

Constructing Illness: How Society Effects Physical and Mental Illness

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ABSTRACT

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The social construction of illness has become one of the central themes in medical sociology over the last fifty years. This field of research focuses on how society and an individual's knowledge and experiences shape the way they understand and view certain physical and mental illnesses. Prior research has found that many people hold stigmatized views towards individuals who suffer from mental illnesses and tend to feel more sympathetic and supportive towards those who have physical illnesses. These previous studies have found that gender, age, race, education and socioeconomic status are factors that influence how a person perceives physical and mental illnesses. Through a survey and data analysis, this current study found partial support that these factors influenced an individual's perceptions towards illness. Specifically, gender, age, and socioeconomic status were found to be the most important indicators of how an individual perceived illness.

Based on these findings, there should be more education given to students and the general public about mental illnesses. Although the majority of participants admitted to knowing someone with a mental illness, many of them still held prejudicial views towards people with these illnesses. Increasing education about mental illnesses has been shown as an effective tool to reduce prejudicial views. This step should be taken to alleviate the stigma surrounding mental illnesses.

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Chapter One: Literature Review

1.1 What is social construction of illness?

At one time or another everyone will experience illness in their life; whether it be acute or chronic, physical or mental. When a person gets sick they follow certain patterns that are not unique to the individual, but are instead ingrained into our society. These experiences contrast with the medical model, which assumes that diseases are universal and do not vary between time and place, and instead they emphasize how the meaning and experience of illness is shaped by cultural and social systems (Conrad and Barker, 2010). Over the years these patterns of behavior have come to be known as the social construction of illness, one of the central themes in medical sociology.

The social construction of illness is made up of a “set of understandings, relationships, and actions that are shaped by diverse kinds of knowledge, experience, and power relations, and that are constantly in flux,” (Brown, 1995, 37). It can be argued that every illness is socially constructed because a person’s own feelings and experiences guide how they perceive various illnesses. The social construction occurs because, “the concepts we invent to account for disease come to shape not only the observations we make and the remedies we prescribe, but the very manifestations of disease itself,” (Eisenberg, 1988, 1). There is no set social construction for each illness; instead every individual brings in their own knowledge and experiences to construct what an illnesses is. Therefore, illness does not shape society, but instead society shapes illness and the illness experience. A doctor, shaped by society, determines whether a patient’s attributes qualify as sick or healthy and

then labels them as such, creating a change in the patient's behavior and adding "a social state to the biophysical state by assigning the meaning of illness to a disease," (Freidson, 1970, 223).

The social construction of illness helps shape how we think about both physical and mental illness and is responsible for creating a division between how we perceive these two different types of illness. In attempting to bridge the gap between physical and mental illnesses, this thesis studies the social construction of illness through a survey to gauge how different demographics effect how people think about different illnesses. This chapter will provide an overview of how medical sociology treats the social construction of illness for physical and mental illnesses and how stigma—a mark of shame-- differs between the two. Additionally, this chapter will discuss how a doctor's diagnosis of a patient is socially constructed, including controversial illnesses and diagnoses.

The Medical Sociology Prospective of Physical Illness

Since the creation of sociology, theorists have examined the role of medicine and its effect in society, but it was not until the 1960s that sociologists truly began to examine the social construction of illness. During the 1960s symbolic interactionism and phenomenology were two overlapping intellectual trends in sociology that contributed to a social constructionist approach to illness (Conrad and Barker, 2010, 68). According to symbolic interaction theory, individuals participate in the construction of their own social worlds by acting in specific ways based on the meaning they have for something due to their ongoing social interaction (Blumer, 1969). These tenets lent themselves perfectly to

social construction because they explored how an ill person's social interactions could affect the way they view themselves and thus alter how they behave, based on their illness. Subsequently, phenomenology, the study of the structures of consciousness as experienced from the first-person point of view, helped scholars understand the role of an individual in constructing their own illness. This area of study showcased how individuals "make sense of their illness, how they cope with physical and social restrictions, and how they deflect self-erosion in the face of those restrictions (Conrad and Barker, 2010, 68). The combination of these two theories allowed sociologists to view illness in a different light and paved the way for future social constructionists.

The majority of research on the social construction of illness occurred after the 1960s, but one of the most important theories related to this topic was created a decade earlier when Talcott Parsons introduced the Sick Role. Parson's theory is comprised of four parts and is a "set of institutionalized expectations and the corresponding sentiments and sanctions," that are given to and expected from people who become sick (Parsons, 1951, 293). The first part of the Sick Role is the "exemption from normal social role responsibilities, which of course is relative to the nature and severity of the illness," (Parsons, 1951, 294). This exemption must be made after a doctor diagnosis a patient as being ill, a person cannot just decide that they are ill as an excuse to exempt themselves from social roles. The level of exemption also varies based on the severity of the patient's illness.

The second component is that "the sick person cannot be expected by "pulling himself together" to get well by an act of decision or will," (Parsons, 1951, 294). The sick person is not responsible for their condition, so to get better their ailment must be fixed,

not their attitude or personal attributes (Parsons, 1951, 294). The realization that it is not the sick person's fault makes it easier for them to seek and accept help from others without fear of stigmatization.

The third and fourth elements of the Sick Role are closely related. The third element is the realization that being sick is undesirable and that the sick person has the obligation to want to get well and become healthy again. The fourth element is that the patient is obligated to "seek *technically competent* help, namely, in the most usual case, that of a physician and to *cooperate* with him in the process of trying to get well," (Parsons, 1951, 294).

In his explanation, Parsons observed several patterns about the sick role and its relation to the overall social structure (Parsons, 1951, 295). The first pattern is that illness is a contingent role that anyone in society can come into, regardless of their socioeconomic status, race, gender, etc. Second, illness is temporary; if the sick person seeks and follows treatment from a physician they will get better. Third, sickness is universalistic; it has objective criteria in determining who gets sick, how they get sick, and what they get sick with. Finally, Parson's claims that illness is functionally specific "confined to the sphere of health, and particular "complaints" and disabilities within that sphere," (Parsons, 1951, 294-295).

One of Parson's major assumptions about illness is that it is a form of deviant behavior. In *Social Systems*, Parsons defines deviance as a "tendency to result either in change in the state of the interactive system, or in re-equilibration by counteracting forces, the latter being the mechanisms of social control," (Parsons, 1951, 170). Sickness is a form of deviant behavior because the Sick Role requires a role shift that falls out of the normal

behavior of everyday living, therefore disrupting the equilibrium of society. Since illness is considered its own statistical status class, the sick role prohibits the sick from forming a collective solidarity with the non-sick that surround them due to the clear differences between the two groups (Parsons, 1951). Because illness is a form of deviance it becomes the patient's responsibility to rely on different forms of social control to help reintegrate them into the social system. One of these is the doctor, the person that serves as the "gatekeeper" between illness and health, who provides the only form of treatment that allows the patient to escape from their deviant behavior and return to normalcy (Parsons, 1951).

The social construct of what illness, and therefore the Sick Role, means to us individually guides us in our day-to-day lives. Someone who often gets sick may have more sympathy for a sick coworker than the person who has not gotten sick in years. Our experience with the Sick Role dictates how we act to our friends and family when we are sick. It has created a whole market of herbal supplements and vitamins for us to take so that we do not get sick, as well as a huge pharmaceutical industry to provide us with medicine for when we do eventually fall ill. The Sick Role created a set of guidelines for how we are supposed to behave when we get sick, but it never defined what sick was. Instead it leaves us to decide, based on our own experiences, what it means to be sick.

Criticisms for the Sick Role began in the 1970s during a time when researchers and doctors first began to notice the shift from acute to chronic illnesses. Those who criticize the theory believe that, "the sick role is widely accepted as an historically adequate account of normative expectations around illness in the middle of the 20th century," but the rise of chronic illnesses has produced an area that the Sick Role does not cover (Varul, 2010, 72).

The sick role is temporary and revolves around the aspect that the patient will seek help so that they can get better and return to their normal role in society. However, a chronic illness by definition excludes recovery, meaning that, by Parsons' theory, someone with a chronic illness would not be able to integrate back into society (Varul, 2010).

Instead, those with chronic illnesses become unwillingly granted dual citizenship to the worlds of illness and health; forced to balance between the Sick Role and the role of everyday life (Varul, 2010). The Sick Role has taught society that when you are sick your main priority is to dedicate all of your time to getting better, however this is not always the case for chronic illness sufferers. When having a chronic illness is a day-to-day struggle individuals must learn to make choices that best align with how they want to live their life. This could either mean purposely not complying with doctor's orders because a medication causes unwanted side-effects, or maybe having to take a few days off work because of a symptom flare-up. These dual citizens must strike a balance between both places they are a part of, even though society does not always understand why. Society has constructed what they think of illness and its patients and proceeds within this set of norms without asking questions until a patient deviates from the norm and challenges society.

Medical Sociology's Perspective of Mental Illness

It is very important to note that mental illnesses are legitimate disorders and saying that they are socially constructed does not mean that they are fictitious, nor does it suggest that they would stop existing if we ceased to recognize them. Calling mental illness socially constructed refers to the social structure and societal views of the illnesses apart from the biophysical causes of the illness. In *The Social Construction of Mental Illness*, L. Eisenberg

argues that the social construction occurs because, “the concepts we invent to account for disease come to shape not only the observations we make and the remedies we prescribe, but the very manifestations of disease itself,” (Eisenberg, 1988, 1). Compared to the scholarly work done on the social construction of physical illness, the work done on the social construction of mental illness is minimal. This is partially due to the immense stigma and fear that have surrounded mental illness for many years; people who suffered from mental illness were labeled as “mad” or “hysterical” and were not viewed as important or worth studying. The bulk of research that has been done on the social construction of mental illness began in the later half of the twentieth century, after the deinstitutionalization movement and when the efforts to reduce the stigma of mental illness began.

Due to the lack of early scholarly work on mental illness, many sociologists trying to understand its social construction relied on non-medical sociological theories to explain mental illness. One of these most cited theories is the Thomas Theorem, introduced by W.I Thomas in his book *The Child in America: Behavior Problems and Programs*. The Thomas Theorem states that, “If men define situations as real, they are real in their consequences,” (Thomas, 1928, 572). In other words, the way that a person interprets a situation causes them to behave or act in a specific way in response to it. W.I Thomas was not a medical sociologist nor did he create the Thomas Theorem with the specific purpose of helping it explain illness. However, his theorem can help us understand how one’s own beliefs about a specific illness can influence their behaviors. Our individual beliefs and knowledge about mental illness then become real in their consequences in how doctors treat their patients, the patients react to their illness, and how society views people with mental illness.

In July 1986, Juan Gonzalez, a homeless man living in New York City killed two people and wounded nine others with a sword onboard a Staten Island ferry boat. The heinous crime became sensationalized when it was reported that Gonzalez had been seen in a psychiatric emergency room only days before his spree. By the end of July, in the weeks following the attack, the number of patients seen each week in psychiatric emergency rooms increased from 1100 to 1500, and the number of patients admitted led to so much overflow that patients had to be transferred by bus to state mental hospitals. The crisis continued into the spring and resulted in psychiatric patients being held in unused medical and surgical beds and the state requesting private psychiatric treatment centers to expand their facilities to keep up with the demand (Eisenberg, 1988).

Statistically, killings by mentally ill persons are uncommon and constitute a very small number of murders. In the ten months after the ferry attack there were no similar killings, however, there were no similar killings in the ten months before the attack either. The increase in psychiatric hospital admissions following the attack did not make New York City any safer, but instead targeted mentally ill persons who were most likely more of a threat to themselves than they ever would be to society (Eisenberg, 1988). Then why did the city go into a panic following the attack? The answer can be explained using the Thomas Theorem. The city's residents, after hearing Gonzalez was mentally ill, became afraid of more attacks by mentally ill persons and acted in response to that belief. In response to the citizens' fears the police began bringing in more emotionally unstable people to the hospital out of fear that their verbal threats could be real. Once these people were brought into the psychiatric emergency room, psychiatrists, afraid of releasing a dangerous person, began to admit more of these patients into the hospital for treatment.

All of these people believed that mentally ill persons were more likely to be dangerous, so it became real in their consequences and they began acting as such (Eisenberg, 1988).

In 1966, Thomas Scheff used the Thomas Theorem to create his groundbreaking labeling theory of mental illness. Scheff's theory is founded on the idea that the symptoms of mental illness can be seen as nonconformity, or deviation from the rules imposed by society. When a person's behavior is disruptive, but there is no obvious label for their deviance, then our society throws them into a residual category. In the past our society labeled this behavior as witchcraft or possession, but today we have created the label of mental illness for these people (Scheff, 1984). Labeling individuals as mentally ill creates an "us" vs "them" mentality and can cause the majority group of "healthy" individuals to shun the minority group of "ill" individuals.

There are two types of labels related to mental illness, official and vernacular. Official labels are those bestowed on someone after they are diagnosed with a mental illness. For example, a person who expresses great feelings of sadness and suicidal thoughts will be diagnosed by their psychiatrist as depressed, and therefore will have that diagnosis as their label. Vernacular labels are much less official, and are often given as shorthand labels without regard to a specific mental illness. Overtime these vernacular labels have become much more popular as part of everyday speech; if someone keeps changing their mind they are "schizophrenic", if someone is briefly upset after a breakup they are "depressed" (Scheff, 1984). Both of these labels are a form of deviance because they violate normal behavior, however they have very different consequences. Vernacular labels are usually used to refer to something that is rather brief and temporary, so the person will be able to go back to their normal role without too many consequences. Official

labels, on the other hand, carry much more serious consequences. These labels, according to Scheff, are “related to stigmatization...since they always carry a heavy weight of moral condemnation,” (Scheff, 1984, 30). With official labels, doctors have decided that something is wrong with someone, so society treats them as such.

One of the most well known examples of the application of Scheff’s theory is a study by psychologist David Rosenhan titled, “Being Sane in Insane Places”. For his study, Rosenhan arranged for 8 “pseudo patients”, himself included, to feign hearing voices in an attempt to gain admission to twelve different psychiatric hospitals across five states in America. Once the pseudo-patients were admitted to the hospital they all returned to “normal” and denied hearing any more voices. During the study, all twelve cases resulted in the pseudo-patient being admitted to a psychiatric hospital and given a diagnosis of a mental illness, eleven of the cases resulted in the diagnoses of schizophrenia and one case was diagnosed as manic-depressive psychosis. Even after the pseudo-patients stopped hearing noises they remained in the hospital for a mean admittance of 19 days, with admissions ranging from 7 to 52 days in the hospital. All twelve of the cases, regardless of primary diagnosis, were discharged with the diagnosis of “schizophrenia in remission” (Scheff, 1984). The purpose of the study was to bring awareness to the dehumanization that occurs in psychiatric hospitals as a result of labeling those with mental illness.

1.2 Stigma

The majority of scholarly work done on the social construction of illness focuses on the stigma associated with both physical and mental illness. Stigma can be defined as a “mark of shame” or an attribute that is discrediting within society, and has been

encountered by humans throughout history (Goffman, 1963). The word comes from the Greek word *stizein* and originally referred to a mark that was placed on slaves to identify them and to indicate that they were humans of lesser value. In modern times the word has come to be interpreted as a mark of social disgrace put upon someone. The process of stigmatization occurs in two elements, the recognition of something that differentiates a person from the rest of society and the devaluation of a person based on this (Arboleda-Florez, 2002).

In their paper, Corrigan and Watson (2002) identified two main types of stigma; public stigma and self-stigma. Public stigma refers to the reaction that the general public has towards someone with either a physical or mental illness; while self-stigma refers to the prejudice that people with an illness turn against themselves, often in response to public-stigma. The authors went on to address three components of stigma: stereotypes, prejudice, and discrimination. Stereotypes are a rather efficient form of knowledge structure that are learned by most members of a social group. They are often comprised of agreed upon notions and allow for individuals to quickly generate beliefs and expectations about individuals who belong to the stereotyped group. Just because a stereotype exists does not mean that everyone who knows about it agrees with it (Corrigan and Watson, 2002). If, however, someone does agree with the stereotype and endorses it, then they are considered to be prejudiced. Being prejudiced is a cognitive response that does not involve any behavioral reaction, but involves strong negative emotional reactions to stereotyped groups. Prejudice often leads to discrimination, which does yield a behavioral response. Discrimination can lead to public stigma if angry prejudice leads to withholding treatment

for an ill person, or it can lead to self-stigma if a person is afraid of being rejected so they put off getting treatment or help (Corrigan and Watson, 2002).

Stigma, both public and self, is socially constructed because people use their own knowledge and opinions about a certain disease to label and ostracize someone for having that illness. It can be argued that the term “disease” itself leads to stigmatization because it initially creates two groups of people, the “healthy” and the “ill”, leading to divisions between those two groups. Stigma can result in social outcast, shame, and labeling amongst other variables.

Stigma and Physical Illness

Often times the conversation around stigma revolves around mental illness, often leaving physical illness out of the discussion. However, stigma exists amongst physical illnesses and is often ignored and overlooked. Stigma towards physical illness prevents those with specific diseases from seeking care, causes fear of those who have the disease, and can cause prejudice amongst entire groups or communities (Perry and Donini-Lenhoff, 2010). Illnesses are usually stigmatized if there is a lack of education surrounding them, if they are perceived as being self-induced, or if the patient does not seem to follow normal patterns of illness-such as violating the Sick Role. The original work on stigma was conducted by Erving Goffman, who identified three types of stigma: physical deformity, character blemishes, and tribal stigma (Goffman, 1963). Goffman’s work was not focused specifically on understanding stigma related to physical illness, but it allows us to understand why we stigmatize certain diseases and not others.

Stigma related to physical deformity occurs when a medical condition causes visible changes in a person's body, the more the condition differs from societal norms the more stigmatized the person will be (Goffman, 1963). Physical deformity can include being in a wheelchair, severe arthritis, or missing an extremity due to a birth defect or injury. Physical deformity stigma can occur in multiple ways, including social avoidance, stereotyping, and discrimination. People with physical deformities may be left out of social activities due to their disability and may find that people avoid them and are less likely to start a conversation with them than before their disability developed. Those with physical deformities are also very likely to be stereotyped as being helpless, unable to make their own decisions, or that they are unable to care for themselves. Many people with physical disabilities are, also, often stereotyped as having an intellectual disability as well. In 1990 the Americans with Disabilities Act was passed, prohibiting discrimination against people with disabilities in all areas of public life, however those with physical deformities still face extreme discrimination. People with physical disabilities may be denied jobs, housing, or other opportunities due to false assumptions about their disability or because of stereotyping (University of Washington, 2016). Physical deformity stigma can also carry over to people with chronic illnesses who require medical aids, such as feeding tubes and colostomy bags. Although these aids are not a deformity per se, they represent an aspect of the person that differs from what is considered normal by society.

