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Exploring the contextual factors and decision-making process of risky sexual behavior among homeless adults in Louisville, Kentucky.

Sarah C. Van Heiden
University of Louisville

EXPLORING THE CONTEXTUAL FACTORS AND DECISION-MAKING PROCESS OF RISKY SEXUAL BEHAVIOR AMONG HOMELESS OLDER ADULTS IN LOUISVILLE, KENTUCKY

By
Sarah C. Van Heiden
M.P.H., University of Louisville, 2016
B.A., University of Northern Iowa, 2013

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A Dissertation Approved on
November 22, 2021

By the following Dissertation Committee:

_____

Dr. Susan Buchino, PhD, OTR/L
Dissertation Chair

_____

Dr. Andrew Scott LaJoie PHD, MSPH, MA

_____

Dr. Jelani Kerr PhD, MSPH

_____

Dr. William Andrew Patterson, PhD, MSW

DEDICATION

This dissertation is dedicated to those who have experienced homelessness, and those who selflessly serve this community.

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To my committee chair, Dr. Susan Buchino, I want to express my sincere appreciation. Through your continuous guidance and support I will always consider the "so what?", and through your numerous tracked changes, you have made me a better scholar and writer. Above all, your countless late night, early morning, and weekend pep-talks have reassured me, we can indeed do hard things.

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ABSTRACT

EXPLORING THE CONTEXTUAL FACTORS AND DECISION-MAKING PROCESS OF RISKY SEXUAL BEHAVIOR AMONG HOMELESS OLDER ADULTS IN LOUISVILLE, KENTUCKY

Sarah C. Van Heiden

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Homelessness is a complex public health issue; individuals who experience homelessness are said to engage in risky sexual behaviors at an increased rate and experience a higher prevalence of sexually transmitted infection (STI). While the sexual behaviors of homeless adolescents are commonly studied, little is known about the sexual behaviors of the growing population of older adults, or how they make decisions to engage in sex.

Three aims guided this research: 1) to describe the sexual behaviors and sexual decision-making process of homeless older adults, 2) to examine how homeless older adults evaluate the outcomes associated with engaging in risky sexual behaviors, and 3) to identify the predictors of sexual behaviors in which homeless older adults engage. This study used a qualitative approach, which included five key informant interviews with providers of homeless services and twenty interviews with the target population. A purposive sampling method was employed by utilizing an indirect facilitation approach,

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CHAPTER I. BACKGROUND & INTRODUCTION

Background

Homelessness is a complex social issue that affects every aspect of an individual's daily life, including relationships with others. However, activities of daily life do not come to an end for those who are homeless. Similarly, the aging process also affects one's ability to do the things they want and need to do; for an older adult experiencing homelessness, the effects of aging can complicate their ability to navigate homeless and housing services and make them more vulnerable while doing so. Due to a variety of reasons, the population of older adults experiencing homelessness has been increasing gradually as the general population ages. Consequently, the unique needs of this population require ongoing assessment so that the services provided can adequately support them.

Burden of Homelessness

Homelessness is an issue affecting cities all over the world, and a lack of adequate housing may impact as many as 1.6 billion people globally (United Nations, 2019). Yet, it is challenging to obtain an accurate picture of the true burden of homelessness. This can be attributed to several reasons, including 1) varying definitions of homelessness, 2) a lack of resources to measure homelessness, 3) the tendency of nations to understate the issue due to stigma that may be attached to the problem, and 4) the fact that individuals experiencing homelessness are reluctant to be registered as such.

In 2009, the United States Department of Housing and Urban Development (HUD) made a revision to the formal definition of "homeless," which most generally includes individuals and families who lack a fixed, regular, and adequate nighttime residence and includes a subset for an individual who is exiting an institution where he or she resided for 90 days or less and who resided in an emergency shelter or a place not meant for human habitation immediately before entering that institution (HUD, 2013).

Individuals experiencing homelessness are often considered in two broad categories, *chronically homeless* or *newly homeless*, based on the amount of time they have experienced homelessness. Individuals who are *newly homeless*, often referred to as experiencing "situational homelessness," are those who have lost housing as a result of a life-altering event; HUD reports as much as 70 percent of the population experiencing homelessness in the United States falls into this category (Shelters to Shutters, 2018).

Individuals may be situationally homeless due to job loss, domestic violence, medical emergencies, or natural disasters (Doran, Ran, Castelblanco, Shelley, & Padgett, 2019). In fact, more than half of newly homeless adults attribute their homelessness to job loss, while others attribute their homelessness to a sudden change in living arrangements due to outside factors (like death of family or friend), substance abuse, or health conditions (Doran et al., 2019). Although many individuals describe their homelessness as a sudden event, upon further reflection, it is clear that it is often a number of hardships which may even begin at a very young age, and it is typical that a combination of structural factors and behavioral choices lead to the inability to maintain housing when a critical event occurs (Doran et al., 2019).

On the other hand, an individual is considered chronically homeless if they have met the definition of homeless continuously for at least 12 months, or if they have been homeless on at least four separate occasions in the last three years, (whereby each occasion was at least 15 days; HUD, 2021). Some of the commonly referenced contributors to chronic homelessness are mental illness, substance use disorders, physical disabilities, and other long-term health conditions (National Alliance to End Homelessness, 2021). It has been reported that since 2007, chronic homelessness has decreased by over 20 percent due to the implementation of Permanent Supportive Housing and several other evidence-based strategies to address homelessness.

According HUD's definition, 18 out of every 10,000 people in the U.S. were experiencing homelessness on a single night in January 2020, which equated to over 580,000 people (National Alliance to End Homelessness, 2021). This point-in-time count increased by two percent from the prior year, and the number of unsheltered individuals increased by seven percent from the prior year. However, these point-in-time counts underestimate true totals, as methods may not include the less visible homeless, or the *marginally housed,* who may be living in cars or temporarily staying with friends and extended family. Some researchers have shown that these estimates fail to account for approximately 29 percent of homeless individuals who were in plain sight, but did not fit stereotypical appearances, while also neglecting to count as much as 40 percent of the homeless who were in spaces not visible to the public (Smith & Castañeda-Tinoco, 2018). Although it is generally understood that this annual point-in-time count is inaccurate, it continues to be the most utilized method of estimating homelessness across

the nation on an annual basis, and funding for serving this population is heavily reliant on this estimate.

Within the homeless population in the United States, approximately 70 percent of people experiencing homelessness are individuals who are not accompanied by children or other adults, and about 60 percent of people experiencing homelessness identify as male. Of concern, approximately half of the United States' homeless population is sleeping outside and in locations not meant for human habitation.

Demographic of Homeless Population

The demographic make-up of the homeless population in the United States is vastly different than that of the general population in terms of gender, age, race, mental illness, and disability status. According to the 2010 Census, the gender ratio in the United States is approximately 50 percent female, 49 percent male, and less than one percent transgender (U.S. Census Bureau, 2010). By comparison, the homeless population is approximately 39 percent female, 61 percent male, and less than one percent transgender (U.S. Department of Housing and Urban Development, 2020).

With reference to age, children under the age of 18 make up approximately 18 percent of the overall population of homeless in the United States, and those between the ages of 18 and 24 make up nearly eight percent. The majority of homeless individuals are over the age of 24, totaling nearly 75 percent of all homeless people (HUD, 2021). However, some reports have claimed that approximately 50 percent of all individuals experiencing homelessness are over the age of 50 (Sorrell, 2016).

Homelessness disproportionately impacts people of color. Approximately 35 percent of the homeless population identify as African American, while this group represents

only about 13 percent of the general population (Buchino, Fosl, Haynes, Kinahan, & Omer, 2019). Furthermore, 22 percent of homeless individuals identify as Latinx, 11 percent as American Indian/Alaska Native, and 1.5 percent Native Hawaiian and Pacific Islander. Individuals identifying as White or Asian are underrepresented among the homeless population (Buchino et al., 2019).

In the United States, homelessness is often correlated with mental illness. Of all individuals experiencing homelessness in the United States, an estimated 45 percent have a mental illness, and 25 percent have a diagnosis of serious mental illness (Buchino et al., 2019). Additionally, the prevalence rates of both intellectual disabilities and acquired brain injuries are higher among homeless individuals than the general population (Buchino et al., 2019).

Evidence-Based Strategies to Address Homelessness

Understanding the factors that contribute to homelessness—both situational and chronic—is key to providing the type and level of support that people need to prevent or resolve it. The United States has implemented several evidence-based strategies to address homelessness. Many of these strategies include increasing accessibility of housing options and providing supportive services for housing stability.

Housing First model: The Housing First model is based on the idea that housing is a basic right and should be provided without prerequisites. It was developed as an alternative to the common belief that individuals need to achieve housing readiness by reaching sobriety, obeying psychiatric treatment, and learning specific skills prior to being granted housing. The Housing First model is known as a harm reduction method, offering choice in terms of needs and readiness.

Housing subsidies and housing choice vouchers: Housing subsidies and housing choice vouchers are funds directed toward very low-income elderly, people with disabilities, veterans, and working families. This assistance is offered through programs like public housing, Section 8, Housing Choice Voucher Program, and other federal initiatives. These initiatives are known to directly pay a landlord a subsidy, and the individual or family is expected to pay the difference in cost.

Permanent Supportive Housing: This intervention combines safe, stable, affordable housing assistance with supportive services for those experiencing mental illness or other disabling conditions. This model offers case management, substance abuse or mental health counseling, assistance with training independent living skills, vocational services, and gaining employment. These services are believed to be critical in achieving stable housing.

National Housing Trust Fund: The National Housing Trust Fund (NHTF) is a grant administered by HUD, intended to supplement other federal and state efforts to provide housing for extremely low-income households experiencing homelessness. Through this initiative, states receive a minimum of $3 million annually to construct new housing units and renovate/rehabilitate existing housing units.

Homelessness prevention programs: A variety of homelessness prevention programs have been implemented at the local level. One example of this would be programs for youth transitioning from foster care which often incorporates mentoring, employment and educational support, connection with permanent housing, and may also include identification and support for developmental delays.

Alternatives to the criminalization of homelessness: Despite the fact that criminalization laws are ineffective, expensive, and violate civil rights, many local governments still have laws in place which make the performance of basic human behaviors (such as sitting, sleeping, and bathing) criminal activities in public spaces. Some communities have enacted a homeless bill of rights which prohibits the criminalization of homelessness as well as discrimination against those who are experiencing homelessness. These rights allow individuals experiencing homelessness to be protected from police harassment while they move freely in public spaces, share food, rest, and collect donations.

Although there is no single strategy to sufficiently address or end the issue of homelessness, multiple interventions can be implemented to address housing, stabilization of income, and health of individuals experiencing homelessness.

Public Health Burden of Homelessness

Homelessness and health status are known to be closely correlated and reflect a bi-directional relationship (National Health Care for the Homeless Council, 2019). For example, an injury or illness may begin as a health condition that can quickly lead to employment concerns due to too much time off, exhausting sick leave, or inability to perform job responsibilities (especially in the case of physically demanding jobs, such as construction or manufacturing). Lack of employment then leads to difficulty paying for not only treatment, but mortgage/rent, utilities, food, and other basic needs. Ultimately, in this situation, the poor health status has led to unemployment, poverty, and eventually, homelessness.

Conversely, homelessness can cause new health issues, or exacerbate existing health concerns. Living on the street or in an emergency shelter (congregate living) can expose individuals experiencing homelessness to communicable diseases, violence, malnutrition, and harmful exposure to the elements. Many chronic health conditions require management through not only properly stored medications (sometimes refrigerated), but also through maintaining a specific diet. Soup kitchens and shelters are unable to meet the demand for nutritious meals, while making them inexpensive and filling. Additionally, lack of housing can cause minor issues like cuts or common colds to very quickly escalate to more serious issues like infections and pneumonia.

Beyond airborne communicable diseases, individuals who experience homelessness are said to be at an increased risk of acquiring or transmitting sexually transmitted infections than those living in stable housing (Santa Maria et al., 2018). The prevalence of sexually transmitted infection among individuals experiencing homelessness ranges as high as 53 percent (Williams & Bryant, 2018). When compared with the general population, HIV prevalence is nine times higher among homeless individuals (Santa Maria, 2018;Thakarar, 2016;Arum, 2021).

When compared with the housed population, homelessness has been commonly associated with an increase in mortality and morbidity. Mortality rates of homeless adults ages 50 and older are four times higher when compared with housed individuals in the same age group (Kessell, Bhatia, Bamberger, & Kushel, 2006). This is due to extreme living conditions that the unhoused population experiences, as well as lack of access to appropriate care and preventive services.

Furthermore, homelessness is associated with increased usage of acute care services (Kessell et al., 2006).As many as half of older homeless adults reported making at least one visit to the emergency department in the past six months, which is much higher than the general population of adults aged 50 and over (Raven et al., 2017). This increased use of acute care services has historically been attributed to lower rates of private medical insurance due to an increased likelihood of impoverishment, unemployment, and disability (Kessell et al., 2006). Although, in general, homeless persons account for a higher proportion of emergency department visits and hospitalizations, only a small proportion of homeless individuals make up the majority of acute care use. This means that a small group of homeless individuals are considered "high-utilizers". High utilizers tend to experience co-morbidities, mental illness, substance abuse, and other physical health issues; they also tend to be considered chronically homeless (Kessell et al., 2006). Hospitalizations by this population tend to have an increased length of stay, when compared with housed individuals, and place a substantially higher burden on acute care settings (Kushel, Vittinghoff, & Haas, 2001). This population ultimately utilizes all public services at a higher rate; among the population of homeless individuals aged 50 and older, nearly half reported spending the majority of time in the previous six months unsheltered, while one-fourth cycled through various institutions including emergency shelters, hospitals, and jails (Raven et al., 2017).

Economic Burden of Homelessness

Individuals who are experiencing homelessness tend to visit the emergency department an average of five times per year, with each visit costing approximately $3,700 and an annual average amounting to $18,500 for the average homeless emergency

department user (Garrett, 2012). The average homeless individual spends three nights per visit in the hospital, which may total more than $9,000 per stay (Garrett, 2012). Prior to Medicaid expansion, many individuals experiencing homelessness did not have health insurance, leaving this cost to the public. Additionally, as a result of not having medical insurance, homeless individuals often lacked a primary care provider, therefore they likely did not receive preventive care or early detection and treatment of health conditions. Delayed diagnosis often leads to disease progression, and ultimately, a more costly treatment, at the cost of the public.

