms as benefit factor formed a single factor and were averaged ( $\alpha = .96$ ,  $M = 4.55$ ,  $SD = .97$ ); nine items representing overreaction formed a single factor and were averaged ( $\alpha = .80$ ,  $M = 3.11$ ,  $SD = .57$ ); seven items related to lessened severity formed a

single factor and were averaged ( $\alpha = .70$ ,  $M = 3.98$ ,  $SD = .74$ ); and the five remaining items related to cynicism formed a single factor and were averaged ( $\alpha = .80$ ,  $M = 3.77$ ,  $SD = .87$ ).

*Social distance.* Desired social distance from individuals with OCD/ADHD was measured using seven items adapted from Penn et al. (1994) and Kalyanaraman, Penn, Ivory, and Judge (2010). Participants were asked to respond on a Likert-type scale from 1 (*definitely unwilling*) to 7 (*definitely willing*) to questions such as “How would you feel about having someone with OCD/ADHD as a neighbor?” and “How would you feel about recommending someone with OCD/ADHD for a job working for a friend of yours?” Two separate indices were formed, one representative of OCD and the other of ADHD. The OCD items formed a single factor and were averaged ( $\alpha = .95$ ,  $M = 37.86$ ,  $SD = 14.39$ ); the ADHD items were similarly averaged ( $\alpha = .95$ ,  $M = 34.70$ ,  $SD = 10.22$ ).

*Attitudes toward people with OCD/ADHD.* Using adapted items from Batson et al.’s (1997) scale used to measure attitudes toward people with AIDS and the items used by Kalyanaraman, Penn, Ivory, and Judge (2010) to assess attitudes toward people with schizophrenia, participants responded using a Likert-type scale regarding their attitudes toward people with OCD/ADHD. From 1 (strongly disagree) to 7 (strongly agree), participants answered questions such as, “Most people with OCD/ADHD could have avoided contracting the disease.” Two separate indices were formed, one about OCD and the other about ADHD. The OCD items were averaged into a single index ( $\alpha = .77$ ,  $M = 29.21$ ,  $SD = 6.66$ ); the ADHD items were similarly averaged ( $\alpha = .76$ ,  $M = 28.80$ ,  $SD = 6.56$ ).

*Behavioral intentions.* Participants’ behavioral intentions related to supporting individuals with OCD or ADHD was adapted from Oliver et al. (2012). Participants were asked to rate their responses on a Likert-type scale from 1 (*definitely unwilling*) to 7 (*definitely willing*)

for statements about donating money to an organization that supports people with the mental illness, signing a petition supporting more funding for research on the mental illness, discussing the mental illness with friends or family, and sharing a link to a news story about the mental illness. Two separate indices were formed, one for behavioral intentions regarding supporting individuals with OCD and the other for ADHD-related intentions. The OCD items formed a single factor and were averaged ( $\alpha = .84$ ,  $M = 16.87$ ,  $SD = 6.43$ ); the ADHD items were similarly averaged ( $\alpha = .87$ ,  $M = 16.98$ ,  $SD = 6.59$ ).

## Results

To analyze the data from this experiment, analysis of covariance (ANCOVA) was used to test for main effects with regard to H6. This hypothesis posited that content portraying the symptoms of mental illness as beneficial would be associated with higher levels of perceived symptoms as benefits trivialization than content portraying the mental illness neutrally. Therefore, the disease (OCD vs. ADHD, run separately) and the presentation of symptoms (as a benefit vs. neutral) served as the independent variables, while the dependent variable was perceived disease trivialization. Gender and personal experience with mental illness (e.g., having a friend or family member diagnosed with OCD, ADHD, or another mental disorder) served as control variables and were included in the ANCOVA.

For the OCD condition, results indicated that though approaching significance,  $F(1, 127) = 2.16$ ,  $p = .108$ ;  $\eta_p^2 = .02$ , there was no statistically significant difference in portrayal of OCD symptoms as beneficial versus neutral with regard to the impact on levels of perceived symptoms as benefit trivialization. Similarly, results indicate that the effects of portraying symptoms of ADHD as beneficial were also not significant on the levels of perceived symptoms as benefit trivialization. While no main effects were found,  $F(1, 128) = .001$ ,  $p = .97$ ;  $\eta_p^2 = .001$ ,

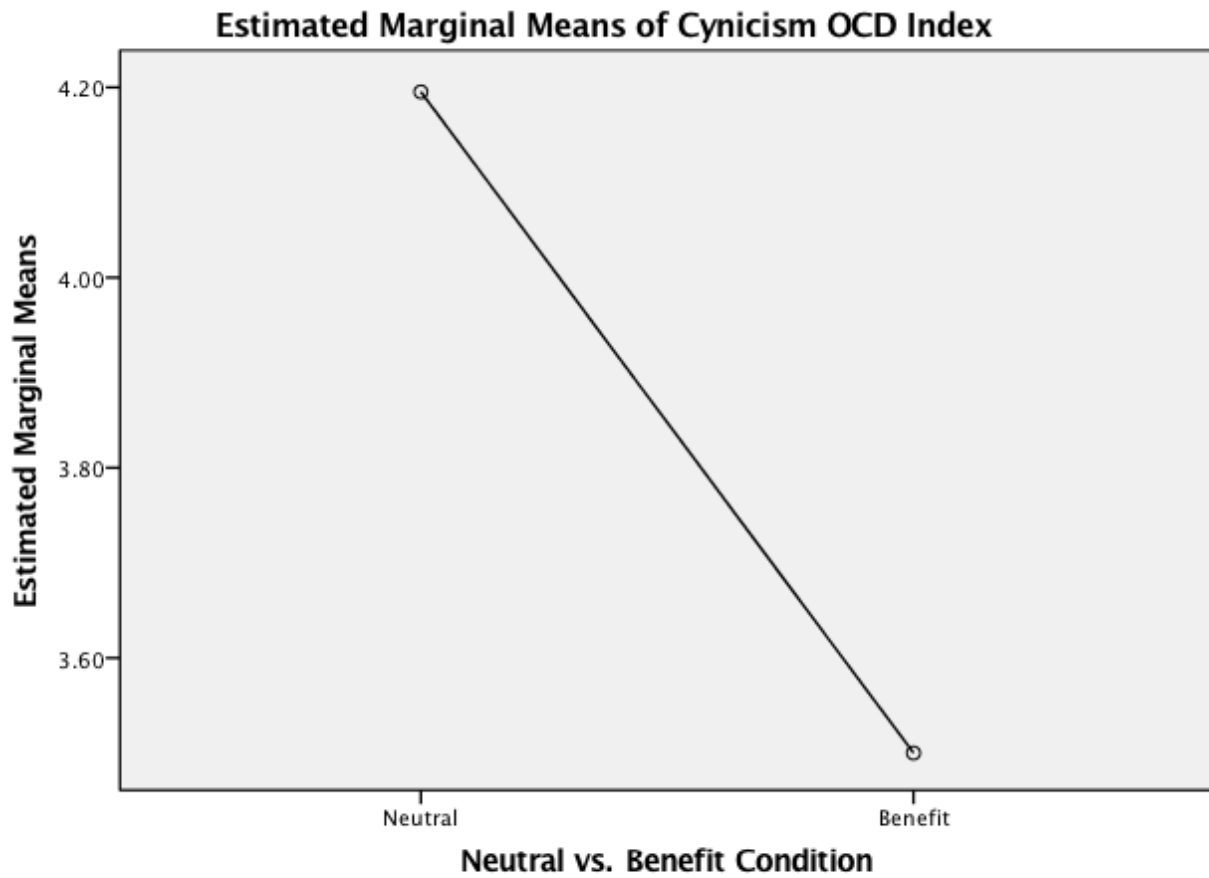
experience with mental illness was a statistically significant control variable ( $p < .01$ ) for those who viewed Reddit threads about ADHD. However, H1 was not supported.

RQ1 asked how perceiving symptoms related to OCD and ADHD as beneficial would impact the other three facets of trivialization (overreacting, lessened severity, and cynicism). To answer this question, a one-way between-groups multivariate analysis of variance (MANCOVA) was run on both the OCD and ADHD condition, separately. Across both conditions, there were three dependent variables: overreacting, lessened severity, and cynicism. The independent variable was condition (i.e., perceived symptoms as benefit content vs. neutral content) and gender and experience with mental illness served as the two covariates.

For the OCD condition, there was a statistically significant difference between the symptoms as benefit portrayal versus neutral condition on the combined dependent variables,  $F(3, 131) = 3.87, p < .05$ ; Wilkes'  $\Lambda = .92$ ; partial eta squared = .085. When the results for the dependent variables were considered separately a Bonferroni adjusted alpha level of .017 showed that the only difference to reach statistical significance was cynicism,  $F(1, 131) = 10.73, p < .001$ ;  $\eta_p^2 = .078$ . Pairwise comparisons further showed that participants in the neutral condition reported higher levels of cynicism ( $M = 4.15, SD = 1.37$ ) as compared to those in the perceived symptoms as benefit condition ( $M = 3.54, SD = 1.29$ ) (see Figure 3). Additionally, an inspection of the mean scores indicated that participants in the neutral condition reported higher levels of overreacting perceptions ( $M = 2.86, SD = 1.01$ ) and lessened severity ( $M = 4.56, SD = .98$ ) as compared to those in the perceived symptoms as benefit condition (overreacting perceptions,  $M = 2.71, SD = .93$ ; lessened severity,  $M = 4.34, SD = .85$ ); however, these differences were not statistically significant (see Figures 4 and 5).