People who suffer from either of these types of deformity are often labeled as "damaged goods" or seen as "defective" by society. These labels often result in the person with the deformity attempting to conform to the norms of society by hiding their disability. As a result, some people may try to conceal their disability in public by refusing to use

walkers or canes, or devices like hearing aids. Or, the individual may try to hide their disability by not disclosing it to others in an attempt to avoid stigma (Goffman, 1963). However, often the stigmatization is not within the control of the individual and occurs even when the person tries to “normalize” their disability or deformity (Washington University, 2017).

The second type of stigma identified by Goffman (1963) is character blemish, or stigma associated with diseases that society views as the responsibility of the person who is sick as a result of a character flaw. One of the most stigmatized diseases in this category is HIV/AIDS because it is often associated with sexual promiscuity and IV drug use, leading many people to think that people with HIV/AIDS are responsible for their own illness. The social construction of HIV/AIDS incorporates moral judgments about the circumstances that the person contracted the disease as well as prior beliefs about the groups perceived to be most affected by it--gay men, prostitutes, and drug addicts (Herek, et al, 2003). Specific HIV-related stigma refers to the “shame or disgrace attached to this disease and expressed through negative social reactions towards people infected with the virus,” (Darlington and Hutson, 2016, 12).

Both men and women with HIV/AIDS are affected by stigma, but women are more susceptible to it because of the moral stigma associated between sexual promiscuity and infection. There is, however, stigma associated with straight men that contract HIV/AIDS because they are afraid that if they disclose their status they will be assumed to be gay, damaging their masculinity. There are four stigmatized attitudes that have been identified towards women with HIV, 1) physical distancing for fear of contagion, often due to lack of education surrounding HIV transmission, 2) overgeneralized stereotypes as women as

“bad” or blameworthy for their disease, 3) social discomfort when women discuss their diagnosis, and 4) pity for the women due to her disease (Darlington and Hutson, 2016, 14). Women who decide to get pregnant while HIV positive can face stigma as well because people think that they are going to transfer their disease to their child, despite the development of medication that can reduce the risk of transmission to the fetus (Darlington and Hutson, 2016).

Stigma can lead to women being defined by their disease and not by their accomplishments or other positive characteristics. Public stigma can then lead women to internalize the stigma, causing depression, loss of self-worth, and isolation (Darlington and Hutson, 2016). Most people are afraid of being stigmatized if they themselves were to test positive for HIV and this fear also plays a role in people’s choice to be tested for the virus, with studies finding that more than one third of people use stigma as a factor in deciding if they should get tested or not (Herek, et al, 2003). If someone decides to get tested and they test positive they are likely to avoid seeking treatment or to adhere to drug therapies due to fear of stigma and having to disclose their diagnosis. Failure to seek treatment is most noticeable in minority populations that hold negative views towards HIV/AIDS, and men in these groups, regardless of sexual orientation, are less likely to seek out prevention services and treatment (Pettit, 2008).

The final type of stigma that Goffman (1963) identified is tribal stigma, stigma of diseases that are often associated with a particular race or religious group. Historically, throughout the 20th century African-Americans experienced stigma based on the presumption of their character and identity. In the early 20th century, when infectious diseases were rampant, African Americans were often blamed as being responsible for

carrying these and infecting white Americans (Wailoo, 2006). During this time Hookworm was prevalent in the South and medical researchers blamed blacks for bringing it to America and spreading it due their unsanitary living conditions. During this time many African Americans worked as the “help” in white homes, causing many whites to fear that they were going to get infected, so they further distanced themselves from them (Wailoo, 2006). The stigma was reinforced during World War II by the American Red Cross’s practice of racial segregation of blood plasma, due to the belief that white soldiers could become infected with diseases if they received “Negro blood”. The media latched onto these beliefs and several cartoons were created that depicted the inferiority of ‘Negro blood’ and supported the notion that group inferiority was a component of disease (Wailoo, 2006).

Tribal stigma is not unique to the African American community, and has existed as a form of stigma since before America was a country. One of the first examples of tribal stigma dates back to the 1300s when European Jews were blamed for creating the Black Death by poisoning wells that Christians used. As a result thousands of European Jews were murdered and entire Jewish communities were wiped out (Perry and Donini-Lenhoff, 2010). Tribal stigma still continues today, although in less obvious forms. Often times if an immigrant brings a disease to the United States, anti-immigrant groups use it as fuel to stigmatize all immigrants from that country and blame them for infecting American citizens. It is most notably seen in how society names flu epidemics across the world; Spanish flu, Asian flu, Hong Kong flu, and Mexican flu (the name some people have given to Swine flu). Naming the disease after the country it originated in creates the belief that a specific population is responsible for the flu and can lead to stigma towards people from that country (Perry and Donini-Lenhoff, 2010).

Stigma and Mental Illness

The majority of work compiled on stigma deals with the stigma associated with mental illness, which remain the most stigmatized illnesses in society. It has been found that people with severe mental illness are stigmatized as much as drug addicts, prostitutes, and criminals (Corrigan and Watson, 2002). Although there have been movements to help end the stigma associated with mental illness, many people still hold prejudiced views towards those with mental illness. Unlike with a physiological illness, people with mental illness are often perceived as being responsible for their conditions and therefore do not deserve the same type of help and care (Corrigan and Watson, 2002). The general public is also less likely to hire people who are mentally ill, to lease apartments to them, or to willingly interact with them (Corrigan et al, 2001, 953).

In the mental illness sphere, eating disorders, bulimia nervosa and anorexia nervosa, are the most stigmatized group of disorders. During one study, one third of the participants believed that people with eating disorders could “pull themselves together” and that they “have only themselves to blame” for their conditions (McLean and Roehrig, 2010, 671). People tend to believe that those with eating disorders are more responsible for their illness than those with other mental illnesses, such as schizophrenia, because they view binging, purging, and restriction as being self-inflicted behaviors. Different levels of stigma even exist between the different eating disorders; with bulimia having a larger stigma associated with it than with anorexia, due to the act of purging that occurs with bulimia. In one study, participants sat closer to people who they believed were anorexic and sat further away from those who they believed to be bulimic (McLean and Roehrig, 2010).

The media is also responsible for reinforcing the stigma of mental illnesses in three ways. First, they are portrayed as “homicidal maniacs who need to be feared,” (Corrigan and Watson, 2002, 17). In the United States, one fifth of prime time programming depicts some aspect of mental illness, but instead of using these characters as educational tools they use them to feed into the violent stereotype of mental illness. On TV one fourth of mentally ill characters kill someone, and half of these characters are shown as hurting people (Staurt, 2006). However, in real life, if all mental illness could be cured tomorrow, there would only be a 4% reduction of the violent crime rate (Swartz and Bhattacharya, 2017).

The second media representation is that “they have childlike perceptions of the world that should be marveled” (Corrigan and Watson, 2002, 17). Often times in the media people with mental illness are shown as having developmental delays as a result of their condition, or their mental illness is seen as a quirk that is used as comic relief during the show. The problem with this perception is that it does not give an accurate portrayal of the symptoms of mental illness and it downplays the seriousness of mental illness. The final representation is that people with mental illness are viewed as being “responsible for their illness because they have weak character,” (Corrigan and Watson, 2002,17). In the Netflix show *13 Reasons Why*, based on a book by the same name, the main character Hannah Baker commits suicide as a result from cruelty and a lack of understanding from her peers. Suicide is often the result of people with severe mental illness who believe that their life is spiraling downward and that it will never get better. Many people believe that suicide is a cry for attention from someone, although people have many reasons for taking their life, wanting attention is usually not why they do it. In *13 Reasons Why*, the show reinforces the

belief that Hannah is responsible for her underlying mental illness that led to her decision to commit suicide. The media has the power to help normalize those with mental illness, but instead it uses antiquated stereotypes to feed into the stigma of mental illnesses.

Stigma towards people with mental illness is a pervasive part of society, but there are several things that can help to reduce it. Strategies for reducing stigma have been grouped into three distinct approaches: protest, education, and contact (Corrigan and Watson, 2002). Evidence suggests that protest campaigns have been effective in getting stigmatizing portrayals and images of mental illness withdrawn from society. Groups have protested inaccurate and negative portrayals of mental illness as a way to challenge the stigmas that these views represent. By protesting, groups send two distinct messages; to the media they signal that it is time to stop reporting and using inaccurate representations of people with mental illness, and to the public they say that it is time for them to stop believing the negative stereotypes that the media reinforces (Corrigan and Watson, 2002).

The second approach to reduce stigma is to educate the public about mental illness. Education allows people to learn more about mental illnesses and causes them to make more informed decisions about their opinions regarding the mentally ill. Research has shown that people who have a better understanding about mental illness are less likely to endorse stigma and discrimination, and that it leads to improved attitudes about the mentally ill (Corrigan and Watson, 2002). Stigma often arises from the fear of the unknown or ignorance, so by educating people about the causes of mental illness they become less judgmental of those who suffer from them. Education also helps people understand that there are biological problems that lead to mental illness, which aids in erasing the belief that people are responsible for their mental illness.

The final approach to reducing stigma is to have people come into contact with persons suffering from mental illness. For years people who had mental illness were shunned from society and locked away in institutions, so the majority of the population had no contact with them and no way to understand what they were going through. Today, people with mental illness are living in the community, holding down jobs, and are no different than their “healthy” neighbors. Research has found an inverse relationship between people who have contact with a person with mental illness and endorsing the stigma related to mental illness. People who are familiar with someone who has a mental illness are less likely to think that they are dangerous, less likely to be afraid of them, and are more likely to willingly interact with them (Corrigan et al, 2001). The only problem with this approach is that, due to stigma, many people with mental illness choose not to disclose their mental illness diagnosis to others; so many people who come into contact with people who have mental illness are unaware of the person’s diagnosis.

A study by Herman (1993) studied 146 nonchronic ex-psychiatric patients after they were discharged from the hospital and started to reintegrate back into society. After discharge, many of the patients realized that they now possessed a stigmatized attribute and began to develop strategies to help manage their new stigma. Nearly 80% of the patients engaged in some type of information control in regards to their mental illness and past hospitalization; mainly through selective concealment, therapeutic disclosure, and preventive disclosure (Herman, 1993).

Selective concealment can be defined as the “selective withholding or disclosure of information about the self perceived as discreditable in cases where secrecy is the major stratagem for handling information about an attribute,” (Herman, 1993, 307). Often times

the patients' selective behavior was related to how close the person was to them, with patients being more open to disclosing to family members than to acquaintances. Those who decided to use selective concealment were also likely to test what reactions their disclosure received, with patients revealing to disclose more if they tended to get positive feedback from people (Herman, 1993). Selective concealment also occurred through patients withdrawing. If patients were in situations where they believed the topic of their mental illness or hospitalization would come up, 2/3rds of patients said they would avoid these situations. Patients reported that they were unsure of how much they were supposed to disclose, so instead of disclosing anything they would avoid talking at all (Herman, 1993).

The second type of stigma management technique that Herman noted was therapeutic disclosure, "the selective disclosure of a discreditable attribute to certain "trusted," "empathetic" supportive others in an effort to renegotiate person perceptions of the stigma of "failing"" (Herman, 1993, 311). Patients often participated in this with family members or close friends as a way to get their experiences off of their chests. It also allowed for them to discuss their own fear of stigma and speak with people about their own views and perceptions of mental illness (Herman, 1993).

The final type of stigma management technique that was noted is preventative disclosure, "the selective disclosure to "normals" of a discreditable attribute in an effort to influence others' actions and/or perceptions about the ex patient or about mental illness in general," (Herman, 1993, 313). Often, patients engaged in this if they feared that their hospitalization could lead to future rejection by "normal" individuals. Patients believed that disclosing this information to individuals first would be beneficial in the long run or that it

could work as a way to testing out the boundaries of a relationship. Examples of preventative disclosure include medical disclaimers, deception/coaching, education, and normalization (Herman, 1993). It was found that patients who employed one or more of these stigma management tools were able to lessen or mitigate the stigma that came with being an ex-psychiatric patient. In order to avoid the stigma of being a psychiatric patient, many of the patients clung onto their new identity as being an ex-psychiatric patient and turned that into a positive identity as a way to show that they were no longer defined by their mental illness (Herman, 1993).

1.3 Diagnosis

Doctors spend years in medical school, where they spend hours pouring over textbooks full of diseases and illness and how to diagnosis and treat them, then they complete residency and fellowships where they are able to put their skills to test. When a doctor diagnoses a patient they do not simply take into consideration the patient's list of symptoms, but also the diagnoses of their previous patients who had similar symptoms, as well as their own opinions and biases. This social construction explains why two doctors can examine a patient and each come to the decision of a different diagnosis for the patient.

One reason that medical sociology greatly emphasizes the diagnostic process is due to its distinction of disease versus illness. Disease refers to the more biomedical phenomenon of an illness, including how social factors--race, class, gender-- affect the production of disease. Illness, on the other hand, is much more subjective and explains how the social factors that explain disease lead to varying experiences and perceptions about one's own health status. The illness experience varies greatly between people who have the

same disease and effects how the individual treats and responds to their symptoms (Brown, 1995). Different perceptions of the same illness can make it much harder for a doctor to diagnosis patients and give them the appropriate treatment. A patient's demographics, such as gender or race, can also affect how a patient is diagnosed with an illness.

In recent years pharmaceutical companies have been one of the groups most responsible for shaping how we understand and diagnosis mental illnesses. In 1997 the United States, following the lead of New Zealand, became the second country to allow the broadcasting of direct to consumer (DTC) pharmaceutical advertisements, forever changing how we think about diagnosing illness. Before the FDA allowed DTC marketing, drug companies had to make consumers aware of all of the risks and side effects related to their product. When the FDA approved this type of marketing, they allowed companies to reduce the amount of information provided, allowing for the public to hear about new diseases and treatments without being informed about all of the negative side effects (Conrad and Slodden, 2013). With DTC marketing, drug companies have billions of dollars to make by being actively involved in "sponsoring" illnesses and promoting their treatment to doctors and consumers. According to Moynihan, Heath, and Henry (2002), pharmaceutical companies are replacing the social construction of illness with the corporate construction of illness.

As a result of doctors and pharmaceutical companies, the diagnostic process shapes the way that society perceives sick individuals. A medical condition, physical or mental, is not simply a diagnosis but is also made up of our opinions and knowledge of that illness. When your neighbor tells you that they are diagnosed with cancer, before they even finish

explaining, your mind starts creating connections between that person and your previous experience with people who have had cancer. The social construction of illness means that, in some cases, society can have more of a say in our determining perceptions of illness, and determining the illness, than the diagnosis does.

Diagnosis and Physical Illness

Diagnosis is the central pillar of medicine and represents the “time and location where medical professionals and other parties determine the existence and legitimacy of a condition,” (Brown, 1995, 38). Differential diagnosis is one of the most rewarded skills for medical students and residents, carrying over into practice when patients seek certain doctors out due to their ability to diagnosis complex cases. Diagnosing a patient is like a puzzle; a doctor must analyze a complex list of symptoms that may be unorganized, unconnected, or confusing and fit them together to arrive at the diagnosis of a specific illness. On the outside, it appears that the diagnostic process should be one of the most medicalized aspects of the illness experience, but instead it is one of the most socially constructed parts. When a doctor is diagnosing a patient they do not only rely on symptoms and X-Rays, but also factor in their own biases and beliefs about illness and take into account societal pressures from pharmaceutical companies.

Society often puts doctors on a pedestal and holds them to a high standard, but often forgets that they are humans and, like all humans, are subject to biases that can affect their decisions. One of the most studied areas of bias in medicine is that of gender. Medicine has a very obvious gender bias towards men; the majority of patients in clinical studies are men and most of the guidelines for diagnosing ailments are based off their experiences. In

drug and medical device trials it is not required that companies report the findings of men and women differently, which can lead to large discrepancies and leaves out effects that are only experienced by one gender (Candy, 2017). The lack of studies and information about how disorders present in women can lead to under-diagnosis and misdiagnosis of certain conditions.

One of the diseases that has the most gendered bias is heart disease, the number one killer of both men and women. However, it has long been viewed as a “man’s disease” resulting from lack of exercise and a love of fatty foods. It has only been in recent years that the medical field has understood the impact of heart disease on women. Every year over 15,000 women under the age of 55 die in the United States from heart disease (Lichtmen, et al, 2015). Women in this age group have twice the risk of dying during hospitalization for a heart attack than men in the same age group (Lichtmen, et al, 2015). After hospitalization women still remain at a greater risk for death (Lichtmen, et al, 2015). However, heart disease in women is often under-diagnosed and misdiagnosed.

Women often do not present with the stereotypical symptoms associated with heart attacks and tend to experience atypical symptoms--nausea, dizziness, and fatigue-- that do not follow the “textbook” definition of what a heart attack should be (Dusenbery, 2015). This is partly due to the fact that most of the research done on heart attacks was conducted on men. A review of the American Heart Association’s 2007 prevention guidelines for women found that in the studies cited, women only made up 30% of the subjects in the studies and only one of the studies contained only female subjects. It also found that only one third of the studies broke down their results by gender (Dusenbery, 2015). As a result women do not know that their symptoms could be the result of a heart attack and doctors

are less likely to assume that it is a heart attack. A study conducted through the Yale School of Public Health (2015) examined the experience of women aged 30-55 who had heart attacks. The women did not believe that their underlying symptoms were the result of heart disease because they differed from their perceptions of heart attacks based off the media's portrayal of them. Women who thought they could be having a heart attack worried about what would happen if they went to the Emergency Room and they did not have a heart attack, many feared being labeled as a hypochondriac (Lichtman, et al, 2015).

