PASS THE POPCORN, LET'S WATCH *ER*

A Study on the Portrayal of Mental Disorder
On the Primetime Medical Drama

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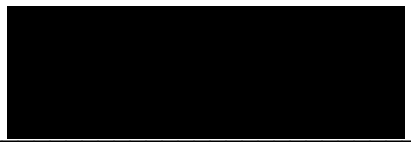

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ABSTRACT

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Title: Pass the Popcorn, Let's Watch *ER:* A Study on the Portrayal of Mental Disorders on the Primetime Medical Drama

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The medical drama, *ER*, is one of the most popular television shows of the last fifty years. Lauded for its entertainment and educational value, the show often presented dramatic medical cases and discussed relevant health topics. *Objective:* The objective of the study was to examine the inclusion and portrayal of mental disorders on this popular show. *Methods:* Data was attained through the coding of ninety-one independent episodes across four seasons. *Results:* Of the ninety-one episodes, twenty-four (26.4%) featured at least one character with a mental disorder. Seasons one and six had significantly more cases of mental disorder than seasons eleven and fifteen. The most prevalent disorder on the show was substance-related disorder, while the least prevalent were anxiety disorder, mood disorder and factitious disorder. Characters were portrayed to some extent as violent and incompetent; the mental health physician was portrayed as judgmental and dismissive. *Conclusion:* Presentations of mental disorder on the show were both consistent and inconsistent with real-life data and public perceptions. For the most part, the show seemed to impede social progress in the way people viewed mental health.

Key Words: Mental Disorder, ER, Medical Television

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Introduction

Television today is a prominent form of mass media. Attracting millions of viewers, television acts as a medium for entertainment, communication, and education. Among television programming, fictional medical shows are widely popular. Both entertaining and educational, these shows communicate health information to the public, while also providing viewers access into the world of medicine.

Medical television shows include series with physicians and/or health care workers as central characters (Turow, 2010). They were first created in the early 1950s, and became popular in the 1960s with the airing of *Dr. Kildare* and *Ben Casey*. They featured the everyday lives of physicians as they worked within their medical atmosphere. Over time, medical shows evolved with series like *ER*, *House*, and *Grey's Anatomy* introducing new types of diseases and public health concerns.

Throughout the last sixty years, medical shows have represented the medical landscape of the country. With shifts in the nature of disease, chronic disease has become more prevalent, and in response medical shows have shifted their focus to represent them. Among chronic disease, mental disorders have significantly increased in prevalence, becoming one of the most common health conditions in the country (Centers for Disease Control, 2018).

Mental disorders--also known as mental illnesses or psychiatric disorders--are defined as, "syndromes characterized by clinically significant disturbances in an individual's cognition, emotion regulation, or behavior that reflect a dysfunction in the psychological, biological, and developmental processes underlying mental functioning" (Diagnostic and Statistical Manual of Mental Disorders, 2013). Affecting both children and adults, they may cause mild and severe functional impairments and interfere with daily activities. Today, there are over 200 mental

disorders, all of which are classified based on their symptoms and behaviors. Some examples include neurodevelopmental disorders, depressive disorders, anxiety disorders, personality disorders, neurocognitive disorders, and substance-related and addictive disorders, among others.

Considering the wide diversity of mental disorders, it's no surprise that millions of people are affected each year—twenty percent of the American population experiences a mental disorder (Centers for Disease Control, 2018). However, despite this high prevalence, mental disorders are rarely featured as significant storylines on television. A study conducted by the USC Annenberg Inclusion Initiative discovered that only 7% of the 1220 characters studied experienced a mental health condition (Smith et al., 2019). Even more, those that did feature mental disorders portrayed them in a negative light. In the same study, 25% of characters with mental disorders were shown to be perpetrators of violence (Smith et al., 2019). Among medical shows, this violence is also presented. Past studies have concluded that medical primetime dramas also present a negative and stigmatized image of mental disorders (Signorielli, 1989; Smith et al, 2019).

With increased featuring of mental disorders, medical television shows can inform and educate the public about their prevalence and seriousness in American society. The stigma associated with mental illness can make people less interested in talking about it, and medical shows can be a medium for further discussion. This thesis looks at how medical shows may present mental disorders to inform their audience.

This thesis specifically investigates how mental disorders are included and portrayed on the primetime medical drama, ER. First aired in 2004, ER drew millions of viewers each week throughout its fifteen-year run. The show followed the lives of healthcare professionals working in the emergency department of a Chicago hospital. Each episode had unique storylines,

composed of dramatic patient cases and physician interactions that reflected the landscape of medicine at the time. While touching on an array of medical conditions, the show quite frequently included storylines involving mental disorders.

In this thesis, ER is examined through a content-based analysis, which specifically looks at the inclusion and portrayal of mental disorders on the show. Based on four full seasons, the study focuses on which mental disorders are included and not included, how patients are depicted and perceived by other characters, and patient outcomes. In doing so, the study shows whether ER represents or fails to represent mental disorders in comparison to the real-world.

Overall, this thesis is uniquely structured so the study is well-substantiated and understood. In the first chapter, I examine mental disorders in regards to characteristics, historical context, and shifts in public perceptions as they relate to television—important background information for understanding the study. Then, in the remaining chapters, I present the study—methods, results, discussion—investigating the inclusion and portrayal of mental disorders on the medical drama, *ER*.

Section 1: Literature Review

Historically, the nature and prevalence of mental disorders have significantly changed over time, which has influenced the portrayal of them on television. When the medical drama, ER, was first introduced in 1994, mental disorders were defined much differently than they were when it ended in 2008. This section examines mental disorders from the late 20th century to the early 21st century through extensive literature. It provides a historical perspective, focusing on their nature and prevalence, public perception, and portrayal on television. The purpose is to provide the context needed to understand the study ahead.

Background Information

Nature of Mental Disorders

Prior to the 1950s, mental disorders were defined by several different theories. In ancient civilizations, mental disorders were defined by supernatural causes—abnormal behaviors caused by godly displeasure and demonic spirits (Bridley and Daffin Jr., 2018). However, by the 19th and 20th centuries, mental disorders were largely defined by the somatogenic theory, arising from physiological causes, and the psychogenic theory, arising from psychological causes (Bridley and Daffin Jr., 2018). In response to the competing forms of diagnosis and treatment, the Diagnostic and Statistical Manual of Mental Disorders (DSM) was created in 1952 to provide a standardized system to diagnose mental disorders. Through a comprehensive classification system, the DSM defined and classified mental disorders based on predominant symptoms and behaviors, allowing mental health providers to diagnose their patients according to specified definitions and diagnostic criteria (Farreras, 2020).

During the time of ER's airing, 1994 to 2008, the DSM-IV (4th edition) provided the definition of a mental disorder, with the caveat that no operational definition could explain mental disorders in all situations. The manual defined a mental disorder as:

> A clinically significant behavioral or psychological syndrome or pattern that occurs in an individual and that is associated with present distress (e.g., painful symptom) or disability (i.e., impairment in one or more important areas of functioning) or with a significantly increased risk of suffering death, pain, disability, or an important loss of freedom… [It was] a manifestation of a behavioral, psychological, or biological dysfunction in the individual. (Diagnostic and Statistical Manual of Mental Disorders IV, 1994, p. xxxi).

By this definition, a mental disorder was distinct from deviant behavior or culturally sanctioned responses.

This operational definition applied to the umbrella term "mental disorder." The DSM-IV further classified all diagnosed mental disorders into a multi-axial system, consisting of clinical disorders (Axial 1), personality disorders and mental retardation (Axial 2), general medical conditions (Axial 3), psychosocial and environmental problems (Axial 4), and global assessment of functioning (Axial 5). Within each axial, there were individually grouped disorders such as substance-related disorders, mood disorders, anxiety disorders, dissociative disorders, personality disorders, eating disorders, and sleep disorders.

Following publication in 1994, the DSM-IV was universally used to define and classify mental disorders. In 2013, the manual was revised to the DSM-V, which eliminated the multi-axial system, and reclassified and eliminated certain individual mental disorders. The operational definition was also changed. The manual now defined a mental disorder as:

> A syndrome characterized by clinically significant disturbance in an individual's cognition, emotion regulation, or behavior that reflects a dysfunction in the psychological, biological, or developmental processes underlying mental functioning (Diagnostic and Statistical Manual of Mental Disorders V, 2013, p.20)

Prevalence of Mental Disorders in America

In the late 1990s and early 2000s, mental disorders were highly prevalent in the United States (Kessler, Chiu, Demler, Ellen, 2005). Prevalence estimates were determined through various epidemiological surveys, the most recognized being the National Comorbidity Replication Survey (NCS-R) and the National Comorbidity Adolescent Survey (NCS-A) –two nationally representative studies.

