2-2021

Assessing Homeless Mental Health Needs and Barriers to Seeking Treatment

Devyn Marie Varner

Assessing Homeless Mental Health Needs and Barriers to Seeking Treatment

by

Devyn Marie Varner

A doctoral research project submitted to the School of Psychology of
Florida Institute of Technology
in partial fulfillment of the requirements
for the degree of

Doctor
of
Clinical Psychology

Melbourne, Florida
February, 2021

We the undersigned committee hereby approve the attached doctoral research project,
"Assessing Homeless Mental Health Needs and Barriers to Seeking Treatment."
by
Devyn Marie Varner

_____

Victoria Follette, Ph.D.
Professor
School of Psychology
Major Advisor

_____

Patrick Aragon, Psy.D.
Assistant Professor
School of Psychology
Committee Member

_____

Catherine Nicholson, Ph.D.
Assistant Professor
School of Behavior Analysis
Committee Member

_____

Robert Taylor, Ph.D.
Professor and Interim Dean
College of Psychology and Liberal Arts

Abstract

Assessing Homeless Mental Health Needs and Barriers to Seeking Treatment

Author: Devyn Marie Varner

Advisor: Victoria Follette, Ph.D.

Research indicates that mental health difficulties are highly prevalent within the homeless population across the globe. Living on the street is shown to contribute to the development of mental health issues and the exacerbation of pre-existing mental health conditions. Research studies also indicate that homeless individuals face limited access to healthcare and report negative healthcare experiences. However, there are few studies that specifically examine mental health care access within the homeless population. Therefore, this study aimed to identify specific mental health needs within the local homeless population, and examined barriers preventing homeless individuals from seeking mental health treatment. A total of 57 homeless adults were surveyed at a local community organization regarding their mental health symptoms, diagnoses, treatment experiences, and barriers to seeking care. The results indicated high prevalence of mental health difficulties including depression, trauma, and substance abuse, and revealed numerous barriers to obtaining care within the local homeless population. The results of this study indicated a strong need for more accessible mental health services in the community.

Keywords: homeless, treatment barriers, mental health needs, healthcare utilization

Table of Contents

List of Figures

List of Tables

Chapter 1: Introduction

A review of the literature indicated that homelessness is a prevalent and consistent issue within the United States. The 2019 Annual Homeless Assessment Report (AHAR) showed that approximately 568,000 people living within the United States were identified as homeless (Henry et al., 2020). The data was collected utilizing a "point-in-time count," which entailed counting all homeless individuals across each state on a single night in January 2019. Henry et al. (2020) additionally found that 96,141 individuals in the United States were chronically homeless. This reflected an increase of 8.5% (7,501 individuals) from 2018 to 2019, but has overall been trending downward in the past decade, with a decrease in 19.8% (23,672 individuals) since 2007.

An estimated 28,328 homeless individuals were counted on a day in January 2019 within the state of Florida, which reflected a decrease of 2,702 homeless individuals (8.7%) from 2018 to 2019, and an overall decrease of 19,741 homeless individuals (41.1%) since 2007 in Florida (Henry et al., 2020). Florida was shown to be the state with the largest decrease in homelessness since 2007, but its overall rate of homelessness in 2019 was closer to the national median. Furthermore, approximately 5,181 individuals in Florida were identified as chronically homeless (Henry et al., 2020).

Homelessness continues to be a prevalent problem throughout the world that has significant implications for health and wellbeing. Long-standing systemic deficits in providing healthcare for homeless individuals has contributed to poor

long-term health outcomes within the population (Withers, 2011). Homeless individuals experience a high rate of unemployment and financial problems, and having minimal financial access to resources is shown to lead to poor health outcomes (Martins, 2008; Salize et al., 2001). Many individuals within the homeless population have trouble with obtaining proper medical and mental health care for a variety of reasons, despite having prominent health needs. Homeless individuals tend to be marginalized in society, and the stigmatization of their socioeconomic status and mental health issues often leads them to feel dehumanized and poorly treated, particularly within health care settings (Gelberg, Browner, Lejano, & Arangua, 2004; Martins, 2008; Purkey & MacKenzie, 2019; Stein, Dixon, & Nyamathi, 2008). This paper reviews the literature pertaining to homeless mental health needs, homeless individuals' experiences within the health care system, and barriers that limit the population's willingness and ability to seek health care.

Chapter 2: Review of the Literature

Homelessness Defined

The United States Department of Housing and Urban Development (HUD) defined a homeless individual as "a person who lacks a fixed, regular, and adequate nighttime residence" (Henry et al., 2020, p. 2). Chronic homelessness was defined as a period of homelessness that lasts at least one year, or at least four episodes of homelessness totaling a minimum of twelve months within the past three years (Henry et al., 2020).

HUD broke down the definition further by specifying four different categories of homelessness: "Literally Homeless," "Imminent Risk of Homelessness," "Homeless under other Federal Statutes," and "Fleeing/Attempting to Flee Domestic Violence" (US Department of Housing and Urban Development, 2012). "Literally Homeless" is the definition most widely associated with homelessness:

> Individual or family who lacks a fixed, regular, and adequate nighttime residence, meaning: (i) Has a primary nighttime residence that is a public or private place not meant for human habitation; (ii) Is living in a publicly or privately operated shelter designated to provide temporary living arrangements (including congregate shelters, transitional housing, and hotels and motels paid for by charitable organizations or by federal, state and local government programs); or (iii) Is exiting an institution where (s)he has resided for 90 days or less and who resided in an emergency shelter or

> place not meant for human habitation immediately before entering that institution (US Department of Housing and Urban Development, 2012).

"Imminent Risk of Homelessness" is defined by HUD as:

> Individual or family who will imminently lose their primary nighttime residence, provided that: (i) Residence will be lost within 14 days of the date of application for homeless assistance; (ii) No subsequent residence has been identified; and (iii) The individual or family lacks the resources or support networks needed to obtain other permanent housing (US Department of Housing and Urban Development, 2012).

Those considered to be "Homeless under other Federal Statutes" are identified as:

> Unaccompanied youth under 25 years of age, or families with children and youth, who do not otherwise qualify as homeless under this definition, but who: (i) Are defined as homeless under the other listed federal statutes; (ii) Have not had a lease, ownership interest, or occupancy agreement in permanent housing during the 60 days prior to the homeless assistance application; (iii) Have experienced persistent instability as measured by two moves or more during in the preceding 60 days; and (iv) Can be expected to continue in such status for an extended period of time due to special needs or barriers (US Department of Housing and Urban Development, 2012).

Finally, the "Fleeing/Attempting to Flee Domestic Violence" category includes:

> Any individual or family who: (i) Is fleeing, or is attempting to flee, domestic violence; (ii) Has no other residence; and (iii) Lacks the resources

or support networks to obtain other permanent housing (US Department of Housing and Urban Development, 2012).

The category titled "Homeless under other Federal Statutes" was not considered within this study, as the focus was on individuals over the age of eighteen. All adults who define themselves as homeless and seek services through a local agency were included in this study.

Mental Health Needs

Mood Disorders and Related Issues

A review of the literature showed that mental health issues are highly prevalent within homeless populations globally. A systematic review conducted by Fazel et al. (2008) evaluated data from 5,684 homeless individuals across seven countries. It was found that the homeless population experienced higher rates of mental health disorders and substance use issues than same-age individuals from the general non-homeless population. Furthermore, a study measuring prevalence rates of psychiatric disorders of the homeless population across three Canadian cities found that over 60% of the homeless population experienced mental health difficulties, including depression, anxiety, posttraumatic stress disorder (PTSD), mania, psychosis, and obsessive-compulsive disorder (Strehlau, Torchalla, Kathy, Schuetz, & Krausz, 2012). Other significant mental health needs included substance abuse, personality disorders, psychologically-connected somatic symptoms, and schizophrenia and other psychotic disorders (Csémy, Vágnerová, & Marek, 2011; Fazel, Khosla, Doll, & Geddes, 2008; Salize et al., 2001). The

prevalence of psychotic and personality disorders was shown to be higher in the homeless population compared to that of the general population (Fazel et al., 2008). Furthermore, across the literature, depression and anxiety are typically shown to be the most highly prevalent mental health issues experienced by homeless individuals (Csémy et al., 2011; Goldstein, Luther, Haas, Gordon, & Appelt, 2009).

Life on the street typically entails a lack of resources, safety, and security, which contributes to high levels of anxiety (Fazel et al., 2008). Homeless individuals who report a high level of anxiety symptoms are more likely to additionally endorse suicidal thoughts and behaviors (Lee et al., 2017). A review of the literature confirmed that suicidal thoughts are a significant problem among this population, especially among homeless women (Csémy et al., 2011; Lee et al., 2017; Strehlau et al., 2012). Strehlau et al. (2012) identified over 20% of their female participants as experiencing a moderate to high level of suicide risk. Csémy, Vágnerová, & Marek (2011) reinforced this finding in their literary review, reporting that 20-50% of young homeless individuals surveyed within the previous ten years of international studies reported experiencing suicidal thoughts, with females endorsing suicidal behavior more often than males. Overall, anxiety is a highly prevalent mental health issue experienced by persons living without shelter, and is associated with a higher risk for suicidal thoughts and actions within the homeless population.

Homeless individuals experience a high overall level of stress, and those who are new to being homeless especially experience significant adjustment

difficulties. Goldstein, Luther, Haas, Appelt, & Gordon (2010) reported that participants who had been homeless for less than one month were more likely to identify higher levels of stress and trauma symptoms than those who had been homeless for one year or longer. Moreover, individuals experiencing higher levels of stress were less likely to utilize available healthcare support (Goldstein, Luther, Haas, Appelt, & Gordon, 2010).

Trauma and Post-Traumatic Stress Disorder

Consistently living without shelter, resources, and security can bring about dangerous situations for homeless individuals. The stressful, high-risk nature of living on the street opens the possibility for many people to become vulnerable to potential traumatic experiences. The Substance Abuse and Mental Health Services Administration (SAMHSA) defines trauma as "an event, series of events, or set of circumstances that is experienced by an individual as physically or emotionally harmful or life threatening and that has lasting adverse effects on the individual's functioning and mental, physical, social, emotional, or spiritual well-being" (SAMHSA, 2019). An intensely traumatic experience may lead to the development of post-traumatic stress disorder (PTSD). According to the Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (DSM-5), major symptoms of PTSD generally include: intrusive memories and thoughts of the traumatic event, avoidance of reminders of the event, negative emotions and cognitions related to the event, irritability, self-destructive behavior, and heightened hypervigilance and startle response (American Psychiatric Association, 2013).

The literature showed that trauma is highly prevalent in the homeless population (Browne, 1993; Csémy et al., 2011; Deck & Platt, 2015; Goodman, Saxe, & Harvey, 1991; Pope, Buchino, & Ascienzo, 2020; Purkey & MacKenzie, 2019; Taylor & Sharpe, 2008). Living on the streets involves a great deal of risk to personal safety, including potential sexual assault, physical attacks, theft, and dangerous weather (Deck & Platt, 2015; Pope et al., 2020; Tsai, Rosenheck, Decker, Desai, & Harpaz-Rotem, 2012). These traumatic experiences often have a significant impact on physical and emotional health, especially for individuals who have been chronically homeless for an extended period of time. People who have lived on the street for longer periods of time are more likely to have experienced a violent attack or other traumatic event (Deck & Platt, 2015). Constant exposure to potentially dangerous situations may lead to acute distress in newer homeless individuals and wear down the coping and defenses of those who have been living unsheltered for a long period of time.