Lichtman, et al. (2015) also found that healthcare professionals--primary care physicians and emergency room practitioners-- were not consistently responsive to the women who reported heart attack symptoms, regardless of if they were typical or atypical. One woman reported calling her primary care physician and telling him that she was experiencing chest pains and numbness, only to have him schedule her for an appointment in five days. Another woman went to the ER and was told that her ECG and chest CAT scan were all negative; it was not until she made a follow-up appointment that she found out that she had a heart attack (Lichtman, et al, 2015). Studies have also shown that if a woman reports heart attack symptoms along with symptoms of stress, doctors are more likely to blame her problems as being psychological. As a result women receive slower access to cardiac testing, with average wait time for an ECG being seven minutes longer than the average wait time for a man (Dusenbery, 2015).

Gender bias can also affect men if they suffer from a stereotypical "women's disease". One third of all hip fractures occur in men, but because it is believed that Osteoporosis is a women's disease there is inadequate research conducted on men and the

guidelines regarding normal bone density levels in men are very vague (Candy, 2017).

Doctors often prescribe medicine or supplements to their female patients to prevent them from developing Osteoporosis, but such regimens are very rare in men (Candy, 2017). Men who suffer from breast cancer also experience gender bias when being diagnosed. Male breast cancer is rare, effecting less than one percent of all breast cancer cases annually, but is under-diagnosed (Susan G. Komen Foundation, 2017). Men are less likely to report symptoms than women, and when they do report symptoms there are often delays in the diagnostic process because many practitioners lack understanding of the disorder in men. As a result men are often diagnosed with breast cancer at a later stage than most women are (Susan G. Komen Foundation, 2017).

Societal beliefs about stereotypical “male” and “female” illnesses can have devastating effects. Since there is not as much research done towards the opposite gender in these disorders knowledge, understanding, and general awareness is lacking; affecting practitioners’ ability to properly assess and diagnosis patients who appear with symptoms that are atypical from what they are used to. This then affects the patients who may suffer due to a misdiagnosis, which can have disastrous results.

A doctor can also let their personal beliefs interfere with the diagnostic process, especially in the instance of contested illnesses. Almost all diseases can be medically proven to exist, whether by a simple blood test or throat swab or a more complex MRI or CAT scan, however there are some illnesses that cannot be explained through medicine. These illnesses are known as contested illnesses and are categorized by 1) symptoms that are broad and nonspecific, and differ in type and severity, 2) the pathogenic mechanisms have not been identified, 3) their causation is disputed as to whether is it psychological,

biological, or both, and 4) their treatment involves competing therapies (Swoboda, 2008). Approximately ten million Americans suffer from these illnesses, a number that has been on the rise over the past two decades (Barker, 2011).

Two relatively well known contested illnesses are Myalgic Encephalomyelitis Chronic Fatigue Syndrome (ME/CFS) and Fibromyalgia. ME/CFS is characterized by extreme fatigue, cognitive dysfunction, sleep abnormalities and autonomic problems and it is estimated that 836,000 to 2.5 million Americans suffer from it. Some scientists believe that ME/CFS is a biological illness, while other scientists argue that is a psychological illness, an immune disorder, or a neurological disorder. Since there is no definitive information about the syndrome, it is not included in two thirds of medical school curriculum and is left out of the majority of medical textbooks. As a result, many clinicians may misunderstand the disease or lack knowledge about how to diagnosis it, leading to a delayed diagnosis or ignoring a patient's complaints completely (Institute of Medicine, 2015).

Fibromyalgia is a pain disorder of unknown origins that is characterized by widespread pain, fatigue, sleep irregularities, and mood disorders. It is estimated that 2-5% of the U.S population suffers from this condition, and women are nine times more than men to be diagnosed. In 1990 the American College of Rheumatology created formal criteria for diagnosing the disorder; to be diagnosed a patient must report widespread pain for at least three months and must have tenderness in at least eleven of eighteen tender points in the body (Barker, 2011). Pain is subjective, so what may be considered painful for one person may not be painful for someone else, but when diagnosing Fibromyalgia it is the only criteria that doctors can use. Due to the vagueness of the diagnostic criteria, many doctors

doubt the “realness” of the condition. As a result many doctors do not diagnosis the condition, or due to the femininity of the disorder label female patients as having a psychological problem due to emotional problems and irrationality (Barker, 2011).

Unlike most medical conditions, when a doctor is faced with a contested illness they cannot rely on diagnostic tools to provide them with supplemental information, so they must rely on their own beliefs and knowledge to determine what is wrong with the patient. Many sufferers go through countless doctors and misdiagnoses before they find a doctor who believes their symptoms and diagnoses them with a contested illness. A study of 459 doctors found that doctors were more likely to diagnosis contested illnesses if they believed that there was sufficient evidence in determining the legitimacy of contested illnesses and to be more familiar with the diagnostic protocols than doctors who did not diagnose contested illnesses (Swoboda, 2008). Those who suffer from contested illnesses know that their symptoms are real, but whether or not they are diagnosed depends on whether their doctor believes that the illness is legitimate.

A doctor used to be the only person responsible for diagnosing a patient, but recently pharmaceutical companies have played a dominant role in shaping the diagnostic process. Pharmaceutical companies shape the diagnostic process by engaging in disease mongering, trying to convince people that they are sick so they will buy and use their products. There is a lot of money on the line for pharmaceutical companies, so they have begun to broaden the range of treatable illnesses to get in on the profit. Disease mongering can include turning ordinary problems into ones that require medical attention, turning mild symptoms into more serious ones, treating person problems as medical ones, turning risks into diseases, and framing prevalence estimates to make the problem seem much

larger than it is (Moynihan, et al, 2002). DTC marketing has allowed for disease mongering to skyrocket. For a company to sell a drug they first need to sell the disease to both patients and doctors. There is no pharmaceutical company that has been more effective at doing this than Pfizer, the creator of Viagra.

The Viagra that the world knows was discovered accidentally in 1992 when Pfizer was looking to create a drug to help with heart problems, but instead researchers found that the drug had an interesting side effect. The researchers abandoned their current trial and started a new trial with twelve patients who had been diagnosed with impotence. The studies found that Viagra statistically improved their condition and in March of 1998 it became the first drug ever approved for this disorder (Benavides, et al, 2004). Pfizer was faced with a problem, how were they supposed to sell a drug that was only going to help a small portion of men. Their first step was to “change” the name of the disorder that their pill was supposed to help. Pfizer’s marketing team believed that the term impotence was embarrassing and that men would not want to talk about it, so they began promoting the term “erectile dysfunction” which could be simplified to ED. The goal of this was to make sure that their drug could be marketed to any man who could experience a “dysfunction” instead of a select niche (Petersen, 2009).

Before the drug even hit the market, Pfizer spent millions on celebrity endorsements to sell their drug. The first spokesman for the company was Bob Dole, a former presidential candidate, who said that he began experiencing ED following prostate cancer surgery. The campaign was more successful than anyone could have imagined; one week after the drug had been launched 4.3 million prescriptions had been written and by the end of 1998 7 million prescriptions had been written in forty countries. In 1988 Viagra

sales had reached \$788 million, a number that few drugs have been able to achieve in history (Benavides, et al, 2004). Sales of Viagra were great, but Pfizer knew they could appeal to a, mostly untapped, younger audience. In 2002 Pfizer hired Rafael Palmerio, a thirty seven year old first baseman for the Texas Rangers, to talk about how Viagra helped enhance performance on the field and in the bedroom (Peterson, 2009). The campaign had nothing to do with treating a medical condition, instead treating it like a social annoyance that could easily be fixed.

Increasing performance, instead of fixing a serious medical condition, soon became a central pillar for Viagra. The company's website states that Viagra is not just for people who suffer from chronic ED, but can be used by any man who experiences problems only once in a while. Marketing Viagra as a lifestyle drug, a drug that treats non-serious and everyday conditions, allowed them to take the stigma away and make it more socially acceptable for younger men to use. Pfizer denies that they are specifically targeting younger men with their drug, but between 1998 and 2002 the group showing the largest increase in Viagra use was men between the ages of 18 and 45, of these men only one third had a possible medical reason for using the drug (Lexchin, 2006).

Ultimately, doctors have the final say in diagnosing a patient with ED and writing a prescription for Viagra, but they are greatly affected by Pfizer. All of the commercials for Viagra end with, "Ask your doctor about Viagra," and the drug's website is full of tips for how to bring up ED with your doctor. Men are taking the company up on this offer and doctors, wanting to make their patients happy are obliging. Pfizer also pays doctors to act as "consultants" by delivering lectures and appearing in the media to promote Viagra and

ED, driving up drug sales (Lexchin, 2006). Today 23 million men have been prescribed Viagra, and the way that society thinks about ED has forever been changed (Pfizer, 2017).

Diagnosis and Mental Illness

Diagnosing a mental illness is very different than diagnosing a physical illness. When a doctor is diagnosing a patient with a mental illness they cannot send them off to radiology for an MRI or down to the lab for a blood draw to find out what their ailment is, because no such technology exists yet for diagnosing mental illness. The only tool that a doctor has for diagnosing a mental illness is the *Diagnostic and Statistical Manual of Mental Disorders* (DSM) and their own previous experience of patients with mental illness. The DSM, now in its 5th edition, was created in 1952 and has since become the official “bible” for designating mental disorders across the United States and on a growing basis internationally. The DSM contains 297 diagnoses of disorders and syndromes and provides detailed and specific criteria for diagnosing doctors and psychiatrists to follow. It has since become such an ingrained part of our society that insurance companies require a DSM diagnosis before they will reimburse for it (Aboraya, 2007).

The DSM is one of the most important components in shaping how we think about mental illness. The addition and removal of diseases and disorders from the manual shapes how we view them. While some activists try to get disorders added to the DSM, as a way of validating the legitimacy of a mental illness, other groups try to get their condition removed from it. Up until 1973 homosexuality was a disorder listed in the DSM, due to the belief that homosexuality arose from a defect or a developmental delay in individuals. Over the years gay activists protested their label in the DSM and said that being in the manual

brought more stigma upon them. As a result, in 1973 the American Psychiatric Association (APA) voted to removing homosexuality from the DSM (Drescher, 2015).

Since the third edition of the DSM in the 1980s, the purpose of the manual has been to improve the reliability of clinical diagnoses. For the most part the DSM has succeeded at this, but only when a clinician was able to spend an extended amount of time with a patient, around 2 to 3 hours, going over the DSM criteria and using a structured interview to properly diagnosis them. Most clinicians do not have this amount of time to spend with their patients, which can lead to unreliable diagnoses. Robert Spitzer, the former head of the APA Task Force and director of the DSM-III and DSM-IV, even admitted that the desired reliability among clinicians had not been obtained (Aboraya, 2007). The lack of reliability in the DSM leads to serious consequences that result in certain populations being over, or under diagnosed with certain mental illnesses.

Mental illness is color-blind; it attacks individuals regardless of the color of their skin, yet African Americans tend to be especially prone to being over diagnosed with certain mental illnesses and under diagnosed with others. African Americans and Caucasians self-report depressive symptoms of similar severity, but depressed African Americans are more likely to receive a diagnosis of a schizophrenia-spectrum disorder more frequently than Caucasians or Latinos. While African Americans are more likely to receive a diagnosis on the psychotic disorder spectrum while in the hospital, Caucasians were more likely to be diagnosed with mood disorders such as depression and bipolar disorder (Payne, 2012). Studies have found that these diagnostic race differences disappear when clinicians are able to spend adequate time assessing patients using the semi-structured instruments and DSM criteria (Neighbors, et al, 2003).

There are two hypotheses that may explain the racial differences in diagnosing mental illness: a clinician's racial and ethnic biases and cultural differences in clinical presentation. Clinician bias assumes that "African Americans and Caucasians exhibit similar depressive symptoms but diagnosticians mistakenly judge similar symptoms differently because of personal biases, prejudices, or cultural ignorance," (Payne, 2012,163). These biases range from intentional prejudice to lack of knowledge about the culture. African Americans who present symptoms of depression are often diagnosed with schizophrenia by white clinicians, while a white person who presents with the same symptoms is more likely to be given a diagnosis of depression. It's also been found that when diagnosing an African American patient, white clinicians are more likely to disproportionately rely on the patient's behavior and their family's behavior than they would with a white patient (Carrington, 2006).

Cultural differences can also lead to under-diagnoses of depressive disorders in African Americans. This hypothesis assumes that "African American and Caucasian clients have different modes of expressing psychopathology, but diagnosticians are unaware or insensitive to such cultural differences," (Payne, 2012, 163). African Americans and Caucasians present with similarities in depressive mood symptoms, but have significant differences in how they express somatic symptoms, physical functioning, health perceptions, and psychosocial distress (Payne, 2012). Psychiatrists have also found that African Americans have more severe symptoms related to insomnia, psychomotor impairment, loss of appetite, weight loss, and hypochondria. Caucasians, on the other hand, have reported higher levels of pessimism, self-blame, suicidal ideation, and dissatisfaction with their counterparts (Payne, 2012). A doctor who is aware of these culture differences

may look at an African American patient and assume that the patient is more likely to have a psychotic disorder, ignoring symptoms that could lead to a diagnosis of a depressive disorder.

It has also been found that African American women are especially affected by this cultural bias. For most of history, African American women have been underrepresented, or completely left out of, medical studies on depression (Carrington, 2006). As a result, when clinicians are looking to diagnosis a woman with depression, most of the data that they are informed by only applies to the experiences of white women with depression. This is problematic because African American women with depression often appear with more somatic disorders than their white counterparts. It's been found that African American women are more likely to experience isolated sleep paralyses, "a state experienced while awakening or falling asleep and characterized by an inability to move," (Carrington, 2006, 783), as well as sudden collapses and spells of dizziness. Because these are not "typical" symptoms of depression, African American women may be less likely to receive a diagnosis of depression and more likely to wait longer until they are properly diagnosed (Carrington, 2006).

Disparities among gender are not just limited to African American women. Although, neither gender experiences significantly worse mental health, men and women experience very different types of mental health problems. Women are more likely to experience internalizing disorders such as depression, anxiety, and phobias; while men more often experience externalizing disorders such as antisocial personality disorders and substance abuse disorders (Rosenfield and Mouzon, 2013). Due to gender roles, women are more likely to seek treatment for a mental illness or show more visible signs that result in a

loved one getting them treatment. Men, on the other hand, are taught that they need to keep their feelings inward and not talk about them. If a man does choose to seek help, problems with misdiagnosis and under-diagnosis arise when men present with symptoms that are associated with stereotypically “female” disorders.

The stereotypical belief is that eating disorders only occur in women who are wealthy, white, and in their teens or twenties. However, eating disorders do not discriminate, men and women from every race and nationality can be susceptible to an eating disorder. Males account for 25% of all individuals who suffer from anorexia and bulimia, and they engage in subclinical eating disorder behaviors (binging, purging, and restricting) just as often as females with eating disorders do (NEDA, 2017). Men, however, are more likely to avoid treatment due to the stigma surrounding their disorder. It has been said that men can face a double-stigma for their eating disorders. First, because eating disorders are often viewed as women’s problems they can face stigma for having a disorder characterized as “feminine” or “gay”. Then, they can also face stigma for seeking psychological help, because it is seen as out of character for a man to do (NEDA, 2017).

If a man chooses to seek help for his condition he may not leave with a diagnosis. Raevuori (2014) found that although men with Eating Disorders have the same symptoms as women, males often present differently than women do. When diagnosing anorexia in women, one of the criteria is that they must fall within a certain BMI, but often times men present with higher minimum and maximum BMIs than women do (Raevuori, 2014). As a result a man may be very sick, but because his BMI is in a healthy range he may not be diagnosed. The majority of men who present with eating disorder symptoms do not fall into the distinct category of bulimia or anorexia, but instead meet the criteria for “other

specified eating and feeding disorder” (OSFED). A diagnosis of OSFED is given when not all of the criteria for bulimia or anorexia are met, this diagnoses is given to approximately 83% of all men who have an eating disorder (Raevuori, 2014). Clinicians who are not well informed about eating disorders may ignore a man’s symptoms because he does not fit all of the criteria for a “typical” eating disorder (Raevuori, 2014).

Because psychiatry relies so heavily on self-reporting, it is very easy for a clinician to bring their own biases into the diagnostic process and produce a misdiagnosis that can severely affect the patients’ life. An improper diagnosis can have serious effects on a patient and can lead to “increasing attrition and drop-out from therapy, decreasing patient satisfaction, exacerbating chronicity, and creating harm by leading to inappropriate interventions and referrals for unsuitable psychotropic drugs,” (Payne, 2012, 162).

A doctor’s own beliefs about mental illness can also factor into how they perceive and diagnosis mental illness in their patients. Several studies have been conducted to identify health providers’ views on mental illness, but the results have been inconclusive. Some of the studies have shown that providers hold more positive views about mental health than the general public does, while other studies have shown that health providers have more negative views than the general public (Stefanovics, Ofori-Atta,et al, 2016). If a doctor believes that mental illness is not a serious problem, then they will be less likely to provide a diagnosis and treatment for a patient.

A doctor’s stigmatized attitude towards mental illness can also be shaped by their local culture. A study was conducted that analyzed “beliefs about the manifestation, causes and treatment of mental illness and attitudes toward people with mental illness among health professionals from five countries: the United States, Brazil, Ghana, Nigeria, and

China,” (Stefanovics, Ofori-Atta, et al, 2016, 63). The results of the study showed that the United States sample scored the highest in the progressive direction on all four of the factors and that the Chinese sample scored the lowest on three out of four factors. The United States’ high scores may be a reflection of the strong movement to reduce stigma for mental health. On the other hand, the scores from the Chinese sample reflect the fact that it is a country where people with mental illness are highly stigmatized (Stefanovics, Ofori-Atta, et al, 2016). The implications of these findings may mean that a doctor from China may be less likely to diagnosis and treat a mental illness than a doctor from the United States may be. The doctor’s belief about mental illness determines how they are going to act to and treat their patient.

The one group that may have the largest effect on shaping the diagnostic process is not doctors, but is pharmaceutical companies. Pharmaceutical companies make their money by selling their product, but according to Conrad and Slodden (2013) they first need to sell consumers on a disorder that needs to be treated. In 1999, SmithKline, now GlaxoSmithKline, produced the drug Paxil, which became the first Selective Serotonin Reuptake Inhibitor (SSRI) approved to treat Social Anxiety Disorder (SAD) (Conrad and Slodden, 2013). Before the company even had FDA approval for their drug, they took advantage of the FDA’s new DTC marketing laws and created an unprecedented pre-launch campaign. SAD was a relatively rare disorder before Paxil was created, so SmithKline hired a public relations firm to launch a “public awareness” campaign to turn SAD into an illness that affects millions. The PR firm’s job was to make shy, introverted people question their mental health so that they would begin using the new drug (Conrad and Slodden, 2013).