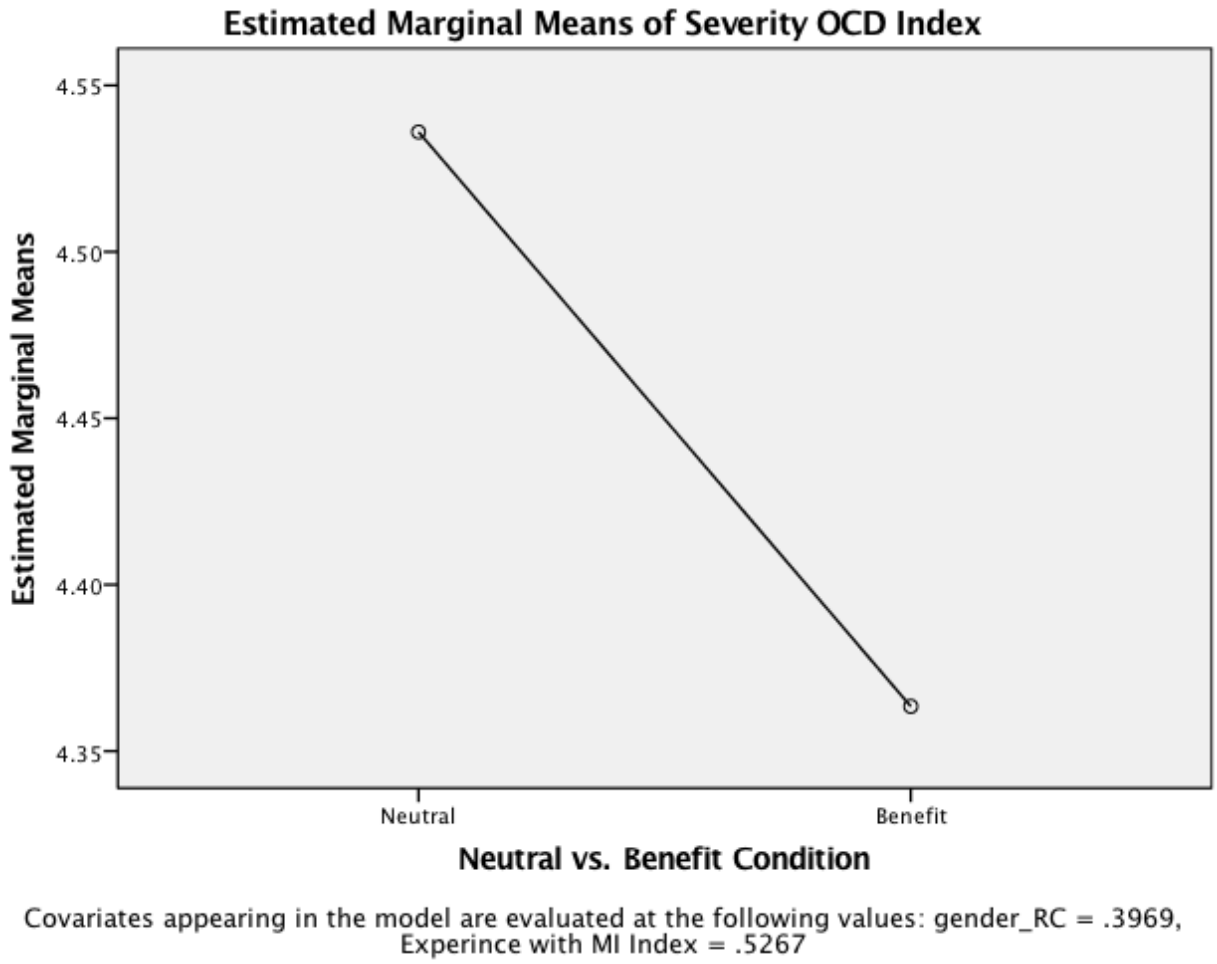


**Figure 3. Estimated Marginal Means of Cynicism for the Neutral vs. Benefit Condition Relevant to OCD**

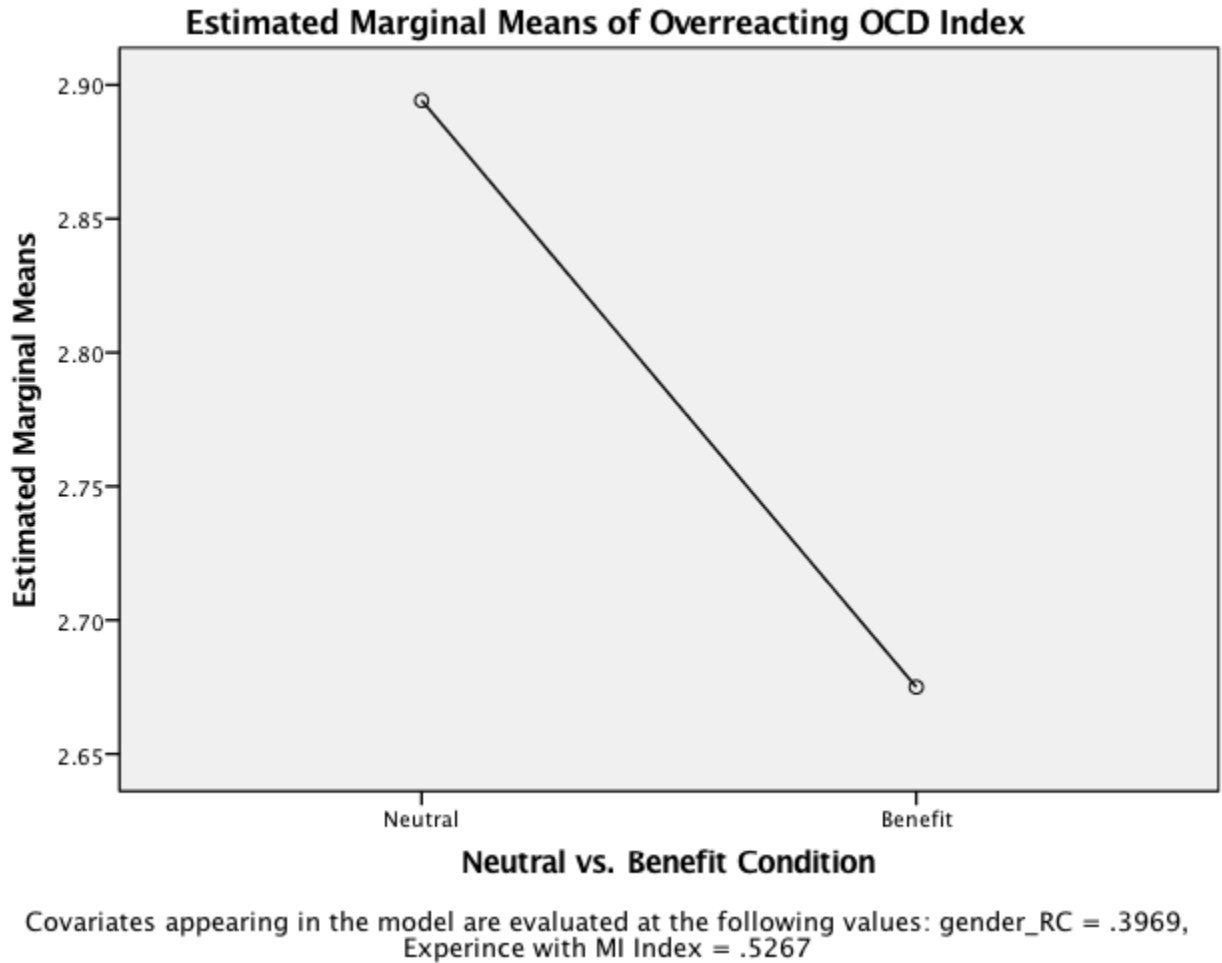


Covariates appearing in the model are evaluated at the following values: gender\_RC = .3969, Experience with MI Index = .5267

**Figure 4. Estimated Marginal Means of Lessened Severity for the Neutral vs. Benefit Condition Relevant to OCD**



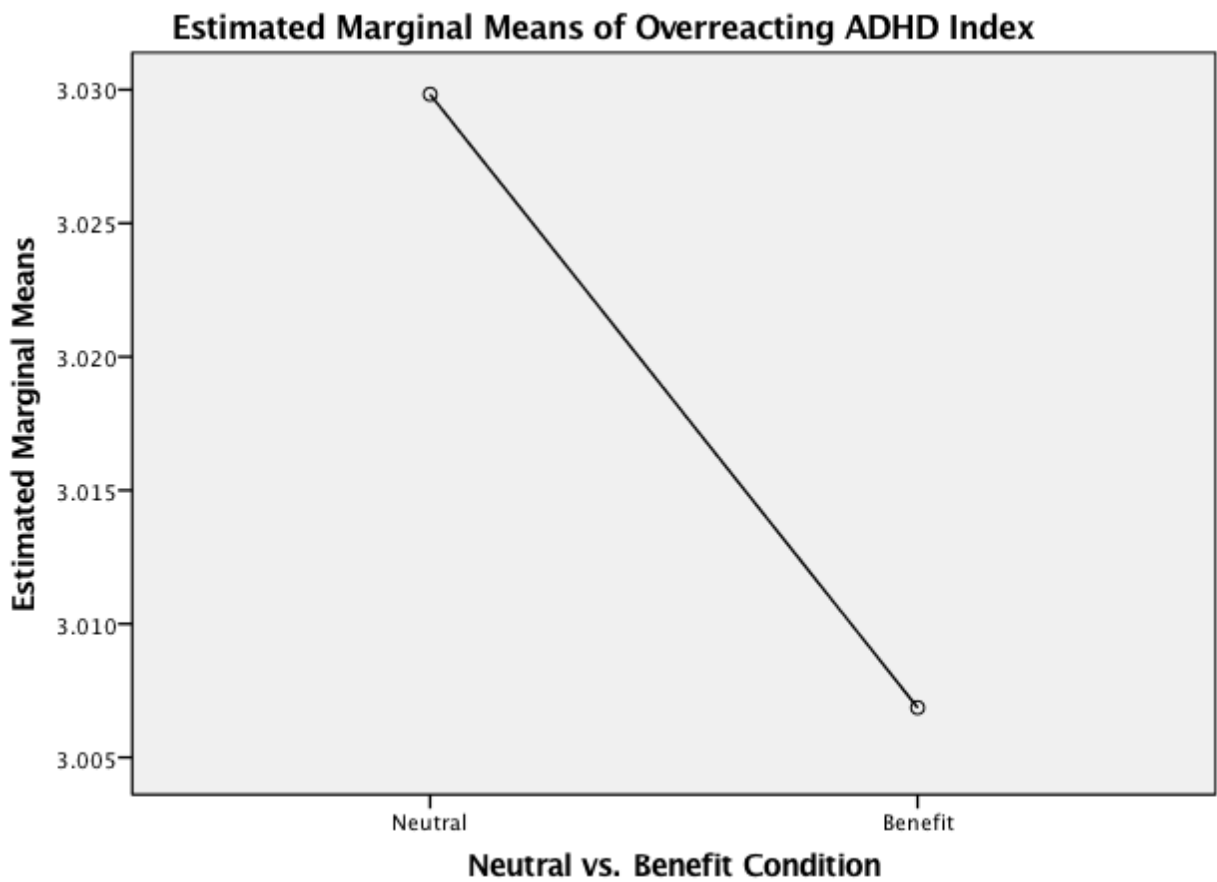
**Figure 5. Estimated Marginal Means of Overreacting for the Neutral vs. Benefit Condition Relevant to OCD**



For the ADHD condition, however, there was no statistically significant difference between the symptoms as benefit portrayal versus neutral condition on the combined dependent variables,  $F(3, 132) = 1.21, p = .31$ ; Wilkes'  $\Lambda = .97$ ; partial eta squared = .028. Pairwise comparisons did indicate that participants in the neutral condition reported higher levels of overreacting perceptions ( $M = 3.06, SD = 1.00$ ) as compared to those in the perceived symptoms as benefit condition ( $M = 2.97, SD = .91$ ) (see Figure 6). Participants in the neutral condition also

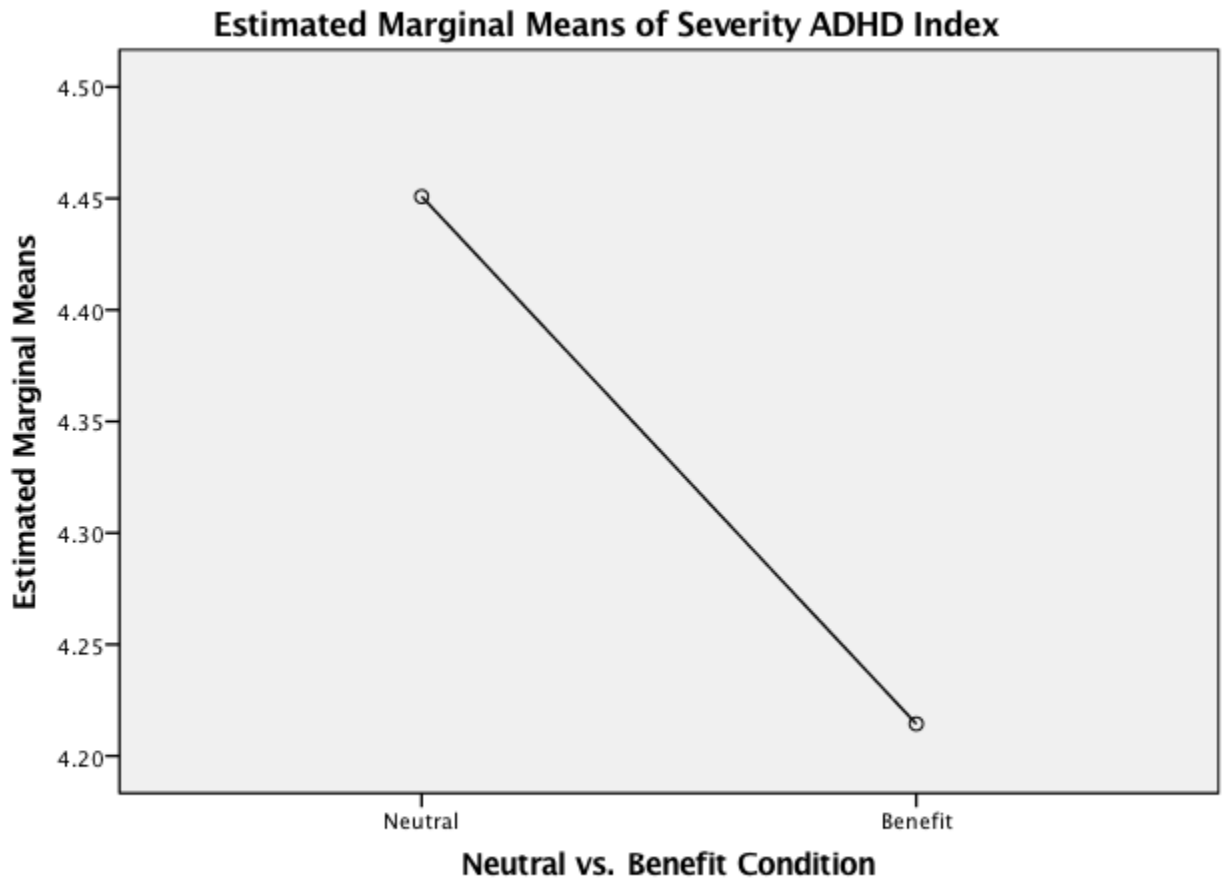
reported higher levels of lessened severity ( $M = 4.46, SD = .93$ ) and cynicism ( $M = 4.08, SD = 1.27$ ) when compared to those in the perceived symptoms as benefit condition (lessened severity,  $M = 4.20, SD = 1.00$ ; cynicism,  $M = 3.76, SD = 1.30$ ). However, none of these differences were statistically significant (see Figures 7 and 8).

**Figure 6. Estimated Marginal Means of Overreacting for the Neutral vs. Benefit Condition Relevant to ADHD**



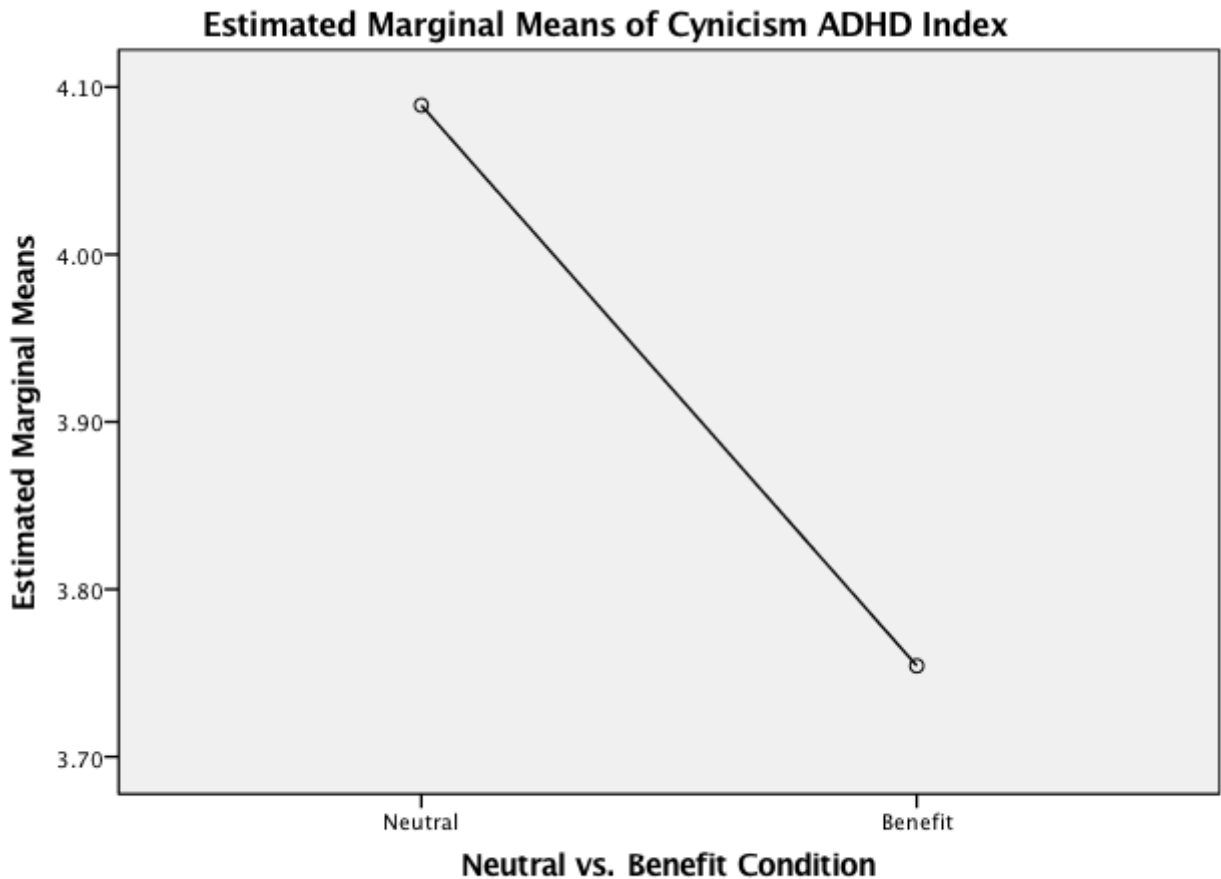
Covariates appearing in the model are evaluated at the following values: gender\_RC = .4015, Experience with MI Index = .5606

**Figure 7. Estimated Marginal Means of Lessened Severity for the Neutral vs. Benefit Condition Relevant to ADHD**



Covariates appearing in the model are evaluated at the following values: gender\_RC = .4015, Experience with MI Index = .5606