Based on NCS-R data (for the period 2001-2003; updated through 2007), more than 30% of American adults had at least one DSM-IV mental disorder in the previous year and more than 50% had a DSM-IV mental disorder at least one point in their life (National Comorbidity Survey, 2003). Among both 12-month prevalence and lifetime prevalence, the two most common types mental disorders were anxiety disorders and substance-related disorders. The most prevalent individual disorders were specific phobia, social phobia, major depressive disorder, and nicotine dependence. Moreover, the NCS-R data showed that among both 12-month and lifetime prevalence, anxiety and mood disorders were more prevalent in women and impulse-control and substance disorders were more prevalent in men.

While the NCS-R provided estimates for the American adult population, the NCS-A provided estimates for the American adolescent population (during the same period). Prevalence estimates showed that among adolescents aged 13-18, nearly half had experienced (or met the

criteria for) a mental disorder in their lifetime (Merikangas et al., 2010). Among lifetime prevalence, the most prevalent class was anxiety disorders, followed by behavior disorders (Merikangas et al., 2010). The major disorders seemed to be major depressive disorder, specific phobia, and oppositional defiant disorder. And similar to adults, anxiety and mood disorders were prevalent in girls and behavioral disorders and substance use disorders were more prevalent in boys.

American Perceptions of Mental Disorders

By 1996, the American view of mental disorders was more broadened and differentiated (Phelan et al., 2000). As compared to 1950, Americans were more likely to include descriptions beyond psychosis and anxiety/mood disorders when defining what constitutes a mental disorder (Phelan et al., 2000). They also included social deviance, mental deficiency, cognitive impairment, and other non-psychotic syndromes (Phelan et al., 2000). The broadened American views were consistent with changes in the DSM, the increase in Americans' first-hand knowledge of persons with a mental disorder, and the growing public awareness for mental health (Pescosolido et al., 2000; Phelan et al., 2000).

Though the American view broadened, Americans still held stigmatizing attitudes and negative perceptions about mental disorders—evidenced through social distance and negative images and stereotypes. These stigmatizing beliefs—incompetence, dangerousness, blame, shame, and criminality—could be associated with personal characteristics and beliefs, previous experiences with individuals with a mental disorder, and causal attributions (the perceived cause of the mental disorder) (Parcesepe and Cabassa, 2013).

The most widespread stigmatizing beliefs were dangerousness and incompetence. Individuals with a mental disorder were largely perceived as physically violent to themselves and others, as well as incompetent to make financial and treatment decisions (Pescosolido et al., 1999). The well-recognized General Social Survey of 1996 found that Americans were more likely to equate a mental disorder with violence or dangerous behavior in 1996 compared to 1950 (Pescosolido et al, 2000). Among specific mental disorders, the far majority (>75%) of American respondents reported that individuals with alcohol dependence, depression, drug dependence, or schizophrenia were likely to do something violent to others (Pescosolido et al, 2000). The same survey found that Americans were also more likely to perceive individuals with a mental disorder as incompetent. Among the specific mental disorders, the majority of American respondents reported that a "troubled person" (the reference group) or an individual with depression (to a lesser extent) were very or somewhat able to make treatment decisions and manage money, but individuals with alcohol dependence, schizophrenia, and drug dependence were not (Pescosolido et al, 2000).

These stigmatizing beliefs, among others, were largely represented in the media, including medical television programming, which further perpetuated them. Though there were some positive representations, the media provided overwhelmingly dramatic, distorted, and negative images of mental disorders (Stuart, 2006). Medical primetime dramas often presented a negative and stigmatized image of mental illness, with mentally ill characters statistically more involved in violence and likely to portray a "bad" character type (Signorielli, 1989). One study found that 25% of mentally ill characters in medical primetime dramas killed someone and 50% hurt someone, thus portraying these characters as more violent than other characters and real people with mental illness (Stuart, 2006). Even more, television shows often portrayed those

with mental disorders as socially excluded and emphasized the negative reactions of other characters. Television portrayals showed the fear, rejection and ridicule of other characters to those with mental disorders (Stuart, 2006).

These negative images certainly influenced the American publics' view of mental disorders. Studies in the late 1990s and early 2000s, showed that, "heavy exposure to media images of mental disorders…engendered intolerance toward people with mental [disorders] and negatively influenced the way in which the public evaluated mental health issues" (Stuart, 2006). A study found that due to stigmatizing attitudes of mental disorders and negative media portrayals, Americans were more unwilling to move next door, make friends with, socialize with, work closely with, or marry an adult and/or child with a mental disorder--depression, schizophrenia, alcohol dependence, drug dependence--compared to a "troubled person" (the reference group) (Pescosolido, 2013).

As a result of these stigmatizing beliefs and negative media portrayals, individuals with mental disorders may have faced prejudice and discrimination (housing, employment, etc.), leading to impaired self-esteem, self-stigma, social exclusion, and reduced autonomy (Stuart, 2006; Parcesepe and Cabassa, 2014). Even more, the stigma surrounding mental disorders certainly increased attitudinal barriers to mental health treatment. A study found that a considerable portion of those with a mental disorder did not seek care or dropped out of care early (Andrade et al., 2016; Mojtaba et al., 2010). Attitudinal barriers, which come from individual and public perceptions of mental disorders, seemed to be the most significant in deterring participants from initiating and continuing treatment. The majority of respondents cited that they could handle it on their own, if they were to seek treatment it would be ineffective or

they were worried about the prejudice and discrimination they would face once they're diagnosed and treated (Andrade et al., 2016; Mojtaba et al., 2010).

Summary

In conclusion, the nature, prevalence, public perception, and media portrayal of mental disorders are all important to understanding the study of ER. At the time of ER's airing, the DSM-IV was published, which provided an operational definition of a mental disorder and classified all diagnosable disorders into seventeen categories. Plus, the prevalence of mental disorders was quite high relative to previous decades. In regards to public perception, Americans held broadened, yet stigmatizing views of mental disorders, which was perpetuated through overwhelmingly negative media portrayals. All of this information provides context to understand the discussions and conclusions of the content-based study, as findings will be compared to real-life conditions of the time, as to determine if the show is accurate in its representation of mental disorders.

Media Depictions of Mental Disorders

Overall, previous research efforts regarding medical television shows and the depiction of mental disorders have varied. Some studies have focused on the impact of medical television programming on viewers' thoughts, perceptions, and behaviors regarding health and medicine. Others have focused on the depictions of selected health conditions on medical television shows.

Though not abundant, there has been research over the last fifty years involving the depiction of health conditions on medical television shows. Previous studies have used content-based analyses to compound qualitative and quantitative data about various shows. One study

looked at the general distribution of inpatient diagnoses across seasons of ER, Chicago Hope, and Grey's Anatomy and found that multiple-disease diagnoses, injuries and poisonings, septicemia (blood poisoning), and mental illness were the most common. These diagnoses were not representative of real-world hospital diagnoses, as the TV dramas focused more on dramatic diseases like mood disorders, which were less common in the real world (Hetsroni, 2009).

In regards to mental disorders specifically, research has been done based on various kinds of television programs, from comedies to crime to action-adventure. One well-recognized study in 1989 concluded that primetime network dramas presented a negative and stigmatized image of mental illness (Signorielli, 1989). Mentally ill characters were statistically more involved in violence and likely to portray the "bad" character type. Another study in 1999, found that 75% of the mentally ill characters sampled were depicted as physically violent and dangerous to another character (Wilson, Nairn, Coverdale, Panapa, 1999). From these studies and others, the consensus seems to be that primetime network shows negatively portray mentally ill characters.

All previous research, including the previous two, has sampled primetime television programs. However, there have been few, if any, studies that have sampled only medical television shows. Therefore, further research can be done on the depiction of mental disorders within medical television. By focusing on the show ER, this thesis can do so, uniquely contributing to the overall body of knowledge on mental disorders and their depiction on television. It will also provide modern research, since most of the current literature is based on studies conducted in the 1980s and 1990s.

Overall, this thesis is intended to add to the current literature. It's unique in that it analyzes mental disorders on one medical television show, and focuses on how its depiction changed over time. This thesis will provide a new perspective that has not been researched

before. With strong findings, this thesis will show how mental disorders are depicted and whether they are accurately represented compared to the real-world.

Following this thesis, further research can be done to see how the depictions found in my study affect an audience and influence their perceptions of mental disorders and medicine, in general. There has been limited research done in this capacity.

Section 2: Methods

This study is a qualitative and quantitative assessment of the inclusion and portrayal of mental disorders on the medical show, ER. The show was selected for its popularity, extended fifteen-year run, and content. It aired from 1994 to 2008, with 15 full seasons and 331 total episodes, providing a large sample of episodes to select from.

I watched a total of ninety-one episodes for this study. I selected seasons one, six, eleven, and fifteen, primarily to show a change in time. These seasons were watched episode-by-episode in sequence. Seasons not selected for were still reviewed through Wikipedia online summaries for the purpose of understanding plot lines and character development.

Coding Measures

Episodes were specifically observed and coded for characters with mental disorders. A character qualified as having a mental disorder if they were designated as such by a physician. The character had to be featured and cared for in at least two scenes throughout the episode. If a character met these inclusion criteria, they were coded for and further evaluated.