In early 1999, billboards, bus station stands, and magazine pages were covered with advertisements that read, “ ‘Imagine Being Allergic To People?’ or ‘You Blush, You Sweat, Shake—Even Find it Hard to Breathe...That’s What Social Anxiety Feels Like,’” (Conrad and Slodden, 2013, 67). The goal of the campaign was to bring awareness to SAD and it did just that, hundreds of magazines, newspapers, and TV segments ran segments about SAD. The FDA approved Paxil in late 1999, and by that time America had already been sold on both SAD and Paxil, leading to Paxil becoming one of the best selling pharmaceuticals of all time. Less than two years after Paxil’s FDA approval, SmithKline was making over \$2 billion in the USA alone (Conrad and Slodden, 2013). Today, SmithKline’s dream of creating a disease that affected millions has come true, with 15 million adults in the United States, or roughly 7% of the country’s population, suffering from the disorder (ADAA, 2017).

In more recent history a similar pharmaceutical response has been seen with Attention Deficit Hyperactivity Disorder (ADHD). Beginning in 1968, the DSM-II identified “hyperkinetic reaction” as a childhood disorder that was characterized by “overactivity, restlessness, distractibility, and short attention span...” (Conrad and Potter, 2000). The condition was importantly defined by distractibility and a short attention span, which soon became the most important criteria for diagnosing the condition in children. By the 1970s this was the most common childhood psychiatric problem with 3-5% of elementary school students suffering from it (Conrad and Potter, 2000).

In 1987, following years of studies, “hyperkinetic reaction” was renamed as ADHD and the criterion for what entailed a diagnosis was broadened. As a result, 50% more children received an ADHD diagnoses and now adults were able to receive a diagnosis as well (Conrad and Potter, 2000). In 1994, the DSM-IV reflecting the growing trend of adults

being diagnosed with ADHD by making reference to the fact that symptoms need not only occur at school, but could occur in a work environment. Since the DSM began including adult ADHD as a psychiatric condition, more adults have begun to retrospectively self-diagnose themselves with the condition. In 1994, a psychiatrist wrote to one of his colleagues, "Adult ADHD has now become the foremost self-diagnosed condition in my practice. I fear that the condition allows a patient to find a biological cause that is not always reasonable, for job failure, divorce, poor motivation, lack of success, and chronic depression" (Conrad and Potter, 2000, 570).

Today 15% of high-school aged children are diagnosed with ADHD, and the number of children on medication for the disorder has risen to 3.5 million, up from 600,000 since 1990 (Schwarz, 2013). Currently, the majority of researchers agree that ADHD is a legitimate disease and that proper treatment can allow children to regain their proper function, but many advocates argue that the drive to treat every person with ADHD symptoms has led to too many people with very mild symptoms being diagnosed. Dr. Keith Conners, one of the leaders of the movement to legitimize ADHD, now calls the rates of diagnosis a "national disaster of dangerous proportions" (Schwarz, 2013). Those who question the legitimacy of ADHD have labeled it as "the medicalization of the underperformer," (Conrad, 573). Often times those who are underperforming and believe that they should be doing better seek out a diagnosis as a way to find out why they aren't performing better. An ADHD diagnosis provides a medical reason for why they are underperforming and shifts the blame away from their self (Conrad and Potter, 2000).

Between 2002 and 2012, the sales of prescription stimulants for ADHD tripled from \$2 billion to \$8 billion. ADHD is now the second most frequent long-term diagnosis made in

children, only second behind asthma. The rise in diagnosis rates and prescriptions for stimulants coincides with a two-decade campaign by pharmaceutical companies to publicize the disorder and promote the medication to doctors and patients. Pharmaceutical companies have now stretched the criteria of diagnosis to include normal behavior such as carelessness and impatience (Schwarz, 2013). Pharmaceutical companies advertise their ADHD drugs in major magazines and on TV, often making false claims which has resulted in every major ADHD manufacturer being cited by the FDA for false or misleading advertising since 2000. The pharmaceutical companies are even affecting the doctors who ultimately diagnosis the disease they're peddling. Doctors who are paid by pharmaceutical companies publish papers that encourage doctors to continue diagnosing ADHD and putting them on a medication regiment (Schwarz, 2013).

Chapter Two: Methodology

2.1 Research Question

The purpose of this study is to explore people's perceptions towards physical and mental illnesses. I chose this topic for my thesis because I suffer from both a chronic physical illness as well as a mental illness; as a result I have noticed that people respond differently to me when I disclose these illnesses. I have always been curious in what leads to people's different responses to physical and mental illnesses and what can be done to bridge the gap between them.

This study attempts to gain a better understanding of how society shapes the way that individuals perceive these two types of illnesses. Moreover, it examines whether gender, age, and socioeconomic status impact the way individuals view these illnesses. By exploring issues related to the social construction of illness from a quantitative approach there is a greater opportunity to examine how policies can be created to educate the public about specific conditions and provide greater support for individuals suffering from stigmatized illnesses and disorders.

2.2 Populations and Participation

Upon receiving permission from the Human Subjects Committee at Union College, HSRC #17071, an anonymous online survey to 1,000 randomly selected Union College students whose emails were provided by the Office of the Registrar. Students were emailed an invitation to participate in the survey and a link to the survey via Google Forms. A

sample of the survey can be viewed in the Appendix under Appendix I. The links to the surveys were also posted on social media and recruited other participants via snowball sampling. Participation in the survey was voluntary and anonymous, and participants' email addresses were not recorded or connected to their survey responses. Everyone who participated in my study was then asked if they would like to be entered into a drawing for a cash prize. Those who chose to be entered into the raffle provided either their Union mailbox number or an address where they would like to receive the prize if they won; assuring that confidentiality was maintained. Only the author of this thesis had access to the address information. Once the study was completed and the drawing was conducted, address information was deleted.

Before taking the survey, all participants were asked if they consented to participating in my study. If participants consented to the survey, they responded by selecting a button on the Google Form. Participants were told that the study would take between 15 and 20 minutes and that their responses would be anonymous, so that it would be impossible to link their name to their answers. Participants were also informed about the types of questions they would be asked and told that they had the right to withdraw, without penalty, from the study at anytime. Following the survey, participants were taken to a second page where they were debriefed about the full goal of the survey.

2.3 Research Questions and Analysis

Four different surveys were created to collect the data and gauge people's opinions and knowledge about physical and mental illnesses. The surveys were broken into three sections: demographics, vignettes, and a multiple-choice section. The purpose of creating

four different surveys was so that there would be an even distribution of race and gender depicted in the vignettes section to see if people's opinions would vary based on the "patient's" race and gender (White/Nonwhite, Male/Female).

The demographics section asked participants about their gender, race, socioeconomic status, and education level. The vignettes section contained descriptions of three different illnesses-ADHD, Anorexia Nervosa, and Asthma. In this section, participants were asked to diagnosis the patient and then answer questions about the patient and their diagnosis. Examples of these questions included:

"How serious would you consider the problem to be?"

"What should be done to help them?"

"In your opinion, how responsible is the patient for his/her problems?"

"In your opinion, how likely is it that their situation MIGHT be caused by a genetic or inherited problem?"

The final section was comprised of 17 multiple-choice questions, which were used to ask about the participants' overall health, their personal experience with physical and mental illnesses, and their beliefs about these two illnesses. Examples of these questions include:

"How would you rate your overall health?"

"Do you have health insurance that covers out patient and inpatient/residential services for mental illness?"

"If a person contracts HIV/AIDS do you think they are responsible for their own illness?"

“Which disease do you believe has a higher mortality rate, cancer (all forms) or eating disorders (anorexia nervosa and bulimia nervosa)?”

Google Forms compiled all of the responses into an Excel spreadsheet in Google Drive. The demographic questions were chosen on the basis that the questions would yield some variation in response rates based on the participants’ gender, race, socioeconomic status, and education level. While analyzing the data, cross-tabulations were run on SPSS for these factors to determine the extent to which these demographics affected people’s perceptions about physical and mental illnesses.

In this study, the quantitative data provides extensive information on the participants’ demographics, perceptions, and experiences with both physical and mental illnesses. The qualitative data provides insight into how participants thought about certain illnesses and what the concept of illness meant to them. Although the majority of this study focuses on quantitative data as a way to better understand what certain groups of people believe about physical and mental illnesses, the qualitative data allows us to explore how participants’ feel about and understand these two illnesses in their own words. The next chapter will examine the results of the survey and explain any statistical significant data that was found. Chapter 4 will then discuss what can explain the data collected in this chapter and offer solutions for what can be done in the future to improve society’s perceptions of physical and mental illnesses.

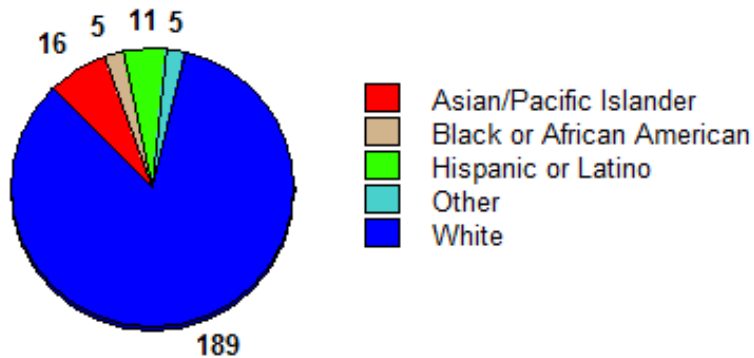
Chapter Three: Quantitative and Qualitative Results

3.1 Demographics

The survey was completed by 226 participants, with a distribution of 161 Union College students and 65 non-Union College participants. The response rate for Union College students was 16.1% (226 participants recruited from a randomly selected sample of college students). It is impossible to calculate a response rate for non-Union College participants because these participants were solicited through social media websites and email. The majority of the participants were female, 77%, and 23% were male. The survey was mainly completed by people aged 18-24, with this age breakdown: 82.3% of participants were 18-24, 1.3% of participants 25-34, 9.7% 45-54, and 6.6% 55 or older. For the purpose of this survey, the participants were combined into two groups based on their age; one group between 18-34 and the other over 35.

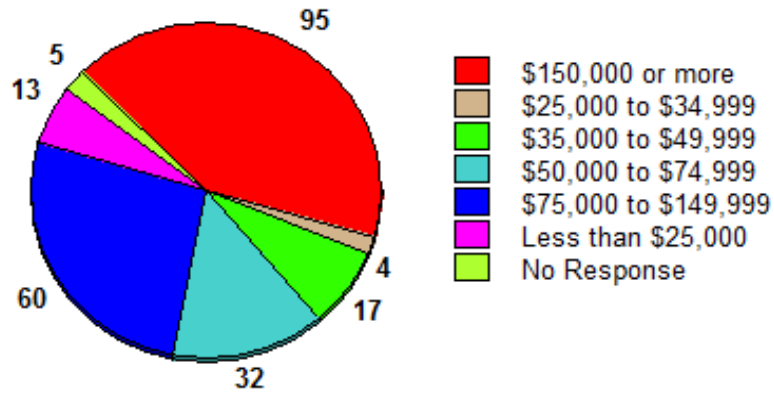
The graph below depicts the ethnicity of the participants. Although the survey was completed by people of all ethnicities, the participants were overwhelmingly white. As a result, it was not statistically significant to run cross-tabulations on this factor to see how race effected the participants' perceptions on physical and mental illnesses.

Ethnicity



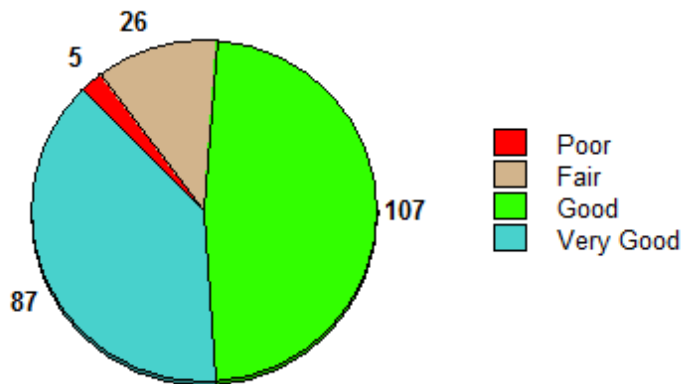
The graph below depicts the yearly household income of the participants. It should be noted that students who do not make an income were told to select the yearly income of their family. This data shows that the distribution of the participants' incomes were widely skewed, but that the average participant, or their family, earned an income of \$75,000 or more a year. For analysis, participants were combined into three groups based on their socioeconomic status. The first group contained participants who earned less than \$50,000 a year, the second group between \$50,000 and \$150,000 a year, and the final group over \$150,000 a year.

Yearly Household Income



The survey also asked participants to rate their overall health; the answers can be viewed in the pie chart below. The average participant rated their health as being good or very good, with very few participants rating their health as being poor.

Overall Health Rating



Everyone who participated in the survey had completed, or was in the process of completing, a Bachelors degree, with 13.3% of participants going on to complete a Masters Degree, a Doctorate, or a Professional Degree. Out of the participants who responded, 100 had majored, or were currently majoring, in a liberal arts field, 85 had majored, or were currently majoring, in a science or engineering field, 13 had majored, or were currently majoring in, in business or finance, and 13 respondents had not yet declared a major. Of the 226 respondents, 179 were currently enrolled in college, either at Union College or another institution. Out of these students, 41 were freshman, 31 sophomores, 35 were juniors, and 72 seniors.

For analysis, the significance level for each variable was set at .05. If a variable was found to have a p-value of less than .05 it was considered to be statistically significant. Any variables that had a p-value of more than .05 were rejected as being statistically insignificant.

3.2 Vignettes

This section focuses on the responses that participants gave to the three vignette questions. These questions provided three different scenarios-one depicting a patient with ADHD, one with anorexia nervosa, and one who suffered from asthma-that the participants were instructed to read and then answer questions based off of the description of the patient. In this section we only ran cross-tabulations to factor for the participants' age and gender.

ADHD

The ADHD/ADD vignette was split up into four different versions, with each survey being assigned a different vignette. One of the surveys depicted the patient as a white female, another depicted the patient as a black female, a third depicted the patient as a white male, and the fourth depicted the patient as a black male; both of the female patients were named Amy and both of the male patients were named Jake. The purpose of making the patient a different race and gender for each vignette was to see if the race and gender of the patient would affect how the participants diagnosed and viewed the patients. In every vignette the participant was given the patient's gender and ethnicity and told that they were 8 years old. They were also told that the patient had been struggling in school and had a hard time concentrating. The patient was easily distractible, was very forgetful, and had a hard time making and keeping friends. For the analysis, we have combined the results from all four surveys.

First, the participants were asked what they believed was wrong with the Amy and Jake. An overwhelming majority believed that they were suffering from ADD/ADHD, with 86.28% of participants believing this was the source of their problems. 3.54% of participants believed the patients were suffering from environmental or social problems, while 2.2% believed that nothing was wrong with them. Another 1.77% believed that Amy and Jake were either suffering from puberty or developmental issues, a psychiatric or personality problem, or they were unsure about what was wrong with them. Additionally, .88% of participants believed that the patients were suffering from depression and 1 participant was unsure about what was wrong with them.

Following this question, the survey contained a qualitative section where the participants were asked why they had picked their diagnosis of the patient. This question was open-ended and allowed the participants to share how they arrived at their specific diagnosis. When the qualitative data was examined it was found that answers could be grouped into four main categories; symptoms, personal experience, blaming outside sources, and believing the patient was too young to label with ADD/ADHD.

The majority of participants used the symptoms of the patient to arrive at their diagnosis, with 97 participants writing the patient's symptoms in their response. Almost all of the participants mentioned the patient's lack of concentration as the reason why they diagnosed them with ADD/ADHD. Referring to the vignette of Amy, one participant wrote, "She has trouble focusing and remembering things which seems like a symptom of ADD/ADHD." While another participant responded, "Being easily distracted and not being able to focus on a task...is at the level where her learning is impacted." Several of the participants mentioned that, although hyperactivity can be a problem with growing children, they thought that the fact that the teacher had become specifically aware of their behavior made it seem like more of a serious problem than just childhood behavior. One participant who was given the vignette of Jake wrote that, "He cannot concentrate and gets easily distracted, while this is a normal problem for little kids, the fact that it is a concern of the teacher leads me to believe that it is occurring more than other students." While another participant, who was also given the Jake vignette, wrote that "His lack of attention/focus," is a sign of ADD/ADHD and that, "...his teachers see loads of kids. If this was a normal developmental phase, they wouldn't be concerned."

The second category was based on participants' personal experiences with ADD/ADHD, with 27 participants identifying that they, or someone close to them, suffered from ADD/ADHD and related to Amy or Jake's experience. One participant wrote that he had ADD and was "very familiar with most of these symptoms as I had a very similar experience in elementary school before I was diagnosed and prescribed medication along with receiving support from the school system to learn how to manage it." Another participant responded that, "I have ADHD so I understand the symptoms and struggles associated and have been tested and prescribed drugs since a young age by a psychiatrist." A third participant was reminded of her sister who "has ADD and the symptoms Amy has sound similar to those of my sister before she was put on medication."

The third most popular response was the belief that there was nothing wrong with either Amy or Jake, but that their problems were caused by outside forces in their lives. Some of the participants believed that the school environment was responsible for Jake's behavior, with one participant writing, "Are his teacher encouraging him to learn, is the environment conducive to his learning?" While another participant blamed the school itself, responding that, "Sometimes school is boring and it's not natural to sit still inside a classroom for many hours a day, especially when you're a kid!" Another participant blamed Amy's parents, saying that, "she is just lazy, side effect of poor parenting and not stressing (the) importance of school."