**Figure 8. Estimated Marginal Means of Cynicism for the Neutral vs. Benefit Condition Relevant to ADHD**

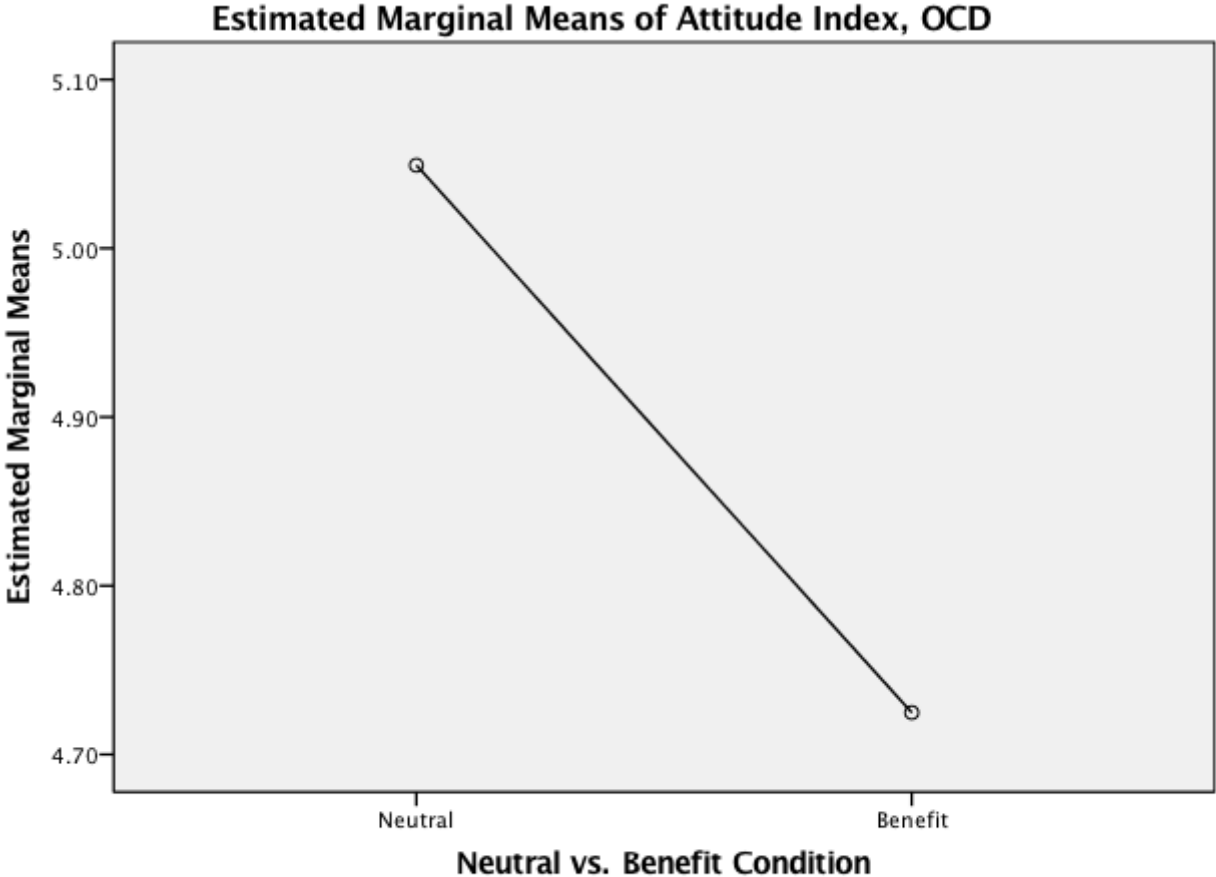


Covariates appearing in the model are evaluated at the following values: gender\_RC = .4015, Experience with MI Index = .5606

RQ2 asked how portraying symptoms of mental illness as beneficial would influence desired social distance, attitudes, and behavioral intentions toward people with OCD and ADHD, respectively. MANCOVA was again used to answer this question, and the OCD and ADHD conditions were run separately. Across both conditions, there were three dependent variables: desired social distance, attitudes, and behavioral intentions. The independent variable was condition (i.e., perceived symptoms as benefit content vs. neutral content) and gender and experience with mental illness served as the two covariates.

For the OCD condition, no statistically significant difference was found between the symptoms as benefit portrayal versus neutral condition on the combined dependent variables,  $F(3, 124) = 1.69, p = .17$ ; Wilkes'  $\Lambda = .96$ ; partial eta squared = .041. However, pairwise comparisons indicated that participants in the neutral condition reported more positive attitudes ( $M = 5.09, SD = 1.22$ ) and behavioral intentions ( $M = 4.38, SD = 1.50$ ) as compared to those in the perceived symptoms as benefit condition (attitudes,  $M = 4.68, SD = 1.09$  and behavioral intentions,  $M = 4.06, SD = 1.60$ ) (see Figures 9 and 10). Participants in the perceived symptoms as benefit condition actually reported greater desired social distance ( $M = 5.25, SD = 1.98$ ) than those in the neutral condition ( $M = 5.01, SD = 2.11$ ) (see Figure 11). However, none of these differences were statistically significant.

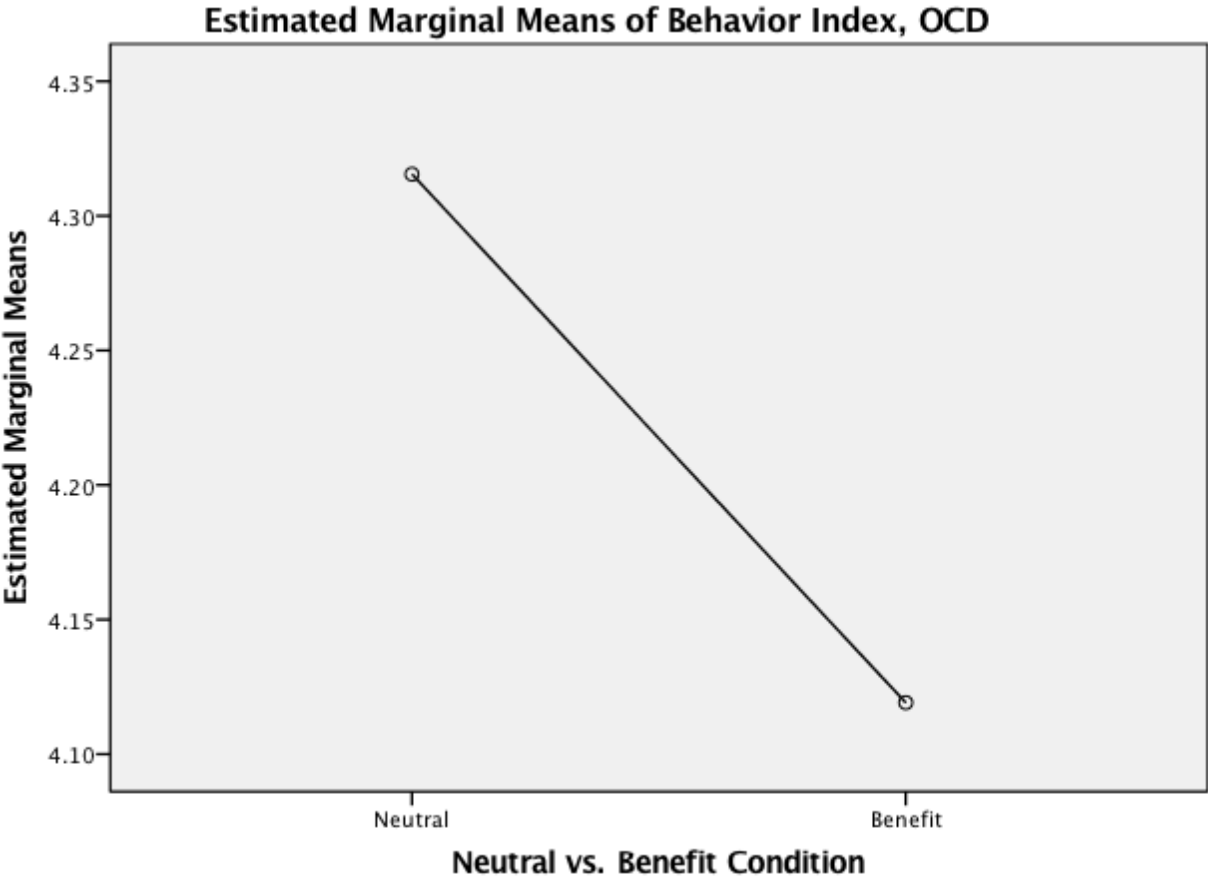
**Figure 9. Estimated Marginal Means of Attitudes for the Neutral vs. Benefit Condition Relevant to OCD**



Covariates appearing in the model are evaluated at the following values: Experience with MI Index = .5242, gender\_RC = .4032

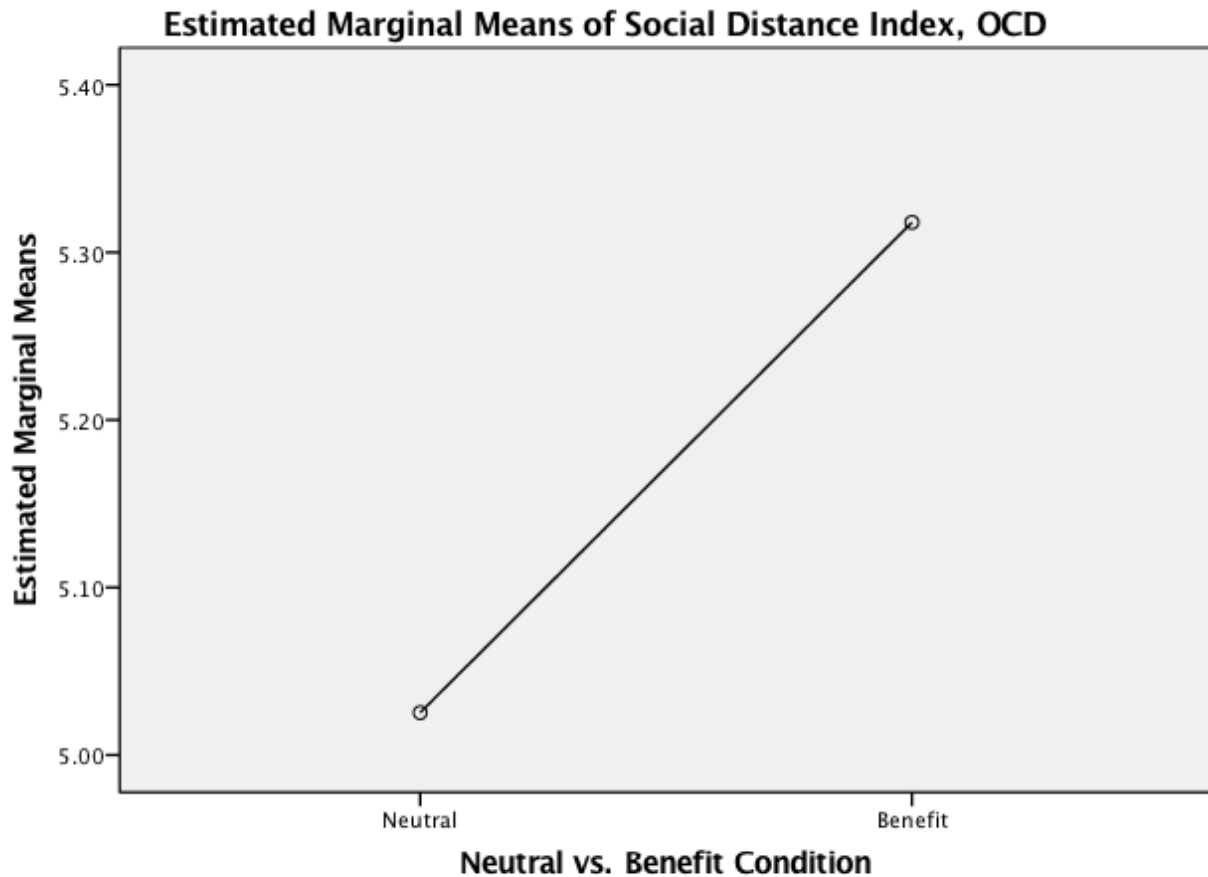


**Figure 10. Estimated Marginal Means of Behavioral Intentions for the Neutral vs. Benefit Condition Relevant to OCD**



Covariates appearing in the model are evaluated at the following values: Experience with MI Index = .5242, gender\_RC = .4032

**Figure 11. Estimated Marginal Means of Social Distance for the Neutral vs. Benefit Condition Relevant to OCD**

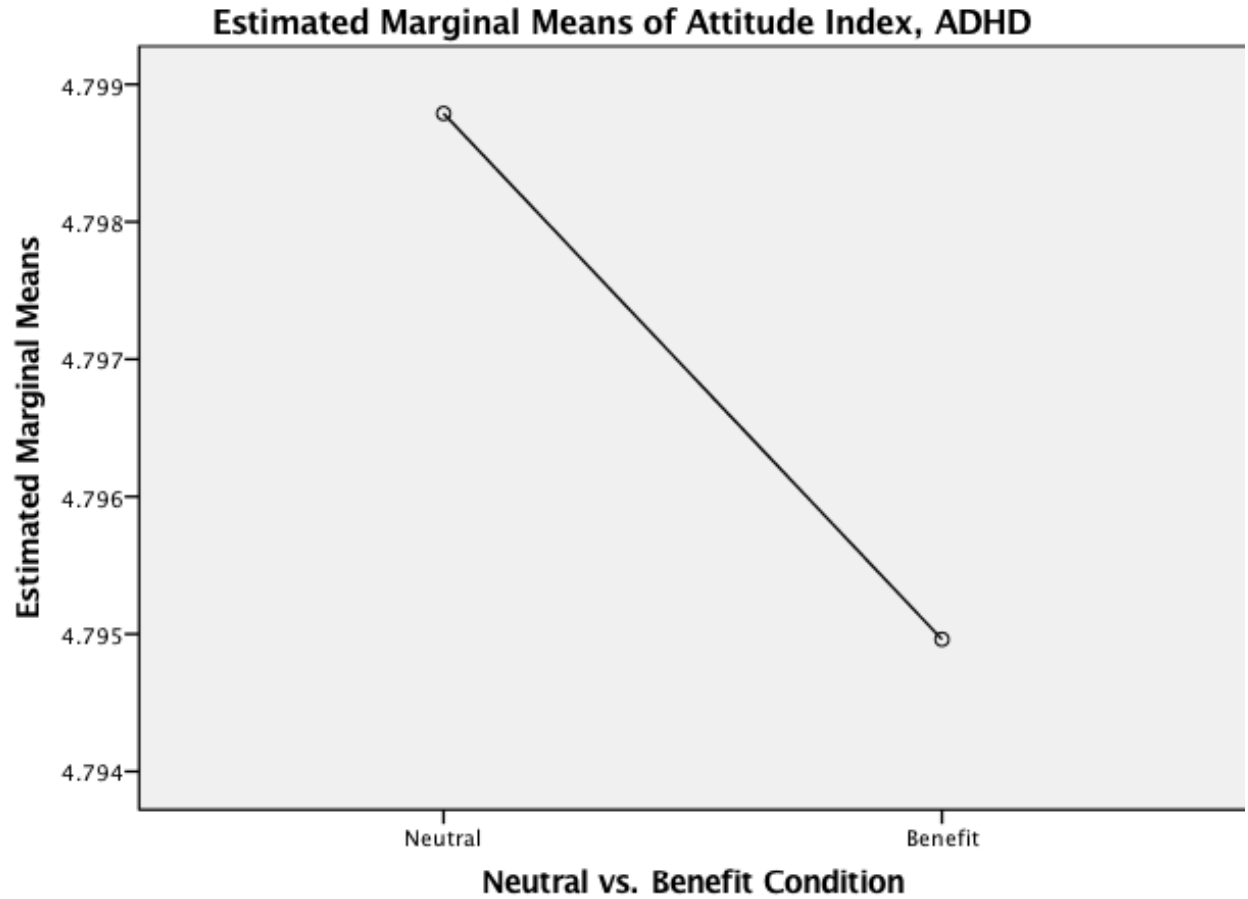


Covariates appearing in the model are evaluated at the following values: Experience with MI Index = .5242, gender\_RC = .4032