Any character that met the criteria was included, even if they were admitted and treated for an unrelated medical condition. Characters were either treated for complications derived from their mental disorder or for unrelated conditions in which their mental disorder was also addressed. For example, a patient might enter the ER due to a violent psychotic episode caused by their schizophrenia. In comparison, another patient with Obsessive Compulsive Disorder might enter the ER due to an unrelated heart attack.

Furthermore, in this study, there were several demographic and descriptive measures included to characterize those with mental disorders. The demographic characteristics used were

gender and age. For coding purposes, these were coded as categorical variables. Gender was dichotomized into male or female. Age was divided into five groups: Child (0-9), Adolescent (10-18), Young Adult (19-40), Middle-Aged Adult (40- 60), and Older Adult (60+). Both were coded based on the explicit appearances and statements made by characters in the episode.

The first descriptive measure was the type of mental disorder. Based on physician statements, a character was coded for one or more DSM-IV classifications. In most cases, the disorder was clearly stated. For example, "[Is she] Schizophrenic? Ooh, floridly, yes." From this statement, the character was coded for schizophrenia. Other examples were, "you are anorexic" and "There's a woman there with Pick's Disease." From each of these statements, the character was coded for an eating disorder and dementia, respectively. In a few cases, the disorder was not explicitly stated, and context information was used. For example, "you're using cocaine…I want to put you in a rehab program." From this statement, the character was coded for a substance-related disorder.

The second descriptive measure concerned the attitude of the treating physician. This was explored by the primary physician's attentiveness or dismissiveness towards the character. A physician was coded as attentive if they patiently and politely attended to the character and listened to his/her concerns. A physician was coded as dismissive if they did not.

The third descriptive measure concerned the portrayal of the character with a mental disorder. Three variables were specifically assessed: dangerousness, disorientation, and agitation. In developing these variables, I referenced previous literature including the prominent 1989 study by Signorielli. Dangerousness was assessed through committed (or attempted) acts of violence, in which the subject physically harmed themselves or another character. Disorientation was assessed by the character's ability to understand their environment and communicate

accurately with other characters. A character was coded as disoriented if they seemed lost or unable to understand the present. They could not coherently answer questions from their physician. Agitation was assessed by the character's overall aggression, hyperactivity, distress, and irritability. A character was coded as agitated if they appeared nervous, upset, aggressive, and/or combative with other characters.

Finally, the fourth descriptive measure concerned the character's outcome. There was a total of four outcomes coded for. First, the character could be discharged from the ER. Second, the character could be admitted to a hospital or a treatment program. Third, the character could refuse treatment against medical advice. Fourth, the character could have some other outcome or no outcome at all. If a character died or their outcome was not addressed, it was coded as "Other."

Coding Episodes

Using these coding measures, each episode was watched at least once. The purpose of the first viewing was to see if the episode featured a character with a mental disorder. If the episode did, it was watched again—only the character's scenes. The purpose of the second viewing was to code for demographic and descriptive measures.

Each episode was also considered independent. If a character appeared on multiple episodes, each appearance was considered a separate case and coded as such—granted the inclusion criteria were met. For example, a character might be diagnosed and treated for a mental disorder in episode one and then return for another treatment in episode three. If the character was featured and cared for in at least two scenes for both episodes, then both appearances would be coded. In comparison, a character might be diagnosed and treated for a mental disorder in

episode one and then return for a brief, non-medical scene in episode three. In this case, only the character's first appearance would be coded.

Coding Sample

Overall, these coding guidelines were used to conduct the study. For better understanding, a coding sample is provided, based on a mentally ill character in episode four of season one.

Figure 1

Coding Sample of Episode 4 (Season 1)

		Demographics			Attitude of Treating Physician		Portrayal of Character			Character's Outcome			
Character's Name	Season Episode	Age	Gender	Type of Disorder	Attentive	Dismissive	Commited Violence (or attempted to)	Disoriented	Agitated	Released Home	Admitted	Refused Treatment and Went home	Other
Mrs. Schap	Season 1 Episode 4	Young Adulthood	Female	Schizophrenia	X		X	X	X		X		

Note. An X indicates the character was coded for that measure.

During the episode, Mrs. Schap physically appeared in three scenes. She had initially come into the ER due to concerns about her son's hearing. However, during his evaluation, she had a psychotic episode and was thereafter treated as a patient with mental illness. Based on her appearance, she was coded as a female and a young adult.

In her first scene, she appeared with her son and a pediatrician. At one point, the pediatrician asked Mrs. Schap, "What are some of the other voices that Ozzie can't hear?" to which she yelled back, "the princess of wales! Does that ring a bell?." She continued yelling aggressively at the physician, which the physician noted was a point of concern. As the physician

was leaving, Mrs. Schap was shown pacing back and forth while yelling and laughing at the air as if someone was there. From this scene, Mrs. Schap was coded as being agitated, due to her interaction with the physician. The pediatrician (primary physician) was coded for being attentive, as he respectfully communicated with her and listened to her concerns, even when she raised her voice.

In the next scene, she was evaluated by a psychiatrist for her symptoms. The psychiatrist diagnosed her with schizophrenia, stating that she was delusional and hearing voices—this was coded under the type of disease. As a result, she was admitted to psych services.

In the third scene, she was shown fighting against physicians, who were trying to restrain her. She consistently kicked and screamed, yelling "Get your hands off me!" At one point, she even bit the psychiatrist—he was shown to be in a lot of pain. Once she was restrained, she started talking gibberish and asked repeatedly, "Where am I going? Why are you doing this?" She didn't appear to understand what was happening and how she was behaving. Based on this scene, she was coded for committing violence, showing disorientation and agitation.

Though Mrs. Schap was physically shown in three scenes, there were several other scenes in which she was discussed by another character. Near the end of the episode, there was a scene between her son and the pediatrician. The pediatrician stated that his mom, Mrs. Schap would be transferred to a psychiatric hospital for treatment. Based on this statement, the second outcome (admitted to hospital or treatment program) was coded for.

Overall, the character was assessed for her portrayal in the episode. As explained, scenes showing or discussing the character were used to designate the coding measures. The statements made by the character or others were the primary evidence for this.

Section 3: Results

Figure 2

Complete Coding Spreadsheet for Sample (91 episodes)

			Demographics			Attitude of Treating Physician		Portrayal of Character			Character's Outcome			
Medical Case #	Character's Name	Season Episode	Age	Gender	Type of Disorder	Attentive	Dismissive	Commited Violence (or attempted)	Disoriented	Agitated	Released Home	Admitted	Refused Treatment	Other
1	Victor	Season 1 Episode 2	Older	Male	Dementia	X			X	X		X		
2	Madam X	Season 1 Episode 3	Older	Female	Alzheimer's	X			X	X	X			
3	Mrs. Schap	Season 1 Episode 4	Young Adulthood	Female	Schizophrenia	X		X	X	X		X		
4	Patrick	Season 1 Episode 7	Young Adulthood	Male	Early Childhood Disorder	X			X		X			
5	Michael Kenny	Season 1 Episode 8	Adolescent	Male	Eating Disorder	X								X
6	Mr. Randall	Season 1 Episode 8	Young Adulthood	Male	Substance -Related Disorder; Depression		X	X		X	X			
7	Mrs. Abernathy	Season 1 Episode 11	Older	Female	Depression	X					X			
8	Patrick	Season 1 Episode 11	Young Adulthood	Male	Early Childhood Disorder	X			X		X			
9	Alan	Season 1 Episode 13	Young Adulthood	Male	Emotionally Disabled	X							X	
10	Rene	Season 1 Episode 17	Adolescent	Female	Substance -Related Disorder	X			X	X				X
11	Jesse K.	Season 6 Episode 5	Young Adulthood	Male	Substance -Related Disorder (Cocaine)	X							X	
12	Meg Corwyn	Season 6 Episode 5	Young Adulthood	Female	Substance -Related Disorder (Opiods/Heroin)	X							X	
13	Chad	Season 6 Episode 7	Adolescent	Male	Substance -Related Disorder (Alcohol)	X				X			X	
14	Dr. Lawrence	Season 6 Episode 7	Older	Male	Alzheimer's	X				X	X			
15	Chad	Season 6 Episode 9	Adolescent	Male	Substance -Related Disorder (Alcohol)	X				X		X		
16	Jake	Season 5 Episode 10	Adolescent	Male	Early Childhood Disorder	X		X	X	X	X			
17	Ms. Connor	Season 5 Episode 12	Young Adulthood	Female	Factitucus Disorder	X				X				X
18	Paul Sobrinke	Season 5 Episode 13	Young Adulthood	Male	Schizophrenia	X		X	X	X				X
19	Paul Sobrinke	Season 5 Episode 14	Young Adulthood	Male	Schizophrenia	X			X	X		X		
20	Claire	Season 5 Episode 20	Young Adulthood	Female	Eating Disorder	X			X				X	
21	Dr. Carter	Season 5 Episode 22	Young Adulthood	Male	Substance-Related Disorder (Prescription meds)	X		X		X		X		
22	Tunny	Season 11 Episode 3	Young Adulthood	Male	Substance-Related Disorder (Aspirin)		X		X				X	
23	Howard	Season 11 Episode 4	Young Adulthood	Male	OCD	X				X			X	
24	Mother	Season 11 Episode 4	Young Adulthood	Female	Substance Related Disorder (Benzo Withdrawal)	X			X	X		X		
25	Charles Metcalf	Season 11 Episode 6	Young Adulthood	Male	Substance-Related Disorder (Alcohol)	X			X	X			X	
26	Mrs. Devon	Season 11 Episode 14	Older	Female	Dementia	X			X		X			
27	Mrs. Bulowski	Season 11 Episode 14	Middle Adulthood	Female	Substance-Related Disorder (Demerol)	X		X		X			X	
28	Mrs. Holmes	Season 15 Episode 4	Older	Female	Alzheimer's	X			X					X
29	Claire	Season 15 Episode 4	Adolescent	Female	General Menta. Disorder	X				X		X		
30	Oliver Kustin	Season 15 Episode 14	Older	Male	Multi-Infarct Dementia	X			X					X
31	Gary Walters	Season 15 Episode 20	Middle Adulthood	Male	Substance -Related Disorder (Alcohol)	X								X