Although nearly one-third of all visits to emergency departments are made by individuals who are chronically homeless, emergency departments are not equipped to meet the needs of homeless patients in terms of psychosocial demands, in addition to assisting with housing, treatment for substance abuse, and mental healthcare (Garrett, 2012). It has been estimated that when homeless individuals are provided housing, their number of visits to the emergency department drops by over 60 percent. The provision of stable housing to an individual experiencing homelessness has also been estimated to save taxpayer dollars by reducing healthcare costs by 59 percent, reducing emergency department costs by 61 percent, and decreasing general inpatient hospitalizations by 77 percent (Garrett, 2012). However, these data were collected prior to the implementation of expanded Medicaid.

Impact of Medicaid Expansion on Homeless

Since 2014, 39 states have expanded Medicaid as a provision in the Affordable Care Act (ACA) to cover more low-income Americans. Before the expansion of Medicaid, the majority of adults living in poverty (including half of U.S. adults experiencing

homelessness) were ineligible for Medicaid coverage (Self, 2021). Following the expansion, the homeless population has benefited from the amended eligibility criteria. Individuals experiencing homelessness now have better healthcare coverage and improved access to care. The homeless population also benefits from enhanced resources for providers which directly address he social determinants of health. Overall, states with expanded Medicaid have displayed reduced odds of being discharged from the hospital against medical advice, and lower total hospital charges (Manzano-Nunez et al., 2019). In fact, the population of homeless individuals showed an immediate increase in emergency department use upon implementation of the expansion, and overtime, inpatient hospitalizations have dropped below baseline (Lanese, Birmingham, Alrubaie, & Hoornbeek, 2021).

Aging and Homelessness

Although definitions of "older homeless" tend to vary slightly across studies, there seems to be a general consensus that individuals who are 50 and over should be considered in the "older homeless" category (National Coalition for the Homeless, 2009). This is because many homeless individuals aged 50 and over develop aging-related conditions, such as difficulty with basic activities of daily living, as well as cognitive impairments, which are similar to that observed in housed adults who are 20 years older (Brown et al., 2019). Therefore, despite their relatively young age, they are considered "older adults".

While the rates of chronic homelessness in the United States are steadily decreasing, in terms of age, the demographic of the homeless population mirrors that of the nation as a whole. The homeless population is aging, and the number of older adults utilizing

homeless services also seems to be increasing. Over the course of the last 25 years, the average age of single homeless individuals has experienced a dramatic rise; the median age of homeless single adults during 1990 was 35 years, and by 2010, the median age of that same group had risen to 50 years (National HCH Council, 2013). Moreover, in 1990, single individuals aged 50 and older made up approximately 11 percent of the homeless population, while today they account for approximately half of the overall population of single homeless adults (Brown et al., 2019).

It is widely hypothesized that this trend is due to a cohort effect. Adults born in the second half of the baby boom era (1954 to 1963) have shown an increased risk of homelessness throughout their lives. After back-to-back recessions in the 1970s and 1980s, many never gained employment, and have spent much of their adult lives cycling through unemployment and working occasionally in low-paying jobs (Culhane, Metraux, Byrne, Stino, & Bainbridge, 2013). Additionally, many in this population spent time in drug treatment programs and/or were incarcerated, both of which make them less appealing in the labor market (Culhane et al., 2013). These individuals are now aged 50 and older (Brown et al., 2016).

In 2013, the Homeless Research Institute projected an increase in the older homeless population of 33 percent by 2020 (National HCH Council, 2013). Furthermore, this estimate is expected to double by the year 2050 (National HCH Council, 2013). A recent estimate reported approximately 202,623 single adults over the age of 50 experience homelessness on a single day (National Alliance to End Homelessness, 2020). The overwhelming majority of these unstably housed adults aged 50 and over are between the ages of 50 and 64, while only about five percent are aged 65 and older (National HCH

Council, 2013). This population of homeless individuals aged 65 and older is expected to see a 2.5-3 times growth rate in many cities nationwide between 2017 and 2030 (Culhane et al., 2019).

Taking into consideration this growing population of homeless older adults, it is important to understand not only how homeless individuals become trapped in a cycle of homelessness through old age, but also how newly homeless older adults find themselves in this situation. While relatively little is known about the cause of homelessness for older adults, studies have indicated that there are two main pathways: 1) some of these individuals battle with mental illness, substance use problems, and imprisonment throughout their lives, causing them to be chronically homeless, and 2) other older adults have lives otherwise very conventional, but financially vulnerable, and experience a crisis later in life that causes them to lose housing for the first time. Some recent estimates have indicated that up to half of homeless older adults are experiencing homelessness for the first time in late middle age (Brown et al., 2016).

Despite the rising number of homeless older adults, this population tends to get neglected, overlooked, and underserved to meet their specific needs. Individuals under 65 are not eligible for Social Security benefits or Medicare without a disability application due to their age, although frequently those experiencing homelessness ages 50 to 64 are in poor physical health, which has been exacerbated by the stressors of their living conditions. While many of these individuals may have a disability, which would potentially qualify them to receive benefits, the application may take years to process and approve, leaving them without income in the meantime. These circumstances can lead to an individual between the ages of 50 and 65 years closely resembling the health profile of

a 70-year-old housed person (National Coalition for the Homeless, 2009). Research has shown that this population tends to have higher rates of difficulty performing activities of daily living; poor vision, hearing, and strength, which result in falls; and general frailty and other geriatric syndromes common to housed persons 20 years older. Additionally, older adults experiencing homelessness are more likely to display signs of cognitive impairments, dementia, and depression (Brown et al., 2017).

Sexual Risk of Older Adults

Despite the fact that the general population of older adults is rapidly increasing in the United States, relatively little is known about the sexual health and sexual behaviors of this population. Although there is a common myth regarding age-related changes to the body which is said to impact sexual functioning, the nature and frequency to which older adults encounter sexual activity does not tremendously change with age (Hooyman, Kawamoto, & Kiyak, 2015). Research has shown that individuals over the age of 59 still value sexual activity. In fact, studies have shown that the population over age 59 indicates experience in various forms of sexual relationships which include new, multiple, casual, and same-sex relationships (Nash, Willis, Tales, & Cryer, 2015). Researchers have also explored the association between sexual activity and greater enjoyment of life, surveying a cohort of 3,045 men and 3,834 women between the ages of 50 to 89 years (Smith et al., 2019). While sexual intercourse was shown to be more influential to overall life enjoyment for men than women, both sexes reported frequent kissing, petting, or fondling were strongly associated with greater life enjoyment (Smith et al., 2019).

Understanding that females have a higher life expectancy on average, when compared to males, Smith and Christakis (2009) explored whether the loss of a spouse was associated with greater sexual risk-taking; this was reflected by a higher incidence of diagnosed STIs. While widowhood was shown to be correlated with an increase in sexual risk taking, older men reported higher levels of sexual desire, greater sexual frequency, and more sexual partners than women (Smith & Christakis, 2009). Another study, which explored the frequency of sexual activity and factors associated with sexual risk behavior among men aged 49 to 80, concluded that older men are indeed sexually active and may need safer sex interventions (Cooperman, Arnsten, & Klein, 2007). Both men and women in the study reported that they consider sex as an important part of life and that they engage in it, even in their older age (Smith & Christakis, 2009).

Not only are older adults engaging in various forms of sexual relationships, but research has also shown that the prevalence of condom use declines with age. A study examining sexual risk behavior among individuals over the age of 50 concluded that approximately 24 percent of individuals ages 50 to 59 reported use of condoms during their last intercourse, while only 17 percent was reported among individuals ages 60 to 69 years (Pilowsky & Wu, 2015).

Sexual Risk of Older Homeless Adults

Sexual health among older adults experiencing homelessness is very rarely studied. Most research examining associations between homelessness and sexual health or behavioral risk factors is focused on youth (Hartley, 2018; Heerde, Scholes-Balog, & Hemphill, 2015; Maria, Narendorf, Ha, & Bezette-Flores, 2015; Santa Maria, Narendorf, Ha, & Bezette-Flores, 2015; Walls & Bell, 2011; Watson, 2011), while less is known

about the behavioral risk factors and sexual health of homeless adults. A study of adults experiencing homelessness in Chicago reported that individuals who are aging and homeless are likely to be at an increased risk for sexually transmitted infections, including HIV/AIDS, due to a lack of knowledge regarding safer sex practices (George, Krogh, Watson, & Wittner, 2009). Additionally, the study claimed that many individuals in this population do not feel at risk of contracting sexually transmitted infections and HIV/AIDS at their age (George et al., 2009). and it is surmisable that individuals experiencing homelessness have difficulty accessing options to protect themselves from STIs. Yet, very little is known about the contextual factors that lead to the higher risk, and how older adults experiencing homelessness make decisions regarding their sexual health.

Current Study

This qualitative study explored how older adults who are experiencing homelessness make decisions to engage in risky sexual behaviors and the use of safer sex practices (implementation of any precautions to reduce the risk of sexually transmitted infections). Because so little is known about the sexual experiences of older homeless adults, qualitative methods are an appropriate approach to gain greater depth and give a voice to the lived experiences of a population which is often not heard. In this study, qualitative research offers a greater understanding of how decisions are made, the barriers to safer sex practices that this population faces, and what supports are needed to improve sexual health. Thus, the purpose of the study is three-fold:

Aim 1: To describe the sexual behaviors and sexual decision-making process of homeless older adults.

Aim 2: To examine how homeless older adults evaluate the health outcomes associated with engaging in risky sexual behaviors.

Aim 3: To identify the predictors of risky sexual behaviors in which homeless older adults engage.

Setting

This study examined the experiences of older individuals experiencing homelessness in Louisville, Kentucky. According to the Alliance to End Homelessness (2020) , Kentucky has seen a 49 percent drop in the rate of homelessness since 2007. More recently, however, the trend has shifted, and the rate has increased 11 percent since 2018. According to the Louisville Metro Continuum of Care Homeless Census, a total of 8,745 Louisvillians were documented as engaging with the homeless system at least once in Federal Fiscal Year 2019 (from October 1, 2018 to September 30, 2019; The Coalition for the Homeless, 2019). This number represents nearly a 25 percent increase from 2018 in the total census of homeless people served (The Coalition for the Homeless, 2019). Single adults make up the largest number of homeless individuals in Louisville Metro, totaling 7,113 in 2018 (Buchino et al., 2019).

Since observing an uptick in the total population, the Louisville community has made substantial efforts to address homelessness. However, very few shelters support couples to stay together. Therefore, couples are more likely to remain unsheltered, while those who opt to stay in shelters must find other spaces to engage in sex, posing possible challenges to being properly prepared to engage in safer sex practices. While it is commonly known that lack of housing places individuals at an increased risk for

engaging in risky sexual behaviors, this does not appear to be currently studied or addressed in the Louisville community.

This study sought to answer three research questions:

1. How does homelessness affect decisions to engage in risky sexual behaviors among older adults?
2. How do older homeless adults process decision-making regarding risky sexual behavior and transactional sex/survival sex?
3. What are the socio-ecological predictors of sexual risk-taking among homeless older adults?

Operational Definitions

Homeless: While there are numerous definitions used to explain homeless individuals, for the purposes of this study the researcher will use the United States Department of Housing and Urban Development (HUD) definition of homeless.

Older Adults: Although in the general population older adults are defined as individuals aged 65 years and older, in this study of the homeless population, older adults will be defined as individuals aged 50 years and older.

Sexual Encounters: Throughout the literature, definitions of sexual encounters range from kissing to engaging in sexual intercourse. For the purposes of this study, the researcher defines sexual encounters as an opportunity to engage in sexual activity.

Risky Sexual Behaviors: Risky sexual behaviors will be defined as any type of behaviors which place individuals at an increased risk for contracting a sexual transmitted infection including multiple sex partners, inconsistent use of a condom, commercial sex work, etc.

Safer Sex Practices: The terms “safe sex” and “safer sex” are often used interchangeably. For the purposes of this study, the researcher will refer to any methods used to reduce the susceptibility of contracting sexually transmitted infections as safer sex practices. This includes using latex or internal condoms for vaginal or anal intercourse, using a latex condom for oral sex, using dental dams or plastic wrap, practicing outercourse, and use of toys rather than performing intercourse.

CHAPTER II. REVIEW OF THE LITERATURE

Introduction

Mirroring the general population, the population of older adults experiencing homelessness has also been gradually increasing over time. Consequently, the unique needs of this population require ongoing evaluation and assessment to ensure that the services offered to them may adequately support their needs. There seems to be a consensus that the "older homeless" population consists of individuals who are 50 and over (National Coalition for the Homeless, 2009) because many individuals experiencing homelessness develop aging-related conditions similar to those observed among housed adults who are 20 years older (Brown et al., 2019). As a result, despite their relatively young age, they are considered "older adults".

Homelessness and health status represents a bi-directional relationship (National Health Care for the Homeless Council, 2019). A person's poor health status can lead to unemployment, poverty, and eventually, homelessness. Conversely, homelessness can cause new health issues, or exacerbate existing health concerns. Living on the street or in an overpopulated shelter can expose individuals experiencing homelessness to communicable diseases, violence, malnutrition, and harmful exposure to the elements.

Additionally, individuals who experience homelessness are thought to be at an increased risk for sexually transmitted infections (STIs) when compared with those with stable housing (Santa Maria et al., 2018). For example, when compared with the general

population, HIV prevalence is nine times higher among homeless individuals (Santa Maria et al., 2018).

Research has shown that older adults still value sexual activity. In fact, studies have shown that this population experiences various forms of sexual relationships including new, multiple, casual, and same-sex relationships (Nash et al., 2015). Yet, while older adults engage in various forms of sexual relationships and remain at risk of STIs, condom use tends to decline with age.

Sexual health among older adults experiencing homelessness is very rarely studied. The literature reflects an abundance of research examining associations between homelessness and sexual health or behavioral risk factors; however, this research tends to be focused on adolescents (Heerde et al., 2015). Little is known about the behavioral risk factors and sexual health of homeless adults. While studies claim that homeless individuals are at an increased risk for HIV/AIDS, very little is known about the factors that lead to this issue, and how older adults experiencing homelessness make decisions regarding their sexual health.

Epidemiology of Sexually Transmitted Infections in Older Adults

The Centers for Disease Control and Prevention (CDC) has reported that rates of STIs are on the rise among Americans of all age groups, with current rates at an all-time high (Centers for Disease Control and Prevention, 2018). Notably, the CDC reported STI rates more than doubling between 2013 and 2017 among those age 65 and older (Centers for Disease Control and Prevention, 2018). This dramatic increase was observed among syphilis, chlamydia, and gonorrhea cases in the last five years (Smith, Bergeron, Goltz, Coffey, & Boolani, 2020). Nationally, syphilis cases increased from 912 in 2013 to 1,935

in 2017, chlamydia cases went from 6,801 in 2013 to 13,534 in 2017, and cases of gonorrhea increased from 4,627 cases in 2013 to 12,930 in 2017 (Smith et al., 2020). Among the population of older adults, men tend to experience STIs at an increased rate when compared to women.