Many individuals who live on the street have experienced a traumatic situation at some point in their lives. Taylor and Sharpe (2008) conducted a study in Sydney, Australia with 70 homeless participants from eight different homeless-oriented agencies. Over 98% of the sample had reportedly experienced a traumatic event in their lifetimes, and the average number of traumatic events each person had experienced was six. Slightly less than 80% of the participants reported developing post-traumatic stress symptoms as a result of their experienced traumatic event (Taylor & Sharpe, 2008).

Although living on the street can be a traumatic experience, the literature showed that many individuals reported encountering a traumatic situation before they became homeless. Approximately 60% of the sample in the Taylor and Sharpe (2008) study reported that their trauma occurred before they were 16 years old, and they developed trauma symptoms before they became homeless for the first time. Additionally, veterans comprise a notable portion of the homeless population, and often claim that the trauma they experienced while serving in the military resulted in pervasive emotional and interpersonal difficulties, which contributed to the eventual onset of their homelessness (Deck & Platt, 2015; Goldstein et al., 2010, 2009). Furthermore, Many homeless individuals report having a history of abuse in childhood prior to living on the street (Christensen et al., 2005; Deck & Platt, 2015; Goodman et al., 1991; Lalonde & Nadeau, 2012; Pope et al., 2020). A study conducted by Christensen et al. (2005) identified that about 80% of their 78 homeless participants from Jacksonville, Florida had experienced physical or sexual assault in their lives, which mainly occurred in childhood. The literature establishes that traumatic experiences, particularly childhood abuse, often contribute to poor development of social competency, life skills, and coping abilities, which can create problems later in life with maintaining educational goals, employment, and healthy relationships (Pope et al., 2020). Moreover, trauma symptoms such as avoidance, emotion regulation difficulties, and poor coping skills likely contribute to difficulty with maintaining employment, stable housing, and social support.

Although many studies discuss the implications of trauma that happens prior to and during homelessness, traumatization may also occur during the actual onset of homelessness. Goodman et al. (1991) asserted that the actual event of becoming homeless can be traumatizing, due to unexpected or gradual loss of financial status, stable housing, and physical safety. It is important to note that a person's most intense traumatic event may be the initial onset of homelessness itself.

Gender Differences in Trauma Risk. The most prevalent types of traumatic experiences that occur while living on the street typically differ according to gender. Homeless men tend to experience violent physical attacks most often, while homeless women are most vulnerable to sexual assault on the street (Browne, 1993; Csémy et al., 2011; Deck & Platt, 2015; Goodman et al., 1991; Kim & Arnold, 2004; Lee et al., 2017; Weinrich et al., 2016).

A study was conducted by Deck and Platt (2015) which surveyed 152 homeless men at a day shelter in a Midwestern city. Approximately 45% of the men reported experiencing a violent physical assault. Additionally, the study indicated that homeless men are more likely to have experienced a physical attack than the general public. Approximately 23-30% of the participants met the minimum criteria for a PTSD diagnosis, most of whom also were identified as chronically homeless (Deck & Platt, 2015). Although the study did not establish whether the traumatic event and subsequent onset of PTSD symptoms occurred before or after becoming homeless, about one fifth of those meeting criteria for

PTSD cited their trauma symptoms and poor mental health as major contributors to their homeless status.

A study by Kim and Arnold (2004) surveyed 99 homeless men from five homeless service programs in order to explore how stressful life events affect homelessness and trauma symptoms. A majority of the participants identified experiencing more than one stressful event at some point within their lives, with the most frequent stressful event being actual or threatened physical assault. The participants who had reported more than one stressful life event typically experienced more intense trauma symptoms and poorer long-term homelessness outcomes. Furthermore, those who were diagnosed with a mental health disorder and experienced multiple stressful events were more likely to exhibit severe trauma symptoms (Kim & Arnold, 2004).

Sexual assault while on the streets is a significant concern and a cause for trauma, especially within the homeless female population (Browne, 1993; Csémy et al., 2011; Goodman et al., 1991; Lee et al., 2017; Weinrich et al., 2016). Browne (1993) asserted that homeless women experience a larger number of sexual and physical assaults compared to non-homeless women, and are at a higher risk for developing PTSD. However, many homeless women report experiencing sexual abuse prior to the onset of homelessness. Browne (1993) indicated that homeless women are highly likely to report a history of childhood physical or sexual abuse and domestic violence. Many women partially attribute their homeless status to the trauma-related symptoms that resulted from their experience of abuse (Browne,

1993; Goodman et al., 1991). Furthermore, of the 29 homeless women surveyed by Weinrich et al. (2016) in Southern California, 54% acknowledged experiencing sexual assault at some time in their lives. All four of the military veterans in the sample reported being sexually assaulted during their time of service (Weinrich et al., 2016). Sexual assault is a traumatic experience that many homeless women experienced earlier in life, and the ongoing mental health effects are likely exacerbated by ongoing vulnerability to assault while living on the street.

Interaction of Homelessness and Trauma. Trauma symptoms and homeless situational outcomes frequently interact and exacerbate one other's negative effects. On one hand, homelessness tends to worsen pre-existing traumatic distress (Goodman et al., 1991; Taylor & Sharpe, 2008; Tsai et al., 2012). Once individuals become homeless, the uncertain experience of depending on a shelter for safety, security, and resources is a significant stressor that may leave people more susceptible to developing trauma-related symptoms (Goodman et al., 1991; Pope et al., 2020). Hypervigilance is necessary when living and sleeping outside, as individuals need to protect themselves against real threats such as attacks, sexual assault, robbery, and extreme weather (Pope et al., 2020). However, this need for constant awareness may exacerbate pre-existing trauma symptoms such as hypervigilance, irritability, and anxiety.

Conversely, trauma often worsens the experience of living on the street and leads to poor long-term outcomes. In a sample of 581 homeless veteran women, Tsai et al. (2012) found that those who had experienced sexual assault were more

likely to have a longer period of homelessness, and those who had been robbed were more likely to become involved with increased substance use. Trauma typically is associated with decreased coping capabilities and increased experiential avoidance, which may lead to further financial, housing, and social problems, and may further impair a person's ability to change their current situation.

Coping with Trauma. Homeless individuals diagnosed with PTSD frequently attempt to avoid experiencing distressing symptoms by using drugs and alcohol, and thus are highly likely to have a comorbid substance use disorder (Goldstein et al., 2009). However, substance abuse can also decrease a person's decision-making capabilities and environmental awareness, and can increase risk for homeless individuals to experience a trauma (Kim & Arnold, 2004). In Christensen et al.'s (2005) study of homeless trauma prevalence, all 27 of the female participants with comorbid substance abuse and mental health disorders reported a history of trauma, along with 68% of the male participants. Homeless individuals often use substances as an attempt to control their distress over their situation, but end up losing control of their addiction and feel helpless to improving their living status.

Isolation and learned helplessness are prominent symptoms of trauma which can be exacerbated by homelessness (Goodman et al., 1991). In a study conducted by Pope et al. (2020) interviewing 18 homeless men aged 50 and older, the participants cited traumatic events that occurred both before and during their current episode of homelessness as reasons for their living situation. They

described feeling "imprisoned" by their homeless status, as they felt hopeless and out of control of their own lives, and unable to break the cycle of poverty and homelessness. They felt helpless due to their constant reliance on shelters and other people for help and resources. Shelter life was portrayed as being akin to living "in jail;" participants described shelters as being loud, crowded, and malodorous with limited options for daily activities (p. 133). Participants described having few personal belongings, and had no time for seeking pleasurable or meaningful activities in life. Homeless individuals often feel as though they are not in control of their own lives, and thus become resigned to attempting to cope through unhealthy methods such as substance use (Goldstein et al., 2009; Goodman et al., 1991; Kim & Arnold, 2004). Comorbid trauma symptoms may further complicate the issue of helplessness and avoidance, and worsen a person's living situation on the street.

Overall, experience with trauma can contribute to becoming homeless, can worsen living outcomes and other mental health issues, and can occur as a result of being homeless. The literature shows that homeless men are more likely to experience violent physical attacks, while homeless women are more likely to be vulnerable to sexual assault while living on the street. Traumatized individuals often feel as though they are helpless and without control over their own lives while living on the street, and frequently turn to unhealthy coping methods such as avoidance and substance abuse to stabilize their emotions and manage their distress.

Substance Abuse

Substance abuse is shown to be a prevalent issue in the homeless population (Collins et al., 2018; Csémy et al., 2011; Fazel et al., 2008; Goldstein et al., 2010, 2009; Purkey & MacKenzie, 2019; Salize et al., 2001). Homeless individuals in Western countries are shown to have a higher prevalence rate of substance use issues than the general population (Fazel et al., 2008). Goldstein et al. (2010, 2009) reported in their analysis of Veteran's Administration national data that many homeless veterans had a substance use disorder involving either illicit drugs or alcohol, and those who were homeless for at least six months reported experiencing higher levels of addiction. Chronic homelessness was associated with higher levels of alcohol use, due to increased long-term emotional difficulties and deficits in healthy coping (Stein et al., 2008).

Collins et al. (2018) interviewed 44 homeless individuals in Seattle, Washington regarding the motives and consequences associated with their drinking behavior. Individuals reported using alcohol to cope with negative psychological symptoms, such as depression, anxiety, trauma, general stress, and other emotional pain. Participants also cited that they drank alcohol in an attempt to find a sense of control over their lives, and to feel more happy, confident, and relaxed in the midst of their constant daily stress. Others disclosed using alcohol to assist with sleep difficulties, and to avoid feeling the effects of a hangover or withdrawal. Many individuals identified feeling distressed about their dependence on alcohol, their growing tolerance to its effects, and its negative long-term physical impact on their

bodies. Furthermore, many participants reported feeling concerned about decreased behavioral control after drinking alcohol, and admitted to alcohol-related legal and social consequences. However, the ability of this study to generalize to the broad homeless population is notably limited. Participants were recruited from a community program focusing on harm reduction, and likely had already developed some level of insight regarding the consequences of their drinking behaviors.

Homeless individual's experience of marginalization and stigmatization often contributes to lower self-esteem and increased stress (Stein et al., 2008). As a result, homeless individuals may often attempt to cope with their negative emotionality by using drugs and alcohol. Substance use disorders are highly comorbid with mood and other mental health disorders within the homeless population (Christensen et al., 2005; Csémy et al., 2011; Goldstein et al., 2010, 2009; Kim & Arnold, 2004; Strehlau et al., 2012). Co-occurring substance abuse and mental health difficulties typically exacerbate one another and lead to increased difficulties in both areas. Notably, homeless individuals abusing drugs are more likely to endorse suicidal ideation and behavior than non-drug abusing individuals (Lee et al., 2017). The highly significant relationship between mood problems and substance abuse in homeless individuals calls for clinical attention (Goldstein et al., 2009).

Furthermore, having a substance abuse disorder diagnosis is associated with decreased engagement with healthcare in the homeless population (Goldstein et al., 2010). Drug and alcohol abuse negatively impact homeless individuals' cognitive

abilities and decision making with regard to their own healthcare, and can also affect their ability to find and qualify for housing and shelters (Goldstein et al., 2009). Though substance abuse serves as an attempt to cope with the negative emotions resulting from living on the street, it can also exacerbate existing mental health difficulties and further complicate an individual's ability to obtain treatment and secure alternative housing.