For the ADHD condition, it was again determined that there was no statistically significant difference between the symptoms as benefit portrayal versus neutral condition on the combined dependent variables,  $F(3, 128) = .167, p = .92$ ; Wilkes'  $\Lambda = .99$ ; partial eta squared = .004. Pairwise comparisons mirrored the trends in the OCD condition, indicating that participants in the neutral condition reported more positive attitudes ( $M = 4.81, SD = 1.13$ ) and behavioral intentions ( $M = 4.39, SD = 1.60$ ) as compared to those in the perceived symptoms as benefit condition (attitudes,  $M = 4.78, SD = 1.01$  and behavioral intentions,  $M = 4.30, SD = 1.75$ ) (see Figures 12 and 13) Participants in the perceived symptoms as benefit condition again reported

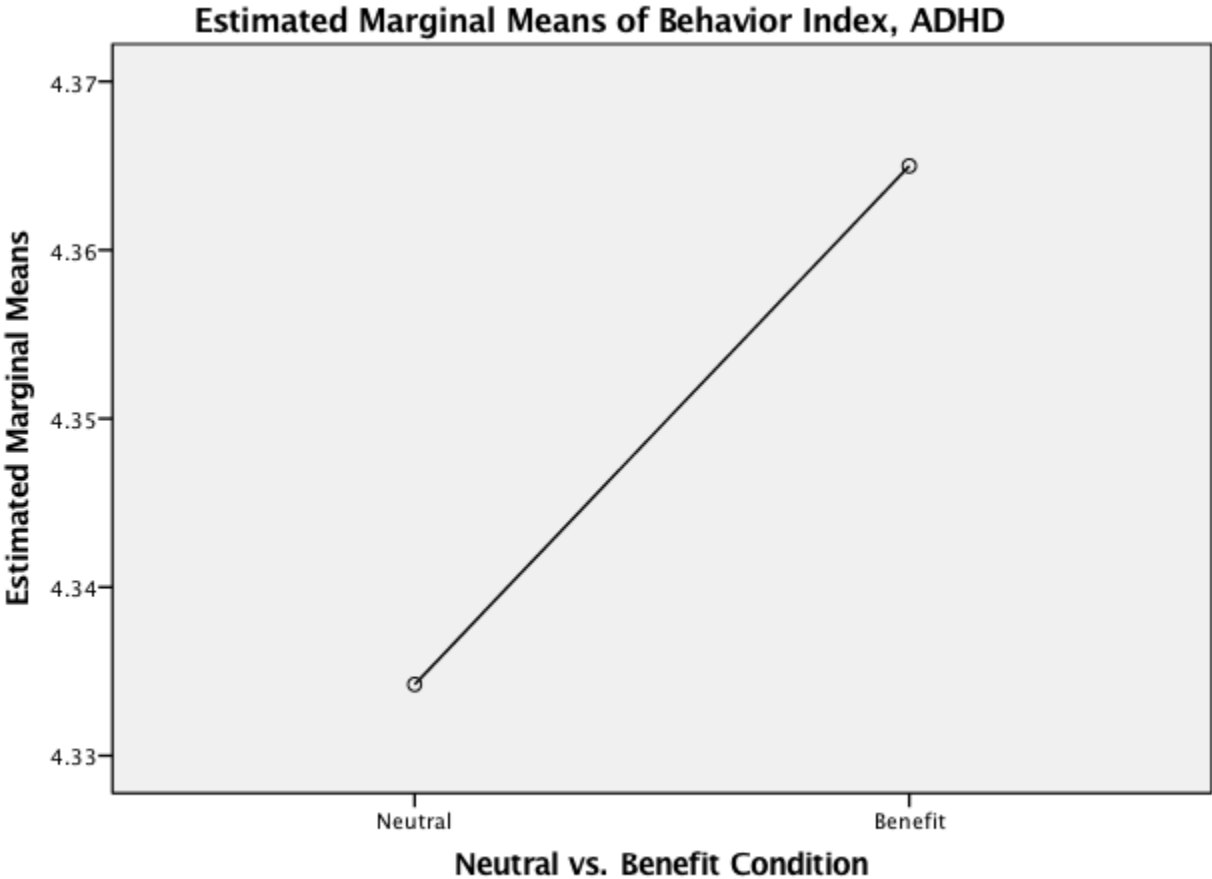
slightly greater desired social distance ( $M = 5.20, SD = 1.46$ ) than those in the neutral condition ( $M = 5.06, SD = 1.45$ ) (see Figure 14). However, none of these differences were statistically significant.

**Figure 12. Estimated Marginal Means of Attitudes for the Neutral vs. Benefit Condition Relevant to ADHD**



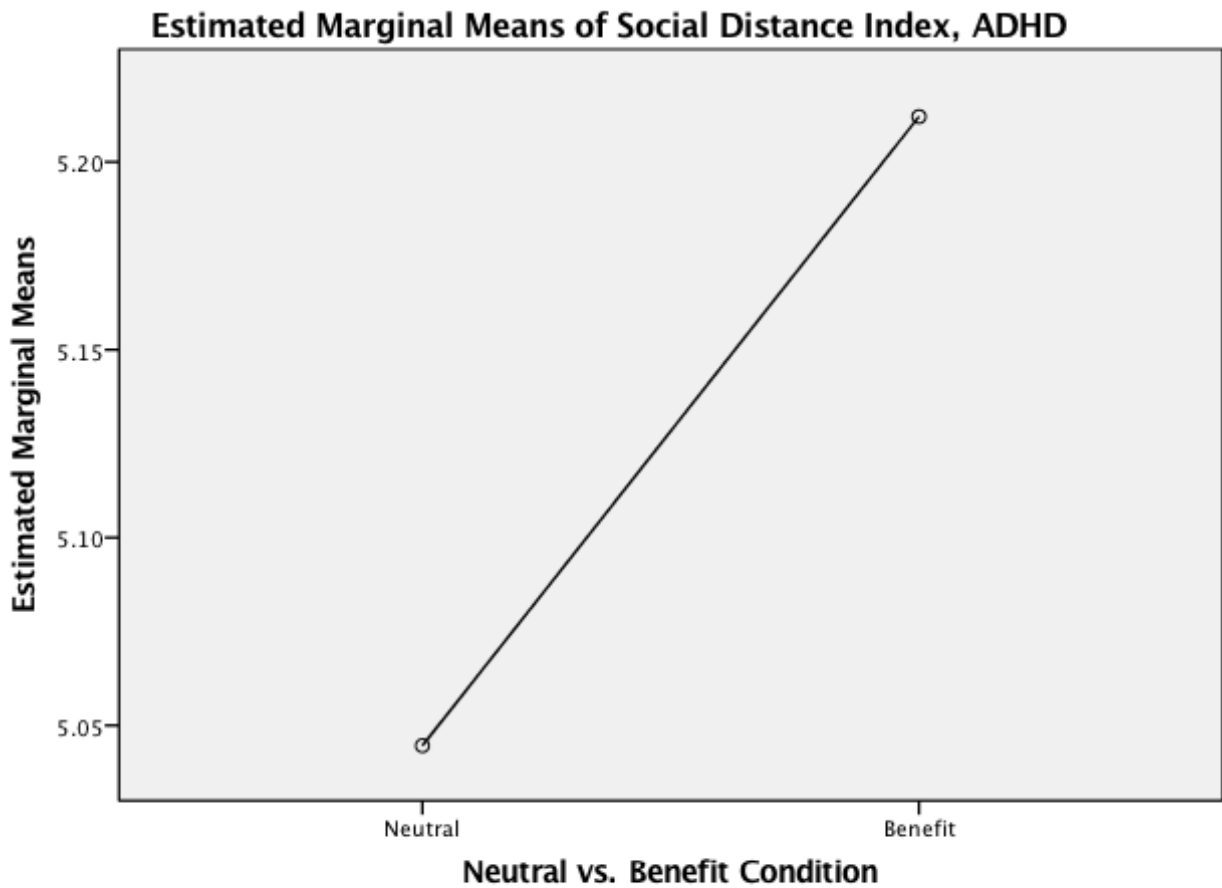
Covariates appearing in the model are evaluated at the following values: Experience with MI Index = .5625, gender\_RC = .4141

**Figure 13. Estimated Marginal Means of Behavioral Intentions for the Neutral vs. Benefit Condition Relevant to ADHD**



Covariates appearing in the model are evaluated at the following values: Experience with MI Index = .5625, gender\_RC = .4141

**Figure 14. Estimated Marginal Means of Social Distance for the Neutral vs. Benefit Condition Relevant to ADHD**



Covariates appearing in the model are evaluated at the following values: Experience with MI Index = .5625, gender\_RC = .4141

### **Discussion**

The present study employed an experimental design to test relationships between perceiving symptoms of OCD and ADHD as beneficial and the three other types of trivialization – overreacting, lessened severity, and cynicism. Additionally, by manipulating the perceived symptoms as benefit measure via the content of social media posts, this experiment sought to assess the impact this particular form of trivialization had on audience attitudes about, behavioral intentions toward, and desired social distance from persons with OCD/ADHD and the illnesses

themselves. While the initial hypothesis was not supported, significant relationships were identified through the analysis of the research questions, suggesting that mediated trivialization can have a meaningful impact on perceptions of mental illness.

Results from the ANCOVA analyses revealed that content manipulations did not have a significant influence on audience perceptions related to the symptoms as benefit measure for OCD nor ADHD. Justification for the lack of significance could be due in part to the relatively small portion of the discussion dedicated to advantageous qualities in the subreddit posts. Perhaps more than the addition of one sentence was needed to better distinguish the beneficial condition from the neutral condition. General misconceptions about OCD and ADHD could also be at play, as Loving (2013) has previously addressed how abstract and vague language used to describe mental illness can be problematic with regard to an overall understanding of the disorder and its symptoms. Discussions about OCD and ADHD in popular culture often propagate the perceptions of positive characteristics associated with the disorders, which could lead the unfamiliar to believe that the presentation of beneficial symptoms is an accurate representation. For example, Weiss (2017) penned a recent blog post highlighting “the five positive side effects of having OCD that will help you crush all your goals.” In his assessment of the disorder, Weiss attributes increased creativity, phenomenal attention to detail, and a ruthless fixation on achieving goals to a diagnosis of OCD. Additional conversations via a subreddit thread, “the positives of OCD,” attribute analytical skills, the impressive memorization of facts, general perseverance, and good grammar skills to the disorder. The manipulated content might therefore not have been perceived as more beneficial, as participants in the experiment may have considered it to be a reasonably accurate and realistic description of the disorders if they have been exposed to online content similar to the Weiss (2017) and Reddit discussions.

A second aim of this study was to assess how perceiving symptoms related to OCD and ADHD as beneficial would impact the other three facets of trivialization. A statistically significant relationship was established between the portrayal of OCD symptoms as beneficial and increased cynicism; meaning the more that aspects of the disorder are represented as a gain to the individual, the more likely the diagnosed are to be met with skepticism, mockery, and the like with regard to impact of OCD on their quality of life. It is reasonable to believe that if OCD is attached to positive character traits, the less likely others are to perceive it as an “illness” in the clinical sense – a specific condition that prevents the body or mind from working normally (Merriam-Webster, 2017). This finding directly relates to Barnes’ (1992) definition of the “super-cripple.” Instead of functioning “normally,” the perceptions of symptoms as benefit form of trivialization implies that those with OCD are operating at a higher, more impressive level than people without OCD. Based on this rationale, it seems justified that bystanders might perceive those with the condition as overplaying the undesirable qualities attached to the disease in order to garner attention.

Interestingly though, no such relationship was found when assessing the impact portraying symptoms as a benefit had on the other types of trivialization with regard to ADHD. Though the means were in the expected direction, no statistically significant relationships emerged. This finding could be partially justified by the increased overuse and acceptance that “everyone has ADHD these days” (Green, 2015). Misconceptions about having difficulty focusing, feeling overwhelmed, feeling restless, or the lacking the ability to complete tasks because of distractions as a comprehensive representation of ADHD could result in perceptions that this is not really an illness at all, but rather, a series of symptoms that everyone can relate to (Green, 2015). Therefore, portraying a particular component of ADHD as beneficial may not be

enough to impact a second type of trivialization, such as lessened severity, if belief about the seriousness is innate to the perceived understanding of the disorder.

A second objective of the present experiment was to analyze the relationship between portraying symptoms of these two disorders as beneficial and the subsequent impact on individuals' desire for social distance, attitudes, and behavioral intentions toward persons with OCD and ADHD. No significant differences were determined, with regard to either disorder, when comparing the beneficial condition with the neutral condition and the resulting influence on the dependent measures. Perhaps an idealized justification for this finding is that participants in the beneficial condition did not respond well to the content that trivialized the mental illnesses by highlighting a specific character trait as advantageous and yet related to the diagnosis. Previous empirical evidence suggests that, when OCD was described using language that represented one of three other types of trivialization, Twitter users reported significantly higher levels of annoyance than when clinical language was used (Pavelko & Myrick, 2015b). If a similar emotional reaction resulted from exposure to language that trivialized mental illness based on advantageous qualities, it is possible that participants would not report more favorable attitudes, behaviors, or desire for less social distance from persons with OCD/ADHD.

In sum, by manipulating the symptoms as benefit measure via the content of social media posts, a foundation was established for which to build upon this particular type of trivialization. Future studies could expand the discussion housed within this exploratory experimental design by creating stimuli that included more content specifically related to the perceived beneficial traits of mental illness. Additionally, an experiment that compared this specific type of trivialization within a characteristically stigmatized mental illness (e.g., schizophrenia or bipolar disorder) to a typically trivialized mental illness could also extend the literature in this emergent



area. It is also important to note that, in addition to using gender as a control variable in the analyses of RQ1 and RQ2, gender was also run as a fixed factor. However, no significant relationship emerged between gender, condition portrayal, and the resulting dependent variables, and was therefore not reported. Future studies should seek to address potential gender differences with the use of refined stimuli that better target the symptoms as benefit factor.