Epidemiology of Sexually Transmitted Infections in Adults Experiencing Homelessness

Although it is generally understood that homeless adults are at an increased risk for various complications to health and wellbeing throughout their life, there tends to be a varied level of understanding related to risk of STI among this population. Results of a systematic literature review report an STI prevalence ranging from two percent to nearly 53 percent among the homeless population of adults. More specifically, rates of chlamydia, range from seven percent to nearly 40 percent in the population of homeless adults; similarly, rates of hepatitis C virus range from nine percent to nearly 53 percent (Williams & Bryant, 2018).

Sexual Behavior among Older Adults

Although there is a common myth regarding age-related changes to the body, which is said to impact sexual functioning, the nature and frequency with which older adults encounter sexual activity does not tremendously change with age (Hooyman et al., 2015). In fact, research has shown that individuals over the age of 59 still value sexual activity as an important part of their wellbeing (Nash, Willis, Tales, & Cryer, 2015; Smith et al., 2019). In addition, the population over the age of 59 indicates experience in various forms of sexual relationships, which include new, multiple, casual, and same-sex relationships (Nash et al., 2015). Table 1 is a representation of sexual behaviors reported among adults age 50 and older.

Table 1: National Survey of Sexual Health and Behavior (Schick et al., 2010)

Sexual Behaviors	50-59 Men	50-59 Women	60-69 Men	60-69 Women	70+ Men	70+ Women
Masturbated Alone	72%	54%	61%	47%	46%	33%
Masturbated with Partner	28%	18%	17%	13%	13%	5%
Received Oral from Women	49%	1%	38%	1%	19%	2%
Received Oral from Men	8%	34%	3%	25%	2%	8%
Gave Oral to Women	44%	1%	34%	1%	24%	2%
Gave Oral to Men	8%	36%	3%	23%	3%	7%
Vaginal Intercourse	58%	51%	54%	42%	43%	22%

Unfortunately, due to the stigma and misconceptions that are attached to sexuality later in life, there seems to be a decreased emphasis on safer sex practices and routine testing among this population (Smith et al., 2020).

A literature review published by Pilowsky and Wu (2015) may provide insight into the rise of STIs in this group. The review found condom use among older adults was highest among individuals between the ages of 50 and 59 at approximately 24 percent. This prevalence seems to decrease with age, as only 17 percent of individuals aged 60 to 69 reported condom use in their last intercourse (Pilowsky & Wu, 2015). Furthermore, the reported likelihood of maintaining the same sexual partner also decreases with age (Pilowsky & Wu, 2015). Yet the risk of becoming infected with HIV or another STI is underestimated among this age group, which may contribute to a late diagnosis and treatment (Pilowsky & Wu, 2015).

Sexual risk-taking behaviors among older adults have also been explored by researchers using the General Social Survey (GSS; Amin, 2016). In this study, risky sexual behaviors were examined among 547 respondents, ages 55 and older. Approximately 87 percent of respondents reported not using condoms during their most recent sexual intercourse. In addition, about 15 percent of respondents reported having engaged in casual sex, paid sex, male to male sex, and drug use during their last sexual encounter. Due to a strong correlation between engagement in these behaviors and prevalence of STIs, findings of this study suggest the importance of HIV/STI prevention programs among older adults (Amin, 2016).

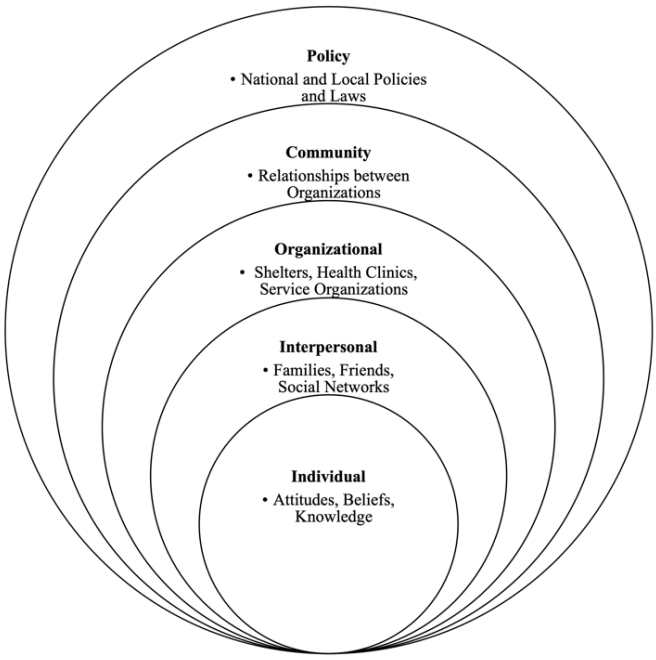
Factors Influencing Sexual Decision-Making

Socio-Ecological Model

It is generally understood that an individual's attitudes, perceptions, and beliefs are predictors of their behavior. However, external factors are also known to shape, predict, and influence an individual's behavior; while individuals are responsible for engaging in a healthy lifestyle, the social environment may be a predictor of individual behavior. The Socio-Ecological Model is widely used and accepted throughout the field of public health and health promotion as a predictive model by taking into consideration barriers and facilitators of health behavior. This theory considers the dynamic and multifaceted effects of personal and environmental factors, as determinants of health. This complex model acknowledges that health-related behaviors at the individual level are shaped through multiple factors that occur at the individual, interpersonal, institutional, community, and policy levels (DiClemente, Salazar, Crosby, & Rosenthal, 2005).

Figure 1 displays the interaction between the various levels of the socio-ecological model.

Figure 1: Socio-Ecological Model



Individual level factors refer to the biological and personal history factors that increase the likelihood of a person engaging in certain health behaviors, due to knowledge, attitudes, beliefs, and personality.

Interpersonal level factors are those which occur among those in a person's social circle-peers, partners, family-influencing their behavior. Interactions that occur at this level can provide social support or create barriers to promoting health behavior.

Institutional/Organizational level factors include the rules, regulations, and informal structures that can either restrict or enhance healthy behaviors.

Community level factors occur in settings such as schools, workplaces, and neighborhoods in which social relationships occur.

Policy level factors include local, state, and federal policies and laws which may act as either barriers or facilitators of health behavior.

Socio-Ecological Model in Predicting Sexual Behavior

Researchers (Ma, Chan, & Loke, 2017) used the socio-ecological model to understand the facilitators of health seeking behavior for sex workers. In their study, Ma, Chan, and Loke (Ma, Chan, & Loke, 2017) explored barriers in access to care that existed at the intrapersonal, interpersonal, institutional, and policy levels. The study concluded that barriers must be addressed at multiple levels, while implementing or maintaining facilitators. By understanding these barriers and facilitators, the researchers were able to identify relevant interventions that target various levels of the socio-ecological model including 1) reducing stigmatizing attitudes which exist among health care professionals toward sex workers, 2) available, acceptable, affordable, and accessible health services, 3) training peer educators on health seeking behaviors and utilization of health services, and 4) policy interventions including the basic human right to health services regardless of the legal status of prostitution. This model has also been used to study the socio-ecological predictors of sexual risk behavior among young adults (Muchimba, 2019).

Health Belief Model

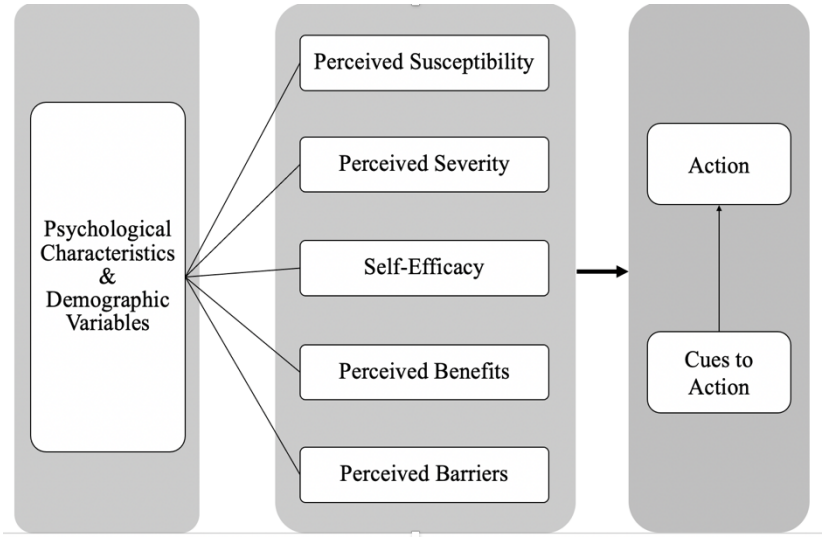
The Health Belief Model (HBM) is commonly used to predict sexual behavior and intentions to adopt safer sex practices, as well as guide interventions for safer sex practices (Allen, Petro, & Phillips, 2009; Carpenter, 2010; Downing-Matibag & Geisinger, 2009; Janz & Becker, 1984; Petosa & Jackson, 1991). The HBM was developed in the 1950s by social scientists aiming to gain a deeper understanding of the failure to adopt health promotion and disease prevention strategies (Edberg, 2007). Since that time, the HBM has also been used to understand individuals' responses to symptoms, help-seeking behavior, compliance with medical treatment, and even sexual behaviors and safe sex practices (Zhang et al., 2013).

The HBM proposes that individuals make a calculated decision about whether the benefits of a particular behavior change offset the costs or obstacles associated with actually performing the behavior (Green, Murphy, & Gryboski, 2020). In this model, subjective assumptions and expectations are highly stressed by cognitive theorists (Glanz, Rimer, & Viswanath, 2008). The HBM is known as a value expectancy model, which means that individuals are expected to engage in the healthy behavior if they 1) value the outcome related to the behavior, and 2) feel the behavior is likely to result in the outcome (Edberg, 2007). It has been noted that an advantage to using the HBM to assess educational needs and likelihood of engaging in health behavior, is the direct implications on interventional designs (Petosa & Jackson, 1991).

Constructs of the Health Belief Model

There are six main constructs of the HBM: perceived susceptibility, perceived severity, perceived benefits, perceived barriers, cues to action, and self-efficacy (Edberg, 2007). Figure 2 depicts the interaction between the six main constructs of the HBM.

Figure 2: Interaction between the HBM constructs



Perceived susceptibility refers to the degree to which the individual feels at risk of acquiring the condition or illness.

Perceived severity refers to the degree of seriousness the individual feels regarding contracting the illness or acquiring the condition. This takes into consideration the person's subjective view of the medical or social consequences associated with the illness or condition.

Perceived benefits make note of the individual's perceptions of the effectiveness in the prevention of the illness or condition. This raises question as to whether the person feels the outcome of the action will be positive.

Perceived barriers take into consideration the individual's feelings regarding the potential obstacles to performing the recommended health action. This can also refer to negative aspects or outcomes a person believes may encounter if they participate in the action.

Cues to action are the external triggers or stimuli necessary to motivate a person to accept and participate in the recommended health action. Cues to action can be either internal (i.e., signs and symptoms of a condition) or external (i.e., social cues).

Self-efficacy refers to the person's level of confidence or belief in their own ability to successfully perform the behavior modification or recommended health action.

Health Belief Model in Sexual Decision-Making

Downing-Matibag and Geisinger (2009) used the HBM to explore the culture of "hooking up" (having casual intercourse without any intention of commitment) and sexual risk-taking among college students. Their study employed semi-structured

interviews with 71 college students to examine their rationales for engaging in risky sexual behaviors. To be eligible to participate in the study, students must have experienced at least one hook-up with someone they had no commitments to. Using the HBM as the theoretical framework for the four-part interview structure, the researchers: 1) assessed the students' perceptions of norms related to sex and dating, acceptability of hooking up, and perceptions of pros and cons related to hooking up, 2) evaluated the events that occurred during the hookup, 3) determined the students' evaluation of the entire hookup experience, and 4) analyzed the students' perceptions of risk during the hookup, and any they took precautions against this risk. Common themes derived from these interviews were a lack of perceived susceptibility to adverse outcomes related to the sexual encounters and lower perceived benefits of safer sex practices than perceived costs. Although students showed high levels of self-efficacy in performing safer sex practices, they demonstrated a lack of preparedness during the sexual encounter (Downing-Matibag & Geisinger, 2009). While this study was specifically focused on the sexual behaviors of young adults, the same principles can be applied to studies of other age groups. Although the HBM does not specifically address the issue sexual coercion, the role of drugs or alcohol, condom accessibility, or negotiations; the researchers suggest incorporating these issues into future studies (Downing-Matibag & Geisinger, 2009).

A study by Petosa and Jackson (Ajzen, 1991) used the HBM to predict intentions to use safer sex practices among adolescents. Researchers developed a 43-item instrument based on the HBM which assessed the knowledge, beliefs, and preventive intentions, with subscales developed to measure the perceived susceptibility, perceived severity, barriers to action, knowledge, and cues to action. The final sample included results from

nearly 700 students from grades 7, 9, and 11, ages 12 to 18 years. The study concluded that patterns of sexual behavior in this age group are highly influenced by situational and social factors, and health related motivations quickly diminish as adolescents age (Petosa & Jackson, 1991). While this study was able to gain a general prediction of intentions to engage in safer sex practices through the use of the HBM for a large sample of adolescents, this quantitative approach lacks an adequate understanding of respondents' insights, motivations, and attitudes. These constructs can be further explored using qualitative research methods.

Older Adults' Sexual Decision-Making

Although the HBM has been widely used to study sexual behaviors, intention to engage in safer sex practices, and sexual decision-making among adolescents and young adults, it has not explicitly been used to examine factors influencing sexual decision-making among older adults. However, research has examined various factors that do impact older adults' decisions to engage in sexual behavior and their understanding of associated risks. Smith and colleagues (2020) conducted a study to identify the knowledge related to STIs among the older adult population. The research team utilized the 27-item Sexually Transmitted Disease Knowledge Questionnaire (STD-KQ) to collect and analyze data from 43 individuals aged 65 to 94 years. Of the 27 survey items, participants reported an average of approximately 11 correct responses (Smith et al., 2020), indicating that older adults are lacking knowledge for informed decision-making about sexual risk.

Moreover, older adults don't perceive they are at risk of STIs, and their sexual behaviors reflect this perception. Syme and colleagues (2016) compared the actual and

perceived sexual risk among older adults aged 50 to 92. This study observed the frequency of which older adults engaged in risky sexual behaviors, as well as the perceived risk and susceptibility of contracting an infection as a result of sexual activity. Approximately half of the sample reported that during the prior six months they had engaged in vaginal and/or oral sex without the use of a condom. Interestingly, approximately two-thirds of respondents reported feeling they were not susceptible to STIs (Syme, et al., 2016). The study concluded that while sexual risk behaviors were prevalent among older adults, nearly half of older adults underestimated their risk of STI (Syme, et al., 2016).