Many of the participants also believed that Amy and Jake were too young to be diagnosed with ADD/ADHD. One participant wrote, "I believe that these symptoms are common in those who are still developing and do not believe medication is necessary. Society today tries to immediately solve our problems through medications, but I believe

letting your body grow in a natural way is best for us, especially when these symptoms of distractions and fatigue are apart of maturing.” While another participant wrote that, Jake “is also young so that may just (be) his youthful energy without an outlet.” Multiple male participants identified with Jake’s behavior and believed that since they were not diagnosed with any problems at this age, then most likely there was nothing wrong with him. With one male participant writing, “Jake sounds like me as an 8 year old. I had no issues.” It should be noted that the majority of participants who wrote that the patient was too young to be diagnosed were given the vignette of Jake. Most of the participants who were given the vignette depicting Amy did not mention her young age as a factor for diagnosing her with ADD/ADHD.

Following this, the participants were asked how serious they believed the Amy and Jake’s problems to be. The majority of participants believed that their problems were serious, with 53.1% believing their problems were somewhat serious and 4.87% believing them to be very serious. In comparison, 21.68% believed that their problems were not very serious and 1.77% believed that the Amy and Jake’s problems were not at all serious. 12.83% of participants remained neutral when asked this question.

Next, the participants were asked, “...how likely is it that (Amy or Jake’s) condition MIGHT be caused by the way (they) were raised?” In response, most participants did not believe that their upbringing caused their problems, with 39.82% believing that this was not a very likely cause and 8.41% believing that this was not at all the cause of their problems. This compares to 25.66% of participants that believed the patients’ upbringing was somewhat responsible for causing their problems, while 2.65% believed that this was a very likely cause. Another 21.68% of participants remained neutral to this question.

The patients were then asked, “how likely is it that (Amy and Jake’s) situation might be caused by a chemical imbalance in the brain?” The majority of participants believed that this was a likely cause for their problems, with 26.55% believing this was a very likely cause and 55.31% of participants answering that this was a somewhat likely cause. Very few participants believed that a chemical imbalance was not a cause of their problems, with 4.87% believing that this was not a very likely cause and .88% thought that this was not at all a likely cause. 12.39% of participants remained neutral to this question.

Finally participants were asked what they believed should be done to help improve the patients’ situation. Based off of the previous questions, many participants recognized the seriousness of their conditions and believed that they needed medical treatment, with 57.96% answering as such. Many participants also believed that the patients could improve through a change of behavior, with 24.34% selecting this as their answer. Some participants also believed that the Amy and Jake’s condition would improve by itself, with 10.18% of the participants selecting this as their answer. Several participants also believed that they could improve through a change of diet, with 2.65% answering as such, or with strict discipline, with 3.98% selecting this answer.

When factoring for age and gender, no statistical differences were found in between these variables and the participants’ answers. Although it should be noted that men were slightly less likely to believe that the male patients suffered from ADD/ADHD and to believe that their condition was serious. This information will be discussed further in the next chapter.

Anorexia nervosa

In the other two vignettes questions were asked about a male and female who was either black or white, but in this vignette only used male and female patients, purposely neglecting to mention the patients' ethnicity. The purpose of only focusing on the patient's gender was to see if there would be a difference in the participants' diagnoses of the patients based on if it was a male or female who suffered from anorexia nervosa.

In the second and fourth surveys, the patient was depicted as a 22-year old female named Erica. Erica was a college senior who was under extreme stress from working on her senior thesis, looking for jobs for after graduation, and from maintaining her social status and appearance. Erica felt like she had no control over anything in her life, so she began restricting food as a way to gain a sense of control-she now eats less than 600 calories a day. Erica is now 20 pounds underweight, but believes she is overweight and is deathly afraid of gaining weight.

The first and third surveys depicted the patient as a 22- year old male named Eric. The participants were told that Eric was a college senior who struggled with his weight freshman year, and as a result he began exercising everyday and cutting out "unhealthy" foods from his diet. As a result he had lost 45 pounds, but still believed that he was overweight and was terrified that he was going to become "fat".

In the first question, the participants were asked what they thought may be wrong with Erica and Eric. For those who answered the Eric vignette, an overwhelming majority believed that she suffered from anorexia, with 87.82% participants selecting this as their answer. 6.1% of the participants believed that Erica was suffering from environmental or social problems, while 2.6% of participants believed that she was experiencing personality

problems. The Eric vignette revealed some slightly different answers. Although most of the participants believed that Eric was suffering from anorexia, participants in this group diagnosed him with more conditions than Erica was diagnosed with, in the above vignette. Of the participants 78.95% believed that Eric was suffering from anorexia, 21.05% participants believed that he was suffering from another condition or problem. 3.51% of the participants believed that he was suffering from environmental or social factors, 2.63% believed that he was suffering from personality problems, and 1 participant believed that his problems were related to developmental or puberty issues. Another 7.89% of participants believed that he was suffering from an “other” condition that was not listed, while 3.51% were unsure what was wrong with him, and 2.63% of participants believed that there was nothing wrong with Eric.

Following this question, participants were asked to elaborate on why they selected their answer. It was found that answers could be grouped into three specific groups; specific symptoms, personal experience, and believing that the patient’s problems were the result of their environment. The majority of participants, 130 of them, arrived at their diagnosis of Erica and Eric based on the symptoms that were presented in the vignettes. Many of the participants identified with the piece in Erica’s vignette that mentioned she felt a need to have control over her life. One participant wrote, “Her symptoms all point towards anorexia, especially the piece about feeling like she needs to be in control of something in her life because that is a common way anorexia starts.” While another participant responded that Erica “uses food as a way to control her life and chooses to not eat despite being underweight because she doesn't see it and is fixated on controlling something in her life.” Several of the participants also identified Erica and Eric as having

body dysmorphia, a disorder where the patient is obsessed with an imagined, or slight imperfection in their body. One participant who was given the Erica vignette wrote that she arrived at her diagnosis, “because she has been restricting caloric intake over time, to a point very far below her recommended calories. She also has body dysmorphia.” A participant who was given the Eric vignette arrived at a similar conclusion because Eric’s “issues with body dysmorphia that cause him to avoid eating despite his already being underweight.”

While most of the participants given the Eric vignette focused on his weight loss due to a reduction in calories, one participant, who identified as being a Certified Person Trainer, was especially concerned with Eric’s gym routine. He wrote that, “...this gym 'fad' is a serious issue. It's great for everyone to be active, but being healthy vs. active is very different. Anyone who drops weight, continues dropping weight, and then does not adjust their diet to their new weight is someone to look out for.”

Several female participants wrote that they had arrived at their diagnosis of anorexia for either Erica or Eric because they had personally struggled with an eating disorder or had a close friend who had struggled. One of the participants who was given the vignette about Erica related to her struggle, writing “I have EDNOS (Eating Disorder Not Otherwise Specified), and have restricted for extended periods of time and undergone a lot of treatment and this rings true with my experiences.” Another female participant identified with the situations that led to Erica’s eating disorder, responding that, “My friend developed a very similar behavior and it started from problems she had with friendships at school and being stressed about school.” One female participant, who was given the vignette of Eric, related to the experiences of watching a male struggle with anorexia. She

wrote, “I was in treatment for bulimia and saw men who were anorexic and barely staying alive, but still refused to eat and believed that they were extremely overweight. I think people don’t realize that men can suffer from EDs (Eating Disorders) because they often aren’t presented in such cut and dry ways like with women with eating disorders.”

Some of the participants who completed the vignettes did not believe that Erica and Eric were suffering from anorexia, but believed they were suffering, instead, from problems in their environments. The most popular answer in this category was that participants believed that society’s pressures were causing Erica and Eric to think that they were overweight. Participants who were given the vignette of Eric were more likely to believe that his problems were caused by environmental factors, than were those who were presented with the vignette of Erica. One participant believed that Eric was working out so much because, “He wants others to see him as in shape.” While another believed that he was suffering from a “mental problem/obsession caused by Eric's concern of other people's opinions.” One participant summed it up by writing, “The notion that you need to have a perfect body is a social construct.”

Next, the participants were asked how serious they believed Erica and Eric’s problem to be. Almost all of the participants believed that Erica’s problem was serious, with 88.7% of participants believing that her condition was very serious and 6.1% of participants believing it was somewhat serious. Only 1.74% of participants remained neutral to this question. Although most participants given the Eric vignette believed that his condition was serious, the percentage was less than those who believed Erica’s condition was serious. 62.28% of the participants believed that his condition was very serious, while 30.7% of participants thought it was somewhat serious. This compares to

4.39% of participants who believed his problem was not very serious, 1 participant believed it was not at all serious, and 1.75% of participants remained neutral to the question.

The participants were then asked what should be done to help Erica and Eric recover from their problems. The majority of participants believed that Erica should see some type of specialist doctor, with 30.43% of participants believing she should see a psychiatrist and 32.17% believing she should see a different type of specialty doctor. 22.61% of the participants believed that she should see a psychologist or social worker for her problems, while 4.35% of participants believed that she should see a general practitioner for help.

The results for this question were much more dispersed for Eric. The majority of participants believed that he should seek out medical services; with 33.33% believing he should see a specialty doctor, 23.68% believing he should see a psychiatrist, and 11.4% of participants believing that he should visit his primary care physician. 24.56% of the participants thought that Eric should visit a psychologist or social worker and two believed that his college should be responsible for helping him. Out of all of the participants, 1.75% believed that he should seek out another type of service and 3.51% of participants did not know what should be done to help him.

Next, participants were asked how responsible they believed Erica and Eric were for their condition. Most of the participants believed that Erica was responsible for her condition, with 31.3% of participants believing that she was somewhat responsible and 11.3% believing that she was very responsible for her problems. This compares to 23.48% of participants who believed that she was not very responsible and 6.96% who believed

that she was not at all responsible for her condition. For this question, 32.17% of participants remained neutral.

When asked this question, the majority of participants who were given the Eric vignette believed that he was responsible for his problems, with 50% believing that he was somewhat responsible and 8.77% of participants believing that he was very responsible. 13.16% of the participants did not believe he was very responsible and 5.26% believed that he was not at all responsible for what was happening. 21.1% of the participants remained neutral to this question.

Participants were then asked how likely they believed that Erica and Eric's problems were caused by stressed. Almost every participant believed that stress was a contributing factor for Erica's problems, with 27.83% believing that it was a somewhat likely factor and 65.22% of participants answering that they believed it was a very likely factor. This compares to only 1 participant who believed that stress was not a very likely factor for her problems, and 4.35% of participants who remained neutral to the question. Similarly to Erica, the majority of the participants believed that stress was a very likely cause for Eric's problems, with 42.11% of participants believing that this was a very likely cause and 49.12% of participants believed this was a somewhat likely cause. Participants were very unlikely to believe that stress did not play role, with 2.63% of participants believing that it was not a very likely cause and 1 participant believing that it was not at all a cause for his problems. 5.26% of the participants remained neutral to the question.

Finally, the participants were asked how they thought Erica and Eric's condition would improve. The majority of the participants believed that Erica required medical treatment to get better, with 54.78% of participants answering with this. Another 29.56%

of participants believed that Erica would get better by changing her behavior. While some of the patients believed that Erica was solely responsible for improving her condition, with 6.09% of participants believing she would get better if she simply started eating again and another 6.09% of participants who believed that she could improve through strict discipline.

When participants were asked how they believed Eric would improve, most believed that he would require medical attention to get better, with 46.49% of participants selecting this as their answer. Participants were also likely to think that he would get better with behavior change, with 35.09% answering as such. 7.89% of participants believed that Eric's problems would improve if he started eating again, another 7.89% of participants believed that he would get better with strict discipline, and 1 participant believed that everything would improve by itself.

Cross-tabulations were then run to analyze how the gender of the participant affected their responses, and to see if there was any bias associated with the gender of the patient. First we controlled for the participant's gender to see if this played a role in determining how serious they believed either Erica or Eric's condition to be. When we controlled for gender for the participants who were given Erica's vignette we found that 95.35% of women and 91.66% of men believed that her condition was serious. However, when we controlled for gender for the participants who were given the vignette for Eric, we found much different results. Women were still more likely to believe that Eric's problems were serious, but the percentage that thought so dropped dramatically. We found that 86.05% of women believed that Eric's condition was serious, but only 78.57% of men believed that his condition was serious.

We found similar results when we controlled for gender and a participant's belief if the patient was responsible for their condition. We found that across the board, men were more likely to believe that a patient was responsible for their eating disorder. When presented with Erica's vignette, 58.3% of men believed that she was responsible compared to only 44.32% of female participants who believed she was responsible. When we examined the vignette of Eric we found that 60.71% of men and 58.14% of women believed that he was responsible for his eating disorder.

We also found some interesting data when we controlled for the participants' gender and what should be done to improve her situation. We found that men and women were more likely to believe that Erica required medical treatment to recover from her eating disorder. Of the participants who were given the Erica vignette, 62.5% of women and 33.33% of men believed that Erica required medical treatment to improve. When we looked at the responses to the Eric vignette, we found that only 52.33% of women and 28.57% of men believed that he required medical treatment to get better. When presented the vignette of Eric, participants were much more likely to believe that he could improve through strict discipline or simply eating again.

Asthma

Similarly to the first vignette, this vignette had a different patient for each of the four surveys. These four surveys depicted the patient as a white boy, a black boy, a white girl, or a black boy. The female patients were named Michelle and the male patients were named Brian. The purpose of using a different version of the patient in each survey was to see if the patient's race and/or gender had any affect on how the participant diagnosed them and

responded to the questions about the patient. These vignettes depicted the patient as a 14 year old who had a history of breathing problems. Michelle and Brian's parents and teachers noticed that their breathing problems tended to get worse during the spring and fall and while they were engaging in strenuous physical activity.

First the participants were asked what they believed was wrong with Michelle and Brian. The majority believed that they were suffering from asthma, with 93.36% selecting this as their answer. 3.54% of participants did not know what was wrong with them and .88% believed that there was nothing wrong with Michelle and Brian. While 1 participant believed that their problems were due to the environment and another participant believed that their problems were due to other factors.

Next, participants were asked to elaborate on why they diagnosed Michelle and Brian with their specific condition. It was found that the majority of answers fit into two groups; personal experience and symptoms. Out of the participants, 128 identified Michelle and Brian as having asthma based on the symptoms that were presented to them in the vignettes. Most of these participants identified the patients as having asthma based on the fact that their symptoms would get worse while playing sports and with the change in seasons. One of the participants who was given the vignette of Brian wrote that, "...Brian experienced trouble breathing during exercise, which is characteristic of sports-induced asthma..." While a second participant wrote that they arrived at their diagnosis based off Michelle's "bouts of coughing, year round but get worse during spring and fall, and symptoms are bad while performing strenuous activities." Another participant also identified a reason why Michelle's asthma gets worse at night, responding that, "Her

breathing problems occur at night, which could be related to allergens in her bedroom (in pillows, for example), and while exercising. These are common triggers for asthma.”

Participants also used their own personal experience or the experience that saw friends and family go through to arrive at their diagnosis of asthma for Michelle and Brian. Many of the participants especially identified with the increase of symptoms during strenuous activities. One of the participants who was given the vignette of Michelle responded that she had sports induced asthma and that “Michelle's symptoms seem the same as the ones I have experienced.” While another participant who was given the vignette of Brian wrote that his “younger brother was diagnosed with Asthma and experienced similar symptoms” to the ones that Brian was experiencing.

Following this, participants were asked how serious they believed Michelle and Brian’s conditions to be. The majority of participants believed their conditions to be serious, with 20.8% believing it was very serious and 58.85% identifying them as being somewhat serious. Only 5.75% of participants believed that their conditions were not very serious and .88% believed that they were not at all serious. 6.19% of participants remained neutral to this question.

Next, participants were asked how likely they believed that Michelle and Brian’s problems could be caused by a genetic or inherited condition. Most of the participants believed that this could be the cause of their problems, with 30.1% believing that this was a very likely cause and 52.21% identifying this as a somewhat likely cause. Very few participants believed that genetics did not play a role in Michelle and Brian’s conditions, with only 4.42% answering that this was not a very likely cause. 10.62% of the participants remained neutral to this question.

Finally, participants were asked how they believed that Michelle and Brian's situation could improve. Almost every participant believed that they could only get medical with the help of medical treatment, with 95.58% selecting this as their answer. The remaining participants believed that they could get better through behavior change (1.77%), by changing their diet (1.33%), with strict discipline (.44%), or believed that their problems would improve on their own (.44%).

When factoring for age and gender, no relationship was found between either of these variables and the participants' responses. This is most likely due to the fact that almost all of the participants agreed on the fact that Michelle and Brian were suffering from asthma and that it could get better with medical treatment. Compared to the other two vignettes, this one presented a condition that is deemed by almost everyone to be a legitimate, noncontroversial disease that has a distinct cause and effect.

3.3 Participants' Personal Experiences

The first group of questions that the participants were asked to answer had to do with their personal experience with physical and mental illnesses. The purpose of this study was to examine how society affects people's perceptions of illness, but also to understand how a person's own experience affected how they perceived these two types of illnesses.

The first two questions in this section asked the participants if they had ever known someone who had been hospitalized with either a physical or a mental illness. When asked about mental illness, 75.2% of the participants admitted to knowing someone who had

been hospitalized. When cross-tabulations were run to account for gender, the breakdown included 78.73% female and 63.46% male participants.

When accounting for age, it was found that those who were 35 and older were more likely to know someone who had been hospitalized for a mental illness, compared to those who were between the ages of 18 and 34. Of the participants who were over the age of 35, 89.19% had known someone who had been hospitalized for a mental illness, compared to 72.4% of participants between the ages of 18-34. When factoring for a participant's socioeconomic status (SES), it was found that there was no relationship between SES and knowing someone who had been hospitalized for a mental illness.

The second question in this section asked if the participants had ever known someone who had been hospitalized for a physical illness, to which 96% responded that they had. When stratifying for gender it was found that men were slightly more likely to know someone who had been hospitalized for this reason. When controlling for gender, age, and SES it was found no statistically significant relationships.

The third question asked participants if they knew anyone who had ever seen a therapist, an overwhelming majority of participants, 95.1%, did. This data indicates that there is less of a stigma around seeing a therapist and that many people are open to discussing this information with their friends and family. When stratifying for gender we found that there was very little difference between men and women who knew someone who had seen a therapist. It was also found that there was no statistically significant difference between a participant's age and this factor. While 100% of the participants aged 35 and over knew someone, 94.18% of the participants between the ages of 18-34 did as well. It was also found that there was no statistically significant relationship between a

participant's SES and knowing someone who had seen a therapist. All participants in the three wage brackets reported similar responses in this category with 94.12% of participants who make less than \$50,000 a year, 93.48% of participants who make between \$50,000 and \$150,000 a year, and 96.48% of participants making over \$150,000 a year indicating that they knew someone who had seen a therapist.

