

Narrative Persuasion and Transportation Theory as a Stigma Reduction Method for Substance  
Use Disorder: A Thematic Analysis  
Emily Therese Maher

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Adrienne Holz, Chair  
John Tedesco  
Kathryn Hosig

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ABSTRACT

Drug use, overdose, and addiction has skyrocketed in the past twenty years (Centers for Disease Control and Prevention, 2020). Negative stigma towards addiction, or otherwise known as substance use disorder (SUD), has only increased since President Nixon declared the “war on drugs” in 1971 (National Public Radio, 2007). Negative public stigma of SUD creates barriers for treatment for those who are suffering, continuing to exacerbate the stigma surrounding SUD. To understand ways to reduce stigma surrounding SUD, this study will look at narrative persuasion through transportation theory to better understand the power of stories and stories of recovery as a method to reduce stigma surrounding SUD among community members. In addition to examining narrative persuasion literature, 21 semi-structured interviews from community stakeholder groups in Virginia’s Department of Behavioral Health and Developmental Services region 3, were conducted. To further understand the content in the stakeholder interviews, a qualitative thematic analysis using inductive themes was conducted to determine common themes surrounding substance use disorder, stigma, and ways to reduce stigma surrounding substance use disorder through narrative persuasion. Based on participant interviews, community stakeholders hold negative perceptions of those with SUD based on personal and professional experiences but believe that positive personal narratives of SUD and recovery can reduce public stigma towards those who suffer from the disorder.

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## CHAPTER 1: INTRODUCTION

Social stigma surrounding health issues such as obesity, tobacco smoking, HIV/AIDS, mental illness, and substance use disorder (SUD) have been embedded in society through the media, laws and law enforcement, policies, and overall attitudes by the American public (Heley et al., 2020). In recent years, substance use disorder has become the most publicly stigmatized disease worldwide (Smith et al., 2016). The negative social stigma surrounding substance use disorder creates barriers that impedes those who need help from receiving it. The public stigma towards substance use disorder often leads to internalized stigma and shame for those who suffer, making it more difficult to ask for help (Smith et al., 2016).

Addiction, overdose, and deaths due to substances, both legal and illegal, has grown enormously throughout the 2000's. Over 46,000 people died from overdose by opioids alone in 2018, compared to 1999 when less than 10,000 people died from opioid overdose (National Institute on Drug Abuse, 2020). This growth is mostly due to the creation of opioid-based painkillers such as OxyContin, Vicodin, and Codeine in the late 90's by large pharmaceutical companies (NIDA, 2020). Although rates of substance use disorder have heightened in the past 20 years, the stigma surrounding the issue has been problematic well before the 2000's.

In the early 1970's, President Richard Nixon started the "war on drugs" initiative to decrease drug supply and drug abuse in the U.S. (Transform Drug Policy Foundation, 2020). While this was a worthwhile attempt to reduce the use of illegal drugs in the U.S., many unintended consequences emerged from the initiative, such as heightened stigma and discrimination towards certain marginalized populations (Transform Drug Policy Foundation, 2020). Not only did the "war on drugs" create more public stigma towards those with substance use disorder by portraying those who suffer from SUD as criminals or morally inept, but it also

created institutionalized stigma from healthcare workers, law enforcement, and policy makers (Transform Drug Policy Foundation, 2020). Already highly stigmatized populations such as those in poverty, minorities, and those who suffer from addiction began to see more discrimination, stigma, and stereotypes from the media, the public, and public institutions such as law enforcement, criminal justice, and healthcare (Transform Drug Policy Foundation, 2020). The discrimination against those with substance use disorder has transformed over the past 50 years as more addictive drugs have been introduced to the U.S. public.

Large pharmaceutical companies were mass producing opioid-based prescription painkillers in the late 90's and early 2000's. They were seen as safe and nonaddictive. As time progressed, the U.S. was seeing higher rates of overdose and death from populations other than what was depicted in the early 70's when the "war on drugs" initiative began (Centers for Disease Control and Prevention, 2020). Although the demographics of those becoming addicted to prescription opioids migrated to less stereotypical populations, the negative stigma surrounding the issue did not. The opioid epidemic has affected people in all demographics.

Rural communities in the U.S. are disproportionately affected by the opioid epidemic. In Central Appalachia, substance abuse rates are steadily higher than the national average (Moody et al., 2017). Rural Appalachia consists of West Virginia, Southwest Virginia, Eastern Kentucky, Southeast Ohio, East Tennessee, and Western North Carolina. Southwest Virginia, the focus of this project, has the highest rates of prescription drug related deaths in the state, and among the highest in all of Appalachia. Poverty, rural life, and manual labor jobs have strongly influenced prescription drug abuse and substance use disorder in rural Appalachia (Moody et al., 2017). Many Appalachian residents hold stigma and distrust towards those with SUD along with a

distrust of healthcare providers, causing barriers to treatment for those suffering (Moody et al., 2017).

Since prescription drug use and substance use disorder is such a large issue both nationally and in rural Appalachia, it is necessary to find ways to reduce stigma surrounding substance use disorder. Green and Brock's Transportation theory (2002) aids in understanding why and how personal narratives can be persuasive in changing attitudes and beliefs through the audience being transported into the story (Escalas, 2007). Narrative persuasion can be used to understand effective ways to reduce stigma surrounding substance use disorder. Stories have the ability to transport the audience into the world of the story, which can lead to a change in attitudes and behaviors that reflect the story being told (Green & Fitzgerald, 2017). Narrative transportation can be an effective mode of persuasion. Therefore, this study used Green and Brock's (2002) Transportation Theory as a guiding framework to explore the ways in which stories can be a method of reducing stigma.

The stigma towards SUD impedes many from getting the help they need. Public stigma surrounding the disorder can lead to internalized shame and embarrassment when trying to get help (Smith et al., 2016). This project aims to understand the existing public stigma surrounding SUD in the community. Alongside understanding the stigma around SUD, the application of narrative persuasion and transportation theory lends a theoretical perspective in reducing stigma around the disorder. By using narrative persuasion and transportation theory, this study explored how different groups of community stakeholders in Southwest Virginia view stigma and specifically stigma towards substance use disorder. Twenty-one semi-structured interviews from stakeholder groups such as judges, those in recovery, law enforcement, and community members, aided in giving insight on the effects of stigma on those who suffer and what should be

done to reduce it to create a better environment to seek treatment. After the completion of the interviews, a thematic analysis of the transcripts was conducted. It can be understood that personal narratives or stories of recovery have the potential to be persuasive in changing attitudes and beliefs of community stakeholders towards those who suffer from SUD.

The following contents of this paper include a literature review of public stigma, as well as narrative persuasion and transportation theory. The in-depth literature review examines the public stigma surrounding SUD and the effective uses of persuasive narratives and more specifically transportation theory. Following the literature review of the main concepts of this study, the methods of data collection, analysis and interpretation are explained. Through the collection and analysis of the data, common themes that arose in the participant interviews were examined within the results section, and then later discussed in terms of narrative persuasion and transportation theory. Lastly, this paper concludes with limitations and implications for further research.

## CHAPTER 2: LITERATURE REVIEW

Substance use disorder (SUD) is an intensely prevalent issue in the U.S. that has rapidly grown in the past thirty years. Most notably opioid use disorder (OUD) has grown exponentially through the abuse of prescription painkillers (Cooper et al., 2018). Substance use disorder has been an issue for the wellbeing of mankind since as early as 323 BC, following the death of Alexander the Great from excessive alcohol drinking (Crocq, 2007). Throughout history addictive substances have transformed; substances once rooted in medicinal plants and herbs found in nature have now progressed to synthetic and lab made substances, which can be much more addictive. The creation of lab-made addictive substances has changed substance use disorder and the effects on the brain (Karimi et al., 2015). Towards the end of the 20th century addictive substances such as legal and illegal opioids, methamphetamines, cocaine, and alcohol were popular, well known, and frequently abused (Crocq, 2007). The U.S. has suffered from high rates of addiction even before the invent of prescription painkillers (Centers for Disease Control and Prevention, 2020). Before the creation of prescription opioids in the late 90's, many doctors found opioids to be taboo, dangerous, and rarely used to treat patients' pain (Sullivan & Howe, 2013). In a 1986 study by Portenoy and Foley about opioid use for non-cancer pain was published regarding patient's response to opioids for pain over a four-to-seven-year time period. Thirty-eight patients treated on opioid analgesics for non-cancer pain were retrospectively studied to understand the indications, safety, and efficacy of this opioid treatment therapy. This research offered opioid treatment of chronic non-cancer pain as safe and effective for reducing pain among patients (Sullivan & Howe, 2013). Portenoy and Foley (1986), found that opioid maintenance therapy can be safe and should be seen as a more humane way to treat pain than other methods of pain relief without drug abuse. This study concluded with the assumption that

opiates in certain dosages are effective in reducing chronic pain with little possibility of addiction (Bernard et al., 2018). Portenoy and Foley's (1986) findings resulted in the notion that opiates were a safe and nonaddictive treatment to chronic pain. Doctors from all over the U.S. used the findings from this study to treat their patients' chronic pain and as a reason to prescribe opioids more frequently (Sullivan & Howe, 2013).

From 1990 to 1995 an increase of 2 to 3 million opioid prescriptions were filled yearly (Bernard et al., 2018). Due to the findings of Portenoy and Foley (1986), doctors were complicit with large pharmaceutical companies in prescribing opioids at a rapid rate. After this research was published and big pharma had created prescription opiates, OxyContin prescriptions had grown from 670,000 in 1997 to 6.2 million in 2002 (Hays, 2004).

Through the late 90's and early 2000's, opioids were aggressively marketed to both doctors and patients by large pharmaceutical companies (Sullivan & Howe, 2013). In 1995, when Purdue Pharma created the new drug OxyContin, a controlled-released form of oxycodone, doctors all over the U.S. were beginning to come around to the idea of giving opioids to their patients to treat pain (Hays, 2004). By 1996, OxyContin was aggressively marketed and highly promoted by Purdue Pharma and sales grew from \$48 million in 1996 to almost \$1.1 billion in 2000 (Van Zee, 2009). By the 2000's, doctors had been liberal in their OxyContin prescriptions and the United States entered the beginning of opioid epidemic that has now affected nearly half of all U.S. citizens (Hays, 2004; Saad, 2020; Van Zee, 2009).

The US Government declared the opioid epidemic a public health emergency in 2017 (Jones et al., 2018). More than 700,000 Americans have died from a drug overdose between 1999 and 2017. The growing popularity of prescription opiates has led to an opioid epidemic in the United States (McGinty et al., 2019). The aggressive marketing tactics combined with the

manipulation of doctors by Purdue Pharma led to the over prescribing of OxyContin (Jones et al., 2018). Doctors were often bribed by Purdue with incentives to prescribe more OxyContin to their patients. In addition to the incentives, the “pain as the fifth vital sign” initiative led by the American Pain Society taught doctors and medical students that not prescribing opioids to a patient with pain risked being labeled as inhumane and could hurt their reputation (Jones et al., 2018, p. 15). It quickly became the new normal to provide patients with lower dose opioids to treat non-cancer related chronic pain (Sullivan & Howe, 2013). Opioids were then used to treat pain post-surgery as a part of an enhanced recovery to shorten hospital stays for those post operation (Jones et al., 2018). The popularity of prescription opioids grew so widely that doctors were now prescribing opioids to treat minor aches and pains after simple surgeries such as a wisdom tooth extraction (Jones et al., 2018).

To manage the patients’ pain after they had left the hospital, doctors would prescribe liberal amounts of opioid painkillers, guiding their patients towards addiction without their knowledge or consent (Jones et al., 2018). Patients continue to return to their doctors in search of more opioids to feed their addiction and treat their pain. With the large incentives doctors were receiving from drug manufactures to prescribe more opioids, the cycle of overprescribing and addiction continues (Jones et al., 2018). Patients can receive opioid prescriptions to treat their pain and addiction when needed and doctors will receive money from pharmaceutical companies in return.

As more and more patients were abusing the prescription opioids by crushing or injecting them, Purdue pharma was pressured to create an abuse resistant form of OxyContin that could not be crushed up because of the large numbers of patients overdosing. This was an effort to not only prevent widespread abuse, but also to prevent having to remove the product from the market

for safety reasons. The abuse-resistant painkillers were one of many factors that led those addicted to move to more potent opioids like heroin (Jones et al., 2018).