Among the general population of older adults, another factor said to influence the decision to engage in sex is the desire for emotional and physical affection. Milrod and Monto (2017) conducted a quantitative study examining the relationship between 208 older male clients, ages 60 to 84, and female sex workers (Milrod & Monto, 2017). Results of this study indicated that many of the older adult male clients of female sex workers are seeking the girlfriend experience, in which paid sexual exchanges mirror that of conventional relationships (Milrod & Monto, 2017). This desire to have an intimate and affectionate relationship places these individuals at an increased risk of STIs as they report engaging in unprotected sex. Respondents in this study reported having engaged in a variety of unprotected sexual activities with a paid sex worker including hand job without a condom (94 percent), oral sex without a condom (97 percent), and vaginal sex without a condom (51 percent; Milrod & Monto, 2017).

Studies on Older Adults and Homelessness

As the homeless older adult population continues to rise in the United States, so too are the studies related to the general health of this population. Brown et al. (2017) studied a population-based sample of homeless adults ages 50 and older and assessed these individuals for common geriatric symptoms. Known as the Health Outcomes of People Experiencing Homelessness in Older Middle Age (HOPE-HOME) Study, this study is viewed as a seminal study to researchers in this field as it is the most comprehensive study conducted amongst this population. The HOPE-HOME Study followed a cohort of 350 older adults experiencing homelessness in California over the course of three years. The researchers utilized both clinical assessments and structured interviews to examine housing history, behavioral health, physical health, and healthcare utilization of homeless older adults (Brown et al., 2016).

Participants of the HOPE-HOME Study were examined for difficulty performing five activities of daily living (bathing, dressing, eating, transferring, and toileting), six instrumental activities of daily living (taking transportation, managing medications, managing money, applying for benefits, setting up of a job interview, and finding a lawyer), cognition as established by the Mini-Mental State Examination (MMSE), visual impairment, and hearing (Brown et al., 2017). In this population, the researchers observed chronic conditions similar to housed adults 15 to 20 years older, and other geriatric conditions which are typically observed in only elderly individuals. Some of the geriatric conditions common to participants included memory loss, falls, difficulty performing activities of daily living, and urinary incontinence (Brown, Thomas, Cutler, & Hinderlie, 2013).

Data from the HOPE-HOME Study have since been analyzed by a multitude of researchers to answer a variety of research questions as it related to homeless older adults.

Raven and colleagues (2017) examined both health status and emergency department use among homeless older adults. They found that over half the participants self-reported their health status as fair or poor. Furthermore, one-third of participants reported having one chronic condition, and over 41 percent of participants reported diagnosis of two or more chronic conditions (Raven et al., 2017). In addition to chronic conditions, nearly 40 percent of participants reported experiencing severe pain in the previous week, and of those who reported experiencing severe pain, nearly 79 percent reported their pain lasting more than six months (Raven et al., 2017).

Mental health status of homeless older adults in the HOPE-HOME Study were equally concerning. One-third of participants screened positive for post-traumatic stress disorder (PTSD) and over half the participants reported moderate to severe symptoms of clinical depression. Meanwhile, two-thirds of participants reported experiencing hallucinations, violent impulses, or a suicide attempt (Raven et al., 2017). These conditions observed by the HOPE-HOME study were associated with an increased rate of emergency department use.

Sexual Health and Homelessness

Williams and Bryant (2018) conducted a literature review on the prevalence of STI among homeless adults in the United States. Overall, literature referenced STI prevalence ranging from approximately two percent to over 52 percent among homeless adults (Williams & Bryant, 2018). Researchers found that homeless women residing in single

shelters had the lowest STI rates (approximately two percent) when compared with women in family shelters (approximately eight percent). Hepatitis C affected homeless men with the most frequency (about 52 percent; (Williams & Bryant, 2018).

In their review, Williams and Bryant (2018) also identified various trends regarding the risk factors for homeless individuals acquiring an STI. These trends include history of intimate partner violence, mental health or psychiatric symptoms, substance abuse, incarceration, and severity of homelessness. Other potential factors that have been said to influence individuals' decisions to engage in sex are the use of drugs and/or alcohol and the need to survive economic hardship. This includes trading or exchanging sex for clothes, money, shelter, food, or other basic needs. This type of interaction is commonly referred to as transactional sex or survival sex (Heerde & Hemphill, 2017).

When exploring sexual behavior, women in family shelters reported higher rates of sexual activity in the previous three months when compared with women in single shelters (63 percent and 44 percent, respectively; (Williams & Bryant, 2018), even when women in the family shelters did not stay with a partner. However, the researchers recommended further research to better understand why women residing in family shelters are engaging in risky sexual behaviors at an increased rate, when compared with women in single shelters.

Sexual Behavior among Individuals Experiencing Homelessness

Various qualitative and quantitative approaches have been taken to gain a deeper understanding of the sexual risk-taking behaviors of individuals experiencing homelessness throughout the United States. Researchers have reported that sexual risk behaviors are strongly associated with unmet survival needs, length of homelessness, and

the influence of social networks. The overwhelming majority of these studies focus on adolescents and young adults, exploring high-risk behaviors including inconsistent use of safer sex practices, multiple partners, survival sex, and drug/alcohol use, which put them at an increased risk for acquiring STIs (Caccamo, Kachur, & Williams, 2017).

Understanding that homeless youth engage in sexual risk behaviors at higher rates than housed youth, Santa Maria and colleagues (2015) explored the contextual factors of sexual risk behaviors among homeless youth ages 14 to 24. These factors were explored through the use of focus groups with the target population. The most common theme emerging from the focus groups was engagement in sex as a survival strategy, trading sex to meet their immediate needs. Other themes that emerged during their focus groups included sexual victimization or the threat of nonconsensual sexual harm, and sexual risky behavior, defined as sexual behavior that increases susceptibility to STIs (Santa Maria, Narendorf & Ha, 2015).

Other studies have found that those who are experiencing homelessness tend to be at an increased risk of sexual victimization and sex trafficking. In fact, rates of victimization among homeless women have remained unchanged while the overall rates of victimization in the United States have decreased (Goodman, 2006; Turner, 2018). Some studies have reported as much as 92 percent of racially diverse homeless women have experienced some form of sexual violence (Jasinski, 2005). Other studies have reported 13 percent of homeless women experiencing rape in the last 12 months, half of whom experienced rape at least twice in the last 12 months (Goodman, 2006). Wenzel et al. (2000) reported nine percent of homeless women experiencing sexual victimization at least one time in the last month (Wenzel et al., 2000).

Frequently, victimization is aligned with survival sex. Walls & Bell (2011) examined the correlates of engaging in survival sex among 1,625 homeless youth and young adults aged 10 to 25 across the United States. Their findings showed that differences exist based on demographic variables, recent drug use, mental health variables, and other physical health variables. They also found a clear and consistent positive correlation between age and their risk of engaging in survival sex. Additionally, each year of homelessness increased the likelihood of engaging in survival sex by 10 percent (Walls & Bell, 2011).

Purser and colleagues (2017) looked more deeply into the links between homelessness and survival sex. Their results indicate that the length of homelessness and the number of homeless episodes can be used as predictors for engagement in survival sex, as these are shown to be closely linked, those who had been homeless for longer than 90 days were twice as likely to have engaged in survival sex. Additionally, those who had been homeless on more than one occasion were significantly more likely to engage in survival sex. Furthermore, this study indicated that the type of homelessness an individual is experiencing may directly influence the likelihood of engaging in such behaviors. Those who had experienced street homelessness presented with higher rates of survival sex than those living in shelters. The authors concluded that further research needs to be conducted to examine survival sex among homeless individuals of all ages, as many studies examining homelessness and survival sex are focused on homeless youth and young adults (Purser, Mowbray, & O'Shields, 2017). Although this study was published somewhat recently, the researchers examined data collected in 1991. Further research should be conducted to evaluate survival sex in the current population of homeless individuals.

Ryan and colleagues (2009) developed a framework for understanding complex decision-making processes of homeless women engaging in sexual risky behaviors. The research team analyzed 56 in-depth qualitative descriptions of recent sexual encounters among 28 women, ages 18 to 63, living in homeless shelters. They categorized the sexual events into three stages: 1) *pre-intimacy*, which refers to the period when the partners were deciding to become intimate, 2) *intimacy*, or the period that sexual activity occurred, and 3) *post-intimacy*, which refers to the period after the intimacy occurred. In approximately one-fifth of the sexual encounters the women described, respondents reported exchanging sex for money, drugs, food, shelter, or other material things (Ryan et al, 2009). In 66 percent of the sexual encounters, condoms were not used, with women reporting a wide range of reasons for not using safer sex practices (Ryan et al, 2009).

Additionally, Ryan and colleagues examined the role of drugs and alcohol in the decision to engage in sex and to use safe sex practices, finding that substances were involved in 43 percent of the sexual encounters. During 50 percent of those sexual events, both partners were using substances. Furthermore, the use of drugs and alcohol were shown to negatively affect condom use (29 percent condom use) when compared to sexual events not involving drugs and alcohol (38 percent condom use; Ryan et al, 2009).

Kushel, Evans, Perry, Robertson, and Moss (2003) conducted structured interviews with 2,577 homeless and marginally housed individuals about their history of sexual and physical assault, history of housing status, sexual practices, substance use, and health status. Over 32 percent of women, 27 percent of men, and 38 percent of transgendered individuals reported either sexual or physical victimization in the last year. Sex work was common among this population of homeless individuals. The researchers observed a

strong association between mental illness, poor health, and sex work with participants' reports of sexual and physical victimization. Women identifying as marginally housed reported significantly less victimization, when compared with homeless women. For men, there was no association between housing status and sexual assault. The study concluded that individuals who are homeless or marginally housed commonly engage in sex work, which increases their risk for sexual and physical violence, and involvement in sex work was also said to be associated with numerous health problems.

Conversely, there seems to be consensus among researchers that when individuals who are experiencing homelessness are provided rapid and/or supportive housing, their engagement in risky sexual behaviors and sexual victimization decrease, and their risk for acquiring STIs declines (Caccamo et al., 2017; Heerde, 2017; Heerde et al., 2015).

Studies on Homeless Older Adults and Sexual Health

Data collected through the HOPE-HOME study indicated that older adults who were experiencing homelessness experienced violent victimization at a rate 10 times higher than the general population of older adults (Tong, Kaplan, Guzman, Ponath, & Kushel, 2019). Furthermore, the variance in sexual victimization was even greater among this population. While the prevalence of sexual victimization tends to decrease in the general population of adults as they age, the study concluded that older adults experiencing homelessness showed rates of sexual victimization similar to that of younger adults (Tong et al., 2019). These findings compliment those of Kushel et al. (2003), which suggested that homelessness eliminated age-related protections against physical and sexual assault.

The risk of individuals experiencing homelessness engaging in risky sexual behaviors and transactional sex/survival sex is a clear public health issue which requires further exploration.

Potential Impact of Research/ Justification and Use of Results

The body of literature around the sexual behaviors of older adults tells us that not only are older adults are still sexually active into their old age, but they are also engaging in a variety of risky sexual behaviors. Research on factors that contribute to sexual risk-taking of people experiencing homelessness states that individuals who are experiencing homelessness tend to engage in risky sexual behaviors at a higher rate when compared with the general population.

While the sexual behaviors of homeless adolescents and sexual behaviors of older adults have also been studied by researchers, there remains a gap in research seeking to understand the sexual behaviors, sexual decision-making, and sexual risk-taking of homeless older adults. The results of this study will provide essential insight into the sexual behaviors and sexual risk-taking among homeless older adults, ages 50 and older. Furthermore, gaining a better understanding of the complexity of sexual decision-making among this population informs the development of public health interventions, as well as contributing to the body of knowledge around best practices in the care and services provided to this population.

CHAPTER III. METHODOLOGY

Introduction

Homelessness is a complex public health issue. Over a half a million people are caught in the cycle of homelessness in the United States. Housing status is known to be a predictor of overall health, as living on the street or in an emergency shelter/congregate living facility can expose individuals to violence, malnutrition, communicable diseases, and other harmful elements. Additionally, individuals who experience homelessness are said to engage in risky sexual behaviors at an increased rate and experience a higher prevalence of sexually transmitted infection (STI) when compared with the housed population. While the sexual behaviors of adolescents experiencing homelessness is commonly studied, little is known about the risky sexual behaviors of the growing population of older adults, or how they make decisions to engage in sex. This study sought to fill this gap in the literature and guide potential interventions among this unique population, with three specific aims:

Aim 1: To use qualitative methods to describe the sexual behaviors and sexual decision-making process of homeless older adults.

Aim 2: To examine how homeless older adults evaluate the health outcomes associated with engaging in risky sexual behaviors through the use of qualitative methods.

Aim 3: To identify the socio-ecological predictors of risky sexual behaviors in which homeless older adults engage.

Research Questions

1. How does homelessness impact decisions to engage in risky sexual behaviors among older adults?
2. How do older homeless adults process decision-making, and how do they perceive risk regarding sexual behavior and transactional sex/survival sex?
3. What are the socio-ecological predictors of sexual risk-taking among homeless older adults?

Setting

The study took place at local community sites serving homeless individuals in Louisville, Kentucky. These sites included two local day shelters and one local clinic specifically focused on healthcare for the homeless. Local day shelters provide a place for clients to receive personal mail, hot showers, clothing, and hygiene products, in addition to connection to services like legal aid, employment and housing counselors. These sites were selected due to their accessibility and pre-established trusting relationships with the population of interest.

Population of Interest

The population of interest for this study was individuals at least 50 years of age considered homeless by the United States Department of Housing and Urban Development (HUD) definition (HUD, 2013), or who were receiving homeless services in the Louisville area at the time the study was being conducted. Based on the 2020 annual homeless census, nearly 19 percent (n=1,604) of homeless individuals are aged 55

and over in Louisville, but this may be underestimated as this is a hidden and hard-to-reach population.

Sample

The researcher conducted five key informant interviews with individuals who were providers of services to the homeless population. These individuals worked at various organizations serving the homeless population, including emergency shelters and primary care clinics. The researcher selected specific individuals from these sites to focus on their observations around health, access to health care, and activities of daily living.

Inclusion Criteria

To be eligible for this study, participants must:

1. Be a direct provider of services to the homeless population,
2. Speak and understand English, and
3. Be at least 18 years of age.

The researcher excluded: service providers with less than one year of experience and those who do not interact with the older adult population.

The researcher also conducted interviews with 20 older adults experiencing homelessness. Data collection was intentional to reach a point of theoretical saturation, which is defined as the point when no new information or themes are observed in the data (Saunders et al., 2018). However, efforts were also made to achieve a sample representative of the population in terms of gender identity; although it was anticipated that most participants would identify as cisgender, individuals identifying as transgender or gender nonconforming were not excluded. New interviews were no longer pursued

when those conducted did not lead to any new emergent themes *and* the gender identity of participants mirrored that of the population.