The next two questions asked the participants about medication usage and their opinions about medication. The first asked if the participants had ever known someone who had taken psychiatric medication, with 89.8% indicating that they had. When stratifying for gender, it was found that women were more likely to know someone who had taken psychiatric medication; with 92.52% knowing someone who had, while 80.77% of men knew someone. When looking at the relationship between ages, it was found that the older a participant was the more likely they were to know someone who had taken these medications. While 100% of the participants aged 35 and over did, only 87.83% of those aged 18-34 knew someone who had.

A relationship was also found between a participants' SES and whether they knew someone who had been on psychiatric medications. Participants who earned less than \$50,000 were the least likely to have known such a person. In this income category, 82.35% of the participants revealed that they knew someone who had taken these medications. This number is less than the participants who made over \$50,000 a year; 91.30% of participants who earned between \$50,000 and \$150,000 a year and 90.53% of the participants who earned over \$150,000 a year knew someone.

The second medication related question asked participants if they would go on medication if a doctor suggested it. 83.6% of the participants indicated that they would go

on medication for both a physical and mental illness, 14.6% said that they would go on medication for a physical illness but not for a mental illness, and 1.3% of the participants responded that they would not go on medication for either illness. When stratifying for gender, it was found that women were more willing to take a medication for a psychiatric illness than men were. 87.36% of women said that they would go on a medication for both a physical and mental illness, while only 71.15% men responded the same. Men were also more likely to say that they would only go on medication for physical illness, but not for a mental illness with 23.08% of men selecting this answer as opposed to only 12.07% of women who indicated this. It is also interesting to note that two men and one woman indicated that they would not go on medication for either a physical or mental illness.

While stratifying for age, a relationship between age and willingness to go on medication for a physical or mental illness was found. It was found that participants aged 35 and older were more willing to go on medication for a psychiatric illness than were participants between the ages of 18-34. 94.59% of the participants 35 and older said that they would go on medication for both a physical and mental illness, compared to only 81.48% of 18-34 year olds who responded. Only one of the participants over 35 years old admitted that they would go on medication for a physical illness but not for a mental illness, while 16.93% of 18-34 year olds responded the same. One participant over 35 and two participants between the ages of 18-34 indicated that they would not go on medication for either a physical or a mental illness.

When looking for relationships between SES and willingness to go on medication, there was no statistical significance found. However, an interesting trend emerged. Of those who made less than \$50,000 a year, none of the participants responded that they would

avoid going on medication for either a physical or mental illness. However, one participant who made between \$50,000-\$150,000 a year and two participants who made over \$150,000 a year said they would not go on medication for either a physical or a mental illness.

The final group of questions asked participants if they had ever been frightened by anyone who suffered from either a physical or mental illness. The first question asked if they had ever been frightened by someone with a mental illness, with 51.8% indicated that they had been. When looking at relationships between gender and if a person has ever been frightened by someone with a mental illness, it was found that more women had reported being frightened by a mentally ill person. Of the female participants, 52.87% indicated that they had been frightened by someone with a mental illness, compared to 48.07% of men who reported the same answer.

When stratifying for age, no statistical significance was found between the two variables. However, when the relationship between SES was examined some interesting patterns appeared between the variables. Unlike most of the data in this category, the data did not follow a linear pattern. It was found that those who made over \$150,000 were the most likely to be frightened by someone with a mental illness, with 61.1% indicating this. The majority of participants who earned less than \$50,000 a year also indicated that they had been frightened by someone with a mental illness, with 55.88% responding as such. Those who earned between \$50,000-\$150,000 were the least likely to be frightened, with only 40.22% answering as such.

The second question asked participants if they had ever been frightened by someone with a physical illness, with 34.5% indicating that they had been. When factoring

for gender, we assumed that the results would mimic those noticed in the above question. However, it was discovered that men were more likely to be frightened by someone with a physical illness than women were, with 40.38% of men indicating this compared to 32.76% of women. When looking at relationships between ages, we found that there was no statistical significance between the two variables. When stratifying for income we found very similar findings to the first question in this section. Our results showed significance amongst income brackets, but found that those who earned over \$150,000 a year were the most likely to have been frightened by someone with a physical illness, with 42.11% admitting to this. Those who earned less than \$50,000 a year were also likely to have been frightened by someone with a physical illness, with 41.18% answering yes to this question. Similar to the above question, we found that those who earned between \$50,000 to \$150,000 were the least likely to have been frightened, with only 26.09% of these participants answering yes to this question.

This section also included a qualitative portion where participants were asked, “What comes to mind when you think of the word “illness”?” The responses to this question were classified into four main groups. The most common response was the belief that illness was a sickness or disease, with 59 of the respondents identifying this in their answer. Some of these respondents’ answers included that illnesses is “any disease that affects your body or mind”, “being physically sick”, or “sick; in need of treatment or diagnosis.” While another respondent wrote that illness is “someone who is sick or doesn’t have the ability to function properly day to day.” Others took this question a little more seriously and classified illness as being “diseases that could kill someone’ or a disease that causes “mental or physical development problems with their mind or body.”

The second most common response, with 54 answers in this category, mentioned that illness referred to both physical and mental disorders. Many respondents also stressed that to be rid of illness a person must have a proper physical and mental balance. One respondent wrote that to them, “(Illness is) a condition; physical, mental, emotional, that causes an individual’s daily living to be altered in a negative way.” While another respondent mentioned that for them, “(Illness is) not just a biomedical disease but social, mental and emotional pathologies affecting overall well being.” A final respondent connected the two at the biological level, saying that illness is a “chemical imbalance or molecular mutation in the body causing abnormal reactions to normal physiological function.”

Six of the respondents who stressed the physical and mental balance noted that the first thing that came to their mind when thinking about illness was that of physical illness, but the more they thought about the question they realized that it was also important to include the importance of mental well being. One of the respondents used their own experience to get to their answer, writing, “The first thing that pops into my head is that something is wrong physically, but I know many people with mental illness including myself, so that’s part of the definition for me.” While another respondent added that, “I mostly imagine physical problem with the body but then immediately realize it could also be a way of thinking that harms the person.”

Twenty-three respondents associated illness with chronic medical conditions, with seven respondents specifically mentioning cancer and one respondent mentioning Crohn’s Disease. One respondent wrote that to them illness was a “chronic condition that requires medical attention.” While another respondent wrote that illness was “a long term

disease affecting (SIC) the body.” A third respondent also included hereditary disorders in their answer, saying that; “genetic and chronic illnesses are the first thing to come to mind when I think of the word illness.”

Other respondents took a different approach, with eighteen respondents focusing on illness as being acute conditions or thinking in terms of specific symptoms that a person may experience while they are ill. Some respondents viewed illness in terms of having the flu or a cold, while others described symptoms of illness such as “fever”, “coughing”, “weakness”, “stress”, and “bed ridden”. One respondent even described illness as being like the “green face throwing up emoji.”

3.4 Insurance Coverage

Two of the questions that the participants were asked were related to services that their insurance provider covered for physical and mental illnesses. The first question asked, “Do you have health insurance that covers outpatient and inpatient/residential mental illness services?” 65% of the participants answered that their insurance did cover these services, while 4.9% indicated that their insurance did not cover mental illness services. Out of the participants, 29.6% answered that they were unsure if these services were covered by their insurance.

For the questions in this section, cross-tabulations were only run to assess the correlations between age and income on a participant’s insurance coverage. It was found that those aged 35 and older were much more likely to have insurance coverage for mental illnesses than those who were between the ages of 18-34. Of the participants over the age of 35, 91.98% reported that their insurance covered inpatient and outpatient mental illness

treatment, with none of these participants responding that their insurance did not cover any of these services. Participants who were between 18-34 were much less likely to have insurance that covered these services, with only 59.79% responding that these services were covered. Many of these participants aged 18-34 did not know if their insurance covered these services or not, with 33.86% of them responding that they were “unsure” about their insurance coverage for mental illness services.

When assessing the relationship between income and insurance coverage, we found a linear relationship that showed that the higher a participant’s SES the more likely they were to have insurance that covered mental illness treatments. Those who made less than \$50,000 a year were the least likely to have insurance that covered these services, with only 47.06% participants indicating they were covered for these services. Participants who earned between \$50,000-\$150,00 a year were more likely to have coverage, with 59.78% of participants indicating this. Those who made over \$150,000 a year were the most likely to have insurance coverage for mental illness services, with 77.89% responding that these services were covered by their provider. It is also interesting to note that many respondents were unsure if their insurance covered these services; 35.29% of those who made less than \$50,000 year, 38.04% who made between \$50,000-\$150,000 a year, and 17.89% who made over \$150,000 a year indicated that they did not know if these services were covered by their insurance provider.

The second question asked, “Does your insurance cover outpatient doctor’s appointments and hospitalizations for physical illness?” 79.6% of participants responded that their insurance covered these services, as opposed to only 1.8% participants that responded they were not covered for these. Another 18.1% of the participants were unsure

if these services were covered under their insurance provider. Similar to the above question, we found that participants who were 35 and over were more likely to have insurance that covered hospital stays and doctor's appointments for physical illness. Of the participants in this category, 91.9% indicated that their insurance covered these services. Participants who were between the ages of 18-34 were less likely to have insurance coverage for physical illnesses, with 77.25% responding that these services were covered and 20.11% indicating that their insurance did not cover these.

As with the above question, a linear correlation between a participant's income and whether their insurance covered services for physical illnesses was found. Those who made less than \$50,000 a year were the least likely to have insurance that covered these services, with 70.59% having coverage. Those who made between \$50,000 and \$150,000 were slightly more likely to have coverage, with 71.74% indicating these services were covered. Those who made over \$150,000 a year were the most likely to have insurance coverage, with 89.47% of these participants answering that they had coverage. Also, it was found that as a person's income increased, their uncertainty about having coverage for these services decreased. While 26.47% of participants who made less than \$50,000 a year were unsure if their insurance covered these services, only 24.21% of those who made between \$50,000-\$150,000 and 10.53% of participants who made over \$150,000 a year were unsure if their insurance covered these services.

3.5 Personal Responsibility and Legitimacy of Illnesses

Another section of this study focused on the participants' beliefs related to personal responsibility of those who suffer from physical and mental illnesses and whether they

believed certain illnesses should be considered as legitimate medical conditions. The first question in this section dealt with the personal responsibility of non-communicable illnesses, asking, "If someone develops a non-communicable disease, are they responsible for their illness?" Out of the participants, 77% answered that they believed someone with a non-communicable disease was not responsible for their illness, while 7.1% believed that an individual was responsible. When stratifying for gender, it was found that women were more likely to believe that a person was not responsible for their non-communicable illness than men were. 78.74% of women believed that a person was not responsible for their non-communicable disease, as opposed to 71.15% of men who responded in the same.

When factoring for age, a slight relationship was found at the .05 level, between the beliefs that a person was responsible for a non-communicable illness. Participants between the ages of 18-34 were more likely to believe that a person was not responsible for developing a non-communicable disease, with 79.37% responding as such. Of the participants over the age of 35, 64.86% answered that they did not believe the individual to be responsible for their illness. When stratifying for income, there was no statistically significant relationship found between SES and the belief of personal responsibility of someone with a non-communicable illness.

The second question asked if the participants believed if an individual with mental illness is responsible for their condition. The results were similar to the above question that asked about personal responsibility of non-communicable illnesses. An overwhelming majority of participants, 80.1%, did not believe that a person with a mental illness was responsible for their condition. Only 6.6% of participants believed that someone with a mental illness was responsible for their condition. When factoring for gender, it was found

that women were more likely to believe that a person was not responsible for their mental illness, with 83.90% of women believing this compared to 67.30%. Men were more likely to be unsure of where the responsibility for a mental illness lay, with 25% indicating this answer, compared to only 8.62% of women were unsure of responsibility.

When factoring for age, it was found that younger people are less likely to believe that a person is responsible for their mental illness. Of the participants aged 18-34, only 4.76% believed that an individual was responsible for their mental illness. On the other hand, those who were older than 35 were more likely to believe that someone with a mental illness was responsible, with 16.22% of these participants believing this. When stratifying for income, it was found that the higher a person's SES the more likely they were to believe that an individual was responsible for their mental illness. Only 2.94% of participants who made less than \$50,000 a year believed that a person was responsible for their mental illness, while 5.43% of participants who made between \$50,000-\$150,000, and 8.42% of those who made more than \$150,000 a year believed the person was responsible for their mental illness. Another interesting relationship that was found was that the higher the participant's income, the less likely they were to select "unsure" as an answer. While 26.47% of participants who made \$50,000 or less a year selected this answer, only 10.89% of participants who made between \$50,000-\$150,000 a year, and 9.47% of participants who made over \$150,000 a year selected this answer.

The next question in this section asked participants, "If a person contracts HIV/AIDS, are they responsible for their illness?" The majority of participants did not know about the person's responsibility for their disease, with 41.6% selecting "unsure" as their answer. 40.3% of the participants believed that the person was not responsible for their

HIV/AIDS diagnosis, while only 17.7% of participants believed that the person was responsible. When factoring for gender, it was found that men were more likely than women to believe that a person with HIV/AIDS was responsible for their illness, 25% of men believed that the person was responsible, only 15.52% of women believed this.

When factoring for age, we found that those who were 18-34 were more likely to believe that an individual was not responsible for contracting HIV/AIDS. While 41.8% of participants in this age category believed the individual was not responsible, only 32.43% of participants 35 and older believed the same. It was also found that the lower a participant's SES, the more likely they were to believe that an individual was responsible for contracting HIV/AIDS. While 23.53% of participants who earned less than \$50,000 a year believed that an individual was responsible for their illness, only 19.57% of those who earned between \$50,000-\$150,000 and 13.68% of participants who earned over \$150,000 a year believed the individual was responsible. However, it should be noted that although those who earned less than \$50,000 a year were the most likely to believe that an individual was responsible, the percentage of participants who believed that the individual was not responsible was very similar to that of participants who earned over \$150,000 a year. While 41.18% of participants who earned less than \$50,000 a year believed the individual was not responsible, 41.05% of those who earned more than \$150,000 year also believed the individual was not responsible.

The final question in this section asked participants whether they believed ADD/ADHD were legitimate medical conditions. Today there is extensive debate over the legitimacy of these two conditions, so it was important to find out participants' opinions. Out of the 225 participants that answered, 87.2% believed that ADD/ADHD were legitimate

medical conditions, while 5.8% of participants did not believe in their legitimacy. When stratifying for gender it was found that women were more likely than men to believe that ADD/ADHD were legitimate medical conditions. Of the female participants, 89.66% believed that ADD/ADHD were legitimate medical conditions, compared to only 78.85% of men. While only 4% of women believed that these were not legitimate conditions, 11.54% of men denied their legitimacy. When factoring for age, no statistical significance was found between age and legitimacy of ADD/ADHD.

3.6 Mortality

One of most important questions asked during this study was about the mortality rates of a physical illness versus a mental illness. This question asked, “Which disease do you believe has the higher mortality rate, cancer (all forms) or eating disorders (anorexia nervosa and bulimia nervosa)?” This question was important because it is one of the only questions in the study that focused on an actual statistic and not just the personal opinion of the participant. The vast majority of participants believed that all forms of cancer had a higher mortality rate, with 71.2% of participants selecting this answer. Only 28.3% of participants believed that the two eating disorders had the higher mortality rate.

When stratifying for gender it was found that there was no statistical significance between these variables. When factoring for age it was found that younger participants were much more likely to believe that eating disorders had the higher mortality rate. While 31.22% of participants 18-34 believed that eating disorders had the higher mortality rate, only 13.51% of participants over the age of 35 believed the same. Participants who were over the age of 35 were more likely to believe that cancer had the highest mortality rate,

with 86.4% selecting this as their answer, compared to 68.25% of participants 18-34 who selected this answer.

When factoring for income some surprising results appeared. It was discovered that those who made less than \$50,000 a year were the most likely to believe that eating disorders had a higher mortality rate than cancer. While only 26.08% of respondents who earned between \$50,000 and \$150,000 a year and 27.27% of respondents who earned over \$150,000 a year believed this, 38.24% of those who made less than \$50,000 a year believed that eating disorders were the deadliest of the two diseases. Those who made over \$50,000 a year were more likely to believe that cancer had a higher mortality rate, with 73.91% participants from both income categories selecting this answer. While only 61.76% of participants who made less than \$50,000 a year believed that cancer had the highest mortality rate.

Chapter Four: Discussion

4.1 Eating Disorders

The responses to this vignette perfectly captured the difficulties that men who suffer from eating disorders face. As the literature reviewed showed, at least 25% of eating disorder patients are men, but it is often much harder for them to get diagnosed with and treated for an eating disorder. The vignette depicted this first hand, although both Erica and Eric suffered from anorexia, participants were less likely to diagnosis Eric with an eating disorder. While 87.8% of participants believed that Erica suffered from anorexia, only 78.9% believed that Eric was battling the same condition. This difference could partly be due to the fact that the two patients presented with different symptoms. While Erica depicted a “textbook” case of anorexia that most individuals would be familiar with (a smart, popular girl who began restricting to gain a sense of control), Eric’s case left a little more to the imagination. For many participants Eric’s case looked “normal”, a college student who gained the freshman 15 and wanted to lose wait by exercising and cutting back on unhealthy foods. The problem was that Eric’s quest for health soon became obsessive and stopped focusing on shedding extra weight and became fixated around the fear of becoming fat. This is the problem with men who suffer from eating disorders; those who are not well educated in specific patterns and behavior can easily miss the diagnosis and fail to see that the patient has a legitimate problem.