As the patient's addiction worsens, prescription opioids become too expensive and cheaper options of illegal opioids, such as heroin and fentanyl, attract those now suffering from substance use disorder. Not only are heroin and fentanyl cheaper, but they are also much more potent than prescription opioids. Synthetic opioids (fentanyl), and heroin deaths rose from 18,515 in 2007 to 47,600 deaths in 2017 (National Institute on Drug Abuse, 2020). A large percentage of Americans are now addicted and being stigmatized by the very people that enacted their addiction to begin. The stigma around SUD affects millions of Americans and can be a barrier to receiving treatment and managing the growing issue of substance use (Luoma et al., 2007).

### **Public Stigma**

Sigma can be defined as an attribute acquired in a negative meaning that disfavors and discredits an individual in society (Goffman, 1986). Being stigmatized can also be looked at as a handicap, a failing, or a shortcoming (Goffman, 1997). Stigma towards SUD can exist at a structural, social, and individual level. Stigma is a significant barrier to treatment for those who suffer from substance use disorder (Smith et al., 2016). Social/public stigma allows for and endorses negative stereotypes surrounding a marginalized population such as those who suffer from substance use disorder (Heley et al., 2020). Public stigma surrounding health issues such as substance use disorder, obesity, HIV/AIDS, and mental illness has been an important topic for decades and commonly associates shame with addressing the issue and seeking help. This shame, whether social or internalized, creates an impediment to treatment for those who need it.

The widespread nature of the opioid epidemic has led to a broader demographic of those who are affected. Since this highly stigmatized problem affects many different types of people and not the stereotypical “drug addict,” it can be harder for those who are suffering to ask for help (Heley et al., 2020). Recent trends show that people who use heroin are almost equally male and female, overwhelmingly white, older, and likely to have begun opioid use through prescription drugs (Cicero et al., 2014). The stereotypical drug addict no longer exists, only in the minds of society. The opioid epidemic has shown the widespread nature of substance use disorder. The stigma surrounding substance use disorder prevents people from all demographics from seeking treatment.

Public stigma prevents SUD patients from getting treatment through many different avenues including family, peers, law enforcement, and healthcare providers (Smith et al., 2016). The stigma they receive from society in turn creates an internalized stigma and shame that continues to perpetuate stigma as a barrier to treatment (Smith et al., 2016). Society places a large moralization, or lack thereof, around substance use and abuse and those who use substances must be morally deficient. Issues such as illness, violence and crime, overdose and death, and failure in major social roles, particularly at work and in the family contribute to the stigmatization of those who suffer from substance use disorder (Room, 2005). Terms such as “junkie” further contribute to the social stigma around substance use disorder and does not give attention to the fact that addiction is a disease rather than a moral failure or bad personal choice (Room, 2005).

A lack of public education about substance use disorder and the pervasive stigma within societal institutions such as healthcare, law enforcement, and the justice system contribute to the continuation of public stigma towards those with SUD preventing them from getting help

(Livingston et al., 2012). In some cases, when patients try to receive treatment, they encounter discrimination from staff who deny them medical treatment (Ahern et al., 2007). Since substance use disorder has become such a widespread issue in the US, an increasing amount of people are unable or unwilling to receive treatment. Looking closely at the social/public stigma and the groups in which it affects can aid in reducing the issue of SUD and provide many with the treatment they need (Livingston et al., 2012).

Stigma from family and friends is also a major barrier to treatment. In a study by Ahern, Stuber, and Galea, over 1,000 drug users were interviewed and over 70% of participants reported being most stigmatized by their family and friends. These respondents also reported not discussing their disorder with family or friends (Ahern et al., 2007). Having a support system through treatment is an important factor in a successful recovery. Not having a reliable support system to aid through the process of recovery could be a large barrier to treatment for many (Livingston et al., 2012).

Seeing that public stigma towards SUD is a barrier to treatment, producing stigma reduction strategies is highly important. Improving perceptions and access to treatment can provide more efficacy for those who need it. Persuasive messages regarding public perceptions of those who suffer from SUD can be a way to reduce stigma surrounding the disease. Specifically, communicating positive stories of people with substance use disorder can be effective in reducing public stigma (Livingston et al., 2012). Persuasive narratives have the ability to transport the audience into the story evoking emotion and changing attitudes and beliefs of the audience (Green & Brock, 2002).

### *Stigma in the media*

The public stigma we see today towards those who suffer from SUD, not only comes from societal institutions such as healthcare, law enforcement, and the justice system, but much of it also comes from the mainstream media, social media, movies, and television. A large portion of the media the public consumes portrays substance use disorder in negative way. Many Americans get their news from the mainstream media and the way substance use disorder is portrayed has a negative effect on the stigma surrounding SUD and how US citizens view those who suffer from the disorder (McGinty et al., 2019). According to McGinty et al. (2019), negative media depictions of addiction and substance use contributes to widespread stigmatization. It can be estimated that those living in the United States spend up to 15 years of their lives watching television, whether that is movies, television shows, or the news media (Sardar, 2015). Since those living in the United States spend much of their life consuming content, the negative depictions of those who suffer from SUD are now deeply engrained in the minds of Americans.

The intentional negative framing of those who suffer from substance use disorder by the news media perpetuates public stigma as well as the internalized shame those affected may feel. The way the media talks about those who suffer from SUD, the causes of SUD, and the consequences of addiction is typically negative and lacks factual information (McGinty et al., 2019). The news media is a key provider of health information and health issues for US citizens, which makes them very dependent on the news media and the information they receive from it. The negative depictions of substance use disorder and lack of factual information from the media perpetuates stigma therefore impeding many from seeking out and receiving treatment. By

portraying SUD as a medical condition and using the stories of those who are affected by SUD, the media can help reduce public stigma around the condition.

### **Narrative Persuasion**

Human consumption and enjoyment of stories and storytelling is an enormous part of the human experience, and as humans we consume stories at a constant rate. Through experiences such as social encounters, books, movies, television, and plays, humans are exposed to powerful stories that can impact and persuade an audience (Green & Brock, 2000). According to Green and Fitzgerald (2017), “A narrative can be defined as a story or series of events that has an identifiable beginning, middle, and end, during which characters may encounter and then resolve a crisis or crises.” (p. 2). In a study done by Green and Brock (2000), a participant pool of college students reported consuming three times more narrative content than rhetorical. Stories are regularly used in advertisements and educational entertainment because of their persuasive abilities. Popular television shows and movies often include a storyline with an underlying persuasive message (Green & Brock, 2000). For example, HBO’s series *Euphoria* included a special episode between seasons that sheds light on the pervasive stigma and negative outcomes of substance use disorder and drug addiction. The creator of the show, Sam Levinson, has personally suffered from substance use disorder and has gone through recovery, attaching his own experiences to the storyline of the series.

Narratives can be more effective in persuading an audience compared to rhetoric. Rhetoric can be defined as the conscious effort to change someone through discursive strategies (Foss & Griffin, 1995). Narratives can be psychologically intense, evoking more persistent attitude changes than rhetorical persuasion. Rhetorical persuasion does not necessarily provide much imagery, or emotional and cognitive responses as narrative persuasion would and does not

include the possibility of transportation (Green & Brock, 2000). People are often collecting memories of people, places, experiences, and emotions. These memories can be more psychologically stimulating than arguments or conversations are. Being exposed to stories that may elicit memories from the audience is persuasive in nature and the audience will be more likely to be affected or transported by the story because of its ability to bring up memories and emotions from the audience (Green & Brock, 2000).

Stories allow for the audience to be transported into the life of whomever is telling the story. Stories of recovery specifically can squash any misconceptions the public may have about substance use disorder and recovery. It is a common misconception that those who suffer from SUD are unable to reach recovery and will always be considered a stereotypical addict. A lack of public education hinders the public from understanding the predisposing factors that contribute to substance use disorder (Luoma et al., 2007). Sharing stories of recovery can put the audience in the shoes of the main character, and the emotions felt by the audience may aid in changing their opinions about those in recovery and those who suffer from SUD. By sharing in the emotions of the main character, the audience's perceived stigma can be reduced.

Narrative persuasion is a valid theoretical concept that can aid in explaining how positive personal narratives and stories of recovery can be effective in reducing stigma towards those who suffer from SUD. There are many different types of messages that can be used to attempt to reduce stigma. Messages that include the consequences of drug use, statistical information on drug users, and scientific and medical facts can all be used to reduce stigma associated with substance use disorder (Oliver et al., 2012). But studies that test narrative persuasion have concluded that narratives can be more effective in reducing stigma than non- narrative messages

because of the narratives' ability to evoke emotion, imagery, and cognitive attention (Oliver et al., 2012).

Persuasive narratives allow audiences to engage in cognitive stimulation. Escalas (2007) found that when audiences process narratives through relating it to themselves and their personal experiences, they are more likely to have a favorable opinion of the narrative being told. When the audience relates the details of the story to their personal life, they are more likely to be transported and persuaded to think positively of the story, according to Escalas (2007). The ability to be transported into the story may allow for the narrative to be persuasive in changing attitudes and behaviors.

### **Narrative Transportation Theory**

Transportation theory assumes that narratives can provide the audience with the experience of being so consumed by the world of a narrative that connection to the real world may be lost for a period of time. Thus, this may allow the audience to change their beliefs and attitudes in accordance with the story being told (Green & Fitzgerald, 2017). Richard Gerrig (1993) was the first to examine narrative transportation in the context of books and novels. Green and Brock furthered this theory by applying it to all narratives, fiction and nonfiction, audio/visual narratives, and spoken or written narratives (Green & Fitzgerald, 2017). According to Green and Brock (2002), all forms of narratives are capable of transportation.

Transportation into a narrative is a distinct mental process where attention, feeling, and imagery mold into what is being displayed in the narrative (Green & Brock, 2000). When the audience is being transported into the world of the story and are escaping reality, they are more likely to change their real-world beliefs, attitudes, and behaviors to become more congruous with the story (Green & Brock, 2002). The more compelling and favorable the narrative is, the more

likely for the audience to be transported from reality into the story. This can lead to the audience being influenced and persuaded by the narrative and therefore be more likely to change their attitudes and beliefs in congruence with the story being told.

Transportation is a convergent process, meaning all mental systems are focused on what is occurring within the narrative being presented to the audience (Green & Brock, 2000). For transportation to occur there must be some sort of cognitive engagement, emotional experience, and mental imagery. Transportation causes the audience to lose access to the real-world. The process of transportation may affect the audience on a physical level and a psychological level. The audience may lose touch with their environment while being transported into the narrative. The audience may not notice a change in environment during the process of transportation. Psychologically, the audience may distance from reality causing the audiences to be less aware of real-world facts that differ from the plot of the narrative. The psychological and physical effects of transportation can lead to the audience to have motivations and emotions related to the narrative, despite knowing aspects of the narrative may not be real (Green & Brock, 2000). Transportation into a narrative is a process of immersion into the story whether fictional or not.

For the narrative or story being told to influence the audience, it should include powerful ways to absorb the audience into the world of the story (Green & Fitzgerald, 2017). The ability of the narrative to transport the audience is key when considering the impact of the narrative. A high ability to transport the audience can lead to a change in attitude and behavior. There are key criteria that a narrative must include for it to be able to transport an audience and be persuasive. The Transportation-Imagery Model further explains the ways in which a narrative can be transportive.