Table 1

Distribution of Coding Measures for Cases of Mental Disorder

Distribution of Coding Measures		
	n=31	%
Demographics		
Gender		
Male	16	57.14
Female	12	42.86
	n= 28	*100%*
Age		
Child (0-9)	0	0
Adolescent (10-18)	5	17.86
Young Adult (19-40)	14	50.00
Middle-Aged Adult (40-60)	2	7.14
Older Adult (60+)	7	25.00
	n=28	*100%*
Attitude of Treating Physician		
Attentive	29	93.55
Dismissive	2	6.45
	n=31	*100%*
Portrayal of Character		
Commits Violence		
Harms Others	6	19.36
No	25	80.65
	n=31	100%
Acts Disoriented		
Yes	16	51.61
No	15	48.39
	n= 31	*100%*
Acts Agitated		
Yes	18	58.06
No	13	41.94
	n=31	*100%*
Character's Outcome		
Released Home	8	25.81
Admitted	7	22.58

Refused Treatment	9	29.03
Other	7	22.58
	n=31	*100%*
Source: *ER* (Seasons 1, 6, 11, 15)		

Descriptive Results

Descriptive Data on Episodes and Characters

The total sample (ninety-one episodes) was coded and translated into descriptive data. Of the ninety-one episodes, twenty-four (26.4%) featured at least one character with a mental disorder. Season six had the most episodes featuring mental disorder (37.5%), followed by season one (33.3%), season eleven (16.7%), and season fifteen (12.5%). A total of seven episodes (21.2%) featured two separate characters with mental disorders; these characters were treated separately and did not interact with each other. Additionally, there were a number of episodes, in which a mental disorder was offhandedly addressed (and not featured). For example, in one episode, a physician mentioned "a suicidal junkie" and "a lady having hallucinations", though these patients were never shown on screen.

There was a total of twenty-eight characters that had a mental disorder and were featured in an episode. 57.14% were male and 42.86% were female. In terms of age, half were Young Adults (19-40), a quarter were Older Adults (60+), 17.86% were Adolescents (10-18) and 7.14% were Middle-Aged Adults (40-60); there were none aged 0 to 9.

The characters had a variety of DSM-IV classified disorders. The most frequent was a substance-related disorder. This included intoxication, dependence, abuse, and withdrawal to alcohol, prescription medications, and/or opioids. The second most frequent disorder was dementia—including Alzheimer's. Aside from these two, other disorders included schizophrenia, early childhood disorders (i.e. mental retardation, developmental disorder), and eating disorders.

The least frequent disorders were anxiety disorder, mood disorder, and factitious disorder. When diagnosing or addressing these disorders, there was only one explicit reference to the DSM-IV manual—the character used it for diagnostic purposes.

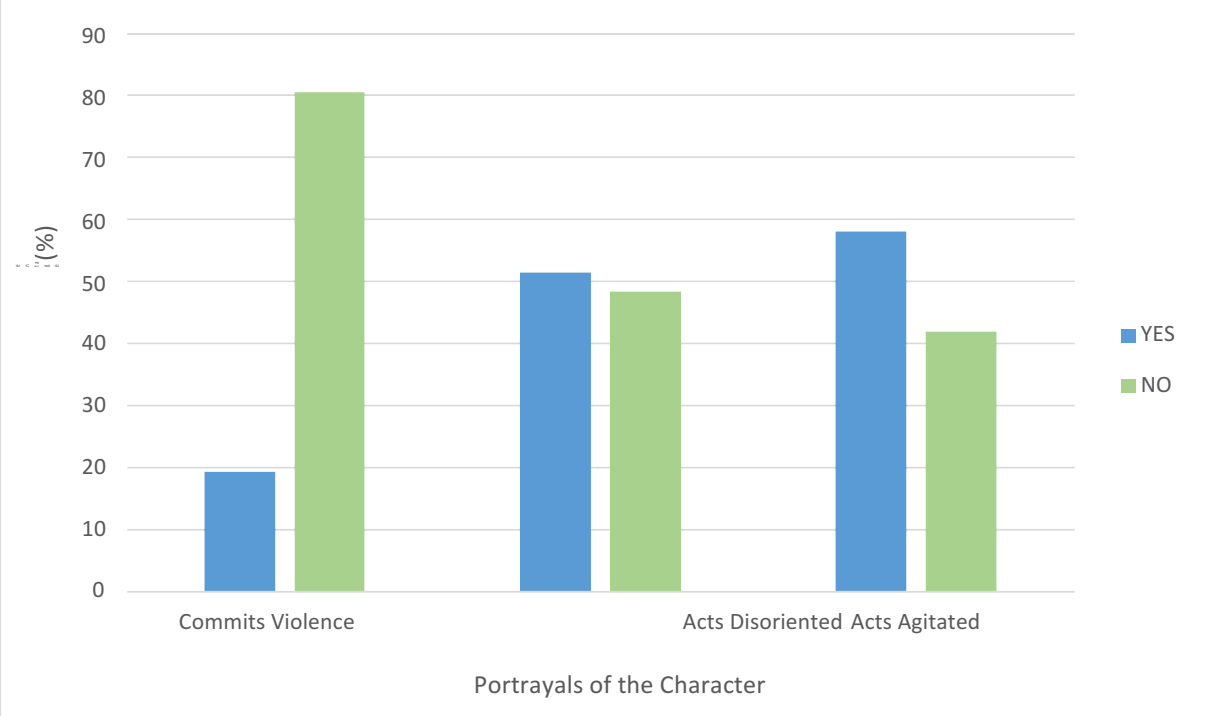
Finally, 85.7% of the characters were specifically discussed or treated for their mental disorder—symptoms related to their disorder or consequences as a result of their disorder. For example, one character came to the ER for an overdose related to their substance addiction. Another character was admitted for hallucinations and disorganized speech, which the physician diagnosed as schizophrenia. In comparison, 14.3% were treated for unrelated medical conditions and traumas—their mental disorders were stated by another character. For example, a character came to the ER for a car accident injury and while being treated, a relative mentioned that the character had Alzheimer's.

Descriptive Data on Mental Disorder Cases

As previously stated, three (out of 28) characters appeared in multiple episodes. Because each appearance was counted separately, the total number of cases (appearances) focused on mental disorders was thirty-one. For these cases, the attitude of the treating physician was overwhelmingly positive. 93.55% of the time the primary physician was attentive to the character, and only 6.45% of the time the physician was dismissive. In most cases, the physician attended to the character politely and patiently, listened to their concerns and attended to all the character's needs.

Figure 3

Portrayals of Character by Percentage



Regarding the portrayal of characters, there was overwhelmingly no violence committed by a character with a mental disorder. 80.65% of the cases did not involve the character harming (or attempting to harm) themselves or another character. In comparison, 19.36% of the cases did. Among those cases, physical harm was widely variant. In one case, a schizophrenic character stabbed two physicians, ultimately killing one of them. In another case, a character suffering from substance dependence attacked a physician with a metal bedpan, causing a painful nose injury. In the remaining cases, the characters punched, kicked, and/or hit other characters, but did not cause injury or death. In all these cases of violence, the character either had schizophrenia, a substance-related disorder, or early childhood disorder.

Furthermore, there was a relatively equal distribution in the disorientation of characters. For 51.61% of cases, the character acted disoriented and for 48.39% of the cases, the character did not act disoriented. For those cases where the character acted disoriented, the treating physician asked them questions and they could not coherently and accurately answer. For example, in one case, the character was asked where they were and they responded with, “What is jail?” though they were at the hospital. The same character also thought she was in the year 1948 and the president was Harry Truman, which was widely inaccurate. Overall, the characters with disorientation had an array of mental disorders; there was no prominent disorder. For the cases with disorientation, the characters had dementia, schizophrenia, substance-related disorder, early childhood disorder and an eating disorder.