Comorbid Medical Issues

Comorbidity between mental and physical disorders is shown to be common within the homeless population. Typical medical problems experienced by the homeless include, "tuberculosis, HIV infection, obstructive lung disease, hepatic disease, skin and orthopedic problems, and eye disease" (Goldstein et al., 2009, p. 200). Medical issues are often exacerbated by additional co-occurring mental health issues. For example, Goldstein et al. (2009) found a significant association between adjustment and mood disorders and vascular problems in homeless individuals. Additionally, participants experiencing depression were also likely to report physical symptoms and pain (Goldstein et al., 2010). Despite the prevalence of co-occurring mental and physical issues, comorbid medical problems often go untreated within the homeless population (Goldstein et al., 2009). Homeless individuals often neglect medical and mental health care, due to poor access to care, low quality of care, and barriers precluding them from seeking treatment.

Access and Quality of Homeless Healthcare

Though mental health issues are shown to be highly prevalent within the homeless population, many homeless individuals report that their needs for mental health care are not met by the current availability and quality of care. Studies regarding homeless individuals' need for healthcare found that although participants acknowledged having medical and psychological concerns, they frequently did not seek or receive treatment (Gelberg et al., 2004; Rae & Rees, 2015; Salize et al., 2001; Weber, Thompson, Schmiege, Peifer, & Farrell, 2013). Weber et al. (2013) sampled 300 individuals from a Colorado homeless day shelter and administered a 60-item self-report measure covering topics such as perceptions of access to care, disease burden, and insurance coverage. Rae & Rees (2015) sampled 14 homeless adults from a UK day shelter and a men's hostel, utilizing a semi-structured interview with questions centering around healthcare needs and experiences with healthcare providers. In both studies, participants perceived having low access to care, and only endorsed limited utilization of healthcare resources. Many individuals reported that they rarely sought medical services despite having health insurance and being within a few miles of a healthcare clinic; and of those who reported having health insurance, only about half perceived having access to care (Weber et al., 2013).

Barriers Related to Provider Experience

Throughout the literature, participants listed poor quality of services and barriers related to being homeless as primary reasons for their low level of

healthcare utilization (Pope et al., 2020; Rae & Rees, 2015; Salize et al., 2001; Weber et al., 2013). Individuals reported having negative experiences with their providers when they had sought healthcare services in the past. Specifically, they reported feeling that their doctors were prejudiced against homeless people, did not consider their living situation when giving medical advice, and did not treat them as well as they treated their non-homeless patients (Purkey & MacKenzie, 2019; Rae & Rees, 2015; Weber et al., 2013). The participants felt as though they were not seen as a priority compared to other non-homeless patients, and that their input on their own experiences was not valued or accepted (Purkey & MacKenzie, 2019; Rae & Rees, 2015; Weber et al., 2013). Homeless individuals reported perceiving that their provider did not attempt to empathize, listen, or understand their perspective and specific needs (Pope et al., 2020; Purkey & MacKenzie, 2019; Wen, Hudak, & Hwang, 2007). Moreover, homeless individuals often report feeling stigmatized, discredited, and shamed by their providers for their homeless status (Martins, 2008; Purkey & MacKenzie, 2019). People often feel as though the providers and staff they encounter are untrained to manage homeless healthcare and unequipped to accommodate their specific needs as a population (Salize et al., 2001). Homeless individuals who have a substance abuse disorder perceive being poorly treated by providers even more strongly (Purkey & MacKenzie, 2019).

These adverse experiences lead to decreased trust in providers and the general healthcare system, and people are thus less likely to follow their provider's guidance (Purkey & MacKenzie, 2019). They frequently avoid seeking healthcare

services until absolutely necessary, and prematurely terminate their current treatment (Martins, 2008; Purkey & MacKenzie, 2019; Rae & Rees, 2015).

Homeless individuals who reported positive healthcare experiences within the literature noted that they were treated with "dignity, trust, and compassion" (Purkey & MacKenzie, 2019, p.1). They felt as though their providers took into consideration their living situation and needs, honored their views and autonomy, were empathetic and compassionate, and did not judge them for their living situation (Purkey & MacKenzie, 2019; Wen et al., 2007). Participants noted that positive experiences involved being treated with humanity and respect, and feeling welcomed into the clinical environment (Wen et al., 2007).

Barriers Related to Environment and Resources

Furthermore, logistical issues related to living on the street often create barriers for accessing care, including high cost of transportation, lack of financial resources, lack of access to health insurance, and inability to register with a primary care doctor because of lack of home address (Rae & Rees, 2015; Tsai, Doran, & Rosenheck, 2013; Weber et al., 2013). Priorities are typically consistent with Maslow's hierarchy of needs, as homeless individuals frequently prioritize basic necessities such as food, shelter, and safety over healthcare concerns (Acosta & Toro, 2000; Rae & Rees, 2015; Weber et al., 2013). In a study by Acosta & Toro (2000), individuals rated their physical health and medical needs as lower priorities than safety and housing, and mental health and substance abuse treatment were rated even lower. Medical concerns were typically only prioritized once they

became emergencies, and many individuals utilized urgent care and emergency services over regular visits to primary care and wellness services (Martins, 2008; Rae & Rees, 2015; Salize et al., 2001; Tsai et al., 2013; Withers, 2011). Overutilization of emergency services may be resulting from many homeless individuals' lack of health insurance (Tsai et al., 2013). However, Weber et al. (2013) noted that homeless individuals with more serious illnesses were more likely to have health insurance coverage, and thus often perceived having higher access to care. Conversely, some cases of poor healthcare utilization may be a result of poor insight. Deck and Platt (2015) indicated that many homeless individuals do not attempt to access care because they do not recognize that the problems they are experiencing can be identified as a mental health issue. An additional environmental barrier was the onset of COVID-19, which contributed to an increase in depression and anxiety within the homeless population and led to even greater difficulty with accessing mental health and substance abuse services (Tucker et al., 2020).

There are a few limitations to studies focusing on barriers to healthcare access. Notably, many studies recruited participants from community services such as homeless day shelters and hostels, thus their samples were primarily representative of the portion of the homeless population who currently sought community services and who previously pursued healthcare services (Acosta & Toro, 2000; Martins, 2008; Pope et al., 2020; Rae & Rees, 2015; Weber et al., 2013). Individuals who did not want to access community services and those who

were unaware of how to obtain health-related services had limited opportunity to participate. Additionally, individuals who appeared mentally unstable or actively intoxicated were often excluded from studies, which may have limited the perspective of homeless individuals suffering from severe mental health issues (Pope et al., 2020; Rae & Rees, 2015; Weber et al., 2013). Weber et al. (2013) noted that many individuals may have been hesitant to participate in the study or answer questions honestly due to fear of stigmatization of mental health difficulties and homelessness. Furthermore, several studies had small sample sizes that may limit the generalizability of the results (Martins, 2008; Pope et al., 2020; Rae & Rees, 2015).

Chapter 3: Study Purpose and Hypotheses

The purpose of this study was to contribute to the body of research exploring homeless individuals' mental health needs and their perceived access to mental health care. The currently existing literature regarding healthcare barriers primarily focuses on medical care or general healthcare as a whole. This study specifically explored mental health needs of the local homeless population, and examined their perceived access to mental health services and barriers that may discourage or preclude them from seeking or obtaining treatment. This study included a special focus on trauma, including its prevalence within the local homeless population, and people's experiences of dealing with trauma while living on the street. Furthermore, studies within the existing body of literature primarily utilized the interview method to gather data on mental health needs and perceptions of health care rather than standardized measures. This study aimed to address this gap in the literature by utilizing several validated self-report measures to investigate mental health status. This study was intended to be descriptive in nature, and explored the local homeless population's mental health needs, their perception of access to mental health care, and specific barriers that may preclude them from obtaining proper treatment.

The present study examined the following hypotheses:

1. To determine the mental health needs of the local homeless population, including trauma and substance use difficulties.
    a. General mental health difficulties will be prevalent.
    b. Trauma will be prevalent, and severity level will be high.
    c. Substance abuse will be prevalent, and severity level will be high.
2. To examine homeless individuals' perceived ability to access mental health care as needed.
    a. Utilization of mental health services will be minimal, and perceived access to care will be low.
    b. Participants who sought mental health services will report poor satisfaction with their experience.
3. To examine barriers hindering homeless individuals from obtaining mental health care.
    a. A high number of participants will identify experiencing barriers.
    b. The most highly endorsed barriers will be lack of transportation, lack of knowledge of how to obtain care, and poor experiences with care including feeling discriminated against.

Chapter 4: Method

Participants

Participants for this study were recruited from a local community organization serving unsheltered homeless individuals. The sample consisted of 57 homeless adults, with ages ranging from 21 to 72. Participants were required to be ages 18 and older in order to avoid potential complications with informed consent and mandatory reporting. All individuals who met the aforementioned criteria and identified as homeless were included in the study.

Measures

Data was collected via a self-report survey which participants completed at the homeless organization. The survey included several validated measures to assess mental health needs, in addition to questionnaires that were developed to examine mental health care experience and satisfaction.

Demographics

Survey questions were developed in order to gain participants' background information, including age group, gender identity, ethnic origin, and United States veteran status. Additional questions gathered information regarding participants' homeless status, including duration of current homeless episode and length of time since the first episode of homelessness.

Patient Health Questionnaire (PHQ-9)

The Patient Health Questionnaire (PHQ-9) is a nine item self-report questionnaire designed to measure symptoms of depression experienced over the

course of the previous two weeks (Kroenke, Spitzer, & Williams, 2001). Items pertain to symptoms such as anhedonia, fatigue, sleep and appetite abnormalities, sadness, guilt, lack of energy, difficulty concentrating, psychomotor retardation, and thoughts of suicide or self-harm. Responses are recorded on a Likert scale from 0 to 3 (0=Not at all, 1 = Several days, 2 = More than half the days, 3 = Nearly every day). Item scoring is grouped according to severity: minimal depression (1-4), mild depression (5-9), moderate depression (10-14), moderately severe depression (15-19), and severe depression (20-27). The PHQ-9 demonstrated strong validity and reliability, with a Cronbach's α of 0.89 (Kroenke et al., 2001).

Life Events Checklist for DSM-5

The Life Events Checklist for DSM-5 (LEC-5) is a self-report inventory listing 16 potentially traumatic or stressful events that participants may have faced in their lifetimes (Weathers, Blake, Kaloupek, Marx, & Keane, 2018). Participants must indicate whether they have experienced each event, with responses on a 6-point scale including "Happened to me," "Witnessed it," "Learned about it," "Not sure," or "Doesn't apply." In order to be more succinct, responses were shortened in this study to only include: "Happened to me as a child," "Happened to me as an adult," and "Doesn't apply." There is no specific scoring system in place, as the measure was intended to simply provide the administrator with an understanding of which distressing events have occurred to the participant. Psychometric information on the LEC-5 is not available as of yet; however, the Life Events Checklist (LEC) is a similar previous version of the LEC-5, which demonstrated

acceptable validity and reliability with a retest correlation (r) of 0.82 ($p < .001$) and a mean kappa coefficient of 0.61 (Gray, Litz, Hsu, & Lombardo, 2004).