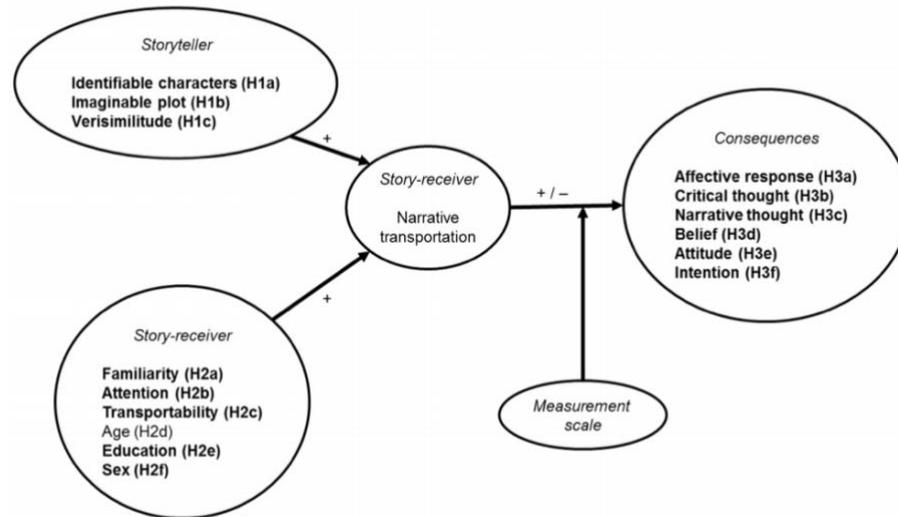
### ***Transportation- Imagery Model***

Green and Brock's (2002) Transportation- Imagery Model postulates that narrative persuasion is limited to stories that are in fact narratives in which emotions are evoked and the audience's beliefs are involved. The experience of transportation links vivid images with the beliefs implied in the story. Belief change occurs when the evoked images are activated by psychological transportation, leaving the real world, and entering the world of the narrative. A mental image is more powerful in affecting beliefs than verbal statistics or arguments (Green & Fitzgerald, 2017). The model also suggests that propensity for transportation by exposure to a narrative is affected by the characteristics of the audience. Someone's transportability depends on many different things like education and age. Along with the characteristics of the audience, the characteristics of the story also affect transportability. The tendency for transportation by exposure to a narrative is influenced by the characteristics of the text, the level of creativity, and the fidelity to the narrative format. By definition, a narrative follows a causal chain that when constant with can be influential to transportation into the story. A narrative that lacks in ability to create mental images will not be effective in transporting the audience. The way in which the narrative is presented to the audience affects transportation. The propensity of transportation by exposure to a narrative is affected by the characteristics of the context or medium. Some mediums may limit the opportunity of emotional and imaginative participation. There is more research to be done in this area, but mediums that compete for cognitive resources limit the ability to be transported. Mediums with pictorial information and visual texts compete for limited cognitive resources (Van Laer et al., 2013).

Van Laer et al. (2013) expanded Green and Brock's (2002) Transportation -Imagery Model. Van Laer et al. (2013) expanded the theory to clarify key concepts within the model. This

new model examines various antecedents and consequences of narrative transportation. The Extended Transportation- Imagery Model considers cognitive responses, beliefs, attitudes, and intentions as consequences of narrative transportation. [See Figure 1] (Van Laer et al., 2013).

**Figure 1**



### Transportation Imagery Model

The storyteller antecedents address ways in which transportation can influence and be affected by the characteristics of the story. Story attributes such as characters, plot, and relatability can affect audience transportation. Story-receiver antecedents focus on key individual attributes that can affect transportability. Story-receiver components like prior knowledge, ability to concentrate, age, sex and education can affect the consequences of narrative transportation. The consequence antecedents of the Extended Transportation-Imagery Model address the different outcomes that may occur when the storyteller and the story-receiver antecedents affect transportation. The end of the model identifies affective and cognitive responses, beliefs, attitudes, and intentions as potential consequences of narrative transportation. One consequence antecedent of narrative transportation is affective responses, which tend to be focused on feeling

and emotion that the narrative evoked. Cognitive responses to the story can be critical or narrative in nature. This means that the story-receiver could respond to the story in a more critical and analytical way or in a narrative way, focusing on story structure, characters, and objects.

Beliefs, attitudes, and intentions can also be affected by narrative transportation. Narrative transportation can influence story-receiver's beliefs about the topic being addressed in the story. How positively or negatively a story-receiver perceives the narrative determines their attitude towards what's being addressed in the story. Transported story receivers are more likely to perceive the story plot as more desirable and truthful, which will positively affect their attitudes. If a story-receiver's beliefs and attitudes are influenced by the narrative, their intentions may be influenced as well. Transported story-receivers may be more willing to perform the action addressed in the narrative. When a narrative is highly transportive it can form more emotional responses and narrative thoughts as well as influence beliefs, attitudes, and behaviors (Van Laer et al., 2013). The Extended Transportation- Imagery Model shows that narrative transportation varies for different characteristics among the storyteller and the story-receiver.

Favorable stories usually include details to attract attention, elicit emotions, and stimulate cognitive responses (Gebbers et al., 2017). The more favorable a story the more likely the audience will be transported, and they can be motivated to change their attitudes and beliefs to follow those of the story being told. If the story isn't applicable or relatable to the audience, the less likely they are to be transported and be more critical of the narrative (Green & Brock, 2002; Van Laer et al., 2013). While the audience is being transported, they are stepping away from reality for the duration of the narrative and can step into the world of the story. People exposed

to positive stories about health issues, such as stories of recovery, have reported higher transportation and self-efficacy than those who were exposed to negative stories according to a study done by Gebbers et al. (2017).

### **Transportation and reducing stigma**

Narratives with this high ability to transport can be powerful in fields such as health messaging (Green & Fitzgerald, 2017). Transportation can lead to belief change by reducing negative association previously held by the audience, creating meaningful attachments or feelings towards the characters, and making the world of the story seem more real and the events feel more like personal experiences (Green & Brock, 2002). The ability to transport the audience can be helpful when trying to reduce stigma surrounding an issue and can aid in the designing of persuasive messages to reduce stigma (Green & Fitzgerald, 2017).

Transportation theory is useful in health communication in particular because it provides an ability to surmount any barriers to persuasion differently than other types of persuasive messages. Narratives can be more relevant to the audience and more inviting than other forms of persuasive messages like advertisements. When the issue at hand is more personalized, it opens an avenue for the audience to be transported into the story more than an advertisement would (Green & Fitzgerald, 2017). It is possible for transportation theory to be effective in changing implicit attitudes the audience may not know they have about a specific health issue (Green & Fitzgerald, 2017). Implicit attitudes can be defined as judgements made without conscious awareness towards the subject at hand. These judgments can be either favorable or unfavorable depending on individual experiences (Devos, 2008). Health messages that use narratives can be a tool to persuade the audience to change their beliefs and attitudes towards highly stigmatized health issues such as substance use disorder, mental health, and more (Heley et al., 2020).

Narratives can reduce one's resistance to media messages, especially messages that are aimed at reducing stigma that may be unrecognized by the audience (Heley et al., 2020). Many people may be unaware of the stigma they hold towards certain marginalized groups such as those who suffer from substance use disorder. Narratives have the ability to be able to change attitudes, beliefs, and stigma associated with SUD and bring to light the effects of stigma in other areas such as healthcare and the justice system that people may not have been aware of previously (Heley et al., 2020). Personal stories of addiction and recovery can educate and transport the audience and inform and influence the audience to change their attitudes towards those with SUD. Stories that describe the challenges of specific individuals can stimulate more favorable beliefs of stigmatized groups better than non-narrative stories of policy and medical facts. Narratives can provoke more compassion towards the stigmatized group compared to non-narrative formats (Oliver et al., 2012). The compassion and empathy invoked by the main characters of the narrative can lead to the breakdown of generalizations of the stigmatized group in focus.

### ***Narrative persuasion applied to opioid addiction***

Narratives that bring about imagery, emotion, and attention can enable the audience to counter-stereotype the stigmatized group addressed in the narrative (Oliver et al., 2012). Heley et al. (2020) found that narratives about prescription opioid addiction increased ascriptions of responsibility toward groups other than the individual suffering from SUD. This includes pharmaceutical companies and doctors. According to Heley et al. (2020), narrative messages can be an effective approach to reducing stigma among those with prescription opioid addiction. The study found that narrative messages focused on reducing stigma can be persuasive enough to be resilient to counter messages that emphasized the aspect of personal choice and addiction.

Gebbers et al. (2017) searched more into narrative transportation and the motivation to change health behavior. They found that highly transportive narratives discussing drinking and driving positively affected perceived risk severity of performing that action. Narratives focusing on changing health behavior can transport audiences, affecting their attitudes and health behaviors. Narratives and their ability to transport an audience can be persuasive in changing attitudes and beliefs.

Through narrative persuasion and transportation theory, this study aims to understand how narratives can be used as a tool to reduce stigma towards those who suffer from SUD. From the provided literature there is a large public stigma of those who suffer from SUD and persuasive narratives and transportation theory can be used as a tool to reduce stigma through health messaging. The themes around personal narratives and the stigma of SUD will continue to be explored in the later sections of this study.

### **Research Questions**

The literature review has provided research that has studied public stigma and its effects on those who suffer from SUD along with narrative transportation and narrative persuasion to change attitudes, beliefs and intentions and reduce stigma. The aim of this study is to explore the perceptions of various persons who work within the community and have interacted with those suffering from SUD in region 3 (as defined by the Department of Behavioral Health and Developmental Services) of Southwest Virginia and ways in which they believe stigma can be reduced. The participants of this study have close proximity to those who suffer from SUD and understanding their point of view on SUD and the stigma surrounding it will aid researchers in understanding how stigma can be reduced through health messaging and more specifically

persuasive narratives about SUD. For the purpose of this study, the following research questions were addressed:

**RQ1.** What themes do community stakeholders (law enforcement, healthcare workers) identify surrounding substance use disorder?

**RQ2.** Do community stakeholder groups differ in the themes identified surrounding SUD?

**RQ3.** What types of messages do community stakeholders believe to be effective in reducing stigma towards substance use disorder?

**RQ4.** What types of narratives do community members believe will be effective in reducing stigma?

## **CHAPTER 3: METHOD**

Prior to beginning the stakeholder interviews and subsequent research, this project received IRB approval through the Virginia Tech Human Research Protection Program (HRPP). Qualitative interviews of community stakeholders that have proximity to those who suffer from substance use disorder were chosen as the method of data collection because of their ability to provide a real-life context to a highly stigmatized health issue. The qualitative interviews were conducted by a team of researchers. Interview questions were open-ended and semi-structured to allow for participants to provide their own perspective on those who suffer from SUD and the stigma surrounding SUD.

### **Researcher Training**

Through the data collection and analysis portion of this project, a group of researchers from the Virginia Tech Population Health Sciences Department and the Virginia Tech Center for Public Health Practice and Research, took on various roles. All researchers underwent multiple training sessions which included how the project would be collecting and qualitatively analyzing the interviews. Three training sessions occurred and were taught by the Senior Research Associates on the project. Table 1 includes each researcher involved and their role within data collection, analysis, and interpretation. Each training session occurred directly before each stage of the data collection, analysis and organization, and interpretation. Researchers were trained on appropriate and ethical methods to conduct the semi-structured interviews and safe ways to store the interview transcripts.

After the interviews were conducted and the transcripts were prepared for analysis, researchers underwent a second training on how to use ATLAS.ti (version 9.0), along with how to code for themes and patterns within the interviews. Once the data was coded and organized

into code groups and quotations, researchers were then trained on the ways in which the data can be interpreted. This training included how to create tables and reports in ATLAS.ti, and how to transfer data to excel, as well as how to determine frequency of themes among stakeholder groups and other tools of ATLAS.ti.

### **Sample**

Region 3 of Virginia consists of ten community service boards (CSBs). CSBs in Virginia are responsible for providing resources and community-based behavioral health and disability services (Virginia Department of Behavioral Health & Developmental Services, n.d.). The CSBs involved in the study include Blue Ridge Behavioral Healthcare, Cumberland Mountain CSB, Danville-Pittsylvania, Dickenson County Behavioral Health Services, Highlands CSB, Mount Rogers CSB, New River Valley Community Services, and Southside CSB (Virginia Department of Behavioral Health & Developmental Services, n.d.).

Potential participants were nominated through the eight region 3 community service board localities. Once nominations were received from each stakeholder group, individuals were randomly selected to be on a list of potential participants to be contacted by the interviewers. An email was sent to eligible participants that included details about the study. For participants that responded to the e-mail and agreed to participate, a follow-up email was sent to schedule a telephone interview at their convenience. Once a date for the interview was set, participants received the verbal consent to review prior to the interview. For participants who did not respond to the initial e-mail, a second email was sent, and two follow up phone call attempts were made.

The interviewers then recruited potential participants via email or phone. Approximately four people from each stakeholder group were recruited. Community stakeholder groups interviewed included region 3 law enforcement directors, judges/justices, faith-based recovery

employees, harm reduction employees, community members, peer recovery support specialists, and family members of those who suffer from substance use disorder. Each stakeholder group offers a different perspective regarding stigma surrounding SUD as illustrated in Table 2.