## CHAPTER 7: CONCLUSION

This dissertation serves as an initial step in expanding research on perceptions of mental illnesses to better match the reality of what those with one of these trivialized conditions experience daily in interpersonal and mediated interactions. In order to provide a foundation from which to study this form of social bias, as well as the ways in which media rely on trivialization tropes when portraying mental illness, a review of pertinent stigma research was first addressed prior to the conceptualization of a trivialization measure. In addition to presenting background on the stigma literature and offering an initial conceptualization of perceived disease trivialization, four studies were conducted to develop, validate, compare, and test a nuanced measure of this new concept. Below, I briefly review the four studies conducted as part of this dissertation before delving into an overarching discussion of what the present findings suggest for theory building and future research regarding mediated portrayals of mental illness and its effects on different types of audiences.

### **Study 1: Exploratory Factor Analysis (EFA)**

The intent of the first study, the exploratory factor analysis (EFA), was to establish patterns of correlations among the four proposed factors of perceived trivialization of mental illness, to assess their structure, and discover which variables formed subsets relatively independent of one another (Tabachnick & Fidell, 2013). Because it was predicted that oversimplification, lessened severity, mockery, and perceiving symptoms as a benefit were the factors that would comprise the trivialization measure, the item pool used in the EFA was divided into these four categories. Beginning with a total of 53 items, there were 10 items relevant to oversimplification (e.g., downplayed, underestimated); 16 items related to the lessening of disease severity (e.g., insignificant, fake); 15 items representing mockery (e.g.,

humorous, foolish); and 27 items related to perceiving symptoms of the disease as a benefit (e.g, creative, skilled). EFA was employed in this early stage of the trivialization measure development to reduce the initial number of observed variables by highlighting which factors, as well as how many factors, to retain for the analyses that followed.

Data collection for the EFA was conducted online via Amazon's Mechanical Turk (Mturk), and respondents were recruited via invitation to take an online survey about audience perceptions of mental illness. Respondents were provided with a URL to an online questionnaire hosted by Qualtrics. The questionnaire was approximately 15 minutes in length, and, after asking respondents for relevant demographic information, included the 53 items from the EFA item pool, tailored specifically toward obsessive compulsive disorder (OCD) and attention deficit/hyperactivity disorder (ADHD). A total of 570 respondents completed the survey, all of who were paid \$0.76 USD for their efforts.

After data collection was completed, principle component axis was used for factor extraction. Within SPSS, Kaiser Normalization was then selected to normalize the data prior to Promax rotation and to denormalize it upon completion. Additionally, screeplots and eigenvalues were used as determinants for which factors to retain. Initially, an EFA was conducted on the OCD and ADHD data separately, however, the results and the factors retained from the two distinct analyses proved similar and included a great deal of overlap. These findings, coupled with the desire to develop a trivialization measure with greater applicability to mental illness beyond OCD and ADHD, led to the averaging of the two data sets. A third EFA was then run on the combined data set. Three rounds of analyses removed a total of 20 factors, based on issues of crossloading ( $>.3$ ) or not loading onto its own factor ( $<.4$ ), resulting in a total of 33 items that formed four factors (eigenvalue  $> 1$ ).

The results of the EFA suggested slightly different categorizations of the components of perceived disease trivialization than the initial predictions. The first factor that emerged, perceived symptoms as benefit, held true to the prediction and items such as clever, creative, and talented clustered together to form this factor. This factor is perhaps the greatest contribution to the emergent literature on mediated disease trivialization based on its divergence from the archetypal representations of stigma. This newer form of social bias can occur without relying on the negative, without increasing the desire for more social distance, and without portraying those affected as inferior. Typical mediated representations of mental illness do not appear to be applicable to the coverage of disorders such as OCD or ADHD, and the symptoms as a benefit factor represents a plausible justification as to why. It seems counterintuitive to expect an audience to feel envious of a character's mental illness based on symptoms; to covet a trait that is attached to a diagnosis of OCD or ADHD, for example, but this phenomenon seems to occur via mediated trivialization. By media showcasing OCD as a disorder that befalls the cleanly and organized, and ADHD as representative of creativity and motivation, characters with these disorders are more likely to be revered than vilified.

However, results of the EFA also established three other factors of trivialization, none of which share the positive valence embodied by the symptoms as benefit factor. Items such as pampered and exaggerated clustered together to form the second factor of overreaction; meaning, those with OCD/ADHD are overreacting to their diagnosis, symptoms, effects on quality of life, etc. The third factor held true to predictions that lessening the severity of the disease is an integral component of trivialization. Items like downplayed and disregarded comprised this factor related to trivialized illnesses being perceived as less serious than other mental, and certainly physical, illnesses. Lastly, the EFA determined that the proposed factor of mockery

actually took shape as cynicism, including the items of doubt and skepticism, illustrative of how perceptions, based on the other three factors of trivialization, can produce skepticism about the disease itself and those diagnosed. What follows is a review of the confirmatory factor analysis (CFA) used to test the factor structure established here.

### **Study 2: Confirmatory Factor Analysis (CFA)**

After the EFA established the number and nature of the factors related to trivialization, a confirmatory factor analysis (CFA) was employed to evaluate if the factor structure held within a different sample. This study therefore used the same questionnaire developed for the EFA, and was altered only to eliminate the 20 superfluous items removed during the previous study. The CFA questionnaire also asked respondents about OCD and ADHD, but simply included fewer items. This study was again run using the Mturk platform, and a new sample of 505 respondents were paid \$0.76 USD for their participation in the online survey hosted by Qualtrics.

Because the predominant goal of the study was to test the psychometric structure of the perceived trivialization scale, the dimensionality of the scale was examined by comparing single-factor and four-factor models against the null model (the null model serving as a baseline as it assumes that all constructs are unrelated). All factor models were created using the Analysis of Moment Structures (AMOS) software. Using the single-factor model, each measure loads on only one factor, signifying that double loadings are absent and that all factors are measuring the same general concept (Noar et al., 2015). Established measures of goodness of fit criteria (Hu & Bentler, 1999) were used to determine that the single-factor model represented a bad model fit.

The four-factor model then tested the trivialization scale as having four separate subscales, with each of the subscales correlated with each other. The cut-off criteria established by Hu and Bentler (1999) determined that this model had a much stronger model fit than the one-

factor, aligning with the theoretical understanding of the trivialization measure and the results of the EFA. In this model, the four latent factors were each significantly correlated with one other, but some positively and some negatively. Due to the contrasting valences of the relationships between these four subscales, the AMOS software was unable to run a hierarchical model to test if the four subscales predicted a single, higher-order construct of perceived trivialization. Subsequently, the four-factor model remained the strongest model fit.

The results of the CFA determined that the factor structure that emerged during the EFA held true within a second sample. Instead of four factors coming together to predict a higher-order construct of perceived trivialization, the CFA established that trivialization is better conceptualized as four, unique types. This second study further emphasized the valence of the four factors and the integral role it played in determining the model with the best fit. Similar to the results of the EFA, the findings here also suggested that perceiving symptoms as a benefit is a far different type of trivialization than perceptions of overreacting, lessening the severity of the disease, or engaging in cynicism.

### **Study 3: Discriminant and Convergent Validity**

After the two aforementioned analyses tested the psychometric structure of the trivialization measure, a third study was conducted to establish construct validity, or the internal validity, of the scale. While discriminant validity tests whether concepts that are not supposed to be conceptually related are, indeed, unrelated (in this case, stigma and trivialization), convergent validity represents the degree to which two measures of constructs that should theoretically be similar, are actually correlated (Campbell & Fiske, 1959). Several previously established measures were selected to test the discriminant and convergent validity of the trivialization scale.

With regard to discriminant validity, two subscales related to discrimination and disclosure from the King et al. (2007) Stigma Scale were adapted to specifically address OCD and ADHD. The prediction was that these variables would not be significantly associated with any of the four types of disease trivialization. To assess convergent validity, it was predicted that the previously established measures of increased compassion, enhanced self-efficacy, positive aspects, third-person mockery, humor, and severity would be significantly related to some or all of the four established types of trivialization. More specifically, the predictions were that increased compassion, enhanced self-efficacy, and positive aspects would be significantly and positively correlated with the perceived symptoms as benefit measure; third-person mockery and humor would be significantly and positively correlated with the cynicism measure of trivialization; perceived severity would be significantly but negatively correlated with the lessened severity trivialization measure; and perceived severity would be significantly but negatively correlated with the overreacting trivialization measure.

To conduct this study, respondents were recruited to participate in a survey about portrayals of mental illness in the media through the undergraduate research subject pool maintained via the Institute of Communication Research (ICR) through the Media School at Indiana University. After recruitment, the course instructor distributed the link to the online Qualtrics questionnaire. After completing questions related to demographics, respondents were asked about experience with mental illness prior to the dependent measures. While Qualtrics randomly selected the order in which respondents answered questions related to OCD and ADHD, all respondents answered the questionnaires for both mental illnesses. A total of 187 students completed the approximately 15-minute survey and received extra credit from their course instructor for their participation.

With regard to assessing discriminant validity, it was theorized that the discrimination and disclosure measures would not correlate with the four types of trivialization. However, support for this hypothesis was not found. While the discrimination measure did not correlate with the overreacting measure of trivialization, it was found to correlate with the other three types. And while the disclosure measure did not correlate with cynicism, statistically significant positive correlations were found between the other three forms of trivialization. Correlation analysis results among the discriminant validity measures foreshadowed how difficult it is to parse out the inner workings of the stigmatization and trivialization relationship.

A correlation assessment of the measures related to convergent validity was also conducted and mixed results were found. Out of the four hypotheses posed, two were supported while two were not. It was predicted that the positive aspects subscale from the Stigma Scale (King et al., 2007) and two subscales from the Perceived Benefits Scale (McMillen & Fisher, 1998) would positively and significantly correlate with the perceived symptoms as benefit measure of trivialization. This was found to be true, providing support for the similarity between the perceptions of advantageous qualities afforded via trivialization and the aforementioned previously established beneficial measures. Support was not found for a third prediction that assumed a positive and statistically significant correlation between the humor and third-person mockery convergent validity measures and the cynicism measure of trivialization. While such a relationship existed between third-person mockery and cynicism, the same was not true of humor and cynicism. H4 suggested that a statistically significant, yet negative correlation would exist between the severity measure related to convergent validity and the lessened severity measure of trivialization, however, a statistically significant positive correlation was found. Support for H5



was established, though, as results indicated that a significant and negative correlation existed between disease severity and the overreacting measure of trivialization.

While mixed results were found, both the supported and unsupported hypotheses within this chapter served to articulate that the relationship between stigma and trivialization is not straightforward or orderly. The finding that three types of trivialization correlate with both discrimination and disclosure measures from the Stigma Scale (King et al., 2007) is perhaps the biggest proponent of this; that these are not necessarily two completely separate and distinct phenomena. A second key contribution that this chapter made to the larger work was highlighting the positive and statistically significant correlations between the symptoms as benefit measure of trivialization and the positive aspects, increased compassion, and enhanced self-esteem subscales. While there do appear to be commonalities between stigma and trivialization, symptoms as a benefit to one's quality of life consistently seems to differentiate from the other types of trivialization.

#### **Study 4: Experimental Test of the Effects of Trivializing Content**

To empirically test the trivialization measure, the fourth and final study employed an experimental design that highlighted user-generated content discussing mental illness that exists on the social networking site Reddit. The experiment sought to explicitly manipulate the perceived symptoms as benefit factor within two trivialized mental illnesses, OCD and ADHD, by creating mock subreddit pages that discussed OCD and ADHD with or without portraying symptoms of the disorders as a benefit. Earlier hypothesized components of trivialization, prior to the empirical development of the trivialization measure, were manipulated in exploratory studies (Pavelko & Myrick, 2015a; Pavelko & Myrick, 2015b), and the addition of the symptoms as benefit factor sought to build upon that foundational work.

When the symptoms of a mental illness are portrayed as a benefit, those with the condition may be envied, even thought to be lucky. Barnes' (1992) definition of the "super-cripple" illuminates this point. The super-cripple is a stereotype that attributes magical, superhuman traits to people with disability (Barnes, 1992). Relative to mental illness, the super-cripple trope is applicable to traits such as creativity or high levels of intelligence, which a person with a trivialized mental illness may exhibit, despite their mental health being compromised. The experiment tested if this particular portrayal of one type of disease trivialization can change social media users' perceptions of mental illness and individuals. A hypothesis predicted that content portraying the symptoms of mental illness as beneficial would be associated with higher levels of perceived symptoms as benefits trivialization than content that portrays the mental illness neutrally. Two research questions were also posed to address how content manipulated to highlight the symptoms as benefit form of trivialization would impact the three other types of trivialization, as well as influence attitudes and behaviors toward persons with OCD/ADHD.

The experimental design was a 2 (type of mental illness: OCD vs. ADHD) by 2 (portrayal of symptoms in content: benefit vs. neutral) fully factorial between-subjects design. The experiment was conducted online using Amazon's Mechanical Turk (MTurk) platform and Qualtrics software. Participants were invited to complete a survey lasting approximately 20 minutes about audience perceptions of mental illness. After providing demographic information, as well as their personal experience with mental illness, Qualtrics then randomly assigned participants to view one of the four mock subreddit pages that were used as the stimuli. Participants then advanced to the remainder of the questionnaire, which included the trivialization, social distance, attitudes, and behavioral intentions dependent measures. Qualtrics

randomly chose the order in which participants viewed questions related to either OCD or ADHD, but all participants completed the questionnaire related to both mental illnesses. A total of 278 participants completed the experiment and were paid \$0.51 USD for their involvement.

To answer the hypothesis, an ANCOVA was run to test the relationship between the condition (symptoms as benefit vs. neutral) and perceived disease trivialization. Findings established that there was no statistically significant difference in portrayal of OCD or ADHD symptoms as beneficial versus neutral with regard to the impact on levels of perceived symptoms as benefit trivialization.

MANCOVAs were used to answer the two research questions posed in this study. A statistically significant relationship was established between the portrayal of OCD symptoms as beneficial and increased cynicism, however, no such significance was found in the portrayal of ADHD symptoms. Additionally, it was determined that portraying the symptoms of OCD and ADHD did not have a significant impact on the participants' attitudes, behavioral intentions, or desired social distance toward persons with these two mental illnesses.