An additional question was asked after the LEC-5 to gather information regarding the timeline of the traumatic events. Participants indicated whether they experienced the events before becoming homeless, during an episode of homelessness, or both.

Posttraumatic Stress Disorder Checklist for DSM-5

The Posttraumatic Stress Disorder Checklist for DSM-5 (PCL-5) is a 20-item self-report measure developed to screen for PTSD-related symptoms (Blevins, Weathers, Davis, Witte, & Domino, 2015). Participants are instructed to indicate the degree to which they have been bothered by trauma-related symptoms in the past month on a 5-point Likert scale from 0 to 5 (0=Not at all, 1=A little bit, 2=Moderately, 3=Quite a bit, 4=Extremely). The measure was revised from the Posttraumatic Stress Disorder Checklist (PCL) to include items related to the updated PTSD criteria in the DSM-5 (e.g., "Blaming yourself or someone else for the stressful experience or what happened after it"). Items are grouped according to DSM-5 criterion (Criterion B=items 1-5, Criterion C=items 6-7, Criterion D=items 8-14, Criterion E=items 15-20). Scored items are added to create an overall total score measuring trauma symptom severity ranging from 0 to 80. Official cutoff scores for potential PTSD have not been established, but suggested cut scores range from 31 to 33 total score (*Using the PTSD Checklist for DSM-5 (PCL-5)* , n.d.). For the purposes of this study, a cut score of 33 was utilized. Each cluster of items may

be totaled as well to find a cut score for each criterion (Criterion B=1, Criterion C=1, Criterion D=2, Criterion E=2). Furthermore, the PCL-5 demonstrated good test-retest reliability (r = .82) and solid internal consistency with a Cronbach's α of 0.94 (Blevins et al., 2015).

Acceptance and Action Questionnaire-II

The Acceptance and Action Questionnaire-II (AAQ-II) is a 7-item measure developed to assess psychological flexibility and experiential avoidance (Bond et al., 2011). Items inquire about the participant's ability to accept negative feelings and memories (e.g., "I'm afraid of my feelings"). Responses are recorded on a 7-point Likert scale (1=Never true, 7=Always true). Higher overall scores reflect higher intensity of experiential avoidance and inflexibility, and lower scores indicate a greater level of acceptance and flexibility. Specifically, Bond et al. (2011) suggest that scores of 24-28 and above may indicate significant clinical distress. For the purposes of this study, a cut score of 24 was utilized. The AAQ-II demonstrated good validity and reliability with a mean Cronbach's α of .84 and a 12-month test-retest r of .79 (Bond et al., 2011).

Drug Abuse Screening Test

The Drug Abuse Screening Test (DAST-10) is a shortened, 10-item version of the DAST screener for problematic drug use (Skinner, 1982). Items inquire whether the participants have engaged in particular drug-abusing behavior with within the past 12 months (e.g., "Are you always able to stop using drugs when you want to?"). "Drug use" for this screener is defined as any illicit use of drugs, in

addition to use of prescribed or over-the-counter drugs differently than directed. Participants indicated "no" or "yes" in response to the questions, and each "yes" response is scored 1 point with the exception of item 3, which is reverse-scored ("Are you always able to stop using drugs when you want to?"). Within this study, one item was removed for brevity and to decrease potential defensiveness ("Have you engaged in illegal activities in order to obtain drugs?"). Total scores were grouped according to severity of drug abuse, and adjusted to account for the eliminated item: No problems reported (0), Low level (1), Moderate level (2-4), Substantial level (5-7), and Severe level (8-9). The DAST-10 demonstrated good validity and reliability with a Cronbach's α of 0.80 (Villalobos-Gallegos, Pérez-López, Mendoza-Hassey, Graue-Moreno, & Marín-Navarrete, 2015). An additional question was added to inquire about duration of drug use, and offered several potential responses, including, "Less than 6 months," "6 months to 1 year," "1 to 5 years," "6 to 10 years," and "Over 10 years."

In order to assess for problematic alcohol use, questions from the DAST-10 were repeated and edited to inquire about alcohol use (e.g., "Are you always able to stop using alcohol when you want to?"). In addition, the question, "Have you used drugs other than those required for medical reasons?" was changed to, "Do you have a problem with alcohol?" One question was removed due to lack of fit in the context of alcohol ("Do you use more than one drug at a time?"). Scoring categories were adjusted accordingly: No problems reported (0), Low level (1), Moderate level (2-3), Substantial level (4-6), and Severe level (7-8). An additional

question was added to inquire about duration of alcohol use, and offered several potential responses, including, “Less than 6 months,” “6 months to 1 year,” “1 to 5 years,” “6 to 10 years,” and “Over 10 years.”

Experience with Mental Health Care

Several measures were developed to assess participants’ past experiences with mental health care and whether they encountered any barriers that preclude them from obtaining treatment. In order to understand the distribution of mental health diagnoses, participants were asked to indicate from a list of DSM-5 psychological disorders which diagnoses they have previously received from a physician or mental health professional. They were additionally asked whether they had ever sought mental health services, and were prompted to indicate from a checklist which types of facilities they had received treatment (e.g., “primary care,” “inpatient services,” etc.).

A questionnaire was adapted from a patient satisfaction survey by Barsade and O’Neill (2014) in order to gather further information regarding level of satisfaction with treatment experience. Participants are prompted to consider their level of satisfaction with specific aspects of their previous experience in mental health care, and responses are recorded on a 5-point Likert scale from 1 to 5 (1 = Very Dissatisfied, 5=Very Satisfied). Several items were incorporated from the original survey, including, “The respect and courtesy you receive,” and “Your level of participation in the decisions about your care.” (Barsade, Sigal G.; O’Neill, 2014). Three additional items were added according to the most common points of

healthcare dissatisfaction from the literature, including: “Your provider’s consideration of your current living situation,” “Your provider’s ability to understand your needs,” and “The ease of getting an appointment when you need one.”

Additional questions were adapted from a survey by the Illinois Department of Human Services regarding barriers people experience that dissuade them from seeking care (*Community Mental Health Needs Assessment*, n.d.). Participants were prompted to indicate whether they have experienced a particular barrier on a 3-point scale (Not a barrier, Sometimes a barrier, Often a barrier). Barriers incorporated from the original survey include: “Long waiting lists,” “No outreach to people who are homeless,” “Language/cultural barriers,” “Limited hours of operation,” “Lack of transportation,” and “Lack of appropriately trained staff” (*Community Mental Health Needs Assessment*, n.d.). Additional items were developed and included based on barriers frequently noted in the literature (Not knowing how and/or where to get services, Feeling judged or shamed by staff, Feeling discriminated against for being homeless).

Procedure

Participants were recruited from a local community organization serving homeless individuals. Data was collected via a self-report survey which participants completed by hand at the local organization. In order to maintain COVID-19 safety, participants and staff were mandated to wear masks, and were socially distanced throughout the room. The survey took approximately 15 to 20 minutes to

complete. An option for the survey to be delivered verbally was offered for individuals who had difficulty with vision or literacy, or for those who were unable to complete the survey on their own. Several participants took advantage of this offering and completed the survey verbally. Additionally, the pencils, desks, and clipboards were frequently wiped with an antibacterial wipe for sanitation. The director of the organization was supportive in conducting this research, and funds were contributed by the organization to provide ten-dollar grocery store gift cards to compensate individuals for participating in the study.

In order to uphold informed consent, participants were provided information explaining the survey content, the purpose of the study, the measures taken to inform confidentiality, and the risks and benefits of participating prior to beginning the survey. They were notified of their right to terminate their participation in the study at any given point with no penalty. Participants were also warned regarding the sensitive content of the survey and that potential triggers for trauma may be encountered. Specifically, they were informed that they would be checking off any traumatic experiences they have undergone in the past, and that they would not be asked to provide any specific details regarding the traumatic events. Furthermore, participants were notified that their responses were anonymous, and that their names were recorded in order to preserve confidentiality.

Participants were encouraged to ask the on-site principal investigators any questions they had regarding any of the aforementioned information, or to contact them via a provided email address. Consent to participate was elicited from each

individual before they began the survey. At the conclusion of the survey, participants were given a ten dollar grocery store gift card to compensate them for their time.

Chapter 5: Results

Demographics

An initial sample of 58 total participants was obtained. However, one survey was incomplete and thus omitted, leaving a total sample size of 57 participants. Participant ages ranged from 21 to 72, with a mean of 46.82 (*SD* = 12.84). There was a greater number of males than females, (*n* = 42 and *n* = 14, respectively). Only one individual identified as "other/prefer not to answer." None identified as transgender or non-binary. The majority of participants identified as Caucasian (56.9%), with 29.3% identifying as African American, 3.4% as Native American/Alaskan, 1.7% as Hispanic/Latino, 1.7% as Asian/Pacific Islander, and 5.2% as Other/prefer not to answer. Seven participants were United States veterans (12.1%), with three from the Army, two from the Navy, and one from the Marine Corps. One veteran declined to provide his branch.

Onset and Duration of Homelessness

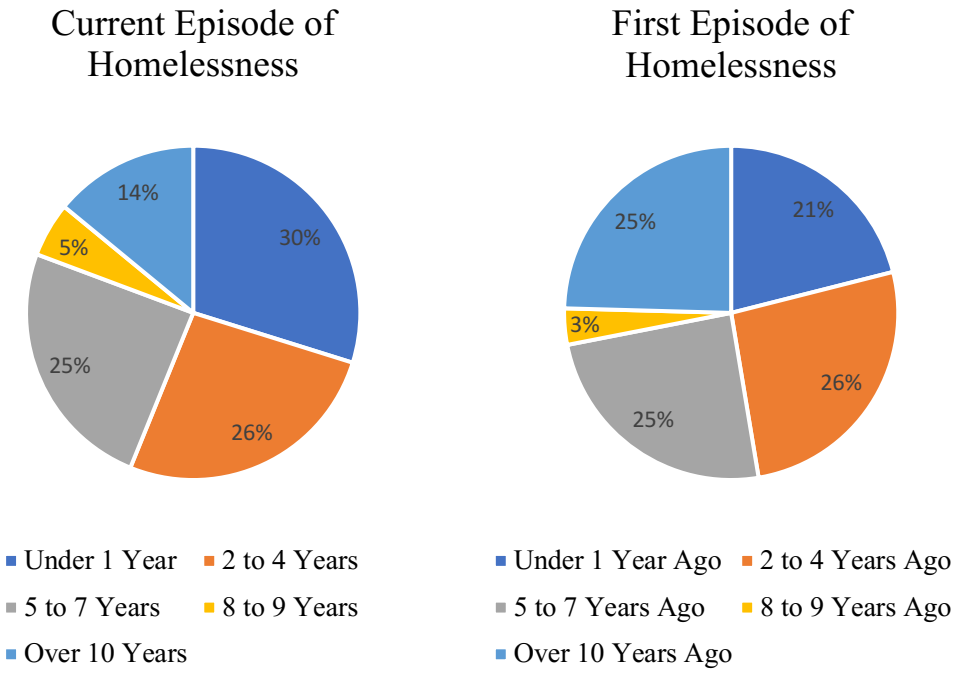

Figure 1. Years Since Onset of Current and First Episodes of Homelessness.