Aside from disorientation, the majority of cases had a character that appeared agitated. Among 58.06% of the cases, the character appeared either distressed, irritable, hyperactive, or aggressive. In many cases, the physician explicitly stated that the character was agitated. In the other 41.94% of cases, the character did not. Similar to disorientation, there was no relationship between the type of disease and agitated behavior.

Finally, the last measure (character outcome) was more evenly distributed. In 25.81% of the cases, the character was released home following treatment in the emergency department. In 22.58%, the character was admitted into the hospital or an outside treatment facility/program. In 29.03%, the character refused treatment. And in 22.58%, the character either died or the outcome was not addressed. Of these outcomes, there seemed to be a pattern between substance-related disorder and the refused treatment outcome. In approximately two-thirds of cases involving a substance-related disorder, the character refused treatment against medical advice.

Additional Observations

Beyond these particular cases, *ER* also portrayed mental illness through the perspective of Dr. Cvetic, the primary psychiatrist in Season One. He frequently referenced many of his cases—his patients and their symptoms and treatments. Throughout his eight-episode arc, he tended to be dismissive of patients when consulted for treatment recommendations by another physician. For example, a fellow physician asked him to admit a patient with senile dementia, however, he immediately refused without acknowledging the patient or reviewing the case.

In addition, the psychiatrist also made many condescending and/or harsh comments towards and about his patients. In one scene, he told his patient—with a patronizing tone-- that, "self-pity [wasn't] the answer," to which the patient took offense, feeling heavily judged for his condition. In a second scene, he told a fellow colleague that his patient, "deserved a lobotomy…a hammer to the head." In a third scene, he stated that his patient was a, "pathetic drunk" and he did not care what happened to him.

Overall, he was overwhelmingly negative to and about his patients. He expressed frustration frequently, stating once that, "he hasn't gone one week in fifteen years without being bitten, spat, puked or peed on." Due to his hostility and irritability throughout the show, fellow physicians questioned whether he was suffering from depression, himself—though it was never confirmed.

Section 4: Discussion

The overall purpose of this study was to evaluate the inclusion and portrayal of mental disorders on the medical show, ER. Then, to conclude whether the show represents or fails to represent real-world cases and discussions surrounding mental health. The results show that *ER* at times accurately represented mental disorders and at other times did not.

Inclusion of Mental Disorders

Frequency of Mental Disorders on the Show

As a whole, mental disorders were uncommon on the show. Of all medical cases, mental disorders accounted for less than 10%. This was an accurate representation of emergency medicine. Studies showed that mental disorders were statistically less common in emergency departments—the setting of the show (NHAMCS, 2008). Rather, injuries and poisonings were the most common, along with diseases of the respiratory system, digestive system, and musculoskeletal system (NHAMCS, 2008).

Though uncommon, the show included mental disorders throughout the series. The frequency of mental disorder cases per season was variant, showing an overall decrease from Season 1 (1994) to Season 15 (2008). This was an inaccurate representation of prevalence changes at the time. Studies showed that between 1990 and 2010 there was an increase in emergency visits related to mental disorders. The well-recognized National Hospital Ambulatory Medical Care Survey (NHAMCS) found that emergency visits related to mental disorders increased by 15% between 1992 and 2000 (Hazlett et al., 2004). An analogous study spanning 1992 to 2001 upheld this finding, showing a 28% increase—from 4.9% to 6.3% (Larkin, et al.,

2005). Additional studies proved a continued increase past years 2000 and 2001. One study found a 9% increase—from 6.4% to 7.0%--during the period 2002 to 2008 (Tenny, et al., 2011).

By not accurately reflecting this change over time (increase), the show potentially misguided its viewers. By decreasing the frequency of cases over time, the show gave a distorted view of mental disorder prevalence in the country, which likely had implications on its viewers. Foremost, viewers would not have known that mental disorders were more frequent in emergency departments over time. Second, it's likely that, from the show alone, viewers had a skewed understanding of mental disorders, specifically in regards to their prevalence. In earlier seasons, the show presented a higher frequency of mental disorder cases. With increased exposure, viewers likely had broadened understandings of what constituted a mental disorder and how they were treated. Viewers likely perceived mental disorders to be more common, and emergency departments to be a viable resource for mental health treatment. This likely was not the case for viewers of the later seasons. In later seasons, the show presented a lower frequency of mental disorder cases. Viewers likely had a limited understanding of mental disorders and likely perceived them to be less common, as they were hardly exposed to them from the show.

Types of Mental Disorders on the Show

The show included a diversity of mental disorders throughout its airing, though some were significantly more prevalent than others. The types of disorders prevalent and not prevalent provide insight into the overall landscape of mental disorders on the show.

The most common class of mental disorders treated on the show were substance-related disorders. This seemed consistent with real-world data. Prevalence estimates from the NCS-R survey (2003) showed that substance-related disorders were one of the two most prevalent kinds

of mental disorders in the U.S adult population (National Comorbidity Survey, 2003). Additionally, studies on mental health-related emergency visits showed that substance disorders were the most common diagnoses in ERs during the 1990s and 2000s (Hazlett et al., 2004; Larkin et al, 2005).

Undoubtedly, the show highlighted substance-related disorders as a significant mental health problem. At least one was featured in every season sampled. Throughout the series, the show included a diversity of substance-related disorders, including both Substance-Use disorders (Abuse, Dependence) and Substance-Induced disorders (Intoxication, Withdrawal, Induced Disorder). Hence, the show was able to reflect on how common and diverse of a mental disorder it was.

The show also reflected gender differences related to substance disorders, a unique finding in the data. The show included more men with substance-related disorders than females, which also seemed to reflect prevalence estimates and data on mental-health related emergency visits. The NCS-R survey showed that adult men had both a higher 12-month prevalence and lifetime prevalence of any substance-related disorder (National Comorbidity Survey, 2003). This included alcohol abuse/dependence, drug abuse/dependence, and nicotine dependence. Even more, findings from the National Institute on Drug Abuse showed that, "illicit drug use was more likely to result in emergency department visits for men than women" (NIDA, 2020).

It's unknown whether this gender difference was intentionally included in the show. However, with this gender difference, along with the diversity of cases, the show seemed to provide a multifaceted view of substance-related disorders. Combined with the high frequency of cases, the show seemed to accurately reflect the prevalence of substance-related disorders in the U.S population and treated in emergency departments. Thus, from the show alone, viewers likely

had a greater understanding of substance-related disorders compared to any other mental disorder on the show.

While the show covered a diversity of substance-related disorders, it only included one anxiety disorder (Obsessive-Compulsive Disorder). It was the least common class of mental disorder out of all presented on the show—aside from factitious disorder. This seemed inconsistent with real-world prevalence data. According to the NCS-R prevalence study, anxiety disorders were the most prevalent class of mental disorders in the country based on 12-month prevalence (National Comorbidity Survey, 2003). They were the second most prevalent based on lifetime prevalence (National Comorbidity Survey). In regards to emergency treatment, they were among the most frequently treated at emergency departments. A study on mental-health related emergency visits showed that anxiety disorders were the third—or second depending on the year—most common diagnoses in ERs during the 1990s and 2000s (Larkin et al., 2005).

Anxiety disorders are characterized by excessive and enduring anxiety, fear, or worry that tends to interfere with an individual's daily living ("Anxiety Disorders", n.d.). Based on the DSM-IV, there was a multitude of anxiety disorders including Panic disorder, Agoraphobia, Social phobia, Posttraumatic Stress Disorder, Obsessive-Compulsive Disorder, and Generalized Anxiety Disorder. Individuals with anxiety disorder frequented the emergency department primarily for acute symptoms. Anxiety disorders have been associated with acute somatic symptoms, such that people presented with physical complaints like dizziness, shortness of breath, and chest pain (Stephenson & Price, 2006). Due to these symptoms, they had an increased health concern and tended to visit the emergency department. In many cases, the symptoms were not classified as immediate/emergent, so these patients were referred to an outside physician and/or discharged home (Dark et al., 2017). As a result, individuals with an

anxiety disorder were frequent visitors to the emergency department. For example, individuals with panic disorder commonly sought treatment for noncardiac chest pain. One study found that almost 25% of patients screened for panic disorder had visited the ER four or more times in the last year (Zane et al., 2003).

Based on this background, it's surprising that the show didn't feature more characters with an anxiety disorder. The show only presented one case. The character had an Obsessive-Compulsive Disorder, which was not highly prevalent in the U.S population or in the emergency department. The show primarily focused on treating patients with acute conditions, yet people with anxiety disorder frequented the emergency department for their acute symptoms. Overall, the show did not seem to accurately reflect the prevalence of anxiety disorders in the real-world. There are possible explanations for this. The show was characterized as a medical drama, such that cases were known for being dramatic. Anxiety disorders may have a less dramatic effect compared to other diseases and conditions. Or anxiety disorders may not have fit within the storylines that the writers wanted to tell.