Although the results of this experiment were largely insignificant, the findings still provided an important primary test of the trivialization measure, as well as initial empirical evidence about the symptoms as benefit type of trivialization, specifically. The significant relationship between the portrayal of symptoms as beneficial and resulting increase in cynicism supports previous research on Barnes' (1992) "super-cripple" and provides insight into the complexity of symptoms of a mental illness being perceived as enviable by the unaffected. While it is plausible to believe that the stereotyped symptoms of stigmatizing illnesses have never before been coveted, such as the violence attached to schizophrenia or aggressive mood swings

attributed to bipolar disorder, this does not appear to be the case for certain symptoms of trivialized illnesses.

### **Conceptual Contributions**

The crux of this dissertation centers on an issue faced by many social science researchers, and that is how to quantify a phenomenon in order to address a particular research objective (DeVellis, 2012). To discuss the relationship between two forms of social bias, the classical representation of stigma and the newer form of trivialization, it is first necessary to be able to quantify both. And, in the case of mediated trivialization of mental illness, existing instruments presented themselves with questionable suitability. Because no “off-the-shelf” measurement tool was readily available (DeVellis, 2012), it was necessary to create a new measure to make sense of these observations of trivialization.

However, prior literature on health measurement scales advises against assembling a scale (meaning, the collecting and amassing of items from previously established measures), and suggests rather to *develop* a measure (DeVellis, 2012; Streiner & Norman, 2008). This recommendation is exemplified in the three studies comprising the scale-development portion of this dissertation, beginning first with the extensive research leading up to the development of the initial item pool that was presented in the exploratory factor analysis (EFA). Conducting an EFA and subsequent confirmatory factor analysis (CFA) using different samples, each with more than 500 respondents, provided a rigorous evaluation of the psychometric structure of the factors related to trivialization. The use of a third unique sample to assess the construct validity of the trivialization measure further showcases the thoroughness attributed to the scale development process, prior to its application as a measure in an experimental design.

By providing the field with a valid and reliable measure of four different types of trivialization, researchers can now apply this measure in multiple contexts to see how varied mediums, character types, genres, and mental illnesses result in different types of perceived disease trivialization. This measure can help expand the conceptual boundaries of research on mediated portrayals of mental illnesses by reminding researchers that biased portrayals of mental illnesses are not all purely negative. Instead, they may also make light of and even define the condition as beneficial to audiences.

In addition to using scale development procedures to create a reliable and valid measure of disease trivialization, it was also the intent of this dissertation to assess if this new measure conceptually overlaps with stigmatization or is distinct. Results from the four studies show that the relationship between these two forms of social bias is multifarious and challenging to dissect. In some ways, parallels could be drawn between ways in which public stigma and trivialization manifest. What follows is an overview of stereotypes, prejudice, and discrimination – the three ways in which stigma may manifest – and potential theoretical ties to the established factors of trivialization.

Prior research has demonstrated that stereotypes represent the cognitive manifestation of stigma and stem from the essential need to classify information (Allport, 1954). Foundational work by both Goffman (1963) and Allport (1954) attributes this classification of persons as an innate human trait that once aided in survival; however, classification continues today, exemplified through the “us versus them” trope and the need to protect one’s in-group (Link, Yang, Phelan, & Collins, 2004). The use of “protect” instinctively triggers assumptions of heightened disease severity, and the vast body of literature in this field has demonstrated that stigmatization yields an increase in desired social distance from persons with mental illness (i.e.,

Link, Phelan, Bresnahan, Stueve, & Pescosolido, 1999; Corrigan, Edwards, Green, Diwan, 2001). If, however, we consider the lessening of disease severity experienced in cases of trivialization, perhaps the functionality of the traditional stereotype can extend to include this newer form of classification, just in an opposite direction.

Rydell and McConnell (2006) since established that such cultural prescriptions have the potential to shape both implicit prejudice and subtle forms of social behavior toward social group members. Referring back to Allport (1954), prejudice is defined as overgeneralizations about a person based solely on their group membership. With the addition of an evaluative or favorability component attached to the classification, prejudice embodies the affective manifestation of stigma (Allport, 1954). When people are exposed to pertinent information about a group and choose to ignore it, essentially accepting a stereotype as fact, it is possible for prejudice to ensue. Consider then, how prejudice may be applicable to trivialization. Accepting the lessened severity stereotype, even though clinical information exists about more typical, more realistic cases of OCD, ADHD, or the like, could serve as the catalyst for prejudiced evaluations of persons with these illnesses as overreacting to their diagnoses. The stereotype regarding severity of the disorder could therefore invite prejudice about the appropriate reaction to the resulting symptoms.

Discrimination, the third way in which stigma may manifest, represents the behavioral component (Link & Phelan, 2001). An example of discrimination would be choosing to not hire a job candidate on account of their disclosed mental illness. The employer is prejudiced against people with mental illness because he considers them to be unstable and dangerous (acceptance of a stigmatizing stereotype), and therefore engages in discrimination by refusing to hire this classification of people. In the case of trivialization, a similar process may occur. If a person is

prejudiced against people with an illness such as OCD or ADHD because they feel it is an insignificant disease, and believe that those diagnosed are overreacting (acceptance of a trivializing stereotype), then the resulting behavioral component of engaging in cynicism may follow. Cynicism could take shape as ridicule, mockery, or disparagement, all of which have played out in real world examples of responses to the trivialization of mental illness. Recall the commentary from Facebook user Mike Smith that appeared under the *USA Today* coverage of the Target OCD sweater controversy: “It’s a joke. It’s funny and designed to be. If you don’t like it, don’t buy it. If it offends and upsets you, seek counseling because you are the problem” (Knoll, 2015). While engaging in cynicism might initially seem dissimilar from traditional discriminatory examples of stigmatized mental illness, it is plausible that making such jokes about OCD could lead to more pejorative behaviors.

One factor noticeably absent from the parallels between how stigma and trivialization manifest is the symptoms as benefit portrayal. This dissertation has shown how this particular type of trivialization is different from the other three forms, and, furthermore, that it may present the starkest contrast to stigmatization. Where there is possible overlap, however, is between the symptoms as benefit type of trivialization and examples of labeling theory from the classic stigma literature. For instance, early research suggested that “tagging” a child as deviant made the child more likely to commit deviant acts (Tannenbaum, 1938), therefore triggering a self-fulfilling prophecy and embracing the label (Scheff, 1963). While there was some pushback in the research community to the labeling camp, Link, Cullen, Struening, and ShROUT (1989) developed a modified approach that suggests a labeled person experiences negative consequences, and because of this, they are vulnerable to repeat episodes in the future based on their condition.

When considering trivialization in the context of the modified labeling approach, it is possible that when people are tagged as “lucky” or “fortunate” (with regard to their perceived beneficial symptoms), it could lead persons with a trivialized illness to subscribe to this label, resulting in the potential negative effects on help-seeking and treatment options. When an identifying characteristic is consistently labeled as a positive, even though it is illustrative of a far more complex, challenging disorder, it is possible that those affected with a mental illness like OCD would question why they would seek treatment for behaviors deemed valuable by society. Of course, just as the modified labeling approach suggests with regard to stigmatized labeling, the individual still maintains a certain level of agency with regard to how the label is acted upon.

In short, the empirical evidence presented in this dissertation, as well as the conceptual propositions offered above, combine to suggest that trivialization and stigmatization may not be entirely separate but instead different-yet-linked—sometimes acting like different ends of the same continuum, other times operating as separate concepts. Additional research is needed to further elucidate and tease apart the interrelationships between these two forms of social bias, particularly as they relate to audience perceptions of individuals with mental illness.

### **Limitations**

While this dissertation advanced the literature on trivialized mental illness measurement and communication, like any social science endeavor it comes with limitations. Two specific illnesses, OCD and ADHD, were selected as prototypes for inclusion in these studies of trivialization. Although exploratory studies had previously addressed OCD in this context, no such background was available regarding presentations of ADHD. And, while the data sets for



these two illnesses were averaged to create a more generalizable measure of trivialization, OCD and ADHD were the only two specifically addressed during the three developmental studies.

With regard to the application of the trivialization measure in the experimental design, the stimuli manipulated only one type of trivialization, and the two possible conditions were again only represented by OCD or ADHD. Additionally, manipulations of the overreacting, lessened severity, and cynicism forms of trivialization were not addressed. Further, upon reflection of the stimuli used in this experiment, it is possible that manipulation intended was not the manipulation that took place. While the intent of the Reddit posts was to highlight symptoms of OCD and ADHD as beneficial in comparison to neutral counterparts, the stimuli might actually be more representative of the frustrations persons with these illnesses experience when their symptoms are labeled as advantageous and/or expected (e.g., being frustrated that family members expect them to be organized because they have OCD). To maintain ecological validity within the experiment, the manipulations were based on the real-world posts of Reddit users who discussed sharing their mental illness diagnoses with family members. Because of how closely the mock posts were designed to mirror the actual Reddit posts, it is possible that the stimuli did not directly manipulate the symptoms as benefit trivialization measure as intended. A pre-test of the stimuli would have aided in addressing this issue. A pilot study could have also been run prior to recruitment on Mturk to verify the stimuli were manipulating the symptoms as benefit factor as intended.

Moreover, the samples used in the four studies presented in this dissertation are not necessarily generalizable to the population as a whole and need further replication across multiple demographic and psychographic groups. A final limitation of the present work is the mixed support of the predictions related to the construct validity of the trivialization measure.

Because findings suggested that counterintuitive correlations exist between stigmatization and trivialization factors, further analysis is needed in order to elaborate on the validity of each of the four unique types of trivialization.

### **Future Studies**

The aforementioned limitations of this dissertation also give rise to areas of potential future research. For instance, it is necessary to address the boundary conditions of trivialization by testing if traditionally stigmatized illnesses can also be trivialized. An experimental design using a disorder such as OCD and a second such as schizophrenia could help accomplish this objective. Extending the trivialization measure to illnesses that have historically been represented in stigmatizing ways in mediated contexts can also help to articulate the theoretical relationship between stigmatization and trivialization.

Testing moderators of disease trivialization such as gender of the audience member, gender of an individual portrayed as having a mental illness, and audience involvement with the character or media personae with a mental illness could also be the motivation of future studies. The experiment in this dissertation used the gender of participants and their prior experience with mental illness as covariates in the analyses, but future work could instead manipulate these variables to expand upon these initial findings. Although when run as a fixed factor within the experimental analyses, gender was found to be insignificant (and therefore not reported), this may have more to do with the aforementioned shortfalls of the stimuli. Socially accepted stereotypes regarding gender and mental illness (e.g., anxiety disorders are inherently more typical of females; substance abuse more often befalls men) (Afifi, 2007) provide possible avenues for which to apply the trivialization measure.

Another aim of future research should be to analyze how physical illness might also be trivialized, and if that type of trivialization is similar or different from the four types presented here. One particular physical illness that could be tested is psoriasis, which has often been represented as a purely cosmetic issue in the media; however clinical research shows that it is a far more serious chronic disease that can be linked to issues like cardiovascular disease, Crohn's disease, cancer, and osteoporosis (Zanni, 2012). Still, media attention tends to focus on individual cases such as Kim Kardashian's diagnosis, and chiefly discusses symptoms like rashes and what creams can be used for treatment (Kirkpatrick, 2017).

A study centered on psoriasis could serve as the initial foray into more in-depth analyses of how physical illnesses may be trivialized. Because physical illnesses present tangible, quantifiable, visible symptoms, most of which are easier to evaluate and diagnose than symptoms attached to mental illnesses (i.e., the obsessive, graphic thoughts of OCD sufferers), the same four types of trivialization may not be applicable. For instance, does the "super-cripple" trope (Barnes, 2012) hold true for trivialized physical illness, in the sense that someone with psoriasis could be seen as superhuman or high-achieving? The trivialization measure could be applied to various studies within this arena.

Lastly, it would be beneficial to conduct content analyses of more recent and popular media content for the presence of trivializing and stigmatizing portrayals of mental illness. A review of such content would provide a baseline for how media coverage has changed since the foundational studies of stigmatizing coverage that often featured violence, criminality, and childlike traits when introducing a character with mental illness (e.g., Diefenbach, 1997; Sieff, 2009; Stout, Villegas, & Jennings, 2004). For instance, more sophisticated portrayals of mental illness, such as the depiction of OCD symptoms in the HBO show *Girls*, offer viewers a more

realistic and accurate look at mental illness. A February 2017 episode of the NBC series *This Is Us* portrayed the physical, mental, and emotional experience of a main character's panic attack through both a first- and third-person lens. Studying newer and more nuanced portrayals of mental illness will only aid in the understanding of the intricate relationships between stigmatization and trivialization processes and their subsequent implications for public opinion and policy support.

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## **Appendix I: EFA Questionnaire**

### **Questionnaire for Study 1: Exploratory Factor Analysis**

**What is your age (in years)? \_\_\_\_\_ [age]**

**Do you identify as: [gender]**

- male
- female
- other: \_\_\_\_\_

**With which race or ethnicity do you identify? Please check all that apply [race]**

- Caucasian
- African American
- Asian
- Arab
- Native Alaskan/Pacific Islander
- Native American
- Hispanic/Latino(a)
- Other (please describe): \_\_\_\_\_

**What is your highest level of education obtained? [edu]**

- Did NOT complete high school or GED
- High school or GED
- 2-year technical college or some college
- 4-year Bachelor's degree
- Some graduate school

- Graduate degree

**Where do you currently reside? [locate – dropdown menu with states and territories]**

**Have you, personally, been diagnosed with any mental illness/psychiatric disorder (e.g., depression, anxiety, bipolar disorder)? [personalexp]**

- no
- yes

**If yes, please list which ones \_\_\_\_\_ [whichpersonal]**

**Have any of your close family members or friends (e.g. a parent, child, partner, roommate, etc.) been diagnosed with any mental illness/psychiatric disorder?**

**[otherexp]**

- no
- yes

**If yes, please list which ones \_\_\_\_\_ [whichother]**

**Please list your level of agreement from 1 (strongly disagree) to 7 (strongly agree) with the following statements about OCD/ADHD and people with OCD/ADHD.**

**[trivialization] [Qualtrics randomly selects OCD/ADHD order]**

*(strongly disagree) 1....2....3....4....5....6....7 (strongly agree)*

- This mental illness is underestimated.
- This mental illness is exaggerated.
- This mental illness is complex.

- This mental illness is complicated.
- This mental illness is discounted.
- This mental illness is easily resolved.
- This mental illness is downplayed.
- This mental illness is glossed over.
- This mental illness is insignificant.
- This mental illness is unimportant.
- This mental illness is open to interpretation.
- This mental illness is inconsequential.
- The mental illness is fake.
- This mental illness is serious.
- This mental illness is severe.
- This mental illness is grave.
- This mental illness allows for skepticism.
- This mental illness allows for cynicism.
- This mental illness allows for doubt.
- This mental illness allows for scrutiny.
- People with this mental illness are self-diagnosed.
- People with this mental illness are associated with stereotypical behaviors.
- People with this mental illness are dramatic.
- People with this mental illness are not taken seriously.
- People with this mental illness are making excuses.
- People with this mental illness are disregarded.