Inclusion Criteria

To be included in the study, participants must meet the following eligibility criteria:

1. Minimum of 50 years of age (no maximum age),
2. Currently receiving homeless services in Metro Louisville, and
3. Able to speak and understand English.

Exclusion Criteria

Because the aims of this study were to provide insight into sexual decision-making that increases risk of exposure to harm and infection, it was presumed that individuals actively refraining from sexual engagement or limiting their engagement to a monogamous relationship demonstrated fundamental differences in their decision-making around sexual behaviors, which warranted their exclusion from the current interview process.

The researcher excluded individuals based on the following criteria:

1. No engagement in sexual activity in the previous 12 months, or
2. Actively practicing monogamy.

Participant Recruitment

Due to the sensitive nature of the topic, a purposive sampling method was employed in this study. Purposive sampling utilizes a predetermined criteria for recruitment, targeting a very specific audience as the research sample (Salazar, Crosby, & DiClemente, 2015). This study necessitated the use of purposive sampling techniques due

to the hard-to-reach population of interest, and because the research question investigated the experiences and perceptions of a population with specific characteristics.

Service providers were invited to participate via phone and email. For interviews with the target population, the researcher utilized an indirect facilitation approach by relying on a partnership with local service providers to identify and refer individuals whom they believed met the eligibility criteria. Due to the pre-established trust developed between the service providers and target population, the researcher predicted a successful recruitment through this indirect facilitation approach. Because of logistical challenges with scheduling, communication, and transportation with the homeless population, the researcher did not preschedule interviews with members of the target population, but rather, spent days on-site at service facilities. The service providers were offered a flyer to guide discussions with potential homeless participants and referred eligible participants who were at the agency at the time the research was also on-site.

Human Subjects Protection

This study was reviewed and approved by the University of Louisville Institutional Review Board. Research personnel completed all necessary training regarding human subjects' protection and confidentiality. The researcher did not experience any breaches in protocol which would require immediately reporting to the University of Louisville Institutional Review Board.

Because the questions were sensitive in nature and posed to a population that has experienced trauma, the researcher predicted it would be possible that some participants may experience an emotional response while recounting difficult memories. The

researcher was prepared not only to stop the interview at any time, but also to link participants with appropriate services to assist if this situation arose.

Consent

Service providers who agreed to participate in key informant interviews were emailed a consent document at least 24 hours prior to the scheduled interview. The researcher reviewed the consent document at the start of the meeting and allowed time for review and questions. Service providers were asked to sign an informed consent document prior to participation.

The researcher utilized an unsigned consent document for participants in the population of interest in this study. A preamble consent document was appropriate because the study involved minimal to no risk to the participants, and questionnaires and interviews are procedures that do not generally involve written/signed documentation of consent when conducted outside of research contexts. In this case, participants did not provide identifying information for any reason, and because service providers arranged meetings, the researcher did not have access to contact information for the participants from the target population. The use of an unsigned consent document further supported participant confidentiality, and the researcher asked each participant to determine how they would like to be identified in the study results (i.e., establish a code name).

Before asking questions, the researcher reviewed the purpose of the study and outlined expectations of participation. The researcher then provided a copy of the preamble consent and read it aloud for participants to eliminate literacy barriers. Participants were given time to review the preamble and ask follow-up questions. The researcher explicitly described that answering questions conveyed an individual's consent

to participate in the study. Once all questions about the study were answered, the researcher began the interview. Participation in the questionnaires and the interviews was completely voluntary. Participants were not compelled to answer any questions that made them feel uncomfortable, and they were allowed to discontinue participation in the interview at any time.

Data Management

All interviews were audio recorded, and audio files for all interviews were saved as coded file names. The primary researcher maintained the coded links for key informant interviews, but for the purpose of this study, no directly identifying information was collected from those who were experiencing homelessness. Audio files were transcribed verbatim by a paid transcription service (Rev). Identifying information disclosed within the interviews was coded in the transcripts. All recordings and transcriptions were saved electronically on an encrypted University of Louisville server.

Participant Compensation

Homeless research participants were provided a $30 gift card (to Walgreens or Thornton's) for their time and contribution to the study. Compensation was provided to anyone who consented to participation, regardless of the amount of time they spent answering interview questions.

Data Collection

Design/Study Procedures

Consistent with conclusions drawn from a review of the literature, as outlined in Chapter 2, the researcher primarily utilized a qualitative research approach to gain a deeper understanding of the decision-making regarding sexual risk-taking behaviors in

the older adult population of homeless individuals in Louisville, Kentucky. The researcher anticipated achieving a deeper understanding by generating rich data and detailed personal narratives through open-ended questions with individuals experiencing homelessness and those who know this population and have observed the population's behaviors and needs. The qualitative approach included 1) key informant interviews with providers of homeless services, and 2) individual interviews with members of the target population. Prior to participating in qualitative interviews, members of the target population also answered demographic questions, administered by the researcher, and a Mini-Mental Status Examination (MMSE).

Qualitative Interviews

Key informant interviews were conducted with providers of homeless services in the Louisville area, specifically targeting individuals who work at local emergency shelters and primary care clinics in outreach and health care positions. Providers at these organizations were selected based on their knowledge and expertise in the provision of care for individuals experiencing homelessness, and because their daily interactions have allowed them to observe trends in behaviors and systemic influences on decision-making among the population. The researcher aimed to collect baseline information on the scope of the problem regarding the risky sexual behaviors in which homeless individuals engage.

Interviews were conducted in a setting convenient to the participant (i.e., their office or a private room provided by their agency) using a semi-structured format, with an interview guide consisting of open ended and broad interview questions. Probes and follow-up questions were used as needed, in an effort to clarify participant responses and

gain a detailed explanation regarding sexual behaviors and sexual decision-making. The interview was intended to last approximately 60 minutes and was audio recorded, with the permission from participants, for data analysis purposes. Data collected during the key informant interviews was reviewed prior to beginning interviews with the target population, as they were expected to provide context or information not found in the literature that would inform data collection with older adults experiencing homelessness.

The researcher also administered questionnaires and conducted interviews with older adults currently receiving homeless services in Louisville. These interviews were intended to understand the lived experiences of the target population, and to collect information on the sexual behaviors in which homeless older adults engage; the extent to which exchange for money, food, shelter, or other goods and services may influence decisions regarding sexual behavior; and the process of decision-making regarding the use of safer sex practices, which includes the perceived susceptibility and severity of various health risks, and perceived benefits and barriers to engaging in safer sex practices. Interviews took place in private rooms provided by service providers, so that participants had access to and were familiar with the settings, and conversations can be held confidentially.

After reviewing the unsigned consent document with a potential participant experiencing homelessness, and explicitly communicating that answering initial questionnaire items conveyed consent to participate, the researcher conducted a MMSE to assess the participant's cognitive performance. The MMSE is an eleven-question validated tool, frequently used to indicate mental illness and cognitive impairment among the homeless population and takes approximately 5-10 minutes to administer and score.

This study did not use the results of the MMSE as inclusion or exclusion criteria, but rather, because cognitive impairment is common among the population, as a way to link conversational skills and decision-making to an individual's capacity to assess of risk and to further understand their personal context.

After completing the MMSE, the researcher asked participants a series of questions to capture participant demographics. Questions were read out loud by the researcher, and collected information such as age, race and ethnicity, education level, gender, marital status, history of homelessness, and health status.

Next, interviews were conducted using a semi-structured format, with an interview guide consisting of open ended and broad interview questions. Probes and follow-up questions were used as needed, in an effort to clarify participant responses and gain a detailed explanation regarding sexual behaviors and sexual decision-making. The interview was intended to last approximately 60 minutes and was audio recorded for data analysis purposes.

The researcher took field notes corresponding with each interview with both key informants and participants experiencing homelessness. These field notes helped to describe the physical setting of the interview, the participants (in terms of appearance, body language, demeanor, distractions, emotions, etc.), the interview itself (in terms of nonverbal behaviors, or ways the interview questions or prompts may have been influenced by this setting), and a critical reflection of the interview (in terms of interviewer performance, possible biases, feelings, etc.). Field notes were incorporated into the data to improve the depth of the qualitative findings.

Instrument

Although individuals are responsible for engaging in a healthy lifestyle, the social environment may serve as a predictor of individual behavior. The researcher utilized the multi-level structure of the Socio-Ecological Model to examine the predictors of risky sexual behaviors in which homeless older adults engage, in order to capture both intrinsic and extrinsic factors that influence health-related sexual behaviors. Additionally, the Health Belief Model (HBM) is a commonly used theory to guide intervention design for health decision-making at the individual-level and considers factors specific to the person and the targeted behavior (in this case, engagement in risky sex practices). The developed interview guides target constructs of both the HBM and the Socio-Ecological Model. Constructs of the Socio-Ecological Model established a guiding framework for understanding predictors of risky sexual behaviors among homeless older adults which occur at the interpersonal, institutional, community, and policy levels. The researcher applied each of the six constructs of the HBM in the development of the semi-structured interview guide specific to the target population to further examine the process of decision-making concerning risky sexual behaviors among homeless older adults. Questions during the interview focused on:

1. the sexual behaviors in which homeless older adults engage;
2. the process of decision-making that occurs prior to sexual encounters;
3. the extent to which exchange for money, food, shelter, or other goods and services may influence decisions regarding sexual behavior; and
4. the process of decision-making regarding use of safer sex practices, which includes the perceived susceptibility and severity of various health risks, and perceived benefits and barriers to engaging in safer sex practices.

Risk/Benefit Assessment

Risks

The risks for participating in the study were minimal. Participation in the study was voluntary, and respondents assessed their own comfort level and independently determined whether to participate. They were not compelled to answer questions and could discontinue an interview at any time. The sensitivity of the research topic had the potential to provoke emotional distress. If this situation occurred, the researcher connected the participant with community resources to help overcome distress.

Benefits

The possible benefits of this study included the characterization of sexual behavior and sexual decision-making practices of homeless older adults. The information learned in this study may be used to develop a risk-reduction intervention and inform service providers. Understanding the complexity of sexual decision-making among this population may direct public health efforts for homeless older adults or bring awareness to gaps in the system of services available to individuals experiencing homelessness, which can then be addressed. Therefore, the information collected in this study may not directly benefit those who participated in the study; however, the findings of this study are likely to be helpful to others.

Assessment

The researcher believes that the risks to participating in this study were minimal and the benefits outweighed the risks associated with participation.

Data Analysis

All interviews were audio recorded. Audio recordings were transcribed verbatim by a transcription service, and transcripts were reviewed by the researcher for accuracy. All interview transcripts were uploaded into Dedoose (8.1.8) software for the facilitation of data management and data analysis. The researcher followed the process outlined by (Hesse-Biber, 2010), which included searching for explicit, implicit, and unconscious meaning in the interview.

Open and Focused Coding

The researcher began by first reading each interview transcript in its entirety, as well as field notes, to understand the overall message which was conveyed throughout the interview. Next, the researcher conducted open coding by highlighting key phrases that appeared in the transcript and paraphrased into a condensed open code. The researcher relied on a second trained, independent coder to code a subset of the interviews to develop an initial codebook based on recurrent themes and categories. This subset of interviews consisted of one key informant interview and four target population interviews (20 percent of total interviews). This codebook was then applied to an additional one key informant interview and four target population interviews (another 20 percent) to ensure its efficacy. The researcher continued to refine codes as needed throughout the analysis process. All transcripts were then analyzed using this codebook. Initial codes were grouped through multiple rounds until overarching themes emerged. This was accomplished by grouping similar codes to avoid duplicate interpretations, and removal of codes that were only present once, or only identified by one coder. Through this

process the researcher identified key themes, patterns, ideas, and concepts existing within the data from the interviews.

Axial Coding

Axial coding was used to display the relationships and connections between each of the themes and categories. This was conducted to visually present the data. At the axial level, the researcher continued to compare data from the interviews to further develop descriptive categories within each theme, ultimately adding new categories as themes emerged. This process resulted in 71 first round codes, 22 second round codes, and nine themes.

Validity

To ensure validity, the researcher relied on a form of member checking. As noted, individual participants experiencing homelessness were not asked to provide contact information, which is a limitation in member checking. However, codes and themes were presented to three key informants and one individual who has had the lived experience of homelessness. Codes and themes were reviewed to ensure the researcher interpreted the data with accuracy and meaning. Upon reflection of the aggregate data and review of codes and themes, it was determined that the researcher had accurately displayed the experiences of homelessness.

CHAPTER IV. RESULTS

Participants

Key Informant Sample Description

The researcher conducted semi-structured interviews with a total of five key informants. Key informants were service providers from four local organizations serving the homeless population in Louisville, Kentucky. The researcher used purposive sampling, inviting key informants based on their roles and relationships with the target population. Three participants serve as healthcare providers and two work within shelter programming.

Target Population Sample Description

In addition to key informants, the researcher conducted semi-structured interviews with 20 members of the target population. A total of 46 members of the target population were referred by providers as candidates for the study. However, only 27 met inclusion criteria. Twenty eligible individuals agreed to participate in the study. Table 2 displays the individuals approached for participation.

Table 2. Target Population Approached for Participation

	Female (n)	Male (n)	Total
Participated	8	12	20
Excluded	10	9	19
Declined	0	7	7
Total Approached	18	28	46

Participants ranged in age from 50 to 65 years. The researcher aimed to enroll participants reflective of the actual population, in terms of gender. A total of 12 males and eight females participated in interviews (60 percent male, 40 percent female). In terms of race, 11 participants (55 percent) self-identified as African American/Black and nine participants (45 percent) identified as White.

Most participants (70 percent) shared a history of mental illness (anxiety, bipolar disorder, depression, schizophrenia, etc.). In addition, 80 percent of participants expressed a history of substance abuse. Participants ranged in length of homelessness from less than one year (5 percent) to more than 10 years of homelessness (30 percent). Four participants reported a history of 30 years experiencing homelessness. See Table 3 for the details of participants' demographic information.

Table 3. Target Population Participant Demographics (n = 20)

Variable	n	%
Age		
50-59	15	75
60-69	5	25
Race		
African American/Black	11	55
White	9	45
Gender		
Female	8	40
Male	12	60
Marital Status		
Single	13	65
Married	1	5
Divorced/separated	6	30
Sexual Orientation		
Gay	3	15
Straight	15	75
Bisexual	1	5
Other	1	5
Educational Attainment		
Less than High School	5	25
High School/GED	6	30
Some College/Trade School	8	40
Associates Degree	1	5
Health History		
Chronic Health Conditions	7	35
Mental Illness	14	70
Substance Abuse	16	80
Diagnosis of STIs or HIV	7	35
Length of Homelessness		
Less than 1 year	1	5
1-2 years	3	15
3-4 years	4	20
5-9 years	6	30
10 or more years	6	30

Prior to the interview, each participant completed a MMSE. The majority of participants (85 percent) displayed normal cognition, while only 15 percent indicated signs of mild cognitive impairment based on the MMSE score.