Similar to anxiety disorders, mood disorders were not heavily featured on the show; in fact, only two characters had one. This low frequency seemed inconsistent with real-world prevalence data on emergency department visits. Though mood disorders were not the most prevalent in the U.S. population, they were frequently treated in emergency departments. A study on mental-health related emergency visits found that mood disorders were the second—or third, depending on the year—most common diagnoses in ERs during the 1990s and 2000s (Larkin et al., 2005). They had a similar prevalence to anxiety disorders.

Mood disorders were characterized by an underlying problem affecting an individual's persistent emotional state ("Any Mood Disorder", n.d.). According to the DSV-IV manual, the

two primary mood disorders were depression and bipolar disorder. People with a mood disorder were considered high utilizers of health care including emergency treatment. They visited the emergency department mainly for somatic symptoms like chest pain and chronic disease. During the 2000s, many were interested in ED-initiated intervention and thus were frequent visitors. One study found that, "76% of patients with a depressed mood had a history of one or more ED visits [within] six months" (Rhodes, K.V, 2008). Knowing this information, you would expect the show to include a higher frequency of mood disorders, as they were widely treated in emergency departments at the time. Similar to anxiety disorder, the show's lack of mood disorders likely had to do with the production elements of the show.

Moreover, the show included other disorders aside from mood disorders, anxiety disorders, and substance-related disorders. However, there is limited literature on their prevalence in the U.S population and emergency departments, and thus their frequency on the show can't be analyzed in terms of real-world prevalence. The show did seem to include a diversity of mental disorders though. In doing so, viewers likely had exposure to new forms of mental disorder.

Overall, while the show accurately reflected prevalence estimates for substance-related disorder, it did not accurately reflect anxiety or mood disorders. The likely implications of this would be that viewers had significantly decreased exposure to those disorders, though they were prevalent in society. It potentially affected the relatability of the show, particularly for viewers with an anxiety or mood disorder. Because those disorders were prevalent in society, it was likely that many viewers experienced them. By not including them in the show, that aspect of relating to the show by similar experience was not there.

Portrayal of Mental Disorders (Character and Physician)

Portrayal of Characters with Mental Disorder

Through character portrayals, the show reflected negative and stigmatized images of the mentally ill. Some characters were presented as dangerous and unpredictable, while others were presented as disoriented and incompetent. Many times these presentations were overly dramatic, which seemed to further emphasize those images. These presentations were certainly problematic for a society that already held strong stigmatizing beliefs about mental disorder.

Overall, the show portrayed its mentally ill characters largely in the extreme. They were portrayed to have severe mental disorders, with the most extreme symptoms. Characters with schizophrenia were shown having full psychotic breakdowns, and characters with dementia were shown having complete cognitive decline. This may be attributed to the dramatic nature of the show, in which entertainment and dramatic effect were the primary focus. Characters with severe disorders potentially were more dramatic for the average viewer than characters with mild symptoms. It may also be attributed to the fact that the show was based in an emergency department, which frequently treats severe and emergent cases. Nonetheless, by highlighting extreme cases, the show perpetuated the stereotype that mental disorders were all extreme. This potentially misguided viewers in their perceptions about the seriousness and severity of mental disorders. At the time of *ER's* airing, serious mental disorders were significantly less prevalent in society compared to mild or even moderate disorders. Yet, the show did not reflect that.

Furthermore, it's been well documented that television shows tend to portray those with a mental disorder as violent towards themselves and others. Though characters in *ER* were not overwhelmingly portrayed as such, there were still nearly 1 in 5 cases where a character

committed some physically violent act, which is relatively high. Overall, the show seemed to perpetuate the stereotype that mentally ill people were dangerous.

It's unclear why *ER* presented and at times exaggerated violence among mentally ill characters—though it was likely due to the dramatic nature of the show. Studies at the time showed only a modest association between mental disorder and violence, if that (Hiday, 1995; Stuart, 2003). Research found that most mental disorder patients were not actually violent, rather they were more likely to be victimized (Stuart, 2003). Research also showed that mental disorders alone did not increase the risk of violence (Hiday, 1995). The increased risk only occurred when mental disorders were combined with risk factors like substance abuse, threat/control override (feelings of threat), psychotic symptoms, and other socio-demographic and socio-economic conditions (Hiday, 1995). The greatest predictors for increased risk of violence were being, "young, adult, single, male, of lower socioeconomic status, and being a substance abuser" rather than the mental disorder itself (Hiday, 1995).

Nonetheless, the show's portrayal of violence among mentally ill characters certainly had implications on the public perception of mental disorders. For most Americans, fictional violence was their only experience of violence among the mentally ill, which meant ER (and other televisions shows) largely contributed to their perceptions (Stuart, 2003). As a result of the show, viewers likely had an exaggerated sense of the association between mental disorders and violence; they likely attributed violence to mental disorders, though this is widely inaccurate. Even more, the show potentially influenced the public's willingness to interact and engage with mentally ill people. Seeing violence among mentally ill characters potentially made viewers less willing to interact with them in real-life, for fear of violence or aggressive behaviors towards them. With changing attitudes, viewers could become less willing to move next door to, socialize

and make friends with, or enter a relationship with the mentally ill (General Social Surveys, n.d.).

Furthermore, the show not only addressed violence among the mentally ill, but also their competence to make treatment decisions. Disorientation was one indicator used to assess this and the results showed that characters with a mental disorder were more likely to present as disoriented than not. Among those disoriented characters, several were portrayed as incompetent, largely through irrational or childlike behaviors. They were shown as being incapable of making medical decisions, and if they did, their decisions were questioned. This incompetence was largely congruent with disorders like dementia and schizophrenia, which are characterized by some cognitive impairment. Ultimately, the show seemed to reflect public perceptions on the competence of people with a mental disorder. The General Social Survey found that Americans in both 1996 and 2006 largely felt that people with mental disorders were "not very able" or only "somewhat able" to make treatment decisions for themselves.

Finally, through character portrayals and character-physician interactions, the show dispelled any stereotype that people with a mental disorder could never recover from their condition. The show actually presented most mental disorders as treatable, with characters having a chance at significant improvement. Physicians were often shown encouraging their patients to seek treatment and advocating for them to be admitted. This was especially the case for substance-related disorders. Overall, this was an accurate reflection of real-world discussions surrounding the treatment of mental disorders. With adequate treatment--drug therapy and/or psychotherapeutic treatments—people with a mental disorder could fully recover or manage without functional impairments (Parekh, 2018).

By highlighting recovery, the show addressed a major attitudinal barrier to treatment. At the time, research showed that perceived ineffectiveness was a prominent barrier to mental health treatment (Andrade et al., 2016; Mojtaba et al., 2010). Individuals with a mental disorder often did not recognize how effective treatment could be, and how treatable their condition was. As a result, they rarely sought treatment, and when they did, they frequently dropped out before it finished (Andrade et al., 2016; Mojtaba et al., 2010). By addressing this barrier, the show hopefully encouraged viewers to recognize the effectiveness of treatment for themselves or someone they know.

Portrayal of Physicians Treating Mental Disorder

The show presented contrasting images of physicians treating mental disorders. The ER physicians were largely attentive to characters with a mental disorder. They were portrayed in a positive light, patiently and politely attending to the characters. In contrast, the sole psychiatrist featured on the show (Season 1) was largely dismissive of characters with a mental disorder. He was clearly portrayed in a negative light, shown to be quite condescending and harsh towards other characters.

This negative portrayal likely perpetuated notions that mental health physicians were judgmental and to be feared. This was certainly problematic in a society where the treatment gap for mental disorders was incredibly high. During ER's airing, the majority of adults with mental disorders did not receive mental health services for their condition ("Result from the 2005 Survey," 2006). This was attributed greatly to attitudinal barriers, which come from the perceptions individuals and the public hold. By negatively portraying the only psychiatrist on the

show, the show might have furthered this gap, discouraging viewers with mental disorders from seeking treatment.

Overall Practical Implications

Considering both the inclusion and portrayal of mental disorders, the show as a whole did a mediocre job at promoting social progress when it comes to views on mental health. The show did present a variety of mental disorder types, providing a multifaceted look at mental disorders. The show addressed substance-related disorder as a significant health problem, educating viewers more on the disorder. The show also dispelled notions that mentally ill people had no hope of recovery.

However, the show also gave a distorted view of mental disorder prevalence, and failed to include the disorders that were most prevalent at the time. This likely gave viewers a skewed understanding of how common mental disorders were. Second, the show overwhelmingly portrayed mental disorders in the extreme and reinforced stereotypes of violence and incompetence. Third, the show negatively portrayed its only mental health physician, which likely discouraged viewers with mental disorders from seeking treatment.