The majority of participants identified themselves as unsheltered and lacking a fixed, regular, and adequate nighttime residence (60.3%, *n* = 35). A smaller 34.5% (*n* = 20) were residing in a temporary shelter or transitional housing, and 3.4% (*n* = 2) were fleeing domestic violence with no other residence or support to obtain permanent housing. When asked how they felt about their current living situation, over half of the participants overall felt dissatisfied (65.5%, *n*= 38). Participants also reported the duration of their current episode of homelessness and the number of years since the onset of their first episode of homelessness, as depicted by Figure 1. Approximately one third of participants have currently been homeless for under one year. Over one quarter have been homeless for two to four

years, and slightly less than one quarter have been homeless for five to seven years. Approximately half of the participants first became homeless within the past four years.

Depression

Scores on the PHQ-9 ranged from 0 to 27, indicating a wide dispersion of depression severity. The mean PHQ-9 score was 12 (*SD* = 8.12), which is associated with the severity category of moderate depression. Moreover, nearly half of the participants were indicated to be experiencing severe or moderately severe depression (45.7%, *n* = 26). Six participants (10.5%) were experiencing moderate depression, while twenty (35.1%) were experiencing mild to minimal depression. Only five of the 57 participants (8.8%) reported experiencing no depressive symptoms at all. Of note, 36.8% (*n* = 21) reported experiencing thoughts of suicide or self-harm within the past two weeks, with 10.5% (*n* = 6) experiencing thoughts "nearly every day," 8.8% (*n* = 5) experiencing thoughts "more than half the days," and 17.5% (*n* = 10) experiencing thoughts for "several days."

Participants additionally rated the severity of the impact their depressive symptoms had on their social and occupational functioning. Over one fifth (21.1%, *n* = 12) identified that their symptoms had made it "extremely difficult" to function day-to-day. Six people (10.5%) found it "very difficult" to function, and 23 people (40%) found it "somewhat difficult."

Trauma

The participants endorsed a wide range of stressful or traumatic events experienced throughout their lives on the LEC-5, as depicted by Table 4 in Appendix A. Of all the 57 participants, 52 reported experiencing at least one traumatic event at some point in their lifetimes (91.2%). The events most frequently experienced in adulthood were transportation accident(s) (50.9%), physical assault(s) (43.9%), and natural disaster(s) (40.4%). Over one third of the participants experienced physical abuse as children (38.6%), and over a quarter experienced a transportation accident (28.1%) and a natural disaster (28.1%) as children. Approximately one fifth reported experiencing sexual abuse in childhood (22.8%). Additionally, over three quarters (77.2%) of the participants reported experiencing three or more traumatic events in their lifetimes, 14% experienced one to two events, and only 8.8% reported experiencing no traumatic events at all.

Participants also identified whether they experienced the endorsed traumatic events before becoming homeless or during a previous or current period of homelessness. 26.3 % indicated experiencing at least one traumatic event prior to becoming homeless, 15.8 % experienced an event during an episode of homelessness, and 22.8 % experienced an event both before and after becoming homeless (26.3% declined to answer).

Furthermore, 70.2% (n = 40) of the participants screened positive for a potential diagnosis of PTSD, as indicated by obtaining a score at or above the cut score of 33 n the PCL-5. Scores ranged from 17 to 85, with the average score being

46.02 (*SD* = 19.18), well above threshold. Additionally, 54.4% of participants showed clinically significant distress and greater experiential avoidance and inflexibility, as indicated by obtaining a score at or above 24 on the AAQ-II.

Table 1

Means, Standard Deviations, and Correlations for Screener Scores

Variable	*M*	*SD*	1	2	3
1. PCL-5 scores	46.02	19.18	-		
2. PHQ-9 scores	12.00	8.12	.72**	-	
3. AAQ-II scores	24.96	13.08	.70**	.54**	-

Note $^{**}p < .01$.

Table 1 depicts the significant correlations between PCL-5 scores, PHQ-9 scores, and AAQ-II scores, indicating positive relationships between trauma symptoms, depression symptoms, and experiential avoidance.

Substance Abuse

Substance abuse appeared to be a notable issue within the local homeless population. Over half of the participants (54.4%) reported abusing drugs within the past 12 months. A review of the DAST indicated that 24.6% met criteria for Moderate level of drug abuse, 21.1% were at Substantial level, and 5.3% were at Severe level. The duration of problematic drug use ranged from less than 6 months to over 10 years. Most commonly, participants acknowledged having a problem with drug use for over 10 years (21%), followed by 8.8% having a problem for 1 to 5 years, 10.5% for 6 months to 1 year, and 3.5% for less than 6 months.

Additionally, 28.1% of participants acknowledged having a problem with alcohol. A review of the data indicated that 8.8% met criteria for Moderate level of alcohol abuse, 19.3% were at Substantial level, and 8.8% were at Severe level. Approximately 14% met criteria for Low level of alcohol abuse. The duration of problematic alcohol use ranged from less than 6 months to over 10 years. Nearly a third of participants acknowledged having a problem with alcohol for over 10 years (29.8%, $n = 17$). Others indicating having a problem for 6 to 10 years (5.3%, $n = 3$), 1 to 5 years (5.3%, $n = 3$), and 6 months to 1 year (3.5%, $n = 2$).

Mental Health Diagnoses

Participants reported being professionally diagnosed with a wide variety of mental health disorders, as delineated by Table 5 in Appendix A. The most common mental health issues were depression and anxiety, which were reported by 49.1% and 47.4% of the participants, respectively. Despite nearly 72% of the scores being above threshold for a potential PTSD diagnosis on the PCL-5, only 26.3% of participants had been diagnosed with PTSD by a physician or mental health professional. However, the frequency of depressive disorder diagnoses was largely commensurate with PHQ-9 severity scores. 45.7% obtained scores in the severe and moderately severe levels of depression, while 49.1% of participants reported being diagnosed with a depressive disorder.

Treatment Settings

Table 2

Frequencies of Mental Health Treatment Settings

Treatment setting	*n*	%
Primary care clinic	14	24.6%
Psychiatrist	13	22.8%
Community mental health clinic	10	17.5%
Other outpatient clinic	10	17.5%
Inpatient mental health	10	17.5%
Emergency department	5	8.8%
Urgent care	2	3.5%
Other/write in	9	15.8%

Overall, the majority of participants (57.9%) had sought mental health treatment at some point in the past. Table 2 depicts the range of settings in which participants received care, with primary care and psychiatry being the most commonly utilized mental health services in this local sample (24.6% and 22.8%, respectively). “Other” facilities that participants endorsed included jail, university medical hospital, “New York,” and “recovery place.” Two participants wrote

"Circles of Care," which is a local mental health treatment organization, but they did not indicate whether they sought inpatient or outpatient services there.

Mental Health Care Experiences

Table 3

Percentage of Participants' Mental Health Treatment Satisfaction Ratings

	Very Dissatisfied	Moderately Dissatisfied	Satisfied	Moderately Satisfied	Very Satisfied
Respect and courtesy	7.0%	8.8%	19.3%	5.3%	15.8%
Participation in decisions	3.5%	7.0%	17.5%	8.8%	17.5%
Consideration of living situation	14.0%	5.3%	19.3%	3.5%	12.3%
Understanding of needs	8.8%	5.3%	21.1%	5.3%	12.3%
Ease of obtaining appointment	10.5%	5.3%	14.0%	5.3%	19.3%

Those who had sought treatment in the past completed a Likert scale questionnaire regarding their satisfaction with various aspects of their treatment experiences, ranging from 1 (very dissatisfied) to 5 (very satisfied). In contrast with the literature, the participants from this local sample were moderately satisfied with their mental health treatment on average, as delineated in Table 3. Of those that sought treatment, the average overall satisfaction score ranged widely from 1 to 5, with a mean of 3.21 (SD = 1.25). The only item with a higher overall dissatisfaction

rating was “your provider’s consideration of your living situation,” in which 19.3% of people reported feeling dissatisfied or very dissatisfied, while 15.8% felt moderately or very satisfied. Overall, participants tended to be slightly more satisfied than dissatisfied with the respect and courtesy they received, their level of participation in decisions about their own care, their provider’s ability to understand their unique needs, and the ease of getting an appointment.

Treatment Barriers

Despite overall satisfaction with mental health treatment, many participants perceived numerous barriers that discouraged or precluded them from seeking services as often as needed. However, in contrast to the treatment satisfaction section, all participants completed the barriers section of the survey, including those who did not access treatment in the past. Consistent with the literature, the most commonly reported barriers to seeking mental health care were lack of transportation (73.7%), feeling discriminated against for being homeless (63.2%), and not knowing how and/or where to get services (61.4%). Approximately 59.7% felt that there was limited outreach to people who are homeless, and long waiting lists were a deterrent for 59.6% of the participants. Limited hours of operation and feeling judged and shamed by staff were barriers perceived by slightly over half of participants, at 52.7% and 52.6%, respectively. Less than half of participants believed treatment staff were not appropriately equipped to handle their needs (43.9%). Finally, the least commonly perceived obstacle to treatment was language and cultural barriers at 19.3%.

Chapter 6: Discussion

This study investigated the local homeless population's mental health needs and their perceptions of mental health care accessibility. Previous studies of homeless healthcare needs primarily focused on medical needs and did not use comprehensive methods to assess for mental health issues. This study evaluated the specific mental health needs of the local homeless population, with a special focus on trauma and substance use. Additionally, we examined homeless individuals' self-report of barriers to care and experiences with mental health care.

Mental Health Needs

The vast majority of participants in the study noted problems with depression as well as a number of other diagnoses. There was a wide range of depression severity across the sample, with the average score indicating moderate depression. It is noteworthy that 45% of participants were experiencing severe to moderately severe depression. These results were consistent with the literature, which states that depression is the most highly prevalent and severe mental health issue within the homeless population across the globe (Csémy et al., 2011; Goldstein et al., 2009). Furthermore, over a third of the participants acknowledged experiencing thoughts of suicide or self-harm. This finding is additionally consistent with the literature, which indicated the prevalence of suicidal thoughts in the homeless population as ranging from 20 to 50% (Csémy et al., 2011; Lee et al., 2017; Strehlau et al., 2012). In addition, participants reported a number of previous diagnoses, including Schizophenia and Bipolar Disorder. These diagnoses are

associated with serious symptomology that would impair individuals in dealing with daily life activities.

The prevalence of serious psychological conditions, including depression, creates a vicious cycle in which mental health issues and homelessness interact to exacerbate each other. Homelessness can be a lonely and isolating experience, and leads to feelings of sadness and hopelessness. In this study, social and occupational functioning were shown to be generally impaired, as approximately one third of the sample reported that their depressive symptoms made it "very" or "extremely" difficult to function in their daily lives. Depression is associated with decreased motivation, limited energy, and increased fatigue, which may further complicate homeless individuals' ability to improve their living situation. Addressing mental health difficulties within the homeless population will help decrease functional impairment and make it possible to find stable housing.

Trauma

The level of trauma experienced in this sample was striking. Nearly of the participants reported experiencing at least one traumatic event in their lifetimes, and many reported exposure to multiple traumatic events. This finding is consistent with the literature, which asserted that trauma is a highly prevalent mental health issues among those who live on the street. Furthermore, over three quarters of the participants reported experiencing revictimization with three or more traumatic events in their lifetimes, with some having experienced upwards of ten total lifetime events. The high prevalence of revictimization within the homeless

population suggests that multiple traumas and revictimization may contribute to increased functional difficulties and poor living outcomes. Additionally, it suggests that those who live on the street may have increased vulnerability to dangerous or risky situations. The literature confirms that homelessness is associated with a higher risk to personal safety, and those who have lived on the streets for longer are more likely to have experienced multiple traumas (Deck & Platt, 2015; Pope et al., 2020; Tsai et al., 2012).