Observational Data

Examining the topic of sexual behavior and sexual decision-making through a qualitative approach was foundational in gathering rich data. This approach allowed for description and elaboration of stories pertaining to sexual experiences and encounters. Throughout the course of interviews, participants shared personal, meaningful, and unique perspectives which would not have been able to be shared with the same level of depth through the use of quantitative data collection methods. Particularly, women appeared to be willing and open to sharing details of their history of homelessness and their sexual encounters while experiencing homelessness, providing in-depth responses of sexual experiences and trauma throughout homelessness. Men commonly provided short, direct responses to open-ended interview questions. When compared with men, women were more likely to have an emotional response to recalling the experience of homelessness.

Themes

After reading transcripts in their entirety, and comparing against field notes and observations, the researcher conducted analysis to extract the overall message conveyed throughout each interview. This process included searching for explicit, implicit, and unconscious meaning in the interview. The researcher then highlighted key phrases and concepts, paraphrasing them into initial open codes. This process resulted in 71 first round codes, 22 second round codes, and nine themes. Codes and themes are displayed in Tables 4 though 12.

Throughout the course of analysis, nine themes emerged in the data:

1) The reality of homelessness comes with inherent risks to safety;

2) Homelessness presents barriers to healthy sexual relationships;

3) The population experiences negative interpersonal relationships;

4) Participants have awareness of and access to safer sex practices;

5) Participants want to be safe and healthy;

6) People experiencing homelessness engage in sex for personal benefits;

7) Participants have experienced negative consequences of having sex;

8) The risks of sex do not deter participants from engaging in sex; and

9) Personal factors influence sexual decision-making.

Table 4.

Theme 1: The reality of homelessness comes with inherent risks to safety

Theme	Second Round Codes	First Round Codes
The reality of homelessness comes with inherent risks to safety	Homelessness increases risk to physical and emotional safety	Homelessness increases risk of sexual assault
		Homelessness increases risk of violence
		Homelessness increases risk of trauma
		Homelessness is scary
	The homeless population have conditions which increase the risk of vulnerability and victimization	Homeless who identify as transgender are preyed upon
		Disability increases risk of victimization
		Age increases risk of victimization

Table 5.
Theme 2: Homelessness presents barriers to healthy sexual relationships

Theme	Second Round Codes	First Round Codes
Homelessness presents barriers to healthy sexual relationships	Systemic policies and resources don't support healthy sexual practices	Shelters lack educational resources for healthy relationships
		Individuals experiencing homelessness are actively discouraged from pregnancy
		Shelter programs do not align with the needs of the population
		Community resources are not accessible when needed
		Housing policies have historically prevented couples from getting housed together
	Homelessness limits opportunities for privacy	Couples are not allowed to touch/be affectionate in shelters
		Limited places for heterosexual couples to stay together
		Couples do not have opportunities for privacy
	Homeless couples find places to have sex	Participants have sex in abandoned buildings or space not meant for human habitation
		Participants have sex outdoors
	Participants report barriers to using safer sex practices	The conditions of homelessness limit access to condoms
		Unplanned sex causes people to not be prepared with the proper protection
		Drugs/alcohol are a barrier to safer sex practices

Table 6.

Theme 3: The population experiences negative interpersonal relationships

Theme	Second Round Codes	First Round Codes
The population experiences negative interpersonal relationships	Participants experienced social disconnection	Participants share they are lonely and don't have friends/support system
		Participants experienced loss of loved one
		Participants do not have family to rely on
		Homeless are transient in nature
		Abandoned by spouse/loved one
	Personal substance abuse negatively impacts relationships	
	Trauma negatively influences relationships	
	Partner's substance abuse can result in harm	Partner's substance abuse causes them to be promiscuous
		Partner's substance abuse causes them to be sexually abusive
		Partner's substance abuse causes them to be physically abusive

Table 7.

Theme 4: Participants have awareness of and access to safer sex practices

Theme	Second Round Codes	First Round Codes
Participants have awareness of and access to safer sex practices	Participants reported they could use safer sex practices	Participants know how to use protection
		Condoms are accessible to the population
	Participants express reasons to use condoms	Condoms prevent pregnancy
		Condoms prevent STI/HIV

Table 8.

Theme 5: Participants want to be safe and healthy

Theme	Second Round Codes	First Round Codes
Participants want to be safe and healthy	Participants express hope for a better future	Participants report a positive outlook on life/the future
		Participants express faith
	Participants report delayed concern about the consequences of having sex	Participants have delayed emotional responses to a sexual encounter
		Participants have a delayed fear about STI/HIV
		Participants feel a delayed sense of guilt/shame about sexual behaviors
		History of diagnosis of HIV causes more caution around unprotected sex

Table 9.

Theme 6: People experiencing homelessness engage in sex for personal benefits

Theme	Second Round Codes	First Round Codes
People experiencing homelessness engage in sex for personal benefits	Participants exchange sex for what they need	Sex can be used in exchange for alcohol/drugs
		Sex can be used in exchange for a place to stay
		Sex can be used in exchange for safety/security
		Sex can be used as an alternative to panhandling
		Sex can be used to help meet general/immediate needs
		Sex is used as a means of survival
	Sex can be used for interpersonal connection	Sex can help reduce feelings of loneliness
		Sex is used when seeking connection/companionship
		Sex may help you feel like someone cares
		Being with someone brings comfort

Table 10.

Theme 7: Participants have experienced negative consequences of having sex

Theme	Second Round Codes	First Round Codes
Participants have experienced negative consequences of having sex	Participants report having experienced physical violence as a consequence of sex	A sexual experience can result in physical violence
		Unexpected spousal/partner interruption can result in violence
	Participants report experiencing negative life consequences for having sex	Participants have experienced an unexpected/unplanned pregnancy
		Participants have experienced unhealthy consequences of having sex
		With HIV, unprotected sex could be a death sentence

Table 11.

Theme 8: The risks of sex do not deter participants from engaging in sex

Theme	Second Round Codes	First Round Codes
The risks of sex do not deter participants from engaging in sex	Participants do not consider risks at the time of a sexual encounter	Participants hold various misperceptions about risk related to sexual behaviors
		Participants are not able to process potential consequences at the time of sexual encounters
	Participants express the threat of STI doesn't deter the decision to have sex	History of diagnosis of STI results in decreased perception of severity
		Participants feel STIs can easily be taken care of with the proper medicine
	Individuals experiencing homelessness accept sexual risk and threats to safety as the norm	Participants express acceptance of the situation
		Homelessness desensitizes to violence and sexual assault
	Partnership influences decisions regarding safer sex practices	Participants let partner decide whether to use a condom
		Participants perceive safety with a familiar partner

Table 12.

Theme 9: Personal factors influence sexual decision-making

Theme	Second Round Codes	First Round Codes
Personal factors influence sexual decision-making	Participants experience behavioral health conditions	Mental illness
		History of substance abuse/addiction
	Substance use is part of sexual encounters	

Theme 1: *The reality of homelessness comes with inherent risks to safety*

Across all key informant and target population interviews, participants described living on the street as a traumatizing experience. Various types of traumas were described throughout the interviews, including acute, chronic, and complex trauma in forms of both physical abuse and sexual abuse. There was a consensus that women and transgender individuals are at an increased risk of experiencing trauma. Furthermore, the risk of trauma greatly increases with untreated mental illness, disability, and age. Notably, the most commonly mentioned form of trauma was rape.

A service provider described experiences of rape in the homeless population:

> I really can just speak not in homelessness in general, but in Louisville, rape is very, very, very prolific. It is so ubiquitous in the homeless population. I mean you wouldn't even believe it.
>
> It is not unusual that if they were to break down every time it happens, I'd have a whole floor full of people breaking down right now. I hate to say that because that's horrific. I guess that's a risky behavior is men sexually assaulting women.

Additionally, participants from the target population shared experiences as victims of physical violence, and interestingly, as perpetrators as well. In general, participants shared an improved reliance on self-defense due to their experiences of homelessness.

Without showing emotion, one participant described various normative threats to safety throughout the seven years she had been homeless, “My life has been threatened repeatedly. I have had guns pulled on me, knives pulled on me.”

Unexpressive during the interview, another participant described his experience acting as a perpetrator of physical violence:

> I cut him. He had no idea who I was, never seen me before and he just walked up out the street, knocked my drink over. I let him go eat, let him drink. I said, ‘When he comes back, I'm going to get him.’ I got him. He was already stabbed, I guess a couple days before because he had stitches. I tried to cut his stitches, but I cut like right below one.

Theme 2: *Homelessness presents barriers to healthy sexual relationships*

Throughout interviews with both service providers and the target population, participants expressed barriers to healthy sexual practices in the form of environmental risk and systemic practices. Participants shared that shelter policies limited their opportunities for privacy. However, regardless of the policies, couples do find places to have sex, often in locations which place them at increased environmental risk, such as outdoors and in abandoned buildings. The most common location of sexual encounters among participants was outdoors. According to interviews with the target population, outdoor sexual encounters place individuals at further risk of theft and physical violence through decreased vigilance. Additionally, interviews with key informants revealed that outdoor sexual encounters place individuals at increased environmental risk, as well as risk of legal ramifications.

One service provider shared their concerns about the location of sexual encounters:

> So, I think part of it is the physical safety of where people are. So, you know, if they're experiencing homelessness, if both parties are experiencing homelessness, the chance of them having a safe physical space to have that interaction is very minimal. I think there are some individuals who may end up with some money and they'll end up with a hotel room for a very limited time. But the majority, if they're living outside, then it's in a tent or in an abandoned vehicle or in a place not meant for human habitation. So, I think there's also that risk.

Both participants from the target population and key informants expressed shelter policies prevent couples from having healthy relationships. For example, there are limited organizations that will allow heterosexual couples to stay together. Commonly noted throughout the interviews, couples are not allowed to touch or show affection while staying in a shelter. One participant, with eight years of homelessness, expressed genuine concern while describing the negative influence of shelter policies on the health of relationships:

> At [one shelter], it's a rule, even a married couple cannot have inappropriate contact or appropriate contact. You cannot kiss your spouse. You can't put your arm around your spouse. You can't hold hands with your spouse. How can a relationship survive that? Just the relationship itself.

Each key informant expressed a sense of frustration around the lack of resources available for women who are in unsafe/abusive relationships. According to key informants, women are unable to obtain the support necessary, which forces them to stay in an unsafe or unhealthy situation. As one service provider stated, “I mean people that come in, literally, ‘I'm scared’. They won't go to the emergency room, but blood coming

out of them, I mean half their face torn off, eyes black, like this, and can't access their services."

Participants from the target population disclosed multiple barriers to using safer sex practices. Their decisions to engage in safer sex practices are often influenced by drugs and alcohol, which negatively affect the decision-making process and can lead to barriers to healthy sexual relationships.

One participant, with 30 years of homelessness, shared a sense of spontaneity which occurred during intimacy due to the involvement of drugs and alcohol:

> I don't want to catch no disease, but sometimes at the spur of the moment, you don't think right. Especially, if you're doing any kind of drugs. That's what we say. Even under the bridge I was staying under, I would get along. But after people's been up for three or four days, it's the meth talking, when they start raising hell.

An additional barrier to engaging in safer sex practices was unplanned sex, which was said to cause participants to not be prepared with the proper protection. When asked why they did not use protection, one participant responded, "We didn't have one. It was spur of the moment."

Although participants from the target population did not explicitly describe themselves as impulsive, their narratives commonly indicated impulsive behavior.

Theme 3: *The population experiences negative interpersonal relationships*

Participants from the target population shared negative experiences with interpersonal relationships, both current and in their past. Participants referred to their lack of a support system, frequently speaking to loss and abandonment by their family or spouse. They

also described feelings of loneliness, which played a role in how they sought to connect with others currently.

However, the most common issue shared at the interpersonal level was a partners' drug/alcohol dependency.

Regarding a partner's substance abuse, one participant shared:

> It causes him to do things that's indecent, to get drugs, towards me and all women. And towards me, it causes him to say things that are hurtful to me and other people. And people would give him drugs and alcohol. I mean, it just causes him to be a monster. It may cause you to get killed, his drug and alcohol problem. It has caused people to. It has happened. It causes him to lie. It causes him to take this woman and whatever they do to that woman, he would say, it's me. Every woman that this happens to. I mean, this is a drug and alcohol problem I've never seen.

One provider explained that many individuals use substances to dull the memory of trauma in their past. In turn, this substance abuse influences their future relationships. The provider stated:

> But I think that they hope this time or this time or this time it will be the right person or the right situation. I think women also will end up in that situation, women who are using substances, because that dulls that past trauma and so the trauma doesn't influence what they move on to and who they choose for partners, which they're probably not choosing. It's just opportunistic. It's not a choice.

Participants of the target population who reported experiences of trauma as an older adult experiencing homelessness, were more likely to report a history of homelessness

and trauma in their past. One participant, with experiences of homelessness throughout the life course, described tearfully, her sexual experiences with multiple adult male family members throughout childhood and adolescence:

> I started with my family, my grandfather and my grandmamas other children's father was paying me to have sex with them when I was a teenager. And because the way I was raised, because they had already been having sex with me when I was in elementary school before I even started school that I thought that that was a upgrade. I didn't stop having sex with my family until I was 21 because I didn't know any better. I was raised that way.

Theme 4: *Participants have awareness of and access to safer sex practices*

Throughout interviews, participants from the target population shared various reasons that couples may wish to use a condom. Participants expressed a general understanding that condoms prevent pregnancy and sexually transmitted infection (STI) and reported they know how to use protective measures.

When asked reasons couple might want to use a condom, one participant shared:

> To protect from venereal diseases. I don't think they trust one another to prevent pregnancy, to protect themselves from one another. You never can say what your partner is doing. And that's just all that is to it. I was telling somebody that you can't say what that person is doing. Whatever they tell you all, you still cannot say. So, I think that's the reason and a pregnancy. That would be my only two reasons for doing so.

When asked whether condoms are accessible to the population, one participant shared, “they're everywhere. They're up there, out front, they're like a candy dish now.”

Another participant responded with:

> They're very easy. They give them away here. Everywhere you go, they're giving them away. Everywhere you go, they're giving them away. … they're very accessible to get to. And you can go over there and ask for one, they'll give it to you.

The researcher noted participants with a diagnosis of HIV positive seemed to have an increased awareness related to the consequences of unprotected sex, when compared with participants who were HIV negative.

One participant stated:

> Sex ain't that serious, not to me, not when it's consequences like that behind it, when it could be a life or death situation. Same about the condoms. I'm going to wear them because it could be a life and death situation.