- People with this mental illness are detailed orientated.
- People with this mental illness are focused.
- People with this mental illness are motivated.
- People with this mental illness are talented.
- People with this mental illness are capable.
- People with this mental illness are proactive.
- People with this mental illness are friendly.
- People with this mental illness are honest.
- People with this mental illness are brilliant.
- People with this mental illness are gifted.
- People with this mental illness are skilled.
- People with this mental illness are accomplished.
- People with this mental illness are lucky.
- People with this mental illness are fortunate.
- People with this mental illness are creative.
- People with this mental illness are clever.
- People with this mental illness are masterly.
- People with this mental illness are ingenious.
- People with this mental illness are inept.
- People with this mental illness are incompetent.
- People with this mental illness are dull.
- People with this mental illness are bland.
- People with this mental illness are eccentric.

- People with this mental illness are special.
- People with this mental illness are indulged.
- People with this mental illness are pampered.
- People with this mental illness are favored.

## **Appendix II: CFA Questionnaire**

### **Questionnaire for Study 2: Confirmatory Factor Analysis**

**What is your age (in years)? \_\_\_\_\_ [age]**

**Do you identify as: [gender]**

- male
- female
- other: \_\_\_\_\_

**With which race or ethnicity do you identify? Please check all that apply [race]**

- Caucasian
- African American
- Asian
- Arab
- Native Alaskan/Pacific Islander
- Native American
- Hispanic/Latino(a)
- Other (please describe): \_\_\_\_\_

**What is your highest level of education obtained? [edu]**

- Did NOT complete high school or GED
- High school or GED
- 2-year technical college or some college
- 4-year Bachelor's degree
- Some graduate school



- Graduate degree

**Where do you currently reside? [locate – dropdown menu with states and territories]**

**Have you, personally, been diagnosed with any mental illness/psychiatric disorder (e.g., depression, anxiety, bipolar disorder)? [personalexp]**

- no
- yes

**If yes, please list which ones \_\_\_\_\_ [whichpersonal]**

**Have any of your close family members or friends (e.g. a parent, child, partner, roommate, etc.) been diagnosed with any mental illness/psychiatric disorder?**

**[otherexp]**

- no
- yes

**If yes, please list which ones \_\_\_\_\_ [whichother]**

**Please list your level of agreement from 1 (strongly disagree) to 7 (strongly agree) with the following statements about OCD/ADHD and people with OCD/ADHD.**

**[trivialization] [Qualtrics randomly selects OCD/ADHD order]**

*(strongly disagree) 1....2....3....4....5....6....7 (strongly agree)*

- This mental illness is underestimated.
- This mental illness is exaggerated.
- This mental illness is discounted.

- This mental illness is easily resolved.
- This mental illness is downplayed.
- This mental illness is glossed over.
- This mental illness is insignificant.
- This mental illness is unimportant.
- This mental illness is open to interpretation.
- This mental illness is inconsequential.
- The mental illness is fake.
- This mental illness is severe.
- This mental illness allows for skepticism.
- This mental illness allows for cynicism.
- This mental illness allows for doubt.
- This mental illness allows for scrutiny.
- People with this mental illness are not taken seriously.
- People with this mental illness are making excuses.
- People with this mental illness are disregarded.
- People with this mental illness are motivated.
- People with this mental illness are talented.
- People with this mental illness are capable.
- People with this mental illness are proactive.
- People with this mental illness are friendly.
- People with this mental illness are honest.
- People with this mental illness are brilliant.

- People with this mental illness are skilled.
- People with this mental illness are accomplished.
- People with this mental illness are creative.
- People with this mental illness are clever.
- People with this mental illness are masterly.
- People with this mental illness are pampered.
- People with this mental illness are favored.

### **Appendix III: Construct Validity Questionnaire**

#### **Questionnaire for Study 3: Convergent and Discriminant Validity Measures**

**What is your age (in years)? \_\_\_\_\_ [age]**

**Do you identify as: [gender]**

- male
- female
- other: \_\_\_\_\_

**With which race or ethnicity do you identify? Please check all that apply [race]**

- Caucasian
- African American
- Asian
- Arab
- Native Alaskan/Pacific Islander
- Native American
- Hispanic/Latino(a)
- Other (please describe): \_\_\_\_\_

**What is your highest level of education obtained? [edu]**

- Did NOT complete high school or GED
- High school or GED
- 2-year technical college or some college
- 4-year Bachelor's degree

- Some graduate school
- Graduate degree

**Where do you currently reside? [locate – dropdown menu with states and territories]**

**Have you, personally, been diagnosed with any mental illness/psychiatric disorder (e.g., depression, anxiety, bipolar disorder)? [personalexp]**

- no
- yes

**If yes, please list which ones \_\_\_\_\_ [whichpersonal]**

**Have any of your close family members or friends (e.g. a parent, child, partner, roommate, etc.) been diagnosed with any mental illness/psychiatric disorder?**

**[otherexp]**

- no
- yes

**If yes, please list which ones \_\_\_\_\_ [whichother]**

**Please list your level of agreement from 1 (strongly disagree) to 7 (strongly agree) with the following statements about OCD/ADHD and people with OCD/ADHD.**

**[trivialization] [Qualtrics randomly selects OCD/ADHD order]**

*(strongly disagree) 1....2....3....4....5....6....7 (strongly agree)*

- This mental illness is underestimated.
- This mental illness is exaggerated.

- This mental illness is discounted.
- This mental illness is easily resolved.
- This mental illness is downplayed.
- This mental illness is glossed over.
- This mental illness is insignificant.
- This mental illness is unimportant.
- This mental illness is open to interpretation.
- This mental illness is inconsequential.
- The mental illness is fake.
- This mental illness is severe.
- This mental illness allows for skepticism.
- This mental illness allows for cynicism.
- This mental illness allows for doubt.
- This mental illness allows for scrutiny.
- People with this mental illness are not taken seriously.
- People with this mental illness are making excuses.
- People with this mental illness are disregarded.
- People with this mental illness are motivated.
- People with this mental illness are talented.
- People with this mental illness are capable.
- People with this mental illness are proactive.
- People with this mental illness are friendly.
- People with this mental illness are honest.

- People with this mental illness are brilliant.
- People with this mental illness are skilled.
- People with this mental illness are accomplished.
- People with this mental illness are creative.
- People with this mental illness are clever.
- People with this mental illness are masterly.
- People with this mental illness are pampered.
- People with this mental illness are favored.

### **Convergent validity measures**

**Extended Parallel Process Model (adapted from Witte, Cameron, McKeon, & Berkowitz, 1996)**

**[severity]**

*(strongly disagree) 1....2....3....4....5....6....7 (strongly agree)*

- I believe that OCD/ADHD is a severe condition.
- I believe that OCD/ADHD is a serious condition.
- I believe that OCD/ADHD is a significant condition.

**Disparagement humor (adapted from Nabi, Moyer-Guse, & Sahara Byrne, 2007)**

**[humor]**

*bipolar measures (1= funny; 7= not funny)*

- This mental illness is funny/not funny.
- This mental illness is entertaining/not entertaining.

- This mental illness is amusing/not amusing.
- This mental illness is laughable/not laughable.

**Disparagement humor (adapted from Parrott, 2016)**

**[third-person mockery]**

*(strongly disagree) 1....2....3....4....5....6....7 (strongly agree)*

- Other people would find this mental illness funny.
- Other people would find this mental illness entertaining.
- Other people would find this mental illness amusing.
- Other people would find this mental illness laughable.

**Positive Aspects Subscale from the Stigma Scale (adapted from King et al., 2007)**

**[positive aspects]**

*(strongly disagree) 1....2....3....4....5....6....7 (strongly agree)*

- Having mental health problems could make you a more understanding person.
- Having mental health problems could make you more accepting of other people.
- Having mental health problems could make you a stronger person.
- Having mental health problems could make you feel that life is unfair.
- Having mental health problems would make me feel bad about myself.

**Increased Self-Efficacy Subscale from the Perceived Benefit Scale (adapted from McMillen & Fisher, 1998)**

**[self-efficacy]**



*(strongly disagree) 1....2....3....4....5....6....7 (strongly agree)*

- OCD/ADHD could make you a stronger person.
- OCD/ADHD could make you a more effective person.
- OCD/ADHD could teach you how to cope more effectively.
- OCD/ADHD could make you a more assertive person.
- OCD/ADHD could make you a more capable person.

**Increased Compassion Subscale from the Perceived Benefit Scale (adapted from McMillen & Fisher, 1998)**

**[compassion]**

- Having OCD/ADHD could make you more compassionate to those in similar situations.
- Having OCD/ADHD could make you more understanding of those in need.
- Having OCD/ADHD could make you more sensitive to the needs of others.
- Having OCD/ADHD could make you more caring toward others.

**Discriminant validity measures**

**Discrimination Subscale from the Stigma Scale (adapted from King et al., 2007)**

**[discrimination]**

*(strongly disagree) 1....2....3....4....5....6....7 (strongly agree)*

- People with OCD/ADHD have likely been discriminated against by employers because of their mental health problems.
- People with OCD/ADHD likely often feel alone because of their mental health problems.

- People with OCD/ADHD would likely have had better chances in life if they had not had mental health problems.
- People with OCD/ADHD are likely angry with the way people have reacted to their mental health problems.
- People with OCD/ADHD have likely not had any trouble from people because of their mental health problems.
- People with OCD/ADHD have likely been discriminated against by health professionals because of their mental health problems.
- People with OCD/ADHD have likely been avoided because of their mental health problems.
- People with OCD/ADHD have likely been insulted because of their mental health problems.

**Disclosure Subscale from the Stigma Scale (adapted from King et al., 2007)**

**[disclosure]**

- People with OCD/ADHD are likely scared of how other people will react if they find out about their mental health problems.
- People with OCD/ADHD would likely not mind people in their neighborhood knowing they have had mental health problems.
- People with OCD/ADHD would likely say they have had mental health problems if they were applying for a job.
- People with OCD/ADHD likely worry about telling people that they take medicines/tablets for mental health problems.

- People with OCD/ADHD likely feel embarrassed because of their mental health problems.
- People with OCD/ADHD likely avoid telling people about their mental health problems.
- People with OCD/ADHD likely feel the need to hide their mental health problems from their friends.

## **Appendix IV: Experiment Questionnaire**

### **Questionnaire for Study 4: Perceived disease trivialization as an outcome of media exposure**

**What is your age (in years)? \_\_\_\_\_ [age]**

**Do you identify as: [gender]**

- male
- female
- other: \_\_\_\_\_

**With which race or ethnicity do you identify? Please check all that apply [race]**

- Caucasian
- African American
- Asian
- Arab
- Native Alaskan/Pacific Islander
- Native American
- Hispanic/Latino(a)
- Other (please describe): \_\_\_\_\_

**What is your highest level of education obtained? [edu]**

- Did NOT complete high school or GED
- High school or GED
- 2-year technical college or some college
- 4-year Bachelor's degree

- Some graduate school
- Graduate degree

**Where do you currently reside? [locate – dropdown menu with states and territories]**

**Have you, personally, been diagnosed with any mental illness/psychiatric disorder (e.g., depression, anxiety, bipolar disorder)? [personalexp]**

- no
- yes

**If yes, please list which ones \_\_\_\_\_ [whichpersonal]**

**Have any of your close family members (for example, a parent, child, spouse/partner, sibling) been diagnosed with any mental illness/psychiatric disorder? [otherexp]**

- no
- yes

**If yes, please list which ones \_\_\_\_\_ [whichother]**

**[Participants will see the following paragraph either with a focus on OCD or ADHD (Qualtrics will randomly assign participants to see one)].**

Reddit, a popular submission-based entertainment, news, and social networking community forum, houses several subreddits, or threads, dedicated to mental illness. Reddit members have created various subreddits about specific mental illnesses and discussed in detail everything from diagnosis, to best prescription medications, to how to manage symptoms. The one you are about

to read deals specifically with the individuals with [OCD/ADHD] told their family about their diagnosis. Please read all of the posts on the subreddit page.

**[Presentation of stimuli]**

**Please list your level of agreement from 1 (strongly disagree) to 7 (strongly agree) with the following statements about OCD/ADHD and people with OCD/ADHD.**

**[trivialization] [Qualtrics randomly selects OCD/ADHD order]**

*(strongly disagree) 1....2....3....4....5....6....7 (strongly agree)*

- This mental illness is underestimated.
- This mental illness is exaggerated.
- This mental illness is discounted.
- This mental illness is easily resolved.
- This mental illness is downplayed.
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- People with this mental illness are disregarded.
- People with this mental illness are motivated.
- People with this mental illness are talented.
- People with this mental illness are capable.
- People with this mental illness are proactive.
- People with this mental illness are friendly.
- People with this mental illness are honest.
- People with this mental illness are brilliant.
- People with this mental illness are skilled.
- People with this mental illness are accomplished.
- People with this mental illness are creative.
- People with this mental illness are clever.
- People with this mental illness are masterly.
- People with this mental illness are pampered.
- People with this mental illness are favored.

**How willing would you be to take the following actions?**

**(adapted from Penn et al., 1994 and Kalyanaraman, Penn, Ivory, and Judge, 2010)**

**[social distance]**

*(definitely unwilling) 1....2....3....4....5....6....7 (definitely willing)*

- How would you feel about renting a room in your home to someone with OCD/ADHD?
- How about as a worker on the same job as someone with OCD/ADHD?
- How would you feel having someone with OCD/ADHD as a neighbor?
- How about as the caretaker of your children for a couple of hours?
- How about having your children marry someone with OCD/ADHD?
- How would you feel about introducing an individual with OCD/ADHD to a young woman/man you are friendly with?
- How would you feel about recommending someone with OCD/ADHD for a job working for a friend of yours?

**Please rate your agreement with the following statements:**

**(adapted from Batson et al., 1997; Kalyanaraman, Penn, Ivory, and Judge, 2010; Major, 2011)**

**[attitudes]**

*(strongly disagree) 1....2....3....4....5....6....7 (strongly agree)*

- For most people with OCD/ADHD, it is their own fault that they have it.
- Most people with OCD/ADHD could have avoided contracting the disease.
- How much personally do you care about the plight of people with OCD/ADHD?
- Our society does not do enough to help people with OCD/ADHD.
- Compared with other social problems we face today (e.g., crime, education, drugs, homelessness, environmental protection, energy conservation), helping people with OCD/ADHD is very important.



- Our society should do more to protect the welfare of people with OCD/ADHD.
- If people work hard, they can overcome OCD/ADHD.
- Any person who is willing to work hard has a good chance of succeeding.