Physical assaults were highly common in this sample, with nearly half having experienced adult physical assault and a third having experienced assault with a weapon. The literature indicates that violent physical attacks are the most frequently experienced traumatic events for homeless men (Browne, 1993; Csémy et al., 2011; Deck & Platt, 2015; Goodman et al., 1991; Kim & Arnold, 2004; Lee et al., 2017; Weinrich et al., 2016). The low prevalence of adult sexual assault found in this sample may also be explained by the high male to female ratio in this sample, as the literature confirmed that homeless women more commonly experience sexual assault than homeless men (Browne, 1993; Csémy et al., 2011; Deck & Platt, 2015; Goodman et al., 1991; Kim & Arnold, 2004; Lee et al., 2017; Weinrich et al., 2016). Indeed, analysis of the data showed that 35.7% of the women in this study had experienced sexual trauma as an adult, while only 2.4% of the men had experienced adult sexual trauma. Overall, these results confirm that personal physical safety is a significant concern for those who live on the street.

Contrary to the literature, this sample reported a high number of stressful experiences with natural disaster that participants from other studies less commonly reported. This is likely due to the region in which participants were recruited, as hurricanes and major storms are common in coastal Florida. Living unsheltered in the local area often leaves people exposed to extreme and dangerous weather, and this threat to personal safety can be considerably traumatizing for many.

Across the literature, it is highly common for individuals to encounter traumatic experiences before the onset of homelessness, especially in childhood. In this study, approximately half of those who endorsed at least one traumatic experience indicated that it had occurred prior to becoming homeless, with childhood abuse being highly prevalent. Early traumatic experiences, especially childhood abuse, have been shown to lead to poor social development, poor coping skills, and limited life skills, which in turn can create social and occupational problems that contribute to becoming homeless (Pope et al., 2020). Improved trauma screening and care across the lifespan for all in the community may be indicated to help decrease the incidence of homelessness.

In this study, a high number of participants (70.2%) screened positive for a potential PTSD diagnosis according to their scores on the PCL-5. This percentage is similar to that of the Taylor and Sharpe (2008) study, which found that just under 80% of the homeless participants reported experiencing post-traumatic stress symptoms after a stressful event. This shows that a large number of homeless individuals are also currently dealing with trauma symptoms that affect their daily

lives on the street. Across the literature, homelessness has been shown to worsen pre-existing traumatic distress (Goodman et al., 1991; Taylor & Sharpe, 2008; Tsai et al., 2012). Additionally, the stress of living on the streets can leave people more susceptible to the development or exacerbation of trauma symptoms (Goodman et al., 1991; Pope et al., 2020). Trauma often leads to poor long term outcomes in the homeless population and can increase the amount of time an individual lives on the street (Tsai et al., 2012). These findings, combined with the high prevalence of positive PTSD screens in this sample, indicates a strong need to address trauma in the local homeless community. Including a focus on trauma may be necessary in order to improve outcomes and help keep people off of the street long-term.

Despite the high prevalence of PTSD symptoms among the participants, only a quarter reported being professionally diagnosed with PTSD. This shows a notable lack of PTSD screening in the community, which in turn points to limited referral and treatment for trauma difficulties locally. Additionally, over half of the participants showed a high level of experiential avoidance and inflexibility according to the AAQ-II, which indicates widespread, poor coping capabilities and a tendency to avoid negative emotions and experiences. The literature confirms that homeless individuals often feel they are not in control of their lives and develop feelings of helplessness, which may further complicate trauma processing and decrease motivation to improve their living situation (Goldstein et al., 2009; Goodman et al., 1991; Kim & Arnold, 2004). Individuals often instead turn to

maladaptive coping mechanisms to avoid their emotional and situational difficulties, such as using drugs and alcohol.

Substance Abuse

A large percentage of the participants in this study reported problematic substance use, which is shown in the literature to be a common avoidance technique and unhealthy coping mechanism in the homeless trauma population. The high prevalence of substance abuse in the homeless population is likely to lead to poor long-term outcomes, and it compromises many people's ability to maintain housing and obtain other community supports. Additionally, substance abuse was shown to be highly chronic in this study, as many of those who abused alcohol and drugs indicated that they had been doing so for at least a decade. These findings supported the literature, which identified drug and alcohol use as a long-term, maladaptive coping mechanism that is frequently utilized in this population. Long-term substance abuse is associated with chronic homelessness in the literature, due to pervasive emotional and coping difficulties (Stein et al., 2008). The high level of substance use in this population contributes to increased functional difficulties, which exacerbates people's ability to maintain employment and housing and prolongs the length of time living on the street.

Additionally, having a substance abuse disorder diagnosis is associated with decreased engagement with healthcare in the homeless population (Goldstein et al., 2010). In this study, although many participants met criteria for a significant substance use problem, very few of them reported being professionally diagnosed

with a substance use disorder. Increased education and outreach toward the homeless population regarding mental health and substance abuse may help to improve treatment engagement and long-term outcomes. Homeless substance abuse is shown in this study and throughout the literature to be a pervasive issue, and many of the individuals would likely benefit from increased substance abuse screening and treatment.

Overall, the results of this study supported our first hypothesis that mental health difficulties would be prevalent and severe, especially including trauma and substance abuse. These results imply a strong need for more intensive efforts to improve mental health treatment for this community. When considering mental health needs among the homeless, it is additionally important to examine treatment engagement and to identify barriers that may be preventing people from obtaining the care they need.

Accessibility of care

Within this study, over half of the participants reported seeking mental health treatment in the past. This finding contrasts the literature, which typically found low treatment-seeking in the homeless population. Additionally, participants within this study most often sought treatment within primary care and psychiatry, while studies in the literature reported higher utilization of urgent care and emergency services over routine primary care and outpatient visits. The findings in this study indicated that emergency department and urgent care visits were the least often utilized services. This difference may be due in part to the resources available

in the county in which the study was completed. The local federally funded primary care clinic operates a mobile unit which provides weekly mental health treatment to those on the streets and in shelters, providing some treatment access for the local homeless population.

Furthermore, participants who did seek mental health services were overall moderately satisfied with the treatment they received. The only item in which participants were overall more dissatisfied than satisfied regarded their provider's consideration of their living situation when providing recommendations. This finding is inconsistent with the literature, which indicated overall low satisfaction and poor quality of healthcare as reported by homeless individuals. The access to care is limited, however there is moderate satisfaction with mental health treatment. There is some support provided by social workers and agency staff, but their time is very limited. The majority of participants endorsed numerous barriers to obtaining care.

Barriers

Although participants on average showed moderate treatment engagement and satisfaction, the majority of individuals reported encountering barriers to seeking mental health care. The most commonly endorsed barriers were lack of transportation, feeling discriminated against for being homeless, and not knowing how and/or where to get services, which supported our third hypothesis and paralleled the findings in the literature regarding frequently endorsed barriers. Additionally, over half reported that limited outreach to people who are homeless,

long waiting lists, limited hours of operation, and feeling judged and shamed by staff (outside the agency) were barriers to seeking care. These findings confirmed that the barriers reported in the literature regarding medical treatment extend to mental health treatment within this population as well. In order to improve treatment engagement and attend to the pervasive mental health needs of this population, it will be important to address the numerous barriers endorsed by the participants in this study.

One discrepancy between the literature and this study regarded individual's perceptions of healthcare staff training on homeless needs. Although many previous studies indicated lack of staff training on homeless healthcare as a highly endorsed barrier, less than half of the participants in this study saw "lack of appropriately trained staff" as a barrier. Nevertheless, increased training of community mental health providers is warranted.

The literature additionally states that the necessity to prioritize basic needs such as food and shelter over healthcare is a significant barrier to seeking treatment. At the local organization focused upon in this study, homeless individuals receive a free daily meal and shower, and many unsheltered individuals are offered motel housing, which may have decreased this barrier within the local community.

Limitations

A limitation of this study was the use of a convenience sample taken from one community organization. The results may not necessarily be representative of the broader homeless population. This study was intended to survey the local

homeless needs and barriers to assist the homeless organization with identifying potential mental health services to offer. Additionally, because the sample was obtained from a homeless organization, the results may be more representative of the portion of the population who currently or previously sought community services. However, it is important to note that in recruitment for the study, all individuals at the agency were approached for participation and offered a small gift card. There is no reason to think that this group represented higher levels of mental health issues. The sample does appear to be representative of the agency population.

Another limitation was the self-report nature of the survey. The results were subject to the point of view of the participants and the information they were willing to reveal. Many participants may have hesitated to answer honestly to some items due to fear of stigmatization. For example, items regarding substance use, trauma experiences, and mental health diagnoses may elicit defensiveness and decrease openness when responding to items. We attempted to address this limitation by ensuring that every participant was informed of their anonymity and confidentiality prior to beginning the survey. Additionally, because of the self-report nature of the study, the participants' reported mental health diagnoses were not able to be confirmed as given by a physician or mental health professional. However, this study focused on individuals' perceptions of their own mental health needs, and it was important to identify what participants believed to be their own areas of difficulty. Clinical graduate students interacted with all participants and

answered questions. Clients did not report any concerns about the content of the questionnaires.

Implications and Future Research

The results of this study indicate a strong need for mental health services in the community, especially trauma and substance abuse treatment. More longitudinal research is needed to learn about coping strategies and protective factors. Implementing and assessing short-term treatment interventions will help to identify cost effective care. In addition, research on training community providers to deliver compassionate care is needed.

Conclusion

Homeless individuals are an important part of the community, and they deserve specialized attention and assistance. The results of this study revealed the high prevalence of mental health difficulties in this population, which have led to poor quality of life and limited opportunity for improvement. Mental health issues are shown to be a barrier to establishing stable housing and becoming a contributing part of our community. In order to better acknowledge the individuals in this community and improve long-term outcomes, it is necessary to advocate for increased funding to provide more comprehensive mental health services.

References

Acosta, O., & Toro, P. A. (2000). Let's ask the homeless people themselves: A needs assessment based on a probability sample of adults. *American Journal of Community Psychology*, *28*(3), 343–366. https://doi.org/10.1023/A:1005105421548

American Psychiatric Association. (2013). *Diagnostic and Statistical Manual of Mental Disorders* (5th ed.). Washington, DC: American Psychiatric Publishing.