Theme 5: *Participants want to be safe and healthy*

Despite reporting they could use safer sex practices; the target population often noted they did not follow through. However, throughout interviews individuals expressed a sense of delayed concern with later reflection and worry, post-intimacy, about their sexual behavior, risk of STIs, and overall safety. This sense of guilt or shame was not realized until much later, typically after reaching some level of sobriety or because of the interview itself. As one participant expressed shame when discussing a long history of exchanging sex, they stated, “Looking back at it now, it disgusts me. I was disgusting, and it's not a healthy way to live. But drug addiction is real, and it's sad that I took myself down that road.” Another participant, with over 30 years of homelessness shared, “Today I look at it, I'm like, ‘Wow.’ I could have ruined a whole lot of people's lives. You know

what I mean? So, that's why I just don't need that in my life right now." Another participant with over 30 years of homelessness stated, "Now that I think about it, I hate it. I ever put myself through something like that, cause it's not healthy."

Regardless of the experiences of trauma participants shared throughout the interviews, target population participants expressed a general sense of hope for a healthier and safer future, and one in which they maintained permanent housing. Much of this hope was in relation to reaching sobriety as one participant stated, "If you are sober, better things are going to come to you than a tent or a sidewalk or living out of a bag." Another participant mentioned, "Now I'm more motivated because now I can come with my sense."

Theme 6: *People experiencing homelessness engage in sex for personal benefits*

Ultimately, participants described valid reasons for engaging in sex, regardless of risk, as they received some benefit for the interaction. Participants in both key informant and target population interviews described some sexual encounters to be transactional in nature among the homeless, exchanging sex for money, alcohol, drugs, a place to sleep at night, and safety/security. This type of transactional behavior was commonly shared throughout the target population interviews due to the population's extreme need.

One man, with over 10 years of homelessness, openly described experiences of monetary sexual exchange:

> Usually it's a bargain, a negotiation in the long run. Like I said if I got something, some money or whatever, some beer, or food. It's a give and take thing. If I fulfill their request or their need, then I can proceed.

Another man shared his experience of monetary sexual exchange:

> I had asked this one female what was she up to, she asked me for a cigarette and I gave her a cigarette. I asked her what was she up to, she said, 'I'm trying to make some money.' I told her, 'This is a coincidence, I'm trying to spend some money.'

Most commonly, participants described exchanging sex for substances, as one woman who recently began practicing abstinence shared, "I'm through with sex, but it has been something that I had to do, for drugs and things like that. I'm not proud of it… It's just, I did a lot of things for dope…"

Another woman, who reported to be HIV positive, with multiple diagnoses of STIs, shared her experiences of exchanging sex for substances:

> I needed money to get high. Yeah. The drugs was the cause of me doing those things. I have a disease and it told me I needed to feed it. So, I had to go to any mess and in exchange I'd get what I needed and if I had to lay down and have sex with five or 10 men, that's what I did.

In addition to the exchange of sex for general needs, participants reported sex can also be used to gain interpersonal connection. Participants expressed that sex could help to reduce feelings of loneliness and can be an instrumental part of seeking connection and companionship. In general, a sense of comfort and caring can be a result of a sexual encounter. As one provider described homeless individuals' reason for engaging in sex, "Just to have that companionship, they might go out and leave the shelter, and that puts them in a riskier situation." Similarly, another provider stated:

> "So, it's more of a need for connection. 'If I'm with this person and I'm complying with this request, this behavior, whether I choose to or not, at least I have

someone that cares about me for whatever reason.' I think their view gets very skewed about that."

When describing the most recent sexual encounter, one participant mentioned:

> Being skin to skin. And I sat on him, and we tried it. And something happened that we connected so much that we just couldn't stop. And it's the most connected and happy and surreal that I had felt in so many years.

Theme 7: *Participants have experienced negative consequences of having sex*

Participants reported having experienced negative consequences as a result of a sexual experience, demonstrating an explicit awareness of the risks that accompany engagement in sexual activity. Among these consequences was physical violence, as one woman shared, "The second year, I was like, 'It's not worth it,' because I don't want to get raped or get beat up. I could get killed. I mean, I experienced some of the things, getting raped and getting beat up."

Additionally, participants described negative experiences of unexpected/unplanned pregnancy as a result of a sexual encounter in their younger days. One participant began to emotionally withdraw as she stated, "That's sort of a question to ask, for me to answer, because I've had so many miscarriages. It kind of makes me go into a bad place."

Furthermore, participants shared experiences of contracting STIs as a result of sexual encounters. A participant shared, "As I just told you, I've caught them. I've experienced them. That's what I know. And they're not fun to have." When asked about experiences of unhealthy consequences, a participant stated, "Oh yeah, not protecting myself, came down with gonorrhea, syphilis and herpes all at the same time."

Theme 8: *The risks of sex do not deter participants from engaging in sex*

Despite reporting negative experiences of sexual activity, participants reported reasons for continuing to incur the risk. Some of these reasons were: low perceived susceptibility, low perceived severity, and the perceived norm of the risks, given their current status of homelessness. As noted, consequences were sometimes not considered until later, and risks may not have been processed at all at the time of a sexual encounter.

Throughout target population interviews, misperceptions of risk were shared, as well as varying levels of perceived susceptibility. A few participants shared they felt they were safe and did not need to use a condom during sexual encounters with familiar partners, even leaving it up to the partner to decide about use of safer sex strategies. When asked whether participants worry what would happen if they contracted a STI/HIV, one man stated, “I don't deal with a condom because pretty much other women that I slept with, I'm used to being with.”

Participants from the target population expressed varying levels of perceived severity related to the consequences of unprotected sex. Even knowing that STIs were a potential consequence, participants perceived the severity of the consequences to be minimal, and easily resolved. In response to being asked what would happen if they contracted a STI/HIV, one woman stated, “I would get it taken care of, go get the proper medicine.” Another participant also displayed a lack of perceived severity when stating, “I'd just go to clinic and get cleaned up.”

Participants from both the target population and key informants conveyed a sense of acceptance around the social norm associated with sexual risk and general threats to safety linked with homelessness. When discussing rape, one provider mentioned, “I mean it's so common that people are almost... Women after they get raped by the community

are almost expected to just get up and kind of shake it off because it happens so often." Participants seemed to be accustomed to the physical and emotional harm that is commonly associated with engaging in sex.

Theme 9: *Personal factors influence sexual decision-making*

Throughout interviews, participants spoke about how personal factors influence sexual decision-making. Among these factors, mental health and substance use were commonly mentioned.

Key informants articulated untreated mental illness was a factor that might influence decisions to engage in sex, *"*So we have untreated mental illness. Well, sexual activity with untreated mental illness, I think, is a risky behavior."

Another key informant also expressed the factor of mental illness:

> Then I think it's more of the individuals that experience homelessness. A lot of them have the mental illness piece, might be living in this fight or flight mode for so long that the boundaries are blurred as to what is appropriate and what is not.

Another key informant described those with a mental illness as being at increased risk for victimization:

> I think that if there's a significant mental health disorder, that they are much more easily victimized and that they make choices based on their lack of perception or self-actualization rather than being able to cognitively work through the consequences of whatever that behavior might be.

According to the target population, another personal factor that influenced sexual decision-making was the use of drugs and alcohol. In their narratives, the use of substances was frequently involved in sexual encounters. One participant admitted, "We

wouldn't have never done it. If we hadn't been using alcohol and meth, we would've never had no sex. We were barely friends."

CHAPTER V. DISCUSSION

A major strength of this study was the qualitative nature because this approach allowed for a deep exploration of sensitive experiences of an extremely vulnerable population. Through in-depth interviews with both providers and members of the target population, the researcher was able to gain insight on sensitive topics through multiple lenses and gain perspective from individuals who have a previously established trust with the population. Regardless of the sensitivity of the research topic, participants seemed to be engaged and open to discussing their experiences. Additionally, participants may have felt a sense of confidentiality due to the research design. The researcher did not attempt to collect identifying information that could be directly tied to the participants. Female participants were particularly detailed in their responses to the interview questions. As a population who has historically not had a voice, participants expressed a sense of appreciation for an opportunity to share their story and have someone listen to their experiences.

Addressing Research Questions

The findings from this study provide insight into the decisions to engage in risky sexual behavior and the socio-ecological predictors of sexual risk-taking among older adults receiving homeless services in Louisville, Kentucky. The three research questions that guided this qualitative study were as follows:

Research Question 1: How does homelessness impact decisions to engage in risky sexual behaviors among older adults?

Research Question 2: How do older homeless adults process decision-making, and how do they perceive risk regarding sexual behavior and transactional sex/survival sex?

Research Question 3: What are the socio-ecological predictors of sexual risk-taking among homeless older adults?

Results from the study are discussed through the context of the three guiding research questions, in connection with the existing literature related to the topic.

Research Question 1

The purpose of the first research question was to investigate the relationship between homelessness and risky sexual behaviors. The results of the study indicate that the reality of homelessness comes with inherent risks to safety. This was seen through numerous accounts of risk to physical and emotional safety, as well as vulnerability and victimization.

In general, homelessness limits opportunities for privacy and a location to engage in sex safe from environmental risk, theft, and other forms of physical and emotional harm. However, homeless individuals will still find places to engage in sex, regardless of the risk of harm. While the population is at an increased risk of sexual assault, violence, and trauma, older homeless adults engage in sex to seek feelings of safety and security.

Additionally, because homeless individuals lack the resources to address their immediate needs, and sex can be used as a tool to meet these needs, the state of homelessness can lead to risky sexual behaviors in the form of transactional/survival sex.

Research Question 2

The second research question examined how older homeless adults make decisions about having sex and choosing their sexual partners, and how they perceive risk regarding sexual behavior and transactional sex/survival sex. First, the researcher analyzed scores from the MMSE to rule out decision-making which may occur because of cognitive impairment. Only three of 20 participants demonstrated mild cognitive impairment in their MMSE responses, which general ruled out that incurring risk in sexual decision-making was purely a result of poor cognitive skills. However, participants' narratives included encounters characterized by poor judgement and impulsivity, within the context of jeopardizing both physical and emotional safety to the benefit of personal gains.

Results from the present study indicate that older adults identify (sexually transmitted infection) STI/HIV and physical harm as possible results of sexual encounters while homeless. The use of both discretion and safer sex practices were identified as beneficial to limiting overall risk. Yet, while participants expressed confidence in their ability to use safer sex practices, and access to protection is not an issue, the majority of participants did not perceive themselves to be at risk of these consequences at the time of the sexual encounter. Additionally, participants claimed that substance abuse is a specific barrier to implementing safer sex practices. Sobriety was correlated with delayed concern for consequences of risky sexual behavior and perception of risk.

As they recounted their narratives, participants confessed to engaging in sex for a variety of personal benefits. These benefits are not limited to tangible needs such as drugs, alcohol, money, etc., but also include the need for interpersonal connection. While

participants admitted risks associated with sexual behaviors, as well as benefits of engaging in sex, participants did not seem to consider the risks at the time of the sexual encounter.

Research Question 3

The final research question explored the socio-ecological predictors of sexual risk-taking among homeless older adults. The present study disclosed predictors of various forms of sexual risk that occur at each level of the socio-ecological model. At the policy level, federal housing subsidy policies have historically prevented unmarried couples from living together. Therefore, couples have lost their housing or have chosen to remain unhoused, rather than separating. At the community level, homeless individuals lack educational recourses, mental health and substance abuse resources, and resources to intervene when they are faced with an unhealthy relationship.

Meanwhile, shelter policies often prevent couples from staying together or having privacy and expressing affection. Because of these restrictive organizational policies, couples frequently choose to stay on the street. These factors tend to discourage the development of healthy relationships, and consequently put the population at increased risk of violence and victimization.

This population of older homeless tend to be socially isolated, with personal histories which include several negative interpersonal relationships, often resulting in feeling disconnected from others. However, engaging in sex reduces feelings of loneliness, and the population continues to seek connection and companionship from others in the form of sexual encounters. Therefore, social disconnection is a predictor of risky sexual behaviors.

Additionally, this population has experienced various forms of trauma and victimization. Age, disability, and untreated mental illness were named as factors that increase the risk of vulnerability and victimization among this population. Other interpersonal and individual predictors of trauma and victimization are often related to substance abuse of either the individual, or the partner. For example, substance abuse by a sexual partner was associated with promiscuity, sexual abuse, and physical abuse. A personal history of mental illness, substance abuse, homelessness, and trauma earlier in the life course can also be an individual-level predictor of sexual risk-taking as an older adult.

Comparison to Literature

The results of this study pinpoint key themes that help scholars and providers understand the sexual decision-making of homeless older adults, enhancing the ability to design programs and practices that can meet the health needs of the population. These themes are comparable with existing literature on adolescent and younger homeless adults' sexual risk-taking behaviors and decisions to engage in sex.

Regardless of age, individuals experiencing homelessness report inconsistent use of safer sex practices, survival/transactional sex, and substance abuse, placing them at increased risk of victimization. Similar to findings from studies on younger homeless, the researcher found that risky sexual behaviors were associated with unmet survival needs, length of homelessness, and the influence of social networks. Additionally, findings from this study are comparable to studies among younger homeless which showed that survival/transactional sex is frequently associated with use of substances, mental illness, and disability.

The researcher did not identify extensive literature to support the need for interpersonal connection serving as motivation for engaging in sex among younger populations of homeless. However, interpersonal connection served as motivation to engage in sex among older homeless adults. This is consistent with the general population of older adults as the desire for emotional and physical affection can provoke individuals to engage in various forms of risky sexual behaviors.

When compared with the existing literature on the general population of housed older adults, the researcher found that sexual activity does not change tremendously with age. The results of this study are also consistent with the existing literature regarding the various forms of sexual relationships among older adults in the general population. Like that of the general population of older adults, the population of homeless older adults are also engaging in new, multiple, and same-sex partner relationships.

Parallel to existing literature regarding the general population of older adults, this study displayed that individuals who are aged 50 and older present various misperceptions of the transmission and risk of STI/HIV. Comparable with the general population of older adults, homeless older adults display a lack of perceived susceptibility related to acquiring a STI/HIV, and condom use tends to be inconsistent among this population.

Study Limitations

First, the researcher encountered limitations due to the study's exclusion criterion "No engagement in sexual activity in the previous 12 months". The researcher approached ten women who were excluded from participating in an interview because they did not meet the criterion of having engaged in sex in the previous year. Of these ten

women, seven openly admitted to not presently being sexually active due to an experience of sexual trauma while experiencing homelessness. While these women were not interviewed on their decisions to engage in sex, the researcher interprets sexual inactivity (due to history of trauma) as a form of sexual decision-making, as they have actively decided to avoid potential sexual encounters. Nearly all women approached for participation (included and excluded) openly shared experiences of trauma and sexual victimization. The researcher feels that this limited the volume of rich data which could have contributed to the understanding of sexual experiences of homeless individuals. Furthermore, this is indication of the active sexual decision-making which occurs among survivors of trauma.