**Please indicate your willingness to engage in the following activities:**

**(adapted from Oliver, Dillard, Bae, & Tamul, 2012)**

**[behavioral intentions]**

*(definitely unwilling) 1....2....3....4....5....6....7 (definitely willing)*

- Donate money to an organization that provides support to those with OCD/ADHD.
- Sign a petition supporting more funding for OCD/ADHD research and treatment.
- Discuss the issue of OCD/ADHD with family and friends.
- Share a link to a story about OCD/ADHD with others.

## RACHELLE L. PAVELKO

### EDUCATION

- *Indiana University*, Ph.D. in Mass Communication (May, 2017)
- *University of Memphis*, M.A. in Journalism (2011)
- *Ohio Northern University*, B.A. in Journalism, Minor in Art with an option in Graphic Design (2009)

### DISSERTATION

“Beyond stigma: Developing and testing a scale of perceived trivialization of mental illness”

- *Brief description:* Mental illnesses such as obsessive-compulsive disorder (OCD) do not fit the traditional mold of stigmatized portrayals, as they are often trivialized in the media by mocking it, making it seem less severe, or by misrepresenting the nature of the disease. This dissertation aims to create and validate a scale to measure perceived mental illness trivialization and then apply it in an experimental manipulation of mediated trivialization. An exploratory factor analysis and confirmatory factor analysis will be employed in the first two studies. The third study will be an experiment testing the effects of different types of user-generated social media content on social media users’ disease perceptions.

### RESEARCH AREAS

- Health Communication
- Media Effects
- Entertainment Media
- Digital Media

### TEACHING AREAS

- Writing and Editing
- Digital Reporting
- Social Media
- Graphic Design

### AWARDS AND HONORS

- Indiana University Graduate Student Judge for the Peabody Awards in Electronic Journalism (Spring 2017)
- Indiana University College of Arts and Sciences Travel Award (Spring 2015)
- Indiana University Media School Graduate Assistantship (2013 – 2016)
- Indiana University Media School Fellowship (2013 – 2016)
- University of Memphis Journalism Department Outstanding Graduate Student of the Year (2011 – 2012)
- University of Memphis Kappa Tau Alpha Inductee (2011)
- University of Memphis Journalism Department Olin Morris Graduate Fellowship (2010 – 2011)
- Ohio Northern University Sigma Tau Delta Inductee (2008)
- Ohio Northern University Dean’s Scholarship (2005)

## **PUBLICATIONS**

### **Refereed Publications**

**Pavelko, R. L.**, Myrick, J. G., Verghese, R. S., & Hester, J. B. (in press). Public reactions to celebrity cancer disclosures via social media: Implications for campaign message design and strategy. *Health Education Journal*.

**Pavelko, R. L.**, & Myrick, J. G. (2015). That's so OCD: The effects of disease trivialization via social media on user perceptions and impression formation. *Computers in Human Behavior*, 49, 251-258. doi: 10.1016/j.chb.2015.02.061

**Pavelko, R. L.**, & Myrick, J. G. (2015). Tweeting and trivializing: How the trivialization of obsessive-compulsive disorder via social media impacts user perceptions, emotions, and behaviors. *Imagination, Cognition & Personality*. Advanced online publication. doi:10.1177/0276236615598957

Read-Bullock, G., **Pavelko, R. L.**, Hwang, H. (in press). Social and evolutionary explanations for face-ism: Facial prominence in female academic profile pictures. *Communication Research Reports*.

Yang, J., **Pavelko, R. L.**, & Utt, S. (2015). College students use videos more than photo slideshows. *Newspaper Research Journal*, 36(2). doi: 10.1177/0739532915587299

### **Invited Publications**

**Pavelko, R. L.**, & Grabe, M. E. (forthcoming). Sampling, content analysis. In J. Matthes (Ed.), *International Encyclopedia of Communication Research Methods*. Hoboken, NJ: Wiley Publishing.

### **Publications Under Review**

Myrick, J. G., & **Pavelko, R. L.** Acknowledging the silly alongside the severe: Mediated portrayals of mental illness as trivializing versus stigmatizing.

van Driel, I. I., Myrick, J. G., **Pavelko, R. L.**, Grabe, M. E., Hendriks Vettehen, P. G. J., Kleemans, M., & Schaap, G. The entanglement of sex, culture, and media in genderizing disease.

### **Selected Works in Progress**

**Pavelko, R. L.**, & Myrick, J. G. *OCD on Girls: The Impact of a non-sanitized portrayal of mental illness on audience perceptions*.

## REFEREED CONFERENCE PRESENTATIONS

- Myrick, J. G., & **Pavelko, R. L.** (2016, August). *Acknowledging the silly alongside the severe: Mediated portrayals of mental illness as Trivializing Versus Stigmatizing*. Poster presented to the Mass Communication and Society Division at the Annual Meeting of the Association for Education in Journalism and Mass Communication, Minneapolis, Minnesota.
- Myrick, J. G., **Pavelko, R. L.**, Verghese, R., & Hester, J. B. (2015, August). *A study of audience reactions to a celebrity's announcement of cancer via social media: The interplay of audience involvement, emotion, and gender*. Poster presented to the Communication Technology Division at the Annual Meeting of the Association for Education in Journalism and Mass Communication, San Francisco, California.
- van Driel, I. I., Myrick, J. G., **Pavelko, R. L.**, Grabe, M. E., Hendriks Vettehen, P. G. J., Kleemans, M., & Schaap, G. (2015, August). *The entanglement of sex, culture, and media in genderizing disease*. Paper presented to the Communicating Science, Health, Environment, and Risk Division at the Annual Meeting of the Association for Education in Journalism and Mass Communication, San Francisco, California.
- Pavelko, R. L.**, & Myrick, J. G. (2015, May). *Tweeting and trivializing: How the trivialization of obsessive-compulsive disorder via social media impacts user perceptions, emotions, and behaviors*. Paper presented to the Health Communication Division at the Annual Meeting of the International Communication Association, San Juan, Puerto Rico.
- Pavelko, R. L.**, & Myrick, J. G. (2015, May). *That's so OCD: The effects of disease trivialization via social media on user perceptions and impression formation*. Paper presented to the Communication and Technology Division at the Annual Meeting of the International Communication Association, San Juan, Puerto Rico.
- van Driel, I. I., Myrick, J. G., **Pavelko, R. L.**, & Grabe, M. E. (2015, May). *The role of media use in genderizing disease*. Paper presented to the Health Communication Division at the Annual Meeting of the International Communication Association, San Juan, Puerto Rico.
- Pavelko, R. L.**, & Myrick, J. G. (2014, October). *OCD on Girls: The Impact of a Non-sanitized Portrayal of Mental Illness on Audience Perceptions*. Paper presented to the Health Division at the Annual Meeting of the Midwest Popular Culture Association, Indianapolis, Indiana.
- Yang, J., **Pavelko, R. L.**, & Utt, S. (2012, August). *Multimedia use on news websites: A look at photo slideshows and videos through the uses and gratifications theory*. Poster presented to the Visual Communications Division at the Annual Meeting of the Association for Education in Journalism and Mass Communication, Chicago, Illinois.
- Pavelko, R. L.** (2011, August). *Anorexia on the Internet: A look at the pro-ana community through feminist, social comparison, and uses and gratifications theories*. Paper presented to the Commission on the Status of Women Division at the Annual Meeting of

the Association for Education in Journalism and Mass Communication, St. Louis, Missouri.

## **INVITED PRESENTATIONS**

Pavelko, R. L. (2017, February). Mental illness and media effects. Presentation to Dr. Jessica Gall Myrick's MSCH-S 315 Media Processes and Effects undergraduate class at Indiana University, Bloomington, Indiana.

Pavelko, R. L. (2017, February). Gender differences in mental health. Presentation to Ashley Kraus's MSCH-C 216 Social Science Perspectives of Gender and Media undergraduate class at Indiana University, Bloomington, Indiana.

Pavelko, R. L. (2016, November). "That's so OCD": The trivialization of mental illness in media. Presentation to the National Alliance on Mental Illness (NAMI) Greater Bloomington Area (GBA) Annual Board Meeting.

Pavelko, R. L. (2016, November). Mental health campaigns. Presentation to Dr. Jessica Gall Myrick's MSCH-S 414 Public Communication Campaigns undergraduate class at Indiana University, Bloomington, Indiana.

Pavelko, R. L. (2016, November). Gender, mental illness, and the media. Presentation to Ashley Kraus's MSCH-C 216 Social Science Perspectives of Gender and Media undergraduate class at Indiana University, Bloomington, Indiana.

Pavelko, R. L. (2015, October). Mediated relationships and audience involvement. Presentation to Dr. Jessica Gall Myrick's MSCH-S 315 Media Processes and Effects undergraduate class at Indiana University, Bloomington, Indiana.

Pavelko, R. L. (2015, April). *That's So OCD: The effects of disease trivialization via social media on user perceptions and impression formation*. Presentation to IU Telecommunications Brown Bag Seminar at Indiana University, Bloomington, Indiana.

Pavelko, R. L. (2014, November). *Pop Culture and portrayals of mental health*. Presentation to Dr. Jessica Gall Myrick's JOUR-J 110 Foundations of Journalism and Mass Communication undergraduate class at Indiana University, Bloomington, Indiana.

Pavelko, R. L. (2014, September). *Photoshop basics and infographic creation*. Presentation to Rosemary Pennington's JOUR-J 303 Online Journalism undergraduate class at Indiana University, Bloomington, Indiana.

Pavelko, R. L. (2014, April). *OCD on Girls: The Impact of a Non-sanitized Portrayal of Mental Illness on Audience Perceptions*. Presentation to the IU School of Journalism Research Colloquium at Indiana University, Bloomington, Indiana.

## **TEACHING**

### **Instructor of Record MSCH-C 225: Writing, Reporting, and Editing**

*Indiana University, Spring 2016*

- Formerly J200, I served as Instructor of Record for C225, a skill-based course that covered introductory news writing, reporting, and editing concepts with 18 undergraduates. In addition to twice-weekly class sessions, I held regular individual conferences to assist with story idea development, crafting strategies for cultivating sources, and coaching them through the writing and editing processes. Design and visual elements were also vital components to this course, as students were taught and then practiced how to create infographics and employ images to aid their reporting.

### **Associate Instructor, MSCH-C 101: Media**

*Indiana University, Fall 2015*

- I served as an Associate Instructor for Dr. Andrew Weaver within the newly formed IU Media School's inaugural course. A total of 225 students were enrolled in the lecture, and I was responsible for three discussion sections, each with 25 students, that met weekly. C101 is an introduction to the various avenues within the media field, with topics ranging from journalism to game design.

### **Instructor of Record, JOUR-J 200: Writing, Reporting, and Editing**

*Indiana University, Spring 2015*

- I served as Instructor of Record for this skill-based course that covered the foundational components of writing hard and feature news stories, how to best conduct professional interviews, and the editing skills necessary to publish. With a course of 18 students, I was able to work individually with students and provide detailed feedback on story assignments.

### **Teaching Assistant, JOUR 3421: Public Relations Writing**

*University of Memphis, Fall 2010*

- As an intensive skill-based course, I aided Professor Beena White with the grading of various press releases, providing feedback for the students on their grammar, press release structure, and writing style.

### **Teaching Assistant, JOUR 4440: Public Relations Campaigns**

*University of Memphis, Spring 2010*

- I created test and quiz materials for Professor Beena White to use in this senior-level campaigns course. I also assisted students with their semester-long campaign projects as they worked with real clients in the Memphis community to meet their public relations needs.

## **SERVICE**

Ad Hoc Review, *New Media and Society* (January, 2017)

Ad Hoc Review, *Transactions on Systems, Man, and Cybernetics: Systems* (October, 2016)

Ad Hoc Reviewer, *New Media and Society* (May, 2016)

Classroom Technology Overview Skills Presentation, The Media School at Indiana University Orientation Week (2015).

Greeter, Indiana University Media School Alumni Reception at the Annual Meeting of the Association for Education in Journalism and Mass Communication (AEJMC), San Francisco (2015).

Cross-Unit Graduate Student Committee Member, The Media School at Indiana University Merger (2014).

Contributing Author, IU Telecommunications “gradspace@IU” blog (2014).

## **PROFESSIONAL EXPERIENCE**

### ***Communications***

- Writer and Graphic Designer, Indiana University Media School Communications Office (May 2016 – present)
- Social Media Instructor, Indiana University Youth Leadership Program with Burma, Bloomington, Ind. (April 2016)
- Marketing and Social Media Communications Manager, Donald P. Pipino Company, Youngstown, Ohio (2012-2013)
- Corporate Communications Intern, Sedgwick CMS, Memphis, Tenn. (2011-2012)
- Writer, *Meeman Matters Journalism Alumni Newsletter*, University of Memphis in Memphis, Tenn. (2011)

### ***Writing and Reporting***

- General Assignment Reporter, Intern, *The Lima News*, Lima, Ohio (2008)
- General Assignment Reporter, Intern, *The Ada Herald*, Ada, Ohio (2006-2007)
- Writer, Reporter, and Section Editor, *The Northern Review*, Ohio Northern University in Ada, Ohio (2005-2009)

### ***Website and Graphic Design***

- Contract Website Designer, Clarendale Cakes, Boardman, Ohio (2015)
- Contract Website Designer, The Surgical Hospital at Southwoods, Boardman, Ohio (2013)
- Contract Website Designer, Poland Presbyterian Church, Poland, Ohio (2013)
- Graphic Designer, *Meeman Matters Journalism Alumni Newsletter*, University of Memphis in Memphis, Tenn. (2011)
- Advertisement and Classifieds Graphic Designer, *The Daily Helmsman*, University of Memphis in Memphis, Tenn. (2010-2011)

### ***Academic Publishing***

- Assistant Editor, *Black Camera: An International Film Journal* (July 2016 – present)

## **MEDIA COVERAGE OF RESEARCH**

Allen, N. (2015). That's so OCD: Let's talk about how we talk about mental health problems. *Lifespan Development Group, Inc.* Retrieved from <http://lifespandevlopment.ca/?p=81>

Jarrett, C. (2015). Give up the #OCD jokes on Twitter, they won't make you popular. *Research Digest: Blogging on Brain and Behaviour*. Retrieved from <http://digest.bps.org.uk/2015/05/give-up-ocd-jokes-on-twitter-they-wont.html>

Shoemaker, N. (2015). Joking About OCD on Twitter Won't Gain You Any Followers. *Big Think*. Retrieved from <http://bigthink.com/ideafeed/joking-about-ocd-on-twitter-wont-gain-you-any-followers>

## **AFFILIATIONS**

- Member, Association for Education in Journalism and Mass Communication (AEJMC)
- Member, International Communication Association (ICA)
- Member, National Alliance on Mental Illness (NAMI)