Because of these findings and the show's grand popularity, the show's presentation of mental disorders surely influenced public perception at the time. The show, overall, seemed to strengthen the stigma surrounding mental disorders, which meant that its viewers likely maintained their stigmatizing beliefs. As a result, mentally ill individuals likely faced increased challenges, including prejudice and discrimination. Plus, attitudinal barriers from stigma likely increased among the mentally ill, affecting their utilization of mental health services.

Considering these consequences, the show incites broad questions about the role of television to entertain, educate and inform its audience. If shows are popular and heavily influential, do they have a responsibility to accurately represent issues like mental disorders? Do accurate representations take precedence over entertainment value? Looking across different fictional television shows, it seems that entertainment value takes foremost precedence over anything else. Of course, this provides an exciting and enjoyable show to watch. Yet, it tends to distort the medical accuracy of the show.

Today, there are many medical shows on television. These include *Grey's Anatomy*, *The Resident*, *Chicago Med*, and *The Good Doctor*. Each show entertains and informs its audience about medicine and the medical environment. Much like *ER*, these shows have to balance the entertainment value of the show, while also portraying and communicating accurate health information. It would be interesting to conduct a study on a current show like Grey's Anatomy and investigate how the show includes and portrays mental disorders. By doing so, you can see what American views are like today and how they've changed over time since *ER* in the early 1990s.

Moreover, given these findings and greater implications, the study seemed to adequately assess mental disorders on the show, *ER*. Even more, it uniquely contributed to the overall body of knowledge on mental disorders and their depiction on television. While it was consistent with previous literature, it did provide new insights for discussion.

Limitations of the Study

Overall, there were two primary limitations to this study. First, the sample size was limited due to time restrictions in watching the show. Only four seasons were watched, which

meant the sample of mental disorders was considerably low. For future research, it would be best to increase the sample size, such that a greater number of episodes were watched and coded. An optimal sample size would be every other season, as this would provide a vast sample of episodes.

Another limitation was that I was the sole coder of the episodes, and did not have previous coding experience. At times, it was difficult to ensure an objective lens when coding certain variables. This likely affected the reliability of the study. If this study were replicated, it is best to have multiple trained coders who independently watched and assessed the sample episodes. In doing so, the results would likely be more objective, and seemingly more reliable.

Directions of Future Research

Overall, there are several directions for future research, all of which build on findings and conclusions from this particular study. The findings illustrated how mental disorders were included and portrayed on the show. Future research can be done to see how these findings influence public perception. This particular study was a content-based analysis, which did not involve participants. As a result, I had to theorize how viewers may react to certain portrayals on the show. For example, I theorized that the show's portrayal of violence among the mentally ill likely influenced viewer's willingness to interact and socialize with them in real-life. However, I could not test that. A future study could do so, assessing how viewers react to these portrayals on the show. One methodology could include viewers watching a particular episode of the show. They could take a pre-show and post-show survey, which would assess if their views changed based on presentations in the show.

Likewise, from the study alone, I had limited information on why certain portrayals were included in the show. A future study could assess this, by examining the decision-making of producers and writers in selecting how they portray mental disorders. In doing so, I can see which aspects were deliberate choice and which just happened by chance. For example, the study could assess whether shows deliberately included violence among the mentally ill, and their reasoning for doing so. The study could also assess whether producers and writers intentionally provided the gender difference in substance-related disorders or whether that happened coincidentally. It would be an interesting follow-up study for the show. I observed general findings in ER's portrayal for mental disorders; it would be interesting to see which portrayals were intentional.

A third direction for research is replicating this study for a concurrent show during ER's time, as well as more recent shows. A study on a concurrent show, like *Chicago Hope*, would provide comparison to see if mental disorders were similarly portrayed throughout television at the time. Meanwhile, a study on more recent shows like *Grey's Anatomy* would provide insight into changing views of mental disorder. This kind of comparison study would show similarities and/or differences in the way mental disorders were portrayed at two distinct times—the 1990s and late 2010s.

Conclusion

Between 1994 and 2008, *ER* was a dominant force on television. At its peak, it had nearly 50 million viewers per episode (Turow, 2010). The show captured the fast-paced nature of emergency medicine, entertaining viewers with unpredictable character storylines and dramatic patient cases. As a medical show, it educated and informed viewers on health topics and various medical conditions. This study specifically looked at how mental disorders were portrayed on this popular medical show. Through coded episodes, the study provided an adequate assessment of the inclusion and portrayal of mental disorders throughout the series.

Evidenced in the study, the show presented cases of mental disorder throughout the show. These presentations were both consistent and inconsistent with real-life data and public perceptions. The show at times accurately represented mental disorders and at other times did not. The show reinforced some stereotypes--violence and incompetence—while dispelling others. The show, for the most part, seemed to impede social progress in the way people viewed mental health. Negative portrayals of characters and physicians largely overshadowed the positive ones.

As a result of portrayals on the show, *ER* likely maintained or strengthened the stigma surrounding mental disorder. At the time of ER's airing, many Americans held deep stigmatizing beliefs about the mentally ill. With such negative portrayals of the characters and the mental health physician, viewers likely felt their beliefs reinforced and supported by the show. Of course, this affected the treatment of individuals with a mental disorder. They likely continued to face prejudice and discrimination, leading to impaired self-esteem, self-stigma, social exclusion, and reduced autonomy. They likely felt discouraged to seek treatment, for fear of being judged or dismissed.

In conclusion, while the show aired between 1994 and 2008, the show still has influence today. Because of its wild popularity, it provides a framework for success in medical television. Shows like *Grey's Anatomy*, *The Resident*, and *Chicago Med* likely emulated some aspect of *ER*. Even more, with an increase in streaming services, the show is now widely available to watch. Viewers like myself who are watching the show for the first time can still be influenced by what's presented on the show, even if it's old.

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Appendix

Figure 1

Table 2. 12-month prevalence of DSM-IV/WMH-CIDI disorders by sex and cohort [1] (n=9282)

12-month	Total		Sex				Cohort							
			Female		Male		18-29		30-44		45-59		60+	
	%	SE	%	SE	%	SE	%	SE	%	SE	%	SE	%	SE
I. Anxiety Disorders														
Panic disorder	2.7	(0.2)	3.8	(0.3)	1.6	(0.2)	2.8	(0.4)	3.7	(0.5)	3.1	(0.4)	0.8	(0.2)
Agoraphobia without panic[7]	0.9	(0.1)	0.9	(0.2)	0.8	(0.2)	1.0	(0.2)	0.8	(0.2)	1.2	(0.3)	0.4	(0.1)
Specific phobia	9.1	(0.4)	12.2	(0.5)	5.8	(0.5)	10.3	(0.8)	9.7	(0.6)	10.3	(0.9)	5.6	(0.5)
Social phobia	7.1	(0.3)	8.0	(0.5)	6.1	(0.5)	9.1	(0.7)	8.7	(0.7)	6.8	(0.6)	3.1	(0.3)
Generalized anxiety disorder[7]	2.7	(0.2)	3.4	(0.2)	1.9	(0.3)	2.0	(0.3)	3.5	(0.3)	3.4	(0.3)	1.5	(0.3)
Post-traumatic stress disorder[2]	3.6	(0.3)	5.2	(0.4)	1.8	(0.3)	4.0	(0.5)	3.5	(0.5)	5.3	(0.6)	1.0	(0.2)
Obsessive-compulsive disorder[3]	1.2	(0.3)	1.8	(0.5)	0.5	(0.2)	1.5	(0.4)	1.4	(0.6)	1.1	(0.6)	0.5	(0.3)
Adult separation anxiety disorder[2]	1.9	(0.2)	2.1	(0.2)	1.7	(0.3)	4.0	(0.5)	2.2	(0.3)	1.3	(0.3)	0.1	(0.1)
Any anxiety disorder[5]	19.1	(0.7)	23.4	(0.8)	14.3	(0.8)	22.3	(1.0)	22.7	(1.0)	20.6	(1.3)	9.0	(0.8)
II. Mood Disorders														
Major depressive disorder[7]	6.8	(0.3)	8.6	(0.4)	4.9	(0.4)	8.3	(0.4)	8.4	(0.5)	7.0	(0.7)	2.9	(0.4)
Dysthymia[7]	1.5	(0.1)	1.9	(0.2)	1.0	(0.1)	1.1	(0.2)	1.7	(0.3)	2.3	(0.5)	0.5	(0.2)
Bipolar I-II-sub disorders	2.8	(0.2)	2.8	(0.2)	2.9	(0.3)	4.7	(0.6)	3.5	(0.4)	2.2	(0.3)	0.7	(0.2)
Any mood disorder	9.7	(0.4)	11.6	(0.5)	7.7	(0.6)	12.9	(0.7)	11.9	(0.7)	9.4	(0.7)	3.6	(0.4)
III. Impulse-control Disorders														
Oppositional-defiant disorder[4,7]	1.0	(0.2)	1.1	(0.2)	0.9	(0.3)	1.2	(0.3)	0.8	(0.2)	--	--	--	--
Conduct disorder[4]	1.0	(0.2)	0.4	(0.1)	1.7	(0.5)	1.4	(0.3)	0.8	(0.3)	--	--	--	--
Attention-deficit/hyperactivity disorder[4]	4.1	(0.3)	3.9	(0.6)	4.3	(0.5)	3.9	(0.4)	4.2	(0.6)	--	--	--	--
Intermittent explosive disorder[7]	4.1	(0.3)	3.4	(0.4)	4.8	(0.4)	8.3	(0.9)	4.6	(0.4)	2.1	(0.3)	0.9	(0.3)
Any impulse^control disorder[4,6]	10.5	(0.7)	9.3	(1.0)	11.7	(0.8)	11.9	(1.1)	9.2	(0.7)	--	--	--	--
IV. Substance Disorders														
Alcohol abuse with/without dependence[2]	3.1	(0.3)	1.8	(0.3)	4.5	(0.4)	7.1	(0.7)	3.3	(0.5)	1.6	(0.3)	0.3	(0.2)
Drug abuse with/without dependence[2]	1.4	(0.2)	0.7	(0.1)	2.2	(0.3)	3.9	(0.5)	1.2	(0.3)	0.4	(0.1)	0.0	(0.0)
Nicotine dependence[2]	11.0	(0.6)	10.5	(0.8)	11.6	(0.7)	16.7	(1.4)	11.2	(1.0)	10.0	(1.1)	5.6	(0.7)
Any substance disorder[2]	13.4	(0.6)	11.6	(0.8)	15.4	(0.9)	22.0	(1.6)	13.8	(1.1)	11.2	(1.2)	5.9	(0.7)
V. Any Disorder														
Any[5]	32.4	(1.1)	34.7	(1.1)	29.9	(1.3)	43.8	(1.8)	36.9	(1.3)	31.1	(2.0)	15.5	(1.0)