The counties included in region three of Virginia are located in one of the more rural parts of the state (Virginia Department of Behavioral Health & Developmental Services, n.d.). Interviewing different stakeholder groups that interact often with the community and those who may suffer from SUD aids in furthering the knowledge of how stigma can be reduced among those with SUD. Table 3 displays the number of stakeholders invited compared to the number that participated in the study.

Among the ten CSBs in region 3 of Virginia, eight agreed to participate in the study. From these eight CSBs, six stakeholder groups were interviewed. The research team recruited 28 agents, and 21 agreed to participate in the study. Tables 2 and 3 show the stakeholder groups that agreed to participate in the study and which CSB the participants work/live, along with how many agents from each stakeholder group were invited and how many agreed to participate.

### **Data Collection**

Eight interviewers, including myself, conducted the interviews in the summer of 2020 during the COVID-19 pandemic. To protect both the research team and the participants of the study from the virus, and to follow all COVID-19 restrictions at the time, all interviews were conducted through telephone/Zoom, a video conferencing website. The research team was brought together through Virginia Tech's Population Health Sciences, Human Development, and Communication departments and included both students and professors from a wide array of backgrounds.

Prior to conducting semi-structured interviews, a review of stigma reduction literature about substance use and abuse was conducted to inform the interview questions. Stigma reduction literature regarding SUD consistently found that personal narratives were an effective way to reduce stigma, along with other non-narrative forms of messages (Heley et al., 2020). The interviews consisted of 14 questions and lasted between 15-30 minutes. Interview questions were guided by stigma reduction literature and were developed to understand how active members in the community understand stigma surrounding substance use disorder. The interview questions aim to shed light on attitudes and behaviors of community members regarding substance use disorder.

Before the interviews began, a confidentiality statement was read aloud for the participant and verbal as well as written confirmation was obtained. For the comfort of the participants, all interviews were audio only and any personal information was inaccessible after the interviews were completed. To differentiate between participants, each received an identification number along with what stakeholder group they belonged to. At the start of the interview, participants were given a detailed description of the study and questions about the study were answered and asked to provide verbal consent. Interview questions addressed three categories: 1) defining and identifying stigma; 2) explaining and improving SUD stigma; and 3) messages to reduce SUD stigma. [See Table 4].

The first five interview questions aimed to have the participants define and identify stigma within their lives and their community. To address what negative stigmas the participant perceived about those with SUD and what their relationships are with those who suffer from the disorder gives further insight to the public stigma surrounding SUD.

The next set of questions aimed to explain and shed light on how to improve negative stigma or continue to portray any positive experiences that the participant has had with someone who suffers from SUD. These questions allowed for examination of how peer recovery specialists may have had much different experiences, and therefore different attitudes than those participants in law enforcement or healthcare. After understanding the attitudes about stigma the participants shared, they were then asked how stigma towards SUD can be improved. Some of the stakeholder groups interviewed encounter those who suffer from SUD more frequently than others and can give another perspective on the most effective ways to reduce stigma, if a campaign was created.

The last question of the interview specifically addressed what types of media messages participants think will be effective in reducing stigma. This question aimed to understand further what types of messages would be most effective in changing the public's beliefs and attitudes towards those with SUD. Although these questions are focused towards reducing stigma in region 3 of Virginia, participant responses can be used to reduce stigma in other communities that suffer from high rates of substance use disorder. The audio from the virtual interviews was saved and transcribed through Rev, an online transcription service. The transcriptions of the interviews were used for the thematic analysis.

### **Data Analysis & Interpretation**

To further understand the content in the stakeholder interviews, a qualitative thematic analysis using inductive themes was conducted to determine common themes surrounding substance use disorder and stigma. A thematic analysis is a method of research that identifies and analyzes patterns within data (Braun & Clarke, 2006). A thematic analysis is widely used and can aid in understanding how individuals experience reality.

This type of analysis will aid this project by describing the data in rich detail. An analysis of such can highlight major themes that explore stigma regarding substance use disorder. A thematic analysis can examine common patterns in the human experience and their effect on how people communicate within society (Braun & Clarke, 2006). Themes can be defined as something important in the data that relates to the research questions being asked. A theme often represents a pattern found within the data set being examined (Braun & Clarke, 2006). Themes bring to light the prevalence of important details in the data that aid in answering the research questions.

To conduct a thematic analysis, there are six recommended steps for a detailed and successful analysis (Braun & Clarke, 2006). First, the researcher must familiarize themselves with the data. Next, the researcher should generate initial codes that identify features in the data that appear interesting or important. After, the researcher should search for themes among the codes in the previous phase. Once themes are established the researcher should review the themes, define, and name them. The last stage of a thematic analysis, after all themes have been established and reviewed, is to produce a report of the findings from the analysis. A logical, coherent, concise account of how the analysis answered the initial research questions can provide merit and validity for the study (Braun & Clarke, 2006). Each of the phases mentioned above will be employed in this study.

To follow Braun and Clarke' (2006) method of a thematic analysis, the research team's primary aim was to identify themes and patterns related to messages to reduce stigma among substance use disorder. Thematic codes, or themes, bring to light the different attitudes and behaviors of stakeholders surrounding SUD and any stigma held by the stakeholder groups who were interviewed. The interviews were coded question by question, through each stakeholder

group and coded for common patterns which were then organized into code groups within ATLAS.ti. The themes from the analysis represented the common patterns in the participant interviews. Common phrases, words, and concepts about SUD, stigma, and stigma reduction messaging were coded. The coding strategy focused on the shared community experiences and the essence of experience shared by the stakeholder groups. By linking these patterns together, important themes can be described which allows for more understanding on the stigma surrounding SUD, people's personal stories, and ways to reduce stigma.

The strategy used to interpret the data included identifying the major themes captured in participant responses. Themes that had the most responses were noted, as well as which stakeholder groups focused on certain themes. Common themes associated with specific questions were investigated and the involvement of stakeholder groups within those specific questions were noted. Themes and quotations specific to stigma reduction messaging, personal experiences of recovery, treatment, stigma, and more were examined and interpreted. The differences between stakeholder groups regarding the topics listed above were also examined in the interpretation process. The community stakeholders in region 3 of Virginia interact with the community daily as a part of their professional responsibilities. The interviews conducted gave insight on how the community views those with SUD which then allowed the researchers to examine ways to potentially reduce stigma. The thematic codes that were used by the research group came directly from the data that was provided by ATLAS.ti after importing interview transcripts and finding common words, phrases, or concepts within each participant interview transcript. ATLAS.ti was able to provide us with specific themes that were frequently mentioned by participants.

## CHAPTER 4: RESULTS

This study used interview methodology to examine common themes about community stakeholders in region 3 of Southwest Virginia perceptions, attitudes, and behaviors towards those who suffer from SUD, as well as what types of messaging strategies would aid in reducing public stigma of those who suffer from SUD. A thematic analysis was used to capture and understand the various topics mentioned by interview participants. This section will discuss the themes associated with the perceptions, beliefs, and attitudes about SUD, the stigma around SUD, the notable differences between stakeholder groups, and themes associated with types of messages to reduce stigma based on their interview responses. [ See Figure 2].

**Figure 2**

<b>SUD stigma themes</b>	<b>Differences between stakeholders</b>	<b>Types of messages to reduce stigma</b>	<b>Types of narratives to reduce stigma</b>
Interpersonal Stigma Themes <input type="checkbox"/> <i>Negative Perceptions</i> <input type="checkbox"/> <i>Judgements based on behaviors</i> <input type="checkbox"/> <i>Lack of understanding or knowledge</i> <input type="checkbox"/> <i>Experiences shapes SUD</i> <input type="checkbox"/> <i>Personal experiences/interactions</i> <input type="checkbox"/> <i>Poor personal choices</i> <input type="checkbox"/> <i>Resistance to change</i> <input type="checkbox"/> <i>Professional/personal jaded/fatigue</i>  Public Stigma Themes <input type="checkbox"/> <i>Illegal activities</i> <input type="checkbox"/> <i>Societal influence</i> <input type="checkbox"/> <i>Negative media representation</i> <input type="checkbox"/> <i>Seen as a moral failing</i>	<input type="checkbox"/> Stakeholders jaded or fatigued from dealing with those who suffer from SUD because of professional interactions tend to have a more negative view of those with SUD <input type="checkbox"/> <i>Resistance to change</i> was mentioned 6 times, all by law enforcement participants <input type="checkbox"/> Other people that work or live closely with those who suffer from SUD (peer recovery support specialists, family members) were more understanding/ empathic	<input type="checkbox"/> <i>Positive messaging about SUD/SUD recovery</i> <input type="checkbox"/> <i>SUD positive change is possible</i> <input type="checkbox"/> <i>Normalize SUD recovery</i> <input type="checkbox"/> <i>SUD happens to everyday people</i> <input type="checkbox"/> <i>SUD is a disease or medical condition, not a choice</i> <input type="checkbox"/> <i>Openly talk about SUD journey</i> <input type="checkbox"/> <i>Peer/Family/Community support</i> <input type="checkbox"/> <i>SUD professional support/treatment/intervention</i> <input type="checkbox"/> <i>SUD education/ training</i> <input type="checkbox"/> <i>More empathetic/understanding</i> <input type="checkbox"/> <i>Trauma leading to SUD</i>	<input type="checkbox"/> <i>SUD happens to everyday people</i> <input type="checkbox"/> <i>Normalize SUD recovery</i> <input type="checkbox"/> <i>SUD positive change is possible</i> <input type="checkbox"/> <i>Openly talk about SUD journey</i> <input type="checkbox"/> <i>Trauma leading to SUD</i>

## **Themes surrounding SUD identified**

RQ1 aims at addressing the most common themes that were gathered from participant interviews. The themes listed and explained in Table 5 show the different types of stigma that exist surrounding SUD according to participants. Interview participants were asked to describe why people may have negative perceptions of those with SUD, where those perceptions may stem from and what types of public messaging would be effective at reducing SUD stigma? The description of each theme in Table 5 was determined by participants' responses to each interview question. The description or explanation of each theme was determined by how the participants expressed their beliefs and attitudes about SUD based on the interview questions.

When asked about perceptions of SUD participants often discussed the ways in which society, interpersonal relationships and interactions, the media, and personal behaviors of those with SUD contribute to the negative perceptions around the disease. Common stereotypes and stigmatizing labels used by the public were also discussed among participants and how a lack of understanding and education along with the use of stigmatizing labels adds to the negative perceptions associated with SUD.

From Table 5 two different types of themes were identified. Themes regarding interpersonal SUD stigma, and themes regarding public SUD stigma. Table 5 also brings forward the themes regarding the types of messages participants believe would be effective in reducing SUD stigma, both public and interpersonal. Among the most common themes mentioned by stakeholders, two types of patterns arose: themes discussing SUD as an interpersonal issue, where SUD stigma happens and themes discussing SUD public stigma.

### *Themes surrounding interpersonal SUD stigma.*

After describing each relevant and most addressed theme in Table 5, it was necessary to further break down the themes into groups. The first group recognizes themes that address interpersonal themes that arose during the interview and analysis process. Interpersonal themes are themes that address the person-to-person interactions and experiences that lead to SUD stigma. Interpersonal is defined as the relationships or communication between two people (Merriam-Webster, n.d.).

Table 6 includes themes such as, *Negative Perceptions, Judgements based on behaviors, Lack of understanding or knowledge, Experiences shapes SUD, Personal experiences/interactions, Poor personal choices, Resistance to change, and Professional/personal jaded/fatigue.* Table 6 also includes notable quotes from interviewees and which stakeholder group mentioned each theme.

By breaking down common themes into smaller subcategories, it can be seen the different ways in which stakeholders hold their stigma and the ways in which those who suffer from SUD are impacted. Table 6 shows that in their personal relationship towards other community members is where a lot of stigma and judgment is taking place.

The most common themes stakeholders mentioned about SUD regard the actions and behaviors of those who suffer from the condition, and how those actions and behaviors affect society and their interpersonal relationships. Some study participants mentioned the actions of those with SUD in a negative light, while others framed the issue as something that has been deeply misunderstood by society. Many of the participants demonstrated a broader understanding and experience with SUD and related behaviors and actions compared to other participants.