Regardless of if the patient is a man or a woman, eating disorders are serious medical conditions that require treatment. However, as the analysis showed, not everyone believes this. The vast majority of participants who were given the Erica vignette agreed that her condition was serious and that she needed outside help to get better. However,

when looking at the responses to Eric's vignette, it was found that participants had different answers. Both men and women were less likely to think that Eric's condition was serious and needed help. Whereas 54.5% of participants believed that Erica required medical help, only 35% believed that Eric required medical attention. This represents a problem that is gender blind, across the board people do not believe that eating disorders require medical help to improve; instead believing that individuals can cure themselves through willpower or simply by deciding to eat again. Due to these beliefs it is often hard for patients with eating disorders to seek treatment. With proper treatment, an individual can become fully cured of their eating disorder, however only one third of patients actually receive treatment. This number becomes significantly lower when you examine adolescents who are suffering from eating disorders, where only one fifth have received treatment ("Facts About Eating Disorders: What the Research Shows", 2017).

The topic of responsibility is also a big issue in the eating disorder debate. An interesting finding appeared when we examined the topic of responsibility. Later in the study participants were asked if they believed if an individual was responsible for their mental illness, with only 6.6% of participants believing that they were responsible. However, when participants were asked if they believed that Erica and Eric were responsible for developing anorexia, we observed very different results. Of the participants presented with Erica's vignette, 42.6% believed that she was responsible, while 58.8% of participants given Eric's vignette believed he was responsible for his eating disorder. These findings echo what was found in the literature, that eating disorders are the most stigmatized mental illness because people see them as being willfully performed. Whereas participants may believe that someone with depression is not responsible for their

condition because they cannot control the thoughts in their brain, they view someone with anorexia as being responsible for their condition because they view them as willingly choosing to restrict from food.

Recent studies have been conducted to change the way that people view the personal responsibility of eating disorders by searching for an underlying genetic component that can cause them. These studies have been successful and have found that 50-80% of the risk for developing anorexia or bulimia is genetic. Sara E. Trace, et al (2013) found that familial and twin studies have revealed important information about how genetic factors play a role in developing an eating disorder. They have also implicated several symptoms that show the molecular basis of eating disorders. The first of these symptoms is 5-HT, a system that is involved in regulation of mood, appetite, and body weight. It has been found that 5-HT plays a likely role in the development of anorexia, as well as other psychiatric disorders. The researchers also found that abnormalities within this system have been observed in bulimic individuals who are acutely ill as well as in individuals who are in recovery (Trace, et al, 2013). The second system implicated in eating disorders is the dopaminergic system (DA), which controls feeding, thinking processes, motor activity, and drug-seeking behaviors. With patients who suffer from anorexia it is believed that this system is responsible for weight loss, body image distortion, and obsessive-compulsive behaviors. In patients who suffer from bulimia, neuroimaging has shown abnormalities within the DA system (Trace, et al, 2013). Most women who suffer from eating disorders believe that, "genetic reframing would be stigma reducing and decrease guilt and self-blame associated with the eating disorder," (Trace, et al, 2013, 611).

4.2 Hospitalizations

When participants we asked if they had ever known someone who had been hospitalized for physical illness or a mental illness, it was found that they were much more likely to know someone who had been hospitalized for a physical illness. Of the participants surveyed, we found that 75.2% knew someone who had been hospitalized for a mental illness versus 96% who knew someone who had been hospitalized for a physical illness. This difference can be attributed to two variables. First, individuals who are hospitalized for a mental illness may be less likely to publicize their admission, as opposed to someone with a physical illness. When a patient is admitted to a psychiatric hospital, often times their phones and other technologies are taken away leaving them unable to communicate with the outside world, leaving them unable to keep friends and family informed about their whereabouts. Also, because there is still a stigma related to those with mental illnesses, especially those who seek inpatient treatment, individuals may be less likely to tell people that they spent time in a psychiatric unit. Participants in this study could have known someone who had been hospitalized for a mental illness, but that individual may have denied disclosing that personal information to them.

Secondly, this difference could be due to the fact that every year less people are admitted to the hospital for mental illnesses as opposed to physical illnesses. According to the Healthcare Cost and Utilization Project, in 2012 there were 36.5 million hospital stays in the United States (Weiss and Elixhauser, 2014). Of these hospitalizations, 8.6 million involved inpatient stays where the patient suffered from at least one mental disorder or substance abuse disorder (Heslin, et al, 2015). With only 23.56% of hospital stays being for

mental illness, statistically speaking, it is much more likely that a participant would know someone who was hospitalized for a physical illness.

4.3 Psychiatric Medications

When participants were asked if they had ever known someone who had taken a psychiatric medication, it was found that 89.8% of them had known someone who had taken these medications. According to the literature, this number should be much lower. In 2017, a study published in the *Journal of the American Medical Association* (JAMA) set out to find how many Americans were currently taking prescription psychiatric medications. The study used the *2013 Medical Expenditure Panel Survey* to calculate the percent of the adult American population aged 18-85 years who were prescribed one, or more, of the three classes of psychiatric drugs, “1) antidepressants, 2) anxiolytics, sedatives and hypnotics, and 3) antipsychotics,” (Moore and Mattison, 2017). The JAMA study found that 16.7% of American adults were currently taking psychiatric medications (Moore and Mattison, 2017).

A factor that could explain the large disparity between this study’s findings and those in the literature could be due to the overwhelming percent of college students who participated in this study. Non-prescription stimulant use, such as Adderall or Ritalin, is rampant on college campuses and this may have factored into how college participants answered this study’s survey. A study published by Johns Hopkins’ Bloomberg School of Public Health found that between 2006 and 2011, the non-medical use of Adderall rose by 67%. The researchers also found that among this increase in usage, 60% was among those aged 18-25 years old (“Adderall Misuse Rising Among Young Adults”, 2016). These findings

indicate that the percentage of participants who knew someone who took psychiatric medication may have been inflated because participants considered the non-prescription use of these drugs. In hindsight, the survey in this study should have asked two questions about medication usage: one that asked about participants who knew someone who had taken psychiatric medication with a prescription and one asking if participants had known someone who used these medications without a prescription.

4.4 Insurance Coverage

Three key findings were observed when participants were asked if their insurance covered inpatient and outpatient services for physical and mental illnesses. First, it was found that the younger an individual was, the less likely they were to know if they had insurance coverage for either type of illness. The main reason for these findings is most likely due to the fact that younger participants are not responsible for purchasing their own health insurance. As part of the Affordable Care Act, all children under the age of 26 are able to stay on their parents' insurance coverage. This means, that unless a young person has first hand experience with using any of these services, they most likely will not know what services are covered under their parents' insurance plan. Older participants are much more likely to know what services are covered by their insurance provider because they are the ones responsible for purchasing their coverage. Regardless of if the participant received their insurance through their employer or if they purchased it through the exchanges, they are responsible for paying the premiums and have a better, and more informed, idea about what is covered under their provider.

Second, it was noticed that as a person's socioeconomic status increased, the more likely they were to have insurance coverage, or at least be more sure of what services were covered under it. This speaks loudly to the way America has developed its health insurance system, a system where the more you can pay the more or better services you can receive. The higher the participant's socioeconomic status, the more choice they have in what insurance plan they want and the services they receive. As a result, those who are of a lower socioeconomic status are less likely to have insurance that covers all of these services or be unsure if these services are fully covered by their provider.

Finally, it was observed that participants were more likely to be aware of their insurance coverage for physical illnesses as opposed to mental illnesses. As the literature shows, people are more likely to be hospitalized for a physical illness, and they are also more likely to use outpatient services for a physical illness-doctor's visits, lab draws, diagnostic testing. Less people are likely to be hospitalized for a physical illness or use outpatient therapy services, so as a result they are less likely to know if these services are covered. What was found to be especially interesting was how many participants were unsure if their insurance provider covered mental health services.

In 2008, The Paul Wellstone and Pete Domenici Mental Health Parity and Addiction Equity Act of 2008 (MHPAEA) was passed by Congress. This Act was passed to prevent insurance providers that provide coverage for mental illness and addiction services "from imposing less favorable benefit limitations on those benefits than on medical/surgical benefits" ("The Mental Health Parity and Addiction Equity Act", 2017). Under this law it became illegal for group health plans or health insurance companies that cover services for both physical and mental illnesses to charge individuals more for mental health services

than for comparable medical/surgical services. However, it did not make it a requirement for insurance providers to cover mental illness services (“The Mental Health Parity and Addiction Equity Act”, 2017). In our study, if a participant knew that their insurance included services for both mental and physical illnesses, then an equal distribution of participants that answered “yes” or “no” to both insurance questions should have appeared. However, because an equal distribution was not noted, it can be assumed that most participants are not aware of MHPAEA and do not know that their insurance plan covers physical and mental illnesses equally.

4.5 Disease Responsibility

When participants were asked if they believed that a person was responsible for developing a non-communicable disease, it was not surprising to find that 77% of participants believed the individual was not responsible for their disorder. However, it was rather unexpected that 15.5% of participants responded that they were unsure if the patient was responsible. Upon further examination, the high amount of uncertainty may be due to the fact that some non-communicable diseases can be the manifestation of years of unhealthy habits.

Every year non-communicable diseases kill 40 million people globally. Of these diseases, four are responsible for 80% of all premature deaths associated with non-communicable diseases: cardiovascular disease, cancer, respiratory disease, and diabetes (“Non-Communicable Diseases”, 2017). Many of the risk factors of these top four killers are associated with unhealthy personal choices, with the World Health Organization noting that, “tobacco use, physical inactivity, the harmful use of alcohol and unhealthy diets all

increase the risk of dying from a non-communicable diseases” (“Non-Communicable Diseases”, 2017). It is believed that participants who thought of conditions such as these were more likely to remain unsure of responsibility or believe that the patient was responsible for their condition, while participants who thought of genetic diseases, or diseases that lacked any patient responsibility, were more likely to believe that the patient was not responsible for their condition.

When participants were asked if they believed an individual was responsible for their mental illness, the results were pleasantly surprising. Although the literature leads you to believe that the majority of participants would hold negative views towards those with mental illness, this study found that 80.1% of participants believed that an individual was not responsible for their mental illness. An interesting factor was also unearthed, the older the participant was, the more likely they were to believe that an individual was responsible for their condition. No significant data could be found in the literature to explain why this relationship existed, but it is believed that this exists because recent anti-stigma and awareness programs have been mainly targeted at younger individuals.

It has been found that educating children on mental illness reduces the amount of stigma that they hold towards people with these conditions and can change their attitudes towards individuals-i.e. making them realize that a mental illness is simply an illness and the patient is not responsible for it (Morris, et al, 2012). However, these programs are rather new and the majority of participants over the age of 35 most likely never would have experienced them while they were in school. It has been found that in older adults, stigma reduction and attitude change are often the result of face-to-face contact (Morris, et al, 2012). The problem with this, however, is that if a person holds stigmatized views

towards someone with a mental illness, then they would be much less likely to talk to someone about their mental illness and change their views on these conditions. It is believed that as more mental illness and mental health programs are taught in schools, society will eventually see a reduction in the amount of those over the age of 35 who believe an individual with mental illness is responsible for their condition.

4.6 Mortality Rates

The question about mortality rates for cancer and eating disorders was important to this study because it was the only question that had actual scientific data to back it up. The answer to this question is that cancer (all forms) has the higher mortality rate, with this disease being responsible for around 595,690 deaths in the United States in 2016 (“Cancer Statistics”, 2017). In asking this question, more interest was put on seeing how many participants selected eating disorders for their answer as a way of quantifying how serious people consider eating disorders to be. It was rather surprising to find out that almost a third of the participants believed that eating disorders had the higher mortality rate.

Eating disorders are the deadliest of all mental illnesses, with anorexia nervosa specifically having the highest mortality rate of any mental illness. At least one person dies as a result of their eating disorder every 62 minutes; this statistic does not include the 25% of anorexia deaths that are caused by suicide. For those who suffer from bulimia nervosa the Standardized Mortality Ratio (SMR), a ratio between the observed number of deaths in a population and the number of deaths that would be expected, is 1.93. The SMR for those who suffer from anorexia is 5.86 (“Eating Disorder Statistics”, 2017).

Of those who suffer from anorexia, 5-10% will die within 10 years of developing the disease, while 18-20% of anorexics will be dead within 20 years of first onset of symptoms. Young people between the ages of 15-24 years who suffer from anorexia have 10 times the risk of dying as compared to their healthy peers of the same age (“Facts About Eating Disorders: What the Research Shows”, 2017). Often times people view eating disorders as diseases of vanity, but it is important to bring more awareness to the fact that these disorders are the deadliest mental illness and should be taken as serious medical conditions.

4.7 ADD/ADHD

The debate over ADD/ADHD has been a contentious one, but it is not surprising that the data in this study revealed that the vast majority of participants believed these were legitimate medical conditions. As the literature review showed, 15% of children are on medication for ADHD, meaning that most people know someone who suffers from either, or both, of these conditions. It is believed that participants who know someone with one of these conditions are more likely to believe in the legitimacy of ADD/ADHD, especially if they have seen how treatment and medication have helped them.

With this question an interesting bias that occurred when stratifying for the participants’ gender. At first it was hard to understand why women were more likely to believe that ADD/ADHD were legitimate medical conditions as opposed to men, but the answer was found when analyzing the qualitative data from the ADD/ADHD vignette. In this section, men were more likely to believe that the patient did not have ADD/ADHD because they thought they were behaving in a way that was typical for that of a young child.

Male participants were also more likely to believe that the female patient, Amy, was suffering from ADD/ADHD while they tended to think that the male patient, Jake, was suffering from environmental problems or that nothing was wrong with him. This difference could be associated with stereotypical gender roles that depict boys as being rambunctious and hyper, while girls are typically depicted as being well behaved and attentive. Whereas woman may look at a hyper child and see something wrong with them that requires treatment, men may be more likely to dismiss these symptoms as being typical childish behavior.

Chapter Five: Conclusion

5.1: Overview of Thesis

The topic of social construction of illness is one of the most widely researched areas in medical sociology, but there is still much work that needs to be done on the topic. This thesis used quantitative and qualitative methods to research how society affects individual's perceptions of physical and mental illnesses. The main purpose for exploring the social construction of illness is to bring awareness to the effect that society has on the way that we perceive these different types of illnesses and treat those who suffer from them. Through surveying individuals, this study was able to offer a comprehensive look into how a person's age, gender, and socioeconomic status effects the way that the individual, and in turn society as a whole, views these two illnesses.

It was found that although most participants reported knowing someone who had been hospitalized for a mental illness or knew someone who had seen a therapist, many of them still held more prejudicial views towards individuals with mental illnesses. It was also found that many participants were less knowledgeable about mental illnesses and were more likely to believe that an individual with one of these illnesses was responsible for their condition. Although society has come a long way, since Thomas Scheff's labeling theory, more can still be done to help mitigate the effect of stigma on those with mental illnesses.

In order for society to fully bridge the gap between physical and mental illnesses, to the point where these conditions are treated and viewed as equal, new policies need to be put in place to ensure for full mental health parity and that further educational resources

need to be created so that the population becomes more aware of mental illnesses. It is believed that these two implications will greatly change the way that society views those with mental illnesses.

5.2 Policy and Educational Implications

Policy Implications

In order to help change the social construction of illness, several governmental policies need to be created. The first of policy initiatives that will benefit society are related to insurance regulations. First, insurance companies should become more transparent with the benefits that they cover. Insurance coverage should be like car shopping, everyone should clearly be able to see what each company offers and be able to clearly understand the extra copays and deductibles they would have to pay for each plan. Too many participants in this study were unsure about services their insurance covered and increased transparency amongst providers would be able to help eliminate the unknown. The MHPAEA should also be expanded to ensure that all insurance companies must provide mental illness coverage to their clients. Currently, the MHPAEA only requires that insurance providers that cover services for both physical and mental illnesses must have parity between these services; it does not state that companies must cover services for mental illnesses (“The Mental Health Parity and Addiction Equity Act”, 2017). This study has proved the legitimacy and seriousness of mental illnesses and it is time that insurance companies are required to cover mental illness services. Proper insurance coverage will also help bring more legitimacy to mental illnesses. One cannot fully be healthy unless they

have a proper balance between mental and physical wellbeing and this cannot be obtained unless insurance companies begin providing proper coverage for both conditions.

Early screenings for mental illness also need to be instituted. When a person goes to the doctor for a check up they are given a battery of tests to check their weight, heart health, and reflexes as a way to detect signs of early physical illnesses. Patients are also asked to fill out forms about their family's history with physical illnesses, so that the doctor can keep an eye out for the development of possible genetic disorders or high-risk conditions. However, no such tests or forms currently exist for diagnosing mental illnesses. The literature has noted that genetic predispositions exist for several mental illnesses, yet unless a doctor specifically asks their patients these questions they will have no idea of a patient's risk factor. According to the National Alliance on Mental Illness, approximately 50% of chronic mental illnesses begin by age 14 and 75% of these illnesses appear by the age of 24. However, due to lack of screening the delay between onset of symptoms and a diagnosis and treatment is 8-10 years ("Mental Health Screening", 2018). Resulting in thousands of American living with undiagnosed mental illnesses that can easily be treated.

Currently children who receive their insurance through Medicaid are some of the only children who receive early screening for mental illnesses through the Early and Periodic Screening, Diagnosis and Treatment mandate. However, many states do not follow through with this federal requirement ("Mental Health Screening", 2018). We believe that policies such as this should be enforced through the federal government to apply to all children under the age of 18, regardless of if their insurance is provided through the state or not. Currently the American Academy of Pediatrics endorses the idea of early screening for mental illnesses by primary care physicians under the belief that these programs will

reduce the likelihood and consequences of delaying care (“Mental Health Screening”, 2018). The belief is that if a primary care physician diagnoses a child through early screening, the child will either be able to go on medication instantly or get an immediate referral to a psychiatrist for further testing and treatment.

Early screening programs for mental illnesses should also be instituted at schools, similarly to how schools already test their students for hearing and vision problems. Conducting mental illness screenings in schools would be able to target a wider group of children, as opposed to screening by primary care physicians, because all students at the school would be tested regardless of if there was a concern for their behavior by a parent or guardian. Currently many schools only rely on office discipline referrals (ODRs) to determine which students are at risk for a mental illness (Bruhn, et al, 2014). The problem with only relying on ODRs as a tool for diagnosis is that schools are more likely to catch students who suffer from behavioral issues, such as ADD/ADHD, and ignore the students who suffer from less disruptive disorders such as depression or anxiety.