Barsade, Sigal G.; O'Neill, O. A. (2014). Overall Patient Satisfaction Measure. https://doi.org/http://dx.doi.org.portal.lib.fit.edu/10.1037/t37754-000

Blevins, C. A., Weathers, F. W., Davis, M. T., Witte, T. K., & Domino, J. L. (2015). The Posttraumatic Stress Disorder Checklist for DSM-5 (PCL-5): Development and Initial Psychometric Evaluation. *Journal of Traumatic Stress*, *28*(6), 489–498. https://doi.org/10.1002/jts.22059

Bond, F. W., Hayes, S. C., Baer, R. A., Carpenter, K. M., Guenole, N., Orcutt, H. K., … Zettle, R. D. (2011). Preliminary Psychometric Properties of the Acceptance and Action Questionnaire-II: A Revised Measure of Psychological Inflexibility and Experiential Avoidance. *Behavior Therapy*, *42*(4), 676–688. https://doi.org/10.1016/j.beth.2011.03.007

Browne, A. (1993). Family Violence and Homelessness: The Relevance of Trauma Histories in the Lives of Homeless Women. *American Journal of Orthopsychiatry*, *63*(3), 370–384. https://doi.org/10.1037/h0079444

Christensen, R. C., Hodgkins, C. C., Garces, L. K., Estlund, K. L., Miller, M. D., & Touchton, R. (2005). Homeless, mentally ill and addicted: The need for abuse and trauma services. *Journal of Health Care for the Poor and Underserved*, *16*(4), 615–621. https://doi.org/10.1353/hpu.2005.0091

Collins, S. E., Taylor, E., Jones, C., Haelsig, L., Grazioli, V. S., Mackelprang, J. L., … Clifasefi, S. L. (2018). Content Analysis of Advantages and Disadvantages of Drinking Among Individuals With the Lived Experience of Homelessness and Alcohol Use Disorders. *Substance Use & Misuse*, *53*(1), 16–25. https://doi.org/10.1080/10826084.2017.1322406

Community Mental Health Needs Assessment. (n.d.). Retrieved from https://www.dhs.state.il.us/OneNetLibrary/27896/documents/By_Division/OASA/Community_Mental_Health_Needs_Assessment_Survey.pdf

Csémy, L., Vágnerová, M. M., & Marek, J. (2011). Mental disorders in young adult homeless: A review. *Psychiatrie*.

Deck, S. M., & Platt, P. A. (2015). Homelessness Is Traumatic: Abuse, Victimization, and Trauma Histories of Homeless Men. *Journal of Aggression, Maltreatment and Trauma*, *24*(9), 1022–1043. https://doi.org/10.1080/10926771.2015.1074134

Fazel, S., Khosla, V., Doll, H., & Geddes, J. (2008). The prevalence of mental disorders among the homeless in Western countries: Systematic review and meta-regression analysis. *PLoS Medicine*, *5*(12), 1670–1681. https://doi.org/10.1371/journal.pmed.0050225

Gelberg, L., Browner, C. H., Lejano, E., & Arangua, L. (2004). Access to Women's Health Care: A Qualitative Study of Barriers Perceived by Homeless Women. *Women & Health*, *40*(2), 87–100. https://doi.org/10.1300/j013v40n02_06

Goldstein, G., Luther, J. F., Haas, G. L., Appelt, C. J., & Gordon, A. J. (2010). Factor structure and risk factors for the health status of homeless veterans. *Psychiatric Quarterly*, *81*(4), 311–323. https://doi.org/10.1007/s11126-010-9140-4

Goldstein, G., Luther, J. F., Haas, G. L., Gordon, A. J., & Appelt, C. (2009). Comorbidity between psychiatric and general medical disorders in homeless veterans. *Psychiatric Quarterly*. https://doi.org/10.1007/s11126-009-9106-6

Goodman, L., Saxe, L., & Harvey, M. (1991). Homelessness as psychological trauma: Broadening perspectives. *American Psychologist*, *46*(11), 1219–1225. https://doi.org/10.1037/0003-066X.46.11.1219

Gray, M. J., Litz, B. T., Hsu, J. L., & Lombardo, T. W. (2004). *Psychometric Properties of the Life Events Checklist*. https://doi.org/10.1177/1073191104269954

Henry, M., Watt, R., Mahathey, A., Ouellette, J., Sitler, A., Associates, A., … Kaur, P. (2020). *The 2019 Annual Homeless Assessment Report (AHAR) to Congress*. Retrieved from https://files.hudexchange.info/resources/documents/2019-AHAR-Part-1.pdf

Kim, M. M., & Arnold, E. M. (2004). Stressful life events and trauma among substance-abusing homeless men. *Journal of Social Work Practice in the Addictions*, *4*(2), 3–19. https://doi.org/10.1300/J160v04n02_02

Kroenke, K., Spitzer, R. L., & Williams, J. B. W. (2001). The PHQ-9: Validity of a brief depression severity measure. *Journal of General Internal Medicine*, *16*(9), 606–613. https://doi.org/10.1046/j.1525-1497.2001.016009606.x

Lalonde, F., & Nadeau, L. (2012, August 1). Risk and protective factors for comorbid posttraumatic stress disorder among homeless individuals in treatment for substance-related problems. *Journal of Aggression, Maltreatment and Trauma*, Vol. 21, pp. 626–645. https://doi.org/10.1080/10926771.2012.694401

Lee, K. H., Jun, J. S., Kim, Y. J., Roh, S., Moon, S. S., Bukonda, N., & Hines, L. (2017). Mental health, substance abuse, and suicide among homeless adults. *Journal of Evidence-Informed Social Work*, *14*(4), 229–242. https://doi.org/10.1080/23761407.2017.1316221

Martins, D. C. (2008). Experiences of homeless people in the health care delivery system: A descriptive phenomenological study: Populations at risk across the lifespan: Empirical studies. *Public Health Nursing*. https://doi.org/10.1111/j.1525-1446.2008.00726.x

Pope, N. D., Buchino, S., & Ascienzo, S. (2020). “Just like Jail”: Trauma Experiences of Older Homeless Men. *Journal of Gerontological Social Work*, *63*(3), 143–161. https://doi.org/10.1080/01634372.2020.1733727

Purkey, E., & MacKenzie, M. (2019). Experience of healthcare among the homeless and vulnerably housed a qualitative study: Opportunities for equity-oriented health care. *International Journal for Equity in Health*, *18*(1). https://doi.org/10.1186/s12939-019-1004-4

Rae, B. E., & Rees, S. (2015). The perceptions of homeless people regarding their healthcare needs and experiences of receiving health care. *Journal of Advanced Nursing*, *71*(9), 2096–2107. https://doi.org/10.1111/jan.12675

Salize, H. J., Horst, A., Dillmann-Lange, C., Killmann, U., Stern, G., Wolf, I., … Rössler, W. (2001). Needs for mental health care and service provision in single homeless people. *Social Psychiatry and Psychiatric Epidemiology*, *36*(4), 207–216.

SAMHSA. (2019). Trauma and Violence. Retrieved July 23, 2020, from https://www.samhsa.gov/trauma-violence

Skinner, H. A. (1982). The drug abuse screening test. *Addictive Behaviors*, *7*(4), 363–371. https://doi.org/10.1016/0306-4603(82)90005-3

Stein, J. A., Dixon, E. L., & Nyamathi, A. M. (2008). Effects of Psychosocial and Situational Variables on Substance Abuse Among Homeless Adults. *Psychology of Addictive Behaviors*, *22*(3), 410–416. https://doi.org/10.1037/0893-164X.22.3.410

Strehlau, V., Torchalla, I., Kathy, L., Schuetz, C., & Krausz, M. (2012). Mental health, concurrent disorders, and health care utilization in homeless women. *Journal of Psychiatric Practice*. https://doi.org/10.1097/01.pra.0000419819.60505.dc

Taylor, K. M., & Sharpe, L. (2008). Trauma and post-traumatic stress disorder among homeless adults in Sydney. *Australian and New Zealand Journal of Psychiatry*, *42*(3), 206–213. https://doi.org/10.1080/00048670701827218

Tsai, J., Doran, K. M., & Rosenheck, R. A. (2013). When health insurance is not a factor: National comparison of homeless and nonhomeless US veterans who use veterans affairs emergency departments. *American Journal of Public Health*. https://doi.org/10.2105/AJPH.2013.301307

Tsai, J., Rosenheck, R. A., Decker, S. E., Desai, R. A., & Harpaz-Rotem, I. (2012). Trauma experience among homeless female veterans: Correlates and impact on housing, clinical, and psychosocial outcomes. *Journal of Traumatic Stress*, *25*(6), 624–632. https://doi.org/10.1002/jts.21750

Tucker, J. S., D'amico, E. J., Pedersen, E. R., Garvey, R., Rodriguez, A., & Klein, D. J. (2020). *Behavioral Health and Service Usage During the COVID-19 Pandemic Among Emerging Adults Currently or Recently Experiencing Homelessness*. https://doi.org/10.1016/j.jadohealth.2020.07.013

US Department of Housing and Urban Development. (2012). *At a Glance_Criteria and Recordkeeping Requirements for Definition of Homeless*. Retrieved from https://files.hudexchange.info/resources/documents/HomelessDefinition_RecordkeepingRequirementsandCriteria.pdf

Using the PTSD Checklist for DSM-5 (PCL-5) . (n.d.). Retrieved from www.ptsd.va.gov

Villalobos-Gallegos, L., Pérez-López, A., Mendoza-Hassey, R., Graue-Moreno, J., & Marín-Navarrete, R. (2015). Psychometric and diagnostic properties of the Drug Abuse Screening Test (DAST): Comparing the DAST-20 vs. the DAST-10. *Salud Mental*, *38*(2), 89–94. https://doi.org/10.17711/sm.0185-3325.2015.012

Weathers, F. W., Blake, D. D., Kaloupek, D. G., Marx, B. P., & Keane, &. (2018). *Life Events Checklist for DSM-5 (LEC-5) - Standard Version - Fillable Form*. Retrieved from https://www.ptsd.va.gov/professional/assessment/documents/LEC5_Standard_Self-report.PDF

Weber, M., Thompson, L., Schmiege, S. J., Peifer, K., & Farrell, E. (2013). Perception of Access to Health Care by Homeless Individuals Seeking Services at a Day Shelter. *Archives of Psychiatric Nursing*, *27*(4), 179–184. https://doi.org/10.1016/j.apnu.2013.05.001

Weinrich, S., Hardin, S., Glaser, D., Barger, M., Bormann, J., Lizarraga, C., … Allard, C. B. (2016). Assessing sexual trauma histories in homeless women. *Journal of Trauma and Dissociation*, *17*(2), 237–243. https://doi.org/10.1080/15299732.2015.1089968

Wen, C. K., Hudak, P. L., & Hwang, S. W. (2007). *Homeless People's Perceptions of Welcomeness and Unwelcomeness in Healthcare Encounters*. https://doi.org/10.1007/s11606-007-0183-7

Withers, J. (2011). Street medicine: An Example of Reality-based Health Care. In *Journal of Health Care for the Poor and Underserved* (Vol. 22). Retrieved from www.streetmedicine.org.

Appendix A

Table 4

Frequency of Stressful Events Endorsed on the LEC-5

	Happened as Adult			Happened as Child	
Life Event	*n*	%	Life Event	*n*	%
Transportation accident	29	50.9%	Physical assault	22	38.6%
Physical assault	25	43.9%	Transportation accident	16	28.1%
Natural disaster	23	40.4%	Natural disaster	16	28.1%
Assault with a weapon	21	36.8%	Fire or explosion	14	24.6%
Serious accident at work or home	21	36.8%	Sexual assault	13	22.8%
Life-threatening illness or injury	16	28.1%	Assault with a weapon	10	17.5%
Fire or explosion	10	17.5%	Life-threatening illness or injury	10	17.5%
Captivity	8	14.0%	Serious accident at home	8	14.0%
Sexual assault	6	10.5%	Captivity	5	8.8%
Combat or exposure to a war-zone	5	8.8%	Combat or exposure to a war-zone	4	7.0%
Any other very stressful event	20	35.1%	Any other very stressful event	16	28.1%

Table 5

Frequency of Mental Health Disorders

Mental Health Disorder	*n*	%
Depression	28	49.1%
Anxiety	27	47.4%
Bipolar Disorder	16	28.1%
Insomnia	16	28.1%
Trauma/PTSD	15	26.3%
Schizophrenia	7	12.3%
Other Mental Disorder	3	5.3%
SUD, Tobacco	18	31.6%
SUD, Alcohol	17	29.8%
SUD, Cannabis	13	22.8%
SUD, Stimulant	4	7.0%
SUD, Opioid	3	5.3%
SUD, Other	1	1.8%
SUD, Sedative	0	0.0%

Appendix B

Demographic Questionnaire

Thank you for your participation in this survey. Please read all instructions carefully before answering questions, and please ensure that you answer every question. If you have any questions, please be sure to let us know.