In the following quote, a law enforcement officer provides their experiences with those who suffer from SUD and how those can lead to negative judgments or perceptions within the profession.

“I think a lot of it comes from personal experience, at least from me from a professional side. It's what we see. Even though it is a negative stigma, and a stereotype, it's something that comes from experience, proven experience, through our interactions with a lot of these people that are suffering with that.”

A participant from the Judge/Justice stakeholder groups expands on their interpersonal experiences with those who suffer from SUD and how others within the community stigmatize those with SUD, in the following quote.

“I also think individuals encounter people in their lives with substance use disorder and they, again, begin to take on the idea that these people are weak or irresponsible and that they're not dealing with a legitimate medical or mental health disorder.”

In addition to discussion of SUD stigma as an interpersonal issue, participants describe how the actions and behaviors of those with SUD are perceived by society and the public.

### ***Themes surrounding public SUD stigma.***

The second group that the most relevant and commonly mentioned themes include themes that address the public stigma towards SUD. Public stigma can be defined as stigmatizing language in publicly accessible material as well as societal norms. Table 7 includes themes such as, *Illegal activities*, *Societal influence*, *Negative media representation*, and *Seen as a moral failing*. Table 7 also includes the stakeholder group that mentioned each specific theme as well as important quotes about each theme.

When participants were asked about their perceptions and attitudes surrounding SUD, answers often touched on the negative ways in which those with SUD are represented in society and the media. Many participants mentioned a lack of education, understanding, and empathy when it comes to society's views of those with SUD and how they should be treated. In the quote

below, a local Judge/Justice describes how *Negative Media Representation* can lead to negative judgements and perceptions of those with SUD and the perceived moral implications of SUD.

“And society doesn't make it better when we portray them in our media, when we portray them in the newspapers or any other, Facebook, or any social media, whatever you want to call it. When they portray them as worthless individuals. That they are the cause of their own problems. That they made the problem. And consequently, they are the ones who should bear the consequences of that problem”

The above quote includes various themes about the perceptions and stigma that surround SUD. It can be seen from participant interviews how there is a misunderstanding and misrepresentation of those who suffer from SUD from personal and professional experiences, society, and the media. Participants regularly mentioned the negative public stigma that is associated with SUD when asked about their perceptions during the interview process. In this next quote, a peer recovery support specialist discusses how society makes judgements about a person based on their habits and what they see through popular media.

“I guess some of the negative perception would come from media. Maybe possibly how the role that that person with substance use disorder would be portrayed in a movie or something of that nature.”

The recognition of the stigma around the condition is a progression towards reducing stigma. Participants could have focused only on the negative behaviors of those with SUD and how the negative behaviors affect society, but many of the participants are aware and knowledgeable about the contributing factors of SUD and the actions of those who suffer from the condition. The ability to recognize the contributing factors and the stereotypes around SUD by participants is already a step in the right direction to reduce stigma. The different personal/professional experiences of the participants and individual stakeholder groups led them to the perceptions they hold about those with SUD, and through their ability to recognize stigma

towards SUD they each can aid their coworkers, family, friends, and community members in also recognizing SUD stigma in their lives and profession.

### **Notable differences between Stakeholder themes**

Since the participants are from various stakeholder groups and CSBs throughout region 3 of Virginia, RQ2 aims to identify certain personal or professional experiences and interactions that may cause participants within the stakeholder groups to view those with SUD in different ways. Those who may be jaded or fatigued from dealing with those who suffer from SUD because of professional interactions tend to have a more negative view of those with SUD than other professions that work or live closely with those who suffer from SUD like peer recovery support specialists and family members of those who suffer from SUD.

Stakeholder groups such as law enforcement and judges/justices may experience some professional jadedness that affects how they view those with SUD. Law enforcement officers and those who work in the judicial system tend to interact with those who suffer from SUD more frequently than other professions and at times when they may have possibly broken the law. Those who work in the criminal justice system like law enforcement and judges/justices often see the same person come through the system many times and create perceptions and judgements based off those interactions through their profession. For example, in Table 5 the theme *resistance to change* was mentioned six times, all by law enforcement participants and by no other stakeholder group. The notable quote below can show how some law enforcement officers view SUD.

“It's probably more focused on the group that's kind of been a drug abuser for a long period of time and haven't had the desire or willingness or ability to get themselves away from it...and

when you see somebody who's just simply not doing anything to help themselves, that's going to provide a more negative perception versus someone who presents more as a victim.”

Those who work in law enforcement mainly see those suffering from SUD in instances of crime and in many cases interact with the same people more than once. Another law enforcement participant describes the actions and behaviors of those with SUD regarding resistance to change and poor personal choices in the quote below.

“it's much harder to have sympathy for someone who's made bad decision after bad decision, after bad decision with no apparent effort to fix it”

Participants note that other professions such as healthcare professionals may experience the same professional jadedness the stakeholder groups interviewed mentioned. The participants who work in law enforcement and the justice system often see repeat offenders and are perceived to be resistant to change their ways. These aspects of SUD greatly affect how they are viewed by the stakeholder groups mentioned, contributing to the stigma around SUD.

For the participants who have seen the complexities of SUD and the success of recovery, their outlook can be more positive and empathetic than participants whose only experiences with those with SUD are highly negative. In the following quote, a peer recovery support specialist explains the different reasons why personal experiences shape the way people perceive or judge those who suffer from SUD.

“So, sometimes there is dishonesty and there are times when people steal or do different things to support the substance use disorder. So, some of it is based on maybe experiences they've had with people that struggle with substance use disorder.”

One family member of someone with SUD notes below that there is a lack of understanding around SUD, and that there is a misunderstanding around what types of people may suffer from SUD.

“If they really knew that substance abuse has no boundaries it doesn't matter, your socioeconomic background, your educational background, your gender, where you came from, where you grew up, there might be a better understanding of this that can impact everyone.”

As mentioned in the quotes above, through personal or professional experiences with SUD, people begin to make judgments and perceptions about the condition and those experiences either lead to a more empathetic and understanding outlook on SUD or a negative and more stigmatized perception of those who suffer from the condition.

### **Types of Messaging to Reduce SUD Stigma**

Along with the different types of stigmas that surround SUD participants also were asked how stigma towards SUD can be reduced. RQ3 aims at addressing what types of public messaging would be effective in reducing stigma. Table 8 shows the most common themes mentioned by stakeholders such as, *Positive messaging about SUD/SUD recovery, SUD positive change is possible, Normalize SUD recovery, SUD happens to everyday people, SUD is a disease or medical condition, not a choice, Openly talk about SUD journey, Peer/Family/Community support, SUD professional support/treatment/intervention, SUD education/ training, More empathetic/understanding, and Trauma leading to SUD.*

Participants also mention how using stories from many different types of people from various population groups and demographics can reduce stigma and stereotyping towards those who suffer from SUD. Some participants mentioned that notable people such as athletes and celebrities telling their stories and experiences with SUD can also be effective in reducing stigma. Other participants believe that many people in the public may be unaware that they are suffering from SUD and messages that include different people's stories and experiences can lead to more education and understanding about what SUD is and how prevalent it is within the United States. Since SUD is negatively represented in the media, participants believe that

messages that make SUD more relatable and applicable to everyone by using stories that show an empathetic and personable side of those who experience SUD first-hand are more beneficial.

The following quotes by local law enforcement officers explain the different types of stories and the experiences of those impacted to convey the importance of the issues and to portray it in a way that doesn't further stigmatize those who suffer from SUD.

“I would definitely say real life messages with just from the people, from those who have suffered through substance use disorder, or if they're still suffering and just have them explain the negative impacts that has on them, if they're trying to recover.”

“I think this particular topic is particularly difficult because there are stigmas around drug addicts and traditionally that's the stereotypical somebody's passed out in an alley someplace. When in reality it's happening in every neighborhood and every community across the country.”

Law enforcement officers despite some of the biases they may have towards those with SUD, are aware that stories that portray the realities of SUD can be impactful in changing lives and the way people view those with SUD. The following quote from a peer recovery support specialist also mentions how impactful stories of lived experiences and the journey of SUD can be on various types of audiences.

“For me personally, some of the most impactful messages are when someone shares a personal testimony or a personal lived experience of what they have experienced or gone through with a substance use disorder.”

Apart from messages that focus on the stories and experiences of those with and surrounded by SUD, participants mention messages that address access and availability to treatment as well as the positive experiences of different types of SUD treatment. There can be a very negative public perception of different SUD treatment methods and participants note this and how messages focusing on the positives of SUD treatment can reduce the stigma surrounding certain treatment methods, such as medicated assisted treatment (MAT). Messages that discuss how someone with SUD may be resistant to change and why that may be the case

can reduce stigma around SUD, according to participants. Other messages that explain how instances of trauma and overall mental health contribute to SUD could be effective in reducing stigma towards those with SUD. The following quote by a peer recovery support specialist expands on how messages that focus on the causes of SUD and what types of experiences or trauma one may go through to lead them to SUD can be helpful in reducing stigma and SUD prevention.

“The message needs to go that it's not so much of the substance use disorder as of why we started using the substance to start with. And if we can identify what has caused people to pick up that substance and address that, that it's okay not to be okay.”

The study participants acknowledge many different types of messages that can be effective in reducing stigma. The mention of educational materials that focus on the science of the condition and the negative symptoms of continued drug use was brief. Most participants recognize how impactful personal narratives can be when discussing an issue such as SUD. Personal narratives that include both the positives and successes of recovery as well as the hardships show audiences the wide range of experiences those who suffer from SUD can encounter.

### **Types of Narrative Messages to Reduce SUD Stigma**

RQ3 looked at the different types of messages participants believe would be effective in reducing stigma. RQ4 looks more specifically at the types of narratives that can be effective in reducing stigma. Table 8 also includes within the types of messaging to reduce stigma, types of narratives that can be useful in reducing stigma. These themes include *SUD happens to everyday people*, *Normalize SUD recovery*, *SUD positive change is possible*, *Openly talk about SUD journey*, *Trauma leading to SUD*.

Of the participants that discussed using narrative style messages to reduce stigma, there were various types of narratives or personal experiences that could be shared to an audience as an effective message strategy to reduce stigma. Narratives that focus on stories of success through recovery, positive experiences of treatment, and that change is possible for those who suffer from SUD are just a few of the types of narratives mentioned by participants. These types of stories can evoke an emotional reaction from the audience as well as provide more education and understanding about the condition. Many participants note that messages portraying scientific and statistical evidence may be less effective in reducing stigma than messages that focus on people's personal experiences.

Stories from those who may not be “fully” recovered but are in the process, the reasons in which they are choosing to recover, and the real hardships that come along with the process of recovery can aid the public in understanding the full spectrum of what SUD may entail for those who suffer. Stories that are relatable to not only those who suffer from SUD, but also to those who have been affected by the interpersonal relationship they may have had with someone who suffers from the condition are able to provide an audience with the ability to place themselves and their loved ones within those narratives, enabling them to better understand the types of things those who suffer SUD go through. Narratives that *Normalize SUD Recovery*, whether positive or negative, of getting treatment and going through recovery can be effective in reducing SUD stigma according to participants. The notable quotes below demonstrate how participants believe different types of narratives can be effective in reducing stigma. Participants from different stakeholder groups agree on the types of messages that can reduce and improve stigma. A law enforcement officer below mentions the use of real-life messages.

“I would say more positive statements, more real-life messages from those folks and actually say, this is what I'm going through and this is what I need to improve myself.”

A community member mentions how messages that normalize the struggles and journey of addiction can be impactful as well.

“I think it would be great for us to see, make it more, I guess, a more normalized message instead of it being somebody that struggles with substance abuse is in category A, and the rest of us are in B. I think trying to normalize that people struggle with addiction.”

A peer recovery support specialist mentions below how people’s different experiences through SUD can break down the stigma and stereotypes associated.

“So, I just think to show the different walks of life and how it affects people differently. How some people function throughout it. How some people lose sight or maybe lose touch with things that were important to them. That’s always made an impact on me, just the human piece to it, to put a face to it.”