Following the wave of school shootings in America, studies have suggested that screening students at school could help pinpoint if any students are at risk for dangerous behavior (Bruhn, et al, 2014). In Montgomery County, Ohio, officials announced in the end of February, 2018 that they were instituting a mental illnesses screening program to not just, “prevent school violence, but as a response to suicides, addiction and other mental health concerns involving students,” (Wedell, 2018). The screenings at the schools in Montgomery County will take place during the school year and will be offered for students in elementary school to high school--with the parents having the option to opt out of their child receiving testing. The schools’ screenings involve a series of questions that ask about

the student's mood, drug and alcohol use, and suicide ideations amongst other questions. The screenings will be conducted by employees of a local behavior health facility, who will be able to "identify a student as at-risk and have a conversation with them about options, including working with the family to get them further treatment and services," (Wedell, 2018). The hope is that these screenings will be able to identify students before they become either a risk to themselves or others and provide them with support and treatment.

Educational Implications

Based on our findings we believe that there also needs to be increased education about mental illnesses amongst the general population. First, there needs to be increased mental health education programs in schools, since this is where the largest proportion of individuals with undiagnosed mental illnesses resides. On July 1, 2018, New York State will become the first state to require that schools must teach mental health as part of the school health curriculum under the "Mental Health Education in Schools" law (Richter, 2017). Although this law is a step in the right direction for educating students about mental illnesses, it is rather vague and does not specify what curriculum content should be included when teaching about mental health. The legislature wrote that the curriculum "will presumably be a matter for the New York State Education Department (SED) to resolve under its statutory authority to implement the law," (Richter, 2017,2). Although this law leads much to be desired, it is a step in the right direction for ensuring that children become educated about mental illnesses as a way to reduce stigma and as a tool for self-detection.

The literature shows that education about mental illnesses is the most important tool for reducing stigma amongst school aged children and teenagers. It has been found that “educational approaches to stigma challenge inaccurate stereotypes about mental illnesses, replacing them with factual information,” (Morris, et al, 2012,964). Examples of this include challenging the perceptions of mental illness that are commonly portrayed in the media. For example, the literature notes that a common belief about people who suffer from mental illness is that they are “homicidal maniacs”. Education can challenge this view by properly presenting students with information and facts about homicide rates amongst those who suffer from mental illnesses compared to the general public, showing students that those who have a mental illness are not dangerous nor should they be feared. The benefits of mental illness education are that it is relatively cheap and can reach out to a wide population of students (Morris, et al, 2012).

Education should not stop at school aged children and teenagers; mental illness education needs to expand to individuals who are post-grad as well. This study found that older participants held equally prejudicial views, if not slightly more prejudicial views, towards those with mental illness than younger participants did. Implementing educational practices that focus on this group of individuals is much harder than with younger individuals. Whereas educational programs for younger individuals should focus on awareness of mental illnesses, programs geared towards older adults should focus on educating them about symptoms, warning signs, and different treatment options.

In recent years the American Psychiatric Association (APA) created a program called *Typical or Troubled* that works with schools and parents to teach parents how to recognize if their child is suffering from a mental illness. The program aims at equipping

adults “who closely interact with adolescents to notice the warning signs of mental health problems, to be prepared with intervention strategies, and to know where to refer teens for help in addressing these issues...” (APA Staff, 2018). The *Typical or Troubled* program works within schools as a companion program to their preexisting health and physical education programs by improving student mental health through early recognition, adult intervention, and treatment. The program trains school social workers, psychologists, nurses and any other health professionals who then train schoolteachers, staff, and parents about the early warning signs of mental illness. The program does not focus on specific mental illnesses, but instead focuses on overarching symptoms of mental illnesses that can be shared by multiple students. The purpose of this isn't to make parents and teachers experts in all areas of mental illness, but instead to make them informed about mental illness as a whole so that they know what to look out for (APA Staff, 2018).

Educational programs like *Typical or Troubled* are important because they are some of the only programs that can educate a large population of adults at once. More programs like these need to be implemented across the country, so that older adults who missed out on mental health education while in school can become more informed. However, programs should become more focused on specific illnesses, rather than *Typical or Troubled's* policy. By focusing on specific illnesses, these programs can bring more awareness to certain conditions and educate parents on treatment and medication options.

5.3 Limitations and Further Research

The main limitations with this study are associated with the fact that the sample pool was not representative of the overall population, with the average participant being a

white, upper-middle class woman who had attended college. As a result the data was rather skewed to represent the ideas of one main group of people, instead of being representative of a larger group. Based on this literature review, it was found that other studies have shown that race, gender, age, socioeconomic status, and education all play a role in the way that individuals perceive physical and mental illnesses. However, because our sample pool was so limited many of these variables were unable to be analyzed. Instead, this study was only able to stratify for age, gender, and socioeconomic status-which often times showed no statistically significant relationship between the variables being tested. If this study had been able to survey a larger pool, it most likely would have found more statistically significant results.

If more time had been granted to work on this study, it would have been able to include a broader demographic of subjects to add more substance to this narrow study. More demographic questions would have also been added as a means to factor for more variables. It is believed that if this study had included more demographic questions, then more statistically significant relationships between a participant's demographics and how they perceive physical and mental illnesses would have been found.

Further, this study was limited by the questions the participants were asked regarding their experiences with mental illness. In order to pass through Union College's Institutional Review Board, this study made sure that the questions about participants' experiences with mental and physical illness were not too specific. This meant that no questions could specifically ask participants if they had personally dealt with a physical or mental illness; instead they were asked if they had ever known someone who had dealt with one of these illnesses. The literature has shown that those who know someone with an

illness, especially a mental illness, are more likely to hold positive, non-stigmatized views people with these illnesses. However, the literature has also shown that people who suffer from a physical or mental illness that is stigmatized may develop a form of self-stigma and hold more negative views towards people who have the same illness, or type of illness, that they have. Because we were unable to separate the patient experience from the friend or relative of a patient, we were unable to control for this variable.

Overall, future research should focus more on the demographics that lead to stigmatization. As a society we will not be able to overcome stigma associated with physical and mental illnesses until we are able to identify what factors that are ingrained into our society are responsible for the stigmatization. Moreover, further research should be focused on examining certain geographical areas to see how certain areas of America perceive differences in physical and mental illnesses. By researching the difference in geography studies could observe what regions of the country hold the most stigmatized views toward these conditions and identify what factors these areas have that make them more susceptible to stigmatization. A person is not born holding stigmatized views of physical or mental illness, but develops these views as a consequence of their surroundings. By understanding what populations of society are more susceptible to holding stigmatized views, the country can create policies and procedures that can help stamp out this stigma even before it begins.

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Appendix I

Part I: Demographics

- 1) What is your age?
 - a. 18-24
 - b. 25-34
 - c. 35-44
 - d. 45-54
 - e. 55 and older

- 2) What is your gender?
 - a. Male
 - b. Female

- 3) What is your ethnicity?
 - a. Black or African American
 - b. White
 - c. Hispanic or Latino
 - d. Native American
 - e. Asian/Pacific Islander
 - f. Other

- 4) What is the highest degree or level of school you have completed? *If currently enrolled, highest degree received.*
 - a. Some high school, no diploma
 - b. High school graduate, diploma or GED
 - c. Some college, no degree
 - d. Trade, Technical, or Vocational training
 - e. Associate Degree
 - f. Bachelor's Degree
 - g. Master's Degree
 - h. Professional Degree (MD, DO, DDS)
 - i. Doctorate Degree (PhD)

- 5) What is the yearly household income of your family? *If you are a student, then select the income of your parents.*
- a. Less than \$25,000
 - b. \$25,000 to \$34,999
 - c. \$35,000 to \$49,999
 - d. \$50,000 to \$74,999
 - e. \$75,000 to \$99,999
 - f. \$100,000 to \$149,999
 - g. \$150,000 or more

Part II: Vignettes

***1/4 of the subjects will be asked about a black male, 1/4 will be asked about a white male, 1/4 will be asked about a white female, and 1/4 will be asked about a black female**

1) (Jake/ Amy) is a (white/black), (male/female), child who is 8 years old. (Jake/ Amy) has always had trouble in school, especially in completing assignments on time, even though (he/she) has average intelligence. (Jake/ Amy)'s teachers note that (Jake/ Amy) is very distractible, and that they often have to remind (Jake/ Amy) to get back to the task at hand. (Jake/ Amy) is often up and down, out of (his/her) seat, looking out the window, or talking to classmates (Jake/ Amy) does similar things at home. (His/Her) parents notice that (he/she) easily forgets what (he/she)'s supposed to be doing, has trouble getting up in the morning and going to bed at night, and loses things like toys and games. (Jake/ Amy) also has difficulty making and keeping friends.

- A) First, I'd like to know what you think may be wrong, if anything, with (Jake, Amy?)
- a. Normal/Nothing
 - b. Asthma
 - c. ADHD/ADD
 - d. Depression
 - e. Developmental/ Puberty
 - f. Illicit Drugs
 - g. ADHD symptoms
 - h. Psychiatric/ Personality Problems
 - i. Environmental/ Social Problems
 - j. Other characteristic
 - k. Don't Know

B) Why did you select this answer? (Open-ended)

C) How serious would you consider Jake/Amy's problem, if any, to be?

- a. Very serious
- b. Somewhat serious
- c. Not very serious
- d. Not at all serious
- e. Don't know

D) What should be done to help Jake/ Amy?

- a. Nothing
- b. Medical/General
- c. Doctor
- d. Specialist
- e. Mental health/ General
- f. Psychiatrist
- g. Social Worker
- h. Counselor/ Therapist
- i. Psychologist
- j. Family/Friends
- k. Blame the parents
- l. Positive Parenting
- m. Assistance from school
- n. Involve teacher
- o. Involve school counselor
- p. Religion
- q. Social/Extracurricular activity
- r. Other help
- s. Don't know

E) In your opinion, how likely is it that Jake/ Amy's situation MIGHT be caused by the way he or she was raised?

- a. Very likely
- b. Somewhat likely
- c. Not very likely
- d. Don't know

F) In your opinion, how likely is it that Jake/Amy's situation MIGHT be caused by a chemical imbalance in the brain?

- a. Very likely
- b. Somewhat likely
- c. Not very likely
- d. Not at all likely
- e. Don't know
- f. No answer

G) In your opinion, how will Jake/Amy's situation improve?

- a. On its own
- b. With strict discipline
- c. With medical treatment
- d. With a change of behavior
- e. By changing their diet

H) Given you were the same age as Jake/Amy, how willing would you be to make friends with them?

- a. Definitely willing
- b. Probably willing
- c. Probably unwilling
- d. Definitely unwilling
- e. Don't know

***Half of the subjects will be asked about a male and ½ of the subjects will be asked about a male**

2) Erica is a 22 year-old college senior who is under immense pressure. She is working on her thesis, studying for the GRE, and also looking for jobs for after graduation. Erica has a history of being an overachiever and has a tendency to obsess over her schoolwork. She is also in the top sorority on campus and spends a lot of effort maintaining her social status and appearance. Erica feels that she has no control over anything in her life, so she began restricting meals to gain back a sense of control. She originally began by just skipping breakfast, but soon moved onto skipping more meals and counting calories. On an average day Erica consumes between 400-600 calories. Erica is 20 pounds underweight, but she believes that she is overweight and is deathly afraid to gain weight.

OR

2) Eric is a 22-year-old senior in college. During freshman year Eric gained the Freshman 15 and became unhappy with the size and shape of his body. Eric vowed that he would shed the weight, so he joined a gym and began to run 5 miles a day. Through his effort, he gradually began to lose weight, but Eric still felt fat so he started a diet. Eric's new diet consists of avoiding fatty foods, not snacking between meals, and eating set amounts of "healthy" foods. On days when Eric is feeling "fat" he doesn't eat anything at all. Through this combination of dieting and exercising, Eric has been able to shed the Freshman 15, plus an additional 30 pounds. Eric now appears thin and gaunt, but denies that he is underweight and keeps dieting and going to the gym. He is terrified of becoming "fat" and refuses to make any effort to put weight back on.

A) First, I'd like to know what you think may be wrong, if anything, with (Eric/Erica)?

- a. Normal/Nothing
- b. Autoimmune Disease
- c. Anorexia
- d. Depression
- e. Type 1 Diabetes
- f. Developmental/ Puberty
- g. Illicit Drugs
- h. Psychiatric/ Personality Problems
- i. Environmental/ Social Problems
- j. Other characteristic
- k. Don't Know

B) Why did you select this answer? (Open-ended)

C) How serious would you consider Eric/ Erica's problem, if any, to be?

- a. Very serious
- b. Somewhat serious
- c. Not very serious
- d. Not at all serious
- e. Don't know

D) What should be done to help Eric/ Erica?

- a. Nothing
- b. Medical/General
- c. Doctor
- d. Specialist
- e. Mental health/ General
- f. Psychiatrist
- g. Social Worker
- h. Counselor/ Therapist
- i. Psychologist
- j. Family/Friends
- k. Blame the parents
- l. Positive Parenting
- m. Assistance from school
- n. Involve teacher
- o. Involve school counselor
- p. Religion
- q. Social/Extracurricular activity
- r. Other help
- s. Don't know

E) In your opinion, how responsible is Eric/ Erica for his/her problems?

- a. Very responsible
- b. Somewhat responsible
- c. Not very responsible
- d. Not at all responsible
- e. Don't Know

F) In your opinion, how likely is it that Eric/ Erica's problem may be caused by stressful circumstances?

- a. Very likely
- b. Somewhat likely
- c. Not very likely
- d. Not at all likely
- e. Don't know

G) In your opinion, how will Jake/Amy's situation improve?

- a. On its own
- b. With strict discipline
- c. By eating again
- d. With medical treatment
- e. With a change of behavior

H) Given you were the same age as Eric/Erica, how willing would you be to make friends with them?

- a. Definitely willing
- b. Probably willing
- c. Probably unwilling
- d. Definitely unwilling
- e. Don't know

***1/4 of the subjects will be asked about a black male, 1/4 will be asked about a white male, 1/4 will be asked about a black female, and 1/4 will be asked about a white female**

3) Blake/ Michelle is a (white/black), (male/female) youth who is 14 years old. Blake/Michelle has a history of breathing problems. Blake/ Michelle often has bouts of coughing at night, and doesn't sleep very well. (His/Her) parents and teachers have noticed that these problems seem to be particularly bad during challenging situations, in the spring and fall, and during strenuous sports activities. Blake/ Michelle used to enjoy playing soccer but recently gave it up because of these problems. Blake/ Michelle feels badly about (his/her) breathing problems, which seem to be getting worse, and wishes (he/she) could "be just like other kids".

A) First, I'd like to know what you think may be wrong, if anything, with (Blake, Michelle)?

- a. Normal/Nothing
- b. Asthma
- c. ADHD/ADD
- d. Depression
- e. Developmental/ Puberty
- f. Illicit Drugs
- g. ADHD symptoms
- h. Psychiatric/ Personality Problems
- i. Environmental/ Social Problems
- j. Other characteristic
- k. Don't Know

B) Why did you select this answer? (open-ended)

C) How serious would you consider Blake/Michelle's problem, if any, to be?

- a. Very serious
- b. Somewhat serious
- c. Not very serious
- d. Not at all serious
- e. Don't know

D) What should be done to help Blake/ Michelle?

- a. Nothing
- b. Medical/General
- c. Doctor
- d. Specialist
- e. Mental health/ General
- f. Psychiatrist
- g. Social Worker
- h. Counselor/ Therapist
- i. Psychologist
- j. Family/Friends
- k. Blame the parents
- l. Positive Parenting
- m. Assistance from school
- n. Involve teacher
- o. Involve school counselor
- p. Religion
- q. Social/Extracurricular activity
- r. Other help
- s. Don't know

E) In your opinion, how likely is it that Blake/ Michelle's situation MIGHT be caused by a genetic or inherited problem?

- a. Very likely
- b. Somewhat likely

- c. Not very likely
 - d. Don't know
- F) In your opinion, how likely is it that Blake/Michelle's situation MIGHT be caused by a chemical imbalance in the brain?
- a. Very likely
 - b. Somewhat likely
 - c. Not very likely
 - d. Not at all likely
 - e. Don't know
 - f. No answer
- G) In your opinion, how will Blake/Michelle's situation improve?
- a. On its own
 - b. With strict discipline
 - c. With medical treatment
 - d. With a change of behavior
 - e. By changing their diet
- H) Given you were the same age as Blake/Michelle, how willing would you be to make friends with them?
- a. Definitely willing
 - b. Probably willing
 - c. Probably unwilling
 - d. Definitely unwilling
 - e. Don't know

Section III. Multiple Choice

- 5) Have you ever known someone who was hospitalized for a mental illness?
- a. Yes
 - b. No
 - c. Unsure
- 6) Do you know anyone who has been hospitalized for a physical illness?
- a. Yes

- b. No
- c. Unsure

7) How would you rate your overall health?

- a) Very Good
- b) Good
- c) Fair
- d) Poor
- e) Very Poor

8) What comes to mind when you think of the word “illness”?

9) Do you have health insurance that covers out patient and inpatient/residential services for mental illness?

- a) Yes
- b) No
- c) Unsure

10) Does your insurance cover outpatient doctor’s appointments and hospitalizations for physical illness?

- a) Yes
- b) No
- c) Unsure

11) Is an individual with mental illness responsible for their condition?

- a) Yes

b)No

c)Unsure

12) Do you know anyone who has ever seen a therapist?

a)Yes

b)No

c)Unsure

13) Do you know anyone who has taken psychiatric medication?

a) Yes

b) No

c) Unsure

14) Would you go on medication if a doctor suggested it?

a) Yes-for both mental and physical illness

b) Yes for mental illness, No for physical illness

c) No for mental illness, Yes for physical illness

d) I wouldn't go on medicine for either

15) Have you ever been frightened by someone who has a mental illness?

a) Yes

b) No

c) Unsure

16) Do you believe that ADD/ADHD are legitimate medical conditions?

- a) Yes
- b) No
- c) Unsure

17) If a person contracts HIV/AIDS do you think they are responsible for their own illness?

- a) Yes
- b) No
- d) Unsure

18) Would you rather donate \$100 to the Colon Cancer Alliance or the Depression and Bipolar Support Alliance?

- a) Colon Cancer Alliance
- b) Depression and Bipolar Support Alliance
- c) Neither organization

19) Which disease do you believe has a higher mortality rate, cancer (all forms) or eating disorders (anorexia nervosa and bulimia nervosa)?

- a) Cancer
- b) Eating disorders