1. What is your age in years? _____

2. What is your gender identity?
    a) Female
    b) Male
    c) Transgender Female
    d) Transgender Male
    e) Non-binary
    f) Other/Prefer not to answer

3. What is your ethnic origin?
    a) White
    b) Hispanic or Latino
    c) Black or African American
    d) Native American or Alaska
    e) Asian / Pacific Islander
    f) Other/Prefer not to answer

4. Are you a United States Veteran?
    a) Yes
    b) No

5. If yes, in which branch or branches did you serve? (*Mark all that apply*)
    a) Army
    b) Navy
    c) Air Force
    d) Marine Corps
    e) Coast Guard

6. Which category of homelessness do you *currently* most identify with?
    a) I currently have no fixed, regular, and adequate nighttime residence
    b) I am currently staying in a temporary shelter, transitional housing, motel, etc.
    c) I am fleeing, or attempting to flee, domestic violence, with no other residence or support to obtain permanent housing.

7. How long have you begin experiencing your current episode of homelessness?
    a) Under 1 year
    b) 2-4 years
    c) 5-7 years
    d) 8-9 years
    e) 10+ years

8. How long ago did you experience your first episode of homelessness?
    a) Under 1 year ago
    b) 2-4 years ago
    c) 5-7 years ago
    d) 8-9 years ago
    e) 10+ years ago

9. How satisfied are you with your current living situation?
    a) Very satisfied
    b) Somewhat satisfied
    c) Neither satisfied nor dissatisfied
    d) Somewhat dissatisfied
    e) Very Dissatisfied

Patient Health Questionnaire (PHQ-9)

Instructions: Over the last *2 weeks*, how often have you been bothered by any of the following problems?

	Not at all	**Several days**	**More than half the days**	**Nearly every day**
Little interest or pleasure in doing things	0	1	2	3
Feeling down, depressed or hopeless	0	1	2	3
Trouble falling or staying asleep, or sleeping too much	0	1	2	3
Feeling tired or having little energy	0	1	2	3
Poor appetite or overeating	0	1	2	3
Feeling bad about yourself – or that you are a failure or have let yourself or your family down	0	1	2	3
Trouble concentrating on things, such as reading the newspaper or watching television	0	1	2	3
Moving or speaking so slowly that other people could have noticed? Or the opposite—being so fidgety or restless that you have been moving around a lot more than usual	0	1	2	3
Thoughts that you would be better off dead or of hurting yourself in some way	0	1	2	3
	Not difficult at all	**Somewhat difficult**	**Very difficult**	**Extremely difficult**
How difficult have these problems made it for you to do your work, take care of things at home, or get along with other people?	0	1	2	3

Life Events Checklist for DSM-5 (LEC-5)

Instructions: Listed below are a number of difficult or stressful things that sometimes happen to people. For each event check one or more of the boxes to the right to indicate whether: (a) it happened to you as a child; (b) it happened to you as an adult; or (c) it doesn't apply to you.
Be sure to consider your *entire life* (growing up as well as adulthood) as you go through the list of events.

Event	Happened to me as a child	Happened to me as an adult	Doesn't apply
Natural disaster (for example, flood, hurricane, tornado, earthquake			
Fire or explosion			
Transportation accident (for example, car accident, boat accident, train wreck, plane crash)			
Serious accident at work, home, or during recreational activity			
Physical assault (for example, being attacked, hit, slapped, kicked, beaten up)			
Assault with a weapon (for example, being shot, stabbed, threatened with a knife, gun, bomb)			
Sexual assault (rape, attempted rape, made to perform any type of sexual act through force or threat of harm)			
Combat or exposure to a war-zone (in the military or as a civilian)			
Captivity (for example, being kidnapped, abducted, held hostage, prisoner of war)			
Life-threatening illness or injury			
Any other very stressful event or experience			

If you checked off any of the above listed events, did the event(s) occur: (*check all that apply*)

Prior to becoming homeless
During a previous or current episode of homelessness

Posttraumatic Stress Disorder Checklist for DSM-5 (PCL-5)

Instructions: Below is a list of problems and complaints that people sometimes have in response to stressful life experiences. How much have you been bothered by each problem *in the last month*?

Response	Not at all	A little bit	Moderately	Quite a bit	Extremely
Repeated, disturbing memories, thoughts, or images of a stressful experience from the past?	1	2	3	4	5
Repeated, disturbing dreams of a stressful experience from the past?	1	2	3	4	5
Suddenly acting or feeling as if a stressful experience were happening again (as if you were reliving it)?	1	2	3	4	5
Feeling very upset when something reminded you of a stressful experience from the past?	1	2	3	4	5
Having physical reactions (e.g., heart pounding, trouble breathing, or sweating) when something reminded you of a stressful experience from the past?	1	2	3	4	5
Avoid thinking about or talking about a stressful experience from the past or avoid having feelings related to it?	1	2	3	4	5
Avoid activities or situations because they remind you of a stressful experience from the past?	1	2	3	4	5

Trouble remembering important parts of a stressful experience from the past?	1	2	3	4	5
Loss of interest in things that you used to enjoy?	1	2	3	4	5
Feeling distant or cut off from other people?	1	2	3	4	5
Feeling emotionally numb or being unable to have loving feelings for those close to you?	1	2	3	4	5
Feeling as if your future will somehow be cut short?	1	2	3	4	5
Trouble falling or staying asleep?	1	2	3	4	5
Feeling irritable or having angry outbursts?	1	2	3	4	5
Having difficulty concentrating?	1	2	3	4	5
Being “super alert” or watchful on guard?	1	2	3	4	5
Feeling jumpy or easily startled?	1	2	3	4	5

Acceptance and Action Questionnaire-II (AAQ-II)

Instructions: Below you will find a list of statements. Please rate how true each statement is for you by using the scale below to mark your choice.

	Never True	**Very Seldom True**	**Seldom True**	**Sometimes True**	**Frequently True**	**Almost Always True**	**Always True**
My painful experiences and memories make it difficult for me to live a life that I would value.	1	2	3	4	5	6	7
I'm afraid of my feelings.	1	2	3	4	5	6	7
I worry about not being able to control my worries and feelings.	1	2	3	4	5	6	7
My painful memories prevent me from having a fulfilling life.	1	2	3	4	5	6	7
Emotions cause problems in my life.	1	2	3	4	5	6	7
It seems like most people are handling their lives better than I am.	1	2	3	4	5	6	7
Worries get in the way of my success.	1	2	3	4	5	6	7

Substance Use Questions

Drug Abuse Screening Test (DAST)

The following questions concern information about involvement with drugs. Drug abuse refers to (1) the use of prescribed or "over-the-counter" drugs in excess of the directions, and (2) any non-medical use of drugs.

Consider the *past year (12 months)* and carefully read each statement. Then decide whether your answer is YES or NO.

1. Have you used drugs other than those required for medical reasons?
   a) Yes
   b) No
2. Do you use more than one drug at a time?
   a) Yes
   b) No
3. Are you always able to stop using drugs when you want to?
   a) Yes
   b) No
4. Have you had "blackouts" or "flashbacks" as a result of drug use?
   a) Yes
   b) No
5. Do you ever feel bad or guilty about your drug use?
   a) Yes
   b) No
6. Does your spouse (or parents) ever complain about your involvement with drugs?
   a) Yes
   b) No
7. Have you neglected your family because of your use of drugs?
   a) Yes
   b) No
8. Have you ever experienced withdrawal symptoms (felt sick) when you stopped taking drugs?
   a) Yes
   b) No
9. Have you had medical problems as a result of your drug use (e.g., memory loss, hepatitis, convulsions, bleeding, etc.)?
   a) Yes
   b) No

How long have you had a problem with drug use? (*circle one*)

Less than 6 months	6 months-1 year	1-5 years	6-10 years	Over 10 years

Alcohol Questionnaire

1. Do you have a problem with alcohol?
    a) Yes
    b) No
2. Are you always able to stop using alcohol when you want to?
    c) Yes
    d) No
3. Have you had "blackouts" or "flashbacks" as a result of alcohol use?
    c) Yes
    d) No
4. Do you ever feel bad or guilty about your alcohol use?
    c) Yes
    d) No
5. Does your spouse (or parents) ever complain about your involvement with alcohol?
    c) Yes
    d) No
6. Have you neglected your family because of your use of alcohol?
    c) Yes
    d) No
7. Have you ever experienced withdrawal symptoms (felt sick) when you stopped drinking alcohol?
    c) Yes
    d) No
8. Have you had medical problems as a result of your alcohol use (e.g., memory loss, hepatitis, convulsions, bleeding, etc.)?
    c) Yes
    d) No

How long have you had a problem with alcohol use? (*circle one*)

Less than 6 months	6 months-1 year	1-5 years	6-10 years	Over 10 years

Mental Health Treatment Questions

Have you ever been diagnosed with the following *by a physician or mental health professional*?
(*Check all that apply*)

- Anxiety
- Depression
- Schizophrenia
- Bipolar Disorder
- Trauma/Posttraumatic Stress Disorder (PTSD)
- Insomnia/Sleep Disorder
- Substance Use Disorder
  - Alcohol
  - Tobacco
  - Cannabis
  - Opioid
  - Sedative
  - Stimulant
  - Other: _____
- Other: _____

Have you ever sought mental health treatment?

a) Yes
b) No

If yes, where have you received mental health care?
(*Check all that apply*)

- Primary care clinic
- Community mental health clinic
- Other outpatient mental health
- Inpatient mental health (e.g., psychiatric hospital)
- Psychiatrist
- Emergency department
- Urgent care
- Other: _____

Regarding your mental health treatment, overall how satisfied were you with:

	Very Dissatisfied		**Satisfied**		**Very Satisfied**
1. The respect and courtesy you received?	1	2	3	4	5
2. Your level of participation in the decisions about your care?	1	2	3	4	5
3. Your provider's consideration of your current living situation?	1	2	3	4	5
4. Your provider's ability to understand your needs?	1	2	3	4	5
5. The ease of getting an appointment when you need one?	1	2	3	4	5

Barriers Questions

Instructions: Please indicate how often each of these statements below is a barrier for you to receive mental health services. Place a check mark in one of the boxes for each statement. *(A barrier is something that may get in the way or prevent you from accessing a service when it's needed.)*

	Not a barrier	Sometimes a barrier	Often a barrier
1. Long waiting lists			
2. No outreach to people who are homeless			
3. Language/cultural barriers			
4. Limited hours of operation			
5. Lack of transportation			
6. Lack of appropriately trained staff			
7. Not knowing how and/or where to get services			
8. Feeling judged or shamed by staff			
9. Feeling discriminated against for being homeless			