Other narratives that can be effective in reducing stigma include those that show various types of people may be affected by substance use disorder, as shown by participant responses in Table 8. The theme labeled as, *SUD happens to everyday people*, was mentioned nine times by four different stakeholder groups. Stories that focus on the different experiences that those who suffer from SUD go through and shed light on the fact that there isn’t a stereotypical drug user can be impactful in reducing stigma. Participants acknowledged that narratives/stories show there isn’t a designated look or appearance of someone who suffers from SUD can help to reduce stigma surrounding SUDs. Narratives that express how public stigma and judgements from society affected their SUD and recovery process were helpful. The themes *Openly talk about SUD journey*, *SUD positive change is possible*, and *SUD is a medical condition, not a choice* were mentioned by nearly every stakeholder group interviewed.

Also, some participants noted that narratives that explain how someone became aware they suffered from SUD and how they received treatment were supportive, specifically the themes *Normalize recovery*, *SUD professional support/intervention/treatment*, and more show

the importance of storytelling and public messaging. Many people in the U.S. may be unaware that they suffer from an SUD because they lack knowledge of the signs. Narratives that can explain, in a more *Empathetic/ Understanding* format, a theme mentioned by participants, how someone discovered they had a SUD and found/received help, or treatment can be beneficial in reducing stigma and can spread awareness and education around the medical condition.

## CHAPTER 5: DISCUSSION

When the participant responses are interpreted in terms of narrative persuasion and transportation theory, it can be understood that messages that focus on the stories and experiences of those who suffer from substance use disorder can be effective in reducing stigma. Narratives that discuss the experiences of those with SUD can be an effective tool in persuading an audience to change their beliefs and attitudes about SUD and those impacted by it. Participants of the study address the ways in which personal narratives about SUD can provide an emotional and cognitive response from the audience. This emotional response can be an effective tool in reducing stigma surrounding SUD. According to Green and Brock (2002), transportation can lead to belief change by reducing negative associations previously held by the audience, by creating meaningful attachments or feelings towards the storyteller, and making the world of the story seem more real and the events feel more like personal experiences. The personal experiences of those that suffer from SUD can transport the audience into the experiences being shared by those who have been impacted by SUD, and therefore persuade them and reduce the negative perceptions they may have held about those with SUD before exposure to the narrative.

When addressing RQ1, regarding what themes community stakeholders identify surrounding substance use disorder, there was an understanding that the actions of those with SUD are a result of a culmination of issues that led to those behaviors rather than demonizing the actions and behaviors of those who are suffering. According to participants, the behaviors of those with SUD are a result of many other issues, such as trauma and mental illness that those who are suffering from that condition have experienced, and by exposing those issues before judging those with SUD, the public perception of SUD can change to a more positive outlook.

The recognition of the stigma around the condition is a progression towards reducing stigma, which is not something to brush over in this process of stigma reduction. Participants could have focused only on the negative behaviors of those with SUD and how the negative behaviors affect society, but many of the participants are aware and knowledgeable about the contributing factors of SUD and the actions of those who suffer from the condition. The ability to recognize the contributing factors and the stereotypes around SUD by participants is already a step in the right direction to reduce stigma.

To address RQ2, regarding if community stakeholder groups differ in the themes identified surrounding SUD, some of the participants and many members of society have a stereotypical idea of what someone with SUD may look or act like, but there is no “one size fits all” with medical conditions or the life experiences that may lead someone to a SUD. Study participants note that people from many different backgrounds and demographics are affected by SUDs and by acknowledging that, there can be a reduction in stigma. The various attitudes and beliefs different participants and stakeholder groups hold about SUD can be very representative of how society perceives those with SUD, since the condition is such a widespread issue, not only in region 3 of Virginia but across all the United States. Although there were some stark differences between stakeholder groups, all could contribute to steps that could be taken to reduce stigma. Stakeholder groups such as law enforcement and judges/justices often see the illegal activities and poor choices those who suffer from SUDs may make. This contributes to the reasons why some people who work within those professions may have more negative attitudes towards those with SUD. Participants in stakeholder groups like peer recovery support and harm reduction typically have more of an education and deeper understanding of SUD, which allows

them to have a more positive and hopeful outlook when discussing the issue of substance use disorder.

RQ3 addresses what types of messages community stakeholders believe will be effective in reducing stigma towards substance use disorder. The narratives about SUD that discuss positive experiences of recovery, success stories, and relatability of the medical condition were the most brought up by the study participants as opposed to stories that focus primarily on loss and struggle. The use of positive stories of recovery and treatment and the possibilities of overcoming SUD were widely noted by participants. A wide range of participants from various stakeholder groups discussed the use of positive messaging as the most effective of any other type of messaging strategy. The participants understood the power of stories and how persuasive they can be in altering the belief and attitudes of the audience. Study participants note that narratives that discuss the positive outcomes of having gone through recovery and the journey from the worst of addiction to the successes of recovery can shed light on how change is possible for people and that their past behaviors do not define their future actions.

Narratives may be able to alter the perceptions the public holds about those with SUD. Participants recommended that positive stories evoking emotion would be more powerful than facts and statistical arguments. The participants mentioned the use of personal anecdotes, narratives, and human experiences over the use of scientific and educational materials, because they believe that stories can be effective in reducing stigma. The data shows that participants view people's experiences of SUD and recovery as an effective messaging strategy to reduce SUD stigma.

RQ4 addresses what types of narratives community members believe will be effective in reducing stigma. Through the participant interviews it can be understood that messages that are

focused on the stories and experiences of those who have been directly impacted by SUD can be compelling and effective in changing the attitudes and beliefs of a public audience. By evoking emotion and cognitive responses in the audience through the stories of those who have been impacted by SUD, the audience can change their views about SUD that fall more in line with what the narrative message is portraying. Participants believe that personal narratives can be persuasive in reducing stigma and changing the beliefs and attitudes of the public.

Participants also mention how the use of personal experiences and stories can reduce the idea that SUD is a moral failing. Some participants note that messages that include people's personal stories of SUD can affect them and others in an emotional and sympathetic state. The responses of the participants fall closely in line with transportation theory and narrative persuasion and how effective the use of stories can be when trying to reduce SUD stigma.

### **Limitations and Strengths**

Throughout this study, there were many strengths and limitations that arose. This research project had a great deal of teamwork that led us to being able to complete this project. The members of the research team on this project were from various departments throughout Virginia Tech with varying backgrounds in education, title, and lived experience, and the wide range of experience among the members of the research team aided in being able to put together a well-informed study. The careful selection of interview participants and interview questions was aimed at understanding substance use disorder and what can be done to reduce public stigma of SUD.

Although the research team was well-informed on many aspects of qualitative research methods, the team faced some challenges and lacked experience in the qualitative data analysis software that was used to code the interview transcripts. The team decided to use the software

ATLAS.ti to analyze and interpret the interview data due to availability of resources through the Department of Population Health Sciences. The research team ran into technical issues in ATLAS.ti that had a slight negative effect on the timing of data analysis and interpretation. When trying to merge the interview transcript data, the research team faced technical difficulties within ATLAS.ti which caused there to be a delay in the data interpretation process. Since the research team was large, finding a time to meet was challenging which also influenced the timing of the analysis and interpretation. Much of the research team was students, therefore the timing of the data analysis and interpretation process was very important to those with project deadlines and graduation dates.

The challenges mentioned above were just that, challenges. The main limitation of this study is that the interview questions were not designed to address persuasive narratives or transportation theory a priori. While the interview questions do not specifically target narrative persuasion or transportation theory, they can be seen through that lens to further understand using transportation theory and narrative persuasion as a method to reduce public stigma surrounding SUD, which the themes that arose aligned with both narrative persuasion and transportation theory. Readers should be aware that the participants of this study live and work in an area that has a large issue with substance use disorder at a rate higher than the national average of residents that suffer from SUD. This is important to note when looking at the results of this study because of the themes and patterns that arise throughout the participants' responses. There is a vast range of lived experience that contributes to what participants believe would be the best ways to reduce stigma regarding SUD, and the findings emphasize how the use of this study sample of participants are specific to a rural Appalachian region of the country but can be

applicable to those who suffer from or have experienced SUD in their personal or professional life.

### **Study Implications**

The findings of this study can be used when looking to create messages about substance use disorder. Media campaigns that aim to normalize SUD recovery and SUD as a medical condition can use personal narratives as an effective method of reducing public stigma towards SUD. Transportation theory and narrative persuasion as seen through this study shows that personal narratives of those who have experienced SUD can create meaningful attachments or feelings towards those telling their personal stories and making the world of the story seem more real to the audience and the events feel more like personal experiences of their own (Green & Brock, 2002).

The stories of those who have had a SUD and their journey through recovery can be an effective tool in reducing public stigma about the condition through mass media campaign and educational interventions for stakeholders such as law enforcement. Through the themes and notable quotes from the participants of this study it can be understood that there is a large public stigma towards those who suffer from SUD and creating messages of personal stories and testimonials can reduce that stigma and lead to change among communities in the United States. Narrative persuasion through transportation theory can be powerful in changing the attitudes and beliefs of the public regarding substance use disorder.

The findings of this study can provide useful information for those who may be looking to create a campaign to reduce stigma, and for many of the stakeholder groups included in the interview portion of this study, as well as stakeholder groups who may not have been included. Law enforcement officers, judge/justices, health care workers, and others can implement a

stigma reduction and education training course about SUD, which can aid in creating a better environment for those who suffer from SUD, by hearing experiences and being educated by their peers, those who work closely with those who suffer from SUD can be more understanding and less stigmatizing.

By the public being able to understand the stigma around SUD, there can be policy implications on how those with SUD are treated within healthcare situations and the judicial system. Access to treatment can be more widely available and accessible if policies and laws around SUD are changed because stigma around the condition is more widely understood. The findings from this study can allow for policies around training and education about SUD stigma and for how those with SUD are treated in the judicial system to be implemented, along with what types of health campaign content would be effective in reducing SUD stigma.

Lastly, when creating educational interventions and campaigns to reduce stigma it's important to target the stakeholders that hold a lot of power and that make decisions for those who are suffering from SUD like law enforcement and judges/justices. Through the results of this study it could be seen the difference in perceptions between other stakeholder groups and law enforcement and targeting law enforcement first with stigma reduction campaigns and educational interventions could make a huge difference in how those with SUD are cared for, understood, and treated in region 3 of Southwest Virginia.

## CHAPTER 6: CONCLUSION

Rural communities in the U.S. are disproportionately affected by the opioid epidemic and substance use disorder. In Central Appalachia, substance abuse rates are steadily higher than the national average (Moody et al., 2017). The social and public stigma that surrounds substance use disorder affects many Americans and is one of the main barriers those who suffer face when trying to reach out for help and access treatment (Smith et al., 2016).

Through the participant interviews and a thematic analysis of the interviews, the reasons in which the public hold stigma and how it can be reduced were further understood and examined. SUD and the experiences of those with SUD can be explained to the public through personal stories and testimonials to reduce the stigma. By hearing the stories of those who have been affected, the public can unlearn some of their attitudes and behaviors about SUD through narrative persuasion. By being able to transport an audience through the personal narrative of those who suffer from SUD their ideas, attitudes, preconceived notions, and previously held beliefs can be altered to fit the narrative that is being shared, according to Green and Brock's transportation theory (2000).

Public health media campaigns that aim at increasing access to SUD treatment and recovery options must first aim to reduce the stigma around the condition. Only when the stigma around the condition is reduced will those who suffer feel accepted and be able to search for recovery and treatment options. Public health campaigns focused on reducing stigma not only for SUD but for other highly stigmatized health issues can use narrative persuasion as an effective messaging strategy by changing the attitudes and beliefs of the audience.