[1]This table includes updated data as of July 19, 2007. Updates reflect the latest diagnostic, demographic and raw variable information.

[2]Assessed in the Part II sample (n = 5692).

[3]Assessed in a random one-third of the Part II sample (n = 2073).

[4]Assessed in the Part II sample among respondents in the age range 18-44 (n = 3197).

[5]Estimated in the Part II sample. No adjustment is made for the fact that one or more disorders in the category were not assessed for all Part II respondents.

[6]The estimated prevalence of any impulse-control disorder is larger than the sum of the individual disorders because the prevalence of intermittent explosive disorder, the only impulse-control disorder that was assessed in the total sample, is reported here for the total sample rather than for the sub-sample of respondents among whom the other impulse-control disorders were assessed (Part II respondents in the age range 18-44). The estimated prevalence of any impulse-control disorder, in comparison, is estimated in the latter sub-sample. Intermittent explosive disorder has a considerably higher estimated prevalence in this sub-sample than in the total sample.

[7]Disorder with hierarchy

Note: Data retrieved from the National Comorbidity Replication Survey

Figure 2

Table 1. Lifetime prevalence of DSM-IV/WMH-CIDI disorders by sex and cohort [1] (n=9282)

Lifetime	Total		Sex				Cohort							
			Female		Male		18-29		30-44		45-59		60+	
	%	SE	%	SE	%	SE	%	SE	%	SE	%	SE	%	SE
I. Anxiety Disorders														
Panic disorder	4.7	(0.2)	6.2	(0.3)	3.1	(0.3)	4.2	(0.5)	5.9	(0.6)	5.9	(0.4)	2.1	(0.4)
Agoraphobia without panic[6]	1.3	(0.1)	1.6	(0.2)	1.1	(0.2)	1.2	(0.3)	1.4	(0.2)	1.8	(0.3)	0.9	(0.2)
Specific phobia	12.5	(0.4)	15.8	(0.6)	8.9	(0.6)	13.0	(0.9)	13.9	(0.7)	14.4	(1.0)	7.7	(0.6)
Social phobia	12.1	(0.4)	13.0	(0.6)	11.1	(0.6)	13.3	(0.7)	14.5	(0.9)	12.6	(0.9)	6.8	(0.5)
Generalized anxiety disorder[6]	5.7	(0.3)	7.1	(0.3)	4.2	(0.4)	4.3	(0.4)	6.5	(0.5)	7.6	(0.7)	4.0	(0.4)
Post-traumatic stress disorder [2]	6.8	(0.4)	9.7	(0.7)	3.6	(0.3)	6.3	(0.6)	8.1	(0.9)	9.2	(0.8)	2.8	(0.5)
Obsessive-compulsive disorder[3]	2.3	(0.3)	3.1	(0.5)	1.6	(0.3)	3.1	(0.7)	3.0	(0.9)	2.4	(0.8)	0.6	(0.3)
Adult/Child separation anxiety disorder[2]	9.2	(0.4)	10.8	(0.6)	7.4	(0.5)	12.4	(0.9)	11.1	(0.7)	9.2	(0.8)	3.1	(0.5)
Any anxiety disorder[5]	31.2	(1.0)	36.4	(1.1)	25.4	(1.2)	32.9	(1.3)	37.0	(1.5)	34.2	(1.7)	17.8	(1.4)
II. Mood Disorders														
Major depressive disorder[6]	16.9	(0.5)	20.2	(0.5)	13.2	(0.8)	16.0	(0.8)	19.3	(0.9)	20.1	(1.2)	10.7	(0.7)
Dysthymia[6]	2.5	(0.2)	3.1	(0.3)	1.8	(0.2)	1.8	(0.3)	2.8	(0.4)	3.8	(0.6)	1.3	(0.2)
Bipolar I-II-sub disorders	4.4	(0.3)	4.5	(0.3)	4.3	(0.4)	7.0	(0.8)	5.3	(0.4)	3.7	(0.4)	1.3	(0.3)
Any mood disorder	21.4	(0.6)	24.9	(0.6)	17.5	(0.9)	22.6	(1.0)	24.5	(1.0)	24.2	(1.2)	12.2	(0.9)
III. Impulse-control Disorders														
Oppositional-defiant disorder[4,6]	8.5	(0.7)	7.7	(0.9)	9.3	(0.8)	9.9	(1.0)	7.3	(0.8)	--	--	--	--
Conduct disorder[4]	9.5	(0.8)	7.1	(0.9)	12.0	(1.0)	10.8	(1.1)	8.4	(0.7)	--	--	--	--
Attention-deficit/hyperactivity disorder[4]	8.1	(0.6)	6.4	(0.7)	9.8	(1.0)	7.8	(0.8)	8.3	(0.8)	--	--	--	--
Intermittent explosive disorder[6]	7.4	(0.4)	5.7	(0.4)	9.2	(0.6)	12.6	(1.1)	8.8	(0.7)	5.3	(0.5)	2.4	(0.5)
Any impulse^control disorder[4]	25.0	(1.1)	21.6	(1.4)	28.6	(1.5)	27.0	(1.6)	23.4	(1.1)	--	--	--	--
IV. Substance Disorders														
Alcohol abuse with/without dependence[2]	13.2	(0.6)	7.5	(0.5)	19.6	(0.9)	14.5	(1.0)	16.4	(1.1)	14.1	(1.0)	6.3	(0.7)
Drug abuse with/without dependence[2]	8.0	(0.4)	4.8	(0.4)	11.6	(0.7)	11.1	(0.9)	12.1	(1.0)	6.8	(0.7)	0.3	(0.1)
Nicotine dependence[2]	29.6	(0.8)	26.5	(1.3)	33.0	(1.0)	26.5	(1.8)	29.4	(1.5)	34.3	(1.6)	27.3	(1.7)
Any substance disorder[2]	35.3	(0.9)	29.6	(1.3)	41.8	(1.1)	33.2	(1.9)	37.1	(1.8)	39.8	(1.5)	29.6	(1.7)
V. Any Disorder														
Any[5]	57.4	(1.1)	56.5	(1.5)	58.4	(1.4)	58.7	(2.2)	63.7	(1.9)	60.0	(1.6)	44.0	(2.3)

[1] This table includes updated data as of July 19, 2007. Updates reflect the latest diagnostic, demographic and raw variable information.

[2] Assessed in the Part II sample (n = 5692).

[3] Assessed in a random one-third of the Part II sample (n = 2073).

[4] Assessed in the Part II sample among respondents in the age range 18-44 (n = 3197).

[5] Estimated in the Part II sample. No adjustment is made for the fact that one or more disorders in the category were not assessed for all Part II respondents.

[6] Disorder with hierarchy

Note: Data retrieved from the National Comorbidity Survey

Biography

Aryce Battle was born in Dallas, Texas on April 25, 1998. She enrolled in the Plan II Honors program at the University of Texas at Austin in 2016 and also obtained a Bachelor of Arts in Health & Society. While at UT, she joined the Epsilon Beta chapter of Delta Sigma Theta Sorority, Incorporated. and served as a member of Camp Kesem and Black Health Professional Organization. She graduated in 2020 and plans to attend medical school in the future.