## Tables

Table 1

Data Collection & Analysis Team		
Name	Title & Department	Role
Dr. Kathy Hosig	Associate Professor, Population Health Sciences Director, Center for Public Health Practice and Research	Principle Investigator
Dr. Rose Wesche	Assistant Professor, Human Development & Family Sciences	Co-investigator
Dr. Monica Motley	Senior Research Associate, Population Health Sciences	Qualitative analysis training, recruitment, data collection, analysis, & interpretation
Dr. Kristina Jiles	Senior Research Associate, Population Health Sciences	Qualitative analysis training, recruitment, data collection, analysis, & interpretation
Emily Maher	Graduate Student Researcher, Communication	Recruitment, data collection, analysis, & interpretation
Charlotte Selbo	Graduate Student Researcher, Population Health Sciences	Recruitment, data collection, analysis, & interpretation
Becky Willis	Graduate Student Researcher, Population Health Sciences	Recruitment, data collection, & analysis
Beverly Vaden	Program Assistant, Population Health Sciences	Recruitment & data collection
Harper Lovegrove	Graduate Student Researcher, Population Health Sciences	Recruitment, data collection, analysis, & interpretation

Table 2

Community Service Boards and Stakeholder Participation

Community Service Board Location- Region 3	Stakeholder Group
Blue Ridge Behavioral Healthcare	Roanoke Rescue Mission Family Member Judge/Justice Law Enforcement
Cumberland Mountain Community Services Board	Faith-based Recovery
Danville-Pittsylvania Community Services Frontier Health	Judge/Justice Peer Recovery Support Specialist Family Member Law Enforcement
Highlands Community Services	Community Member Peer Recovery Support Specialist
Mount Rogers Community Services	Harm Reduction Peer Recovery Support Specialist
New River Valley Community Services	Community Member Peer Recovery Support Specialist
Southside Community Services	Peer Recovery Support Specialist Family Member Judge/Justice Law Enforcement

Table 3

Interview Participant Results			
CSB Stakeholder Group	CSB Location	Recruited [n=28]	Participated [n=21]
Law Enforcement	Blue Ridge Behavioral Healthcare	4	3
	Frontier Health		
	Southside Community Services		
Judges / Justices	Blue Ridge Behavioral Healthcare	4	3
	Southside Community Services		
	Danville- Pittsylvania Community Services		
Family Members	Blue Ridge Behavioral Healthcare	4	3
	Frontier Health		
	Southside Community Services		
Community Members	Highlands Community Services	4	3
	New River Valley Community Services		
	New River Valley Community Services		
Peer Recovery Support Specialist	Mount Rogers Community Services	8	5

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	New River Valley Community Services		
	Highlands Community Services		
	Frontier Health		
Other:		5	4
Harm Reduction	Blue Ridge Behavioral Healthcare		
Faith-Based	Cumberland Mountain Community Services		
	Mount Rogers Community Services		
	Mount Rogers Community Services		

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Table 4

Interview Questions	
Interview Topic/Subject	Interview Question
Defining and identifying stigma (DIS)	<p>DIS.Q1. Have you interacted with someone with substance use disorder in your private life and/or work life?</p> <p>DIS.Q2. What is your relationship to people with substance use disorder?</p> <p style="padding-left: 40px;">DIS.Q2. Prompt 1. For example, do you work with them, have personal relationships with them, see them where you live, or something else?</p> <p>DIS.Q3. How do you personally define stigma?</p> <p style="padding-left: 40px;">DIS.Q3. Prompt 1. It's the idea that sometimes people see others in a negative way because of something about them. In this case, people with substance use disorders are often seen in a negative way.</p> <p>DIS.Q4. In your experience, do you feel that people have negative perceptions of those with substance use disorder?</p>
Explaining and improving stigma (for participants who believe there is stigma) (EISS+)	<p>EISS+.Q1. Why do you think people might have negative perceptions about people with substance use disorder? Where do you think these negative perceptions came from?</p> <p style="padding-left: 40px;">EISS+.Q1. Prompt 1. For example, people may hold negative beliefs about people with substance users because of personal experiences, things they have heard from others, or even movies and television.</p> <p style="padding-left: 40px;">EISS+.Q1. Prompt 2. There are many possible reasons for stigma. Sometimes there are things happening in our society or culture,</p>

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in our families, in our workplaces, and even within our own psychology that affects how we feel about people. Do any of these things sound like reasons why someone might have negative beliefs about people with substance use disorder?

EISS+.Q2. What is an example of a time you witnessed stigma toward a person with substance use disorder?

EISS+.Q2. Prompt 1. In the example you just gave, why do you believe that there was a negative perception of the person with substance use disorder?

EISS+.Q2. Prompt 2. In the example you gave, what could have been done to reduce the negative perceptions of the person with substance use disorder?

EISS+.Q2. Prompt 3. It could be something you could do, or something that could change within your community, your government, or your culture.

EISS+.Q3. In general, what do you think would help to improve perceptions about people with substance use disorder?

EISS+.Q3 Prompt 1. It could be something you could do, or something that could change within your community, your government, or your culture.

Explaining and improving stigma (for participants who do not believe there is stigma) (EISS-)

EISS-. Q1. What is an example of a time you witnessed neutral or positive beliefs about a person with substance use disorder?

EISS-. Q1. Prompt 1. In the example you just gave, why do you believe that there was a neutral or positive perception of the person with substance use disorder?

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EISS-. Q2. In general, why do you think there is not stigma about people with substance use disorder?

EISS-. Q2. Prompt 1. There are many possible reasons why stigma does or does not exist. Sometimes there are things happening in our society or culture, in our families, in our workplaces, and even within our own psychology that affects how we feel about people. Do any of these things sound like reasons why someone might have neutral or positive beliefs about people with substance use disorder?

EISS-. Q3. In general, what do you think would help to improve perceptions about people with substance use disorder?

EISS-. Q3. Prompt 1. It could be something you could do, or something that could change within your community, your government, or your culture.

Explaining and improving stigma (for everyone) (EISE)

EISE.Q1. How have your own opinions about people with substance use disorder changed over time?

EISE.Q1. Prompt 1. What do you think caused those changes?

Reducing Stigma (RS)

RS. Q1. Because of your experiences with people who use substances, we would like to hear your opinion. What kinds of messages do you think would help reduce stigma against substance use disorder?

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Table 5

## SUD &amp; Sigma Reduction Themes

Theme	Description	Times Mentioned by Stakeholders
Negative Perceptions	Peoples views on those who suffer from SUD are generally negative	22
Judgements Based on Behaviors	People form their judgements of those with SUD based on the behaviors of those with SUD	21
Lack of Understanding/Knowledge	People generally have a lack of knowledge about people who suffer from SUD and/or lack understanding of why SUD occurs	13
Positive messaging about SUD and/or SUD recovery	Participants believe messages about SUD and SUD recovery that are positive can reduce stigma	11
Illegal Activities	Participants experience those with SUD commit illegal activities	11
Experiences Shapes SUD Perceptions	The experiences people have with those with SUD shape their perceptions and judgements	10
SUD Positive Change is Possible	Messages that portray SUD positive change/ recovery is possible for many people may reduce stigma	10
Normalize SUD Recovery	Messages that highlight the experiences of those with/ recovering from SUD and reveal the commonality of SUD can reduce stigma	10
SUD Happens to Everyday People	Messages that discuss how SUD doesn't happen to one type of person, it affects people from various demographics may reduce stigma towards SUD	9
Societal Influence	People's perceptions of SUD may come from societal influence of how society perceives those who suffer from	9
SUD is a disease or medical condition, not a choice	Messages that discuss people who suffer from SUD do not choose to suffer they have a defined medical condition that can be treated can reduce stigma	8
Negative Media Representation	Popular media represents those with SUD in a negative way	8

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Personal Experiences/Interactions	Peoples personal experiences or interactions they've had with those who suffer from SUD	7
Poor Personal Choices	People believe those with SUD make poor personal choices	7
Openly Talk About SUD Journey	Messages that talk openly and freely about SUD journey and recovery can reduce SUD stigma	7
Peer/Family/Community Support	Messages that highlight the possible access for social support for those who suffer from SUD trying to /going through recovery can aid in reducing stigma	7
SUD professional support/treatment/intervention	Messages that discuss access to professional medical support and treatment for those who suffer from SUD can reduce stigma	7
Resistance to Change	People believe those who suffer from SUD are resistant to change their ways and stop using drugs	6
Seen as a Moral Failing	People believe those who suffer from SUD have failed in having standards of behavior that don't include using drugs	5
SUD Education/Training	Participants believe there needs to be more education and training to those who may encounter those with SUD on a regular basis	5
More Empathetic/ Understanding	Messages that provide more empathy for those who suffer from SUD and more understanding for those who may be going through recovery may reduce stigma	4
Trauma Leading to SUD	The traumatic experiences those who suffer from SUD may have experienced that contribute to their medical condition	4
Professional/Personal Jaded/Fatigue	People who frequently encounter those with SUD may feel jaded or fatigue towards those with SUD based on their prior experiences	4

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Table 6

Interpersonal SUD Stigma Themes

Theme Mentioned	Stakeholder Mentioned By	Notable Quotes
Negative Perceptions	Peer Recovery Support Specialist: 8	<p><b>Notable Quote 1</b>                      “I think part of it is society as a whole, which obviously frowns upon the particular actions of using some of these drugs, particularly in an illegal form” - Judge/Justice</p> <p><b>Notable Quote 2</b>                      “I think probably because of the history there, because people with substance use disorder are known for, in their history, known for having questionable boundaries, questionable decision-making and things like that. I think maybe that would influence the way that they are treated maybe.”- Peer Recovery Support Specialist</p>
	Harm Reduction: 4	
	Community Member: 3	
	Judge/Justice: 3	
	Family Member: 2	
	Faith-Based: 1	
	Law Enforcement:1	
Judgements Based on Behaviors	Peer Recovery Support Specialist: 7	<p><b>Notable Quote 1</b>                      “So, sometimes there is dishonesty and there is times when people steal or do different things to support the substance use disorder. So some of it is based on maybe experiences they've had with people that struggle with substance use disorder.”- Peer Recovery Support Specialist</p> <p><b>Notable Quote 2</b>                      “a lot of times individuals who have substance use disorder will engage in other conduct so that they can obtain money or obtain the</p>
	Judge/Justice: 4	
	Community Member: 3	
	Family Member: 2	
	Harm Reduction: 2	
	Law Enforcement: 2	
	Faith-Based:1	

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Lack of Understanding/Knowledge

Judge/Justice: 5

Law Enforcement: 2

Family Member: 2

Peer Recovery Support Specialist: 1

Community Member: 1

Faith-based: 1

Harm Reduction: 1

substance that they want. So there's burglary, there's larceny, there's in some cases, robberies- Judge/Justice

**Notable Quote 1**

“just their lack of education about what it is maybe from the, you know, how they were, um, raised in their families with, you know, a preconceived notion of what it's about or what it, you know, um, you know, maybe hearing people talk about, you know, people that have problems with addiction”- Family Member

**Notable Quote 2**

“Part of it is the lack of understanding how substance use disorder comes about and how it interplays with people's lives.” - Judge/Justice

Experiences Shapes SUD Perceptions

Peer Recovery Support Specialist: 3

Community Member: 3

Law Enforcement: 2

Harm Reduction: 1

Family Member: 1

**Notable Quote 1**

“I think a lot of it comes from personal experience, at least from me from a professional side. It's what we see. Even though it is a negative stigma, and a stereotype, it's something that comes from experience, proven experience, through our interactions with a lot of these people that are suffering with that” - Law Enforcement

**Notable Quote 2**

“they've just again let those negative events or experiences with other people just generalize the whole community of people that have used substances.” -

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Personal Experiences/Interactions	Harm Reduction: 3 Faith-based: 2 Judge/Justice:1 Family Member: 1	Harm Reduction <b>Notable Quote 1</b> “I also think individuals encounter people in their lives with substance use disorder and they, again, begin to take on the idea that these people are weak or irresponsible and that they're not dealing with a legitimate medical or mental health disorder.”- Judge/Justice
Poor Personal Choices	Law Enforcement: 4 Community Member: 2 Peer Recovery Support Specialist: 1	<b>Notable Quote 2</b> “It's those prior events that they've experienced, and on a personal level too I'm sure many of them have had negative experiences.”- Harm Reduction <b>Notable Quote 1</b> “Well I guess it’s human nature to start to be more critical of people who continually get themselves into trouble, versus someone who something bad happened to.”- Law Enforcement
Resistance to Change	Law Enforcement: 6	<b>Notable Quote 2</b> “it's much harder to have sympathy for someone who's made bad decision after bad decision, after bad decision with no apparent effort to fix it” - Law Enforcement <b>Notable Quote 1</b> Well I think just like I've said before it's much harder to have sympathy for someone who's made bad decision after bad decision, after bad decision with no apparent effort to fix it.”- Law Enforcement

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Professional/Personal  
Jaded/Fatigue

Law Enforcement: 2

Harm Reduction: 1

Community Member:1

**Notable Quote 2**

it's probably more focused on the group that's kind of been a drug abuser for a long period of time and haven't had the desire or willingness or ability to get themselves away from it...and when you see somebody who's just simply not doing anything to help themselves, that's going to provide a more negative perception versus someone who presents more as a victim.”- Law Enforcement

**Notable Quote 1**

“in my line of work, we deal with a lot of thefts and most of the time, people automatically assume that someone who stole their stuff is someone who uses drugs, whether or not it be the case”- Law Enforcement

**Notable Quote 2**

“Well I guess it’s human nature to start to be more critical of people who continually get themselves into trouble,” - Law Enforcement

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Table 7

Public SUD Stigma Themes

Theme Mentioned	Stakeholder Mentioned By	Notable Quotes
Illegal Activities	Peer Recovery Support Specialist: 3	<p><b>Notable Quote 1</b>                      “And that registers, and they just register that as something negative, something bad that this person, they probably think this person is making a conscious decision to do this. And again, in my line of work, we deal with a lot of thefts and most of the time, people automatically assume that someone who stole their stuff is someone who uses drugs, whether or not it be the case” - Law Enforcement</p> <p><b>Notable Quote 2</b>                      “In active addiction, people do sketchy stuff. They steal, they lie, they manipulate, they do all the things that are necessary for their survival in the lifestyle that they're in.”- Peer Recovery Support Specialist</p>
	Law Enforcement: 2	
	Family Member: 2	
	Community Member: 1	
	Faith-Based: 1	
	Harm Reduction: 1	
	Judge/Justice: 1	
Societal Influence	Judge/Justice: 3	<p><b>Notable Quote 1</b>                      “And then, my gosh, then it goes from there to just culture in general, peer groups, et cetera, not the least of which is the language. We've always used the word addict. It's still part of the way our government talks about substance abuse disorder.”- Community Member</p> <p><b>Notable Quote 2</b>                      “I think part of it is society as a whole, which obviously</p>
	Peer Recovery Support Specialist: 2	
	Community Member: 2	
	Law Enforcement: 1	
	Harm Reduction: 1	

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Negative Media Representation

Harm Reduction: 2

Peer Recovery Support Specialist: 2

Law Enforcement: 1

Judge/Justice: 1

Faith-based: 1

Family Member: 1

frowns upon the particular actions of using some of these drugs, particularly in an illegal form.”- Judge/ Justice

**Notable Quote 1**

“I guess some of the negative perception would come from media. Maybe possibly how the role that that person with substance use disorder would be portrayed in a movie or something of that nature.” - Peer Recovery Support Specialist

**Notable Quote 2**

“And society doesn't make it better when we portray them in our media, when we portray them in the newspapers or any other, Facebook, or any social media, whatever you want to call it. When they portray them as worthless individuals. That they are the cause of their own problems. That they made the problem. And consequently, they are the ones who should bear the consequences of that problem”- Judge/Justice

Seen as a Moral Failing

Community Member: 2

Harm Reduction: 1

Peer Recovery Support Specialist:1

Judge/Justice:1

**Notable Quote 1**

“And part of that, I just said, because recovery is hard to achieve and I believe when a person has tried to recover and they fail, it is viewed as a moral issue and not a medical issue.”- Peer Recovery Support Specialist

**Notable Quote 2**

“all of us have a moral compass, and that we are all

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to make decisions about right and wrong and that we are to do the thing that is right and not to do the thing that is wrong. And so when a person, under this theory, makes a decision to start using drugs and to then abuse them, it then is a choice that they have made. And it's a moral choice"- Judge/Justice

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Table 8

SUD Stigma Reduction Themes

Theme Mentioned	Stakeholder Mentioned By	Notable Quotes
Positive messaging about SUD and/or SUD recovery	Law Enforcement:3	<b>Notable Quote 1</b> “I would say more positive statements, more real-life messages from those folks and actually say, this is what I’m going through and this is what I need to improve myself.”- Law Enforcement
	Community Members: 2	
	Peer Recovery Support Specialist: 2	
	Faith-based: 1	
	Harm Reduction: 1	<b>Notable Quote 2</b> “I would definitely say real life messages with just from the people, from those who have suffered through substance use disorder, or if they’re still suffering and just have them explain the negative impacts that has on them, if they’re trying to recover.”- Law Enforcement
	Judge/Justice: 1	
	Family Member: 1	
SUD Positive Change is Possible	Community Member: 3	<b>Notable Quote 1</b> “Something I’ve always thought of would be helpful is for people to know that change is possible. It doesn’t always have to be this way”- Harm Reduction
	Harm Reduction: 2	
	Peer Recovery Support Specialist: 2	<b>Notable Quote 2</b> “I think the messages that people really need to hear is that people should not just be defined by their past behaviors. Everybody has the ability to change, and change is possible for everyone. “- Harm Reduction
	Family Member: 1	
	Faith-based:1	
	Judge/Justice: 1	
Normalize SUD Recovery	Peer Recovery Support Specialist: 4	<b>Notable Quote 1</b> For me personally, some of the most impactful messages

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	Community Member: 2	<p>are when someone shares a personal testimony or a personal lived experience of what they have experienced or gone through with a substance use disorder,”- Peer Recovery Support Specialist</p> <p><b>Notable Quote 2</b>          “I think it would be great for us to see, make it more, I guess, a more normalized message instead of it being somebody that struggles with substance abuse is in category A, and the rest of us are in B. I think trying to normalize that people struggle with addiction.” - Community Member</p> <p><b>Notable Quote 1</b>          “I think this particular topic is particularly difficult because there are stigmas around drug addicts and traditionally that's the stereotypical somebody's passed out in an alley someplace. When in reality it's happening in every neighborhood and every community across the country.”- Law Enforcement</p> <p><b>Notable Quote 2</b>          “So, I just think to show the different walks of life and how it affects people differently. How some people function throughout it. How some people lose sight or maybe lose touch with things that were important to them. That's always made an impact on me, just the human piece to it, to put a face to it.” - Peer Recovery Support</p>
	Law Enforcement: 1	
	Harm Reduction:1	
	Faith-based:1	
	Judge/Justice: 1	
SUD Happens to Everyday People	Community Members: 4	
	Law Enforcement:2	
	Peer Recovery Support Specialist: 2	
	Family Member: 1	

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SUD is a disease or medical condition, not a choice	<p>Family Member: 3</p> <p>Law Enforcement: 1</p> <p>Peer Recovery Support Specialist: 1</p> <p>Harm Reduction: 1</p> <p>Judge/Justice: 1</p> <p>Community Member:1</p>	<p>Specialist</p> <p><b>Notable Quote 1</b></p> <p>“Yeah. Something relating to that it's not a choice. That it goes further than addiction. That once those substances a person is addicted, and you have substance abuse disorder, that it's a disease like any other, and it needs to be treated as such.”- Law Enforcement</p>
Openly Talk About SUD Journey	<p>Harm Reduction: 2</p> <p>Faith-based: 2</p> <p>Peer Recovery Support Specialist: 2</p> <p>Judge/Justice:1</p>	<p><b>Notable Quote 2</b></p> <p>“And as I said previously, I equate it to diabetes. Do we judge people with diabetes? We don't. They didn't ask for it just like these drug abusers didn't ask for it, but they have it so let's help them.”- Family Member</p> <p><b>Notable Quote 1</b></p> <p>“To normalize "Today was a rough day" and not hide that it was a rough day, because I think that's the other part, is we make sometimes substance use and the recovery piece of it look like everything is roses and it's not always roses.”- Faith based</p>
Peer/Family/Community Support	<p>Peer Recovery Support Specialist: 4</p> <p>Family Member: 2</p>	<p><b>Notable Quote 2</b></p> <p>“I find is there are some celebrities who have no problem talking about their battles and their struggles, but they talk about their battles and struggles about everything else except for substance use.”- Faith Based</p> <p><b>Notable Quote 1</b></p> <p>“That they really do need support from others around them, and that it's not</p>

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	Community Member: 1	something that you're going to get over on yourself, you're not going to be able to solve yourself. I believe that it does take group. It does take support in a positive way.”- Peer Recovery Support Specialist
		<b>Notable Quote 2</b> “A message that there is help. You can modify some of that impact on your life. It's not easy. You have to work at it. There are people who are willing to help you and help is out there. It's better help than it used to be”- Community Member
SUD professional support/treatment/intervention	Community Member: 3 Peer Recovery Support Specialist: 2 Law Enforcement: 1 Family Member: 1	<b>Notable Quote 1</b> “They know that they made the choice to start using for whatever the reason. Now they feel like they should be able to stop at any point, but unfortunately they physically can't without some intervention”- Law Enforcement
		<b>Notable Quote 2</b> “So there are lots of improvements and there is help if you just open yourself up to accepting the help.” - Community Member
SUD Education/Training	Family Member: 2 Community Member: 1 Judge/Justice: 1 Peer Recovery Support Specialist: 1	<b>Notable Quote 1</b> “I feel that education on the medical part has to do with a lot of the failure, and with the negative perception that comes with it.” - Peer Recovery Support Specialist
		<b>Notable Quote 2</b> “If they really knew that

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More Empathetic/  
Understanding

Peer Recovery Support  
Specialist: 2

Family Member: 1

Community Member: 1

substance abuse has no boundaries it doesn't matter, your socioeconomic background, your educational background, your gender, where you came from, where you grew up, there might be a better understanding of this can impact everyone.” -

Family Member

**Notable Quote 1**

“and as those that are using, that they sometimes question, "Why is this happening? Why can't I get better?" Did they have a better understanding of the role of the brain and the role of the body and addiction? And understanding that because particularly people who don't get treatment, they don't understand what their body is doing and why doing it. So to really hear that they have a disease and that they can get well and improve is huge.”-

Community Member

**Notable Quote 2**

“think if there were more understanding. I've heard this by different therapists here. They'll say, "Everybody knows what it does. They don't need to know what it does to your body." I disagree with that, in that if people did understand more why people use.”- Peer Recovery Support Specialist

**Notable Quote 1**

“The message needs to go that it's not so much of the substance use disorder as of why we started using the

Trauma Leading to SUD

Peer Recovery Support  
Specialist: 2

Harm Reduction: 1

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Faith-based: 1

substance to start with. And if we can identify what has caused people to pick up that substance and address that, that it's okay not to be okay.”- Peer Recovery Support Specialist

**Notable Quote 2**

“People are not, again, they're not born into this world wanting to live this life of addiction. There is a lot of things that happen along the way that influence people or encourage people to use substances, and just people remembering that they're human.”- Harm Reduction

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## Appendix A

Virginia Tech Institutional Review Board Certification



**Division of Scholarly Integrity and  
Research Compliance**  
Institutional Review Board  
North End Center, Suite 4120 (MC 0497)  
300 Turner Street NW  
Blacksburg, Virginia 24061  
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irb@vt.edu  
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### MEMORANDU

**DATE** August 4,  
**TO** Kathy Hosiq, Rose Wesche, Harper Manette Lovegrove, Becky Willis,  
Ashleigh Jiles, Monica Motley, Emily Maher, Beverly Vaden, Charlotte  
Selb  
**FROM** Virginia Tech Institutional Review Board (FWA00000572, expires  
2024)

**PROTOCOL** Interviews for Stigma Reduction

**IRB** 20-

Effective August 4, 2020, the Virginia Tech Human Research Protection Program (HRPP) that this protocol meets the criteria for exemption from IRB review under 45 CFR 46.104(d) (ies) )

Ongoing IRB review and approval by this organization is not required. This determination to the activities described in the IRB submission and does not apply should any changes be changes are made and there are questions about whether these activities impact the determination, please submit an amendment to the HRPP for a

This exempt determination does not apply to any collaborating institution(s). The Virginia Tech and IRB cannot provide an exemption that overrides the jurisdiction of a local IRB or other mechanism for determining

All investigators (listed above) are required to comply with the researcher requirements

<https://secure.research.vt.edu/external/irb/responsibilities>.

(Please review responsibilities before beginning your

### PROTOCOL

Determined **Exempt, under 45 CFR 46.104(d) category(ies)**  
Protocol Determination **July 29,**

### ASSOCIATED

The table on the following page indicates whether grant proposals are related to this which of the listed proposals, if any, have been compared to this protocol, if

*Invent the Future*

VIRGINIA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY  
*An equal opportunity, affirmative action institution*