A second limitation relates to the location of data collection. Interviews were conducted at three community sites serving the homeless. In order to identify quiet and confidential spaces for conversation, the researcher did not visit homeless encampments to conduct interviews. However, both previous research, as well as the data collected in this study, indicate that individuals residing in homeless encampments may experience trauma at an increased rate, when compared with individuals receiving services from local day shelters. Therefore, the location of interviews was viewed by the researcher as a study limitation.

A third limitation is that this study was only carried out in one community with a limited population. Therefore, results may not be generalizable to the entire population of homeless older adults in the United States. Participants of this study may carry unique experiences due to the existing community resources (or lack thereof) in the Louisville

area. Furthermore, participants ranged in age from 50 to 65; individuals older than 65 did not present for study inclusion. Although, the reasoning for this is unknown.

A fourth limitation was in regard to researcher positionality. Since homeless individuals experience various negative interpersonal relationships, the researcher made an effort to build rapport with the homeless population prior to conducting the study. The researcher attempted to establish a framework for a trusting relationship through volunteering at local day shelters and various events serving this population for nearly two years prior to data collection. Additionally, as advised by the literature, the researcher employed reflexivity throughout the study (Berger, 2013; Bourke, 2014; Dwyer & Buckle, 2009). This was a conscious and critical reflection of beliefs, values, biases, and identity, with respect to the research methodology and interpretation of the findings. Despite that, a limitation of qualitative research is that participants may have felt a sense of discomfort or distrust with the researcher during a face-to-face conversation, due to her positionality as an outsider of the population. This may lead to reluctance to reveal experiences, and it can be assumed that both perpetrators and victims of trauma may withhold details of their story. The researcher also made an effort to mitigate the effects of this by conducting interviews with trusted providers of homeless services.

It is also important to note that one researcher conducted all data collection for this study, which allows for the possibility of researcher bias influencing the study outcomes. However, a four-person committee guided the protocol development and establishment of the interview guides. Additional provisions were made to reduce researcher bias throughout the analysis phase through employing a second trained independent coder to

analyze interview transcripts and develop the codebook. Furthermore, the researcher attempted to validate the findings by employing member checking through a review of key codes and themes with three current providers of homeless services, and one person who has the lived experiences of homelessness in the Louisville community.

Implications for Interventions

The results of this study provide numerous implications for interventions. This study indicates that opportunities for intervention exist surrounding the knowledge and beliefs of sexual decision-making practices. Older adults experiencing homelessness may benefit from resources related to sexual risk and sexual decision-making, with the intent of adopting safer sex practices and decreased opportunities for risk of vulnerability and victimization. It is believed that homeless older adults may engage in overall safer practices if they feel their behaviors may make them susceptible to an unsafe/unhealthy consequence, if the consequences are viewed as severe, and if they value the outcome associated with safer behaviors.

Opportunities for intervention exist at various stages throughout the lifespan. Since many of the participants had a history of homelessness, victimization, and trauma throughout childhood, adolescents, and early adulthood, there are numerous opportunities for mental health, substance abuse, and housing interventions.

The present study indicates a lack of organizational resources existing in the community. Resources are necessary for 1) mental health and counseling, 2) treatment and recovery from substance abuse, as well as 3) services for women and families experiencing various forms of trauma including intimate partner violence and sexual assault. Resources currently devoted to this work do not have the capacity to meet the

high demand in this community. Furthermore, results indicate that homeless service organizations in the community do not support healthy relationships through standard policies and practices. Interventions may also include reflection and revision on current policies and practices negatively influencing the health of relationships.

Research Implications

This study highlights several areas that warrant further research. Implications for future research include 1) victimization as a result of substance abuse among older homeless adults, 2) revictimization of homeless older adults, 3) avoidance of sexual encounters post-traumatic event, and 4) comparison of findings to similar populations in other communities.

First, findings from the present study indicate that substance abuse is a substantial contributing factor for engaging in risky sexual behavior, and places older homeless adults at increased risk of experiencing various forms of trauma and victimization. Although literature exists around the influence of substance abuse, use of services for addition recovery, and their impact on risky sexual behavior among homeless adults, a gap remains in research specific to older adults experiencing homelessness. Future research should further explore these issues among homeless older adults.

Second, findings from this study reflect a correlation between a history of trauma and sexual risk-taking later in life. Although research exists regarding help-seeking behaviors post-traumatic event and sexual decision-making, as well as the risk of revictimization, future research should seek to further understand the relationship between past trauma and sexual decision-making among this unique population of older homeless adults. This research should explore the use of counseling and mental health services post-traumatic

event to better understand potential prevention of future trauma and victimization as it relates to this specific population.

Third, the researcher observed numerous members of the population who were excluded from the study due to a reported avoidance of sexual encounters, because they had previously experienced a traumatic event. Future research should specifically seek to understand the influence of trauma on sexual behaviors, including practices of abstaining from sex.

Finally, the present study only included participants currently receiving homeless services from a handful of community organizations. Although the researcher did not exclude individuals residing in homeless encampments, active recruitment was not conducted at these sites. Based on feedback from the participants and existing literature, the researcher would like to expand to actively recruit participants who may be residing in homeless encampments as the experiences of trauma, victimization, and survival sex of these individuals may be more severe than those receiving routine services from local organizations. Furthermore, the researcher feels that it would be valuable to compare the experiences of older adults in Louisville with those in other communities to better understand the decision-making process and socio-ecological predictors, while controlling for factors specific to the Louisville community.

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Glossary

Chronically Homeless:

An individual is considered chronically homeless if they have met the definition of homeless continuously for at least 12 months, or if they have been homeless on or at least four separate occasions in the last three years (where each occasion was at least 15 days).

Continuums of Care (CoC):

Local planning bodies responsible for coordinating the full range of homelessness services in a geographic area, which may cover a city, county, metropolitan area, or an entire state.

Emergency Shelter:

A facility with the primary purpose of providing temporary shelter for people who are experiencing homelessness.

Individual:

A person who is not part of a family with children during an episode of homelessness. Individuals may be homeless as single adults, unaccompanied youth, or in multiple-adult or multiple-child households.

Low Barrier Shelter:

A shelter which removes many conditions to entry, including a government issued ID, sobriety, and absence of pets.

Marginally Housed:

Individuals with very temporary claims to a less conventional dwelling or housing. This often includes less visible homeless individuals living in cars or temporarily staying with friends or relatives.

Point-in-Time Count:

A point-in-time count is a count of individuals experiencing homelessness on one particular night. This typically includes individuals both sheltered and unsheltered.

Permanent Supportive Housing (PSH):

An intervention which combines voluntary support services to address the needs of people experiencing homelessness, and affordable housing assistance.

Rapid Rehousing:

A housing model designed to provide temporary housing assistance to people experiencing homelessness, moving them quickly out of homelessness and into permanent housing.

Safer Sex:

Implementation of any precautions to reduce the risk of sexually transmitted infections**.**

Sheltered Homeless:

Individuals residing in shelters for the homeless.

Transitional Housing Programs:

Temporary housing programs designed to help segments of the homeless population who are working, but earning too little to afford long-term housing. Transitional housing programs are intended to help transition individuals into permanent, affordable housing.

Unsheltered Homeless:

Individuals residing in places not meant for human habitation such as parks, cars, sidewalks, streets, tents, etc.

APPENDIX

Appendix A: Key Informant Interview Guide

Relationship to Homelessness

1. Please briefly describe your organization's role with the homeless in the Louisville area.

Probes: What are the responsibilities of the organization?

2. *Tell me about your personal involvement in this work.*

Probes: How long have you been involved in this type of work? How did you get involved in this work?

Introductory Questions

3. When I say, "risky sexual behavior", what does that mean to you?

Probes: What makes engaging in sex risky? What might someone be at risk of?

4. Broadly speaking, how would you describe the sexual behaviors of individuals who are experiencing homelessness?

5. Tell me about your observations of risky sexual behavior and homelessness intersect.
   Probe: Is this a bi-directional relationship?

Sexual Decision-Masking

6. Within the homeless population, what factors have you observed that influence sexual decision-making?

Probe for role of trauma: How might others in their social circle (friends, family, etc.) influence decisions to engage in risky sexual behavior?

Probe for role of policy: How do organizational policies, such as single-sex shelters, influence someone to participate in risky sexual behavior?

Transactional/Survival Sex

7. To what extent do you feel that an exchange for needs is taken into consideration when engaging in sex?

Probes: How do you feel a need for clothing, money, food, shelter influence decisions to engage in sex?

Sexual Victimization

8. How would you describe sexual victimization?

9. Tell me how sexual victimization might impact the older homeless population.

Probes: How might homelessness influence whether someone engages in sex when they do not want to?

10. How do policies for mandatory reporting around STIs and victimization impact your role? Your relationships with clients?

11. What facilitators to having healthy relationships have you observed in the population?

Probe: Tell me about the policies or practices are currently in place to prevent homeless individuals from engaging in risky sexual behavior.

Probe: How are Service providers addressing risky sexual behaviors? Education? Trafficking/victimization?

Role of Age

12. What differences have you seen for older adults (role of age, cognition, disability, gender, length of homelessness) in decision-making around sex?

Health Education and Behavior

13. How would you describe homeless individuals' knowledge/understanding of sexual risk related to sexually transmitted infection?

14. How would you describe homeless individuals' perception of risk related to sexually transmitted infections?

15. Tell me about some of the possible barriers to homeless individuals engaging in safer sex practices.

Wrap-up

Do you have any final thoughts you would like to share about what we have discussed today?

Thank you for sharing your thoughts and experiences.

Appendix B: Mini-Mental Status Examination

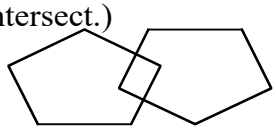
Mini-Mental State Examination (MMSE)

Patient's Name:_____

Date: _____

Instructions: Score one point for each correct response within each question or activity.

Maximum Score	Patient's Score	Questions
5		"What is the year? Season? Date? Day? Month?"
5		"Where are we now? State? County? Town/city? Hospital? Floor?"
3		The examiner names three unrelated objects clearly and slowly, then the instructor asks the patient to name all three of them. The patient's response is used for scoring. The examiner repeats them until patient learns all of them, if possible.
5		"I would like you to count backward from 100 by sevens." (93, 86, 79,72, 65, …) Alternative: "Spell WORLD backwards." (D-L-R-O-W)
3		"Earlier I told you the names of three things. Can you tell me what those were?"
2		Show the patient two simple objects, such as a wristwatch and a pencil, and ask the patient to name them.
1		"Repeat the phrase: 'No ifs, ands, or buts.'"
3		"Take the paper in your right hand, fold it in half, and put it on the floor."(The examiner gives the patient a piece of blank paper.)
1		"Please read this and do what it says." (Written instruction is "Close your eyes.")
1		"Make up and write a sentence about anything." (This sentence must contain a noun and a verb.)

1		"Please copy this picture." (The examiner gives the patient a blankpiece of paper and asks him/her to draw the symbol below. All 10angles must be present and two must intersect.) 
30		TOTAL

Interpretation of the MMSE:

Method	Score	Interpretation
Single Cutoff	<24	Abnormal
Range	<21	Increased odds of dementia
	>25	Decreased odds of dementia
Education	21	Abnormal for 8th grade education
	<23	Abnormal for high school education
	<24	Abnormal for college education
Severity	24-30	No cognitive impairment
	18-23	Mild cognitive impairment
	0-17	Severe cognitive impairment

Interpretation of MMSE Scores:

Score	Degree of Impairment	Formal Psychometric Assessment	Day-to-Day Functioning
25-30	Questionably significant	If clinical signs of cognitive impairmentare present, formal assessment of cognition may be valuable.	May have clinically significant but mild deficits. Likely to affect only most demanding activities of daily living.
20-25	Mild	Formal assessment may be helpful tobetter determine pattern and extent ofdeficits.	Significant effect. May require some supervision, support, and assistance.
10-20	Moderate	Formal assessment may be helpful ifthere are specific clinical indications.	Clear impairment. May require 24-hour supervision.
0-10	Severe	Patient not likely to be testable.	Marked impairment. Likely to require24-hour supervision and assistance with ADL.

Source:

- Folstein MF, Folstein SE, McHugh PR: "Mini-mental state: A practical method for grading the cognitive state of patients for the clinician." *J Psychiatr Res* 1975;12:189-198.

Appendix C: Demographic Questionnaire

How old are you?	☐ 50-59 ☐ 60-69 ☐ 70-79 ☐ 80<
What is your race?	☐ American Indian or Alaska Native ☐ Asian ☐ African American/Black ☐ Hispanic or Latino ☐ Native Hawaiian or Other Pacific Islander ☐ White ☐ Mixed ☐ Other
What is your ethnicity?	☐ Hispanic/Latino ☐ Not Hispanic/Latino
What gender do you identify as?	☐ Cis-man ☐ Cis-woman ☐ Trans-man ☐ Trans-woman ☐ Genderqueer/ gender non-conforming ☐ Prefer Not to Answer ☐ Don't Know
What is your marital status?	☐ Single ☐ Unmarried partner ☐ Married ☐ Divorce/separated ☐ Widowed ☐ Prefer Not to Answer
How would you describe your sexual orientation (sexual preference)?	☐ Gay ☐ Straight ☐ Bisexual ☐ Other ☐ Don't know ☐ Prefer Not to Answer
What is your highest education level?	☐ Less than High School ☐ High School/GED ☐ Some College/Trade School

	☐ Associates Degree ☐ Bachelor's Degree ☐ Master's Degree ☐ Advanced Degree (professional, doctorate) ☐ Prefer Not to Answer ☐ Don't Know
Do you have a history of any of the following conditions?	☐ Chronic health conditions (cardiovascular disease, diabetes, cancer, arthritis, etc.) ☐ Mental illness (anxiety, bipolar, depression, etc.) ☐ Substance abuse ☐ Diagnosis of STIs or HIV
How long have you been experiencing homelessness?	☐ 6 months or less ☐ 7-11 months ☐ 1-2 years ☐ 3-4 years ☐ 5-9 years ☐ 10 or more years ☐ Prefer Not to Answer ☐ Don't Know

Appendix D: Target Population Interview Guide

History of Homelessness:

1. Can you briefly describe your history of homelessness?

   Probes: What was the age you first experienced homelessness? How many times have you been homeless? How long have you been homeless this time? Where do you typically stay?

Introductory Questions:

2. Tell me what being "healthy" means to you.

3. When I say we're going to talk about sex, what does that mean to you?
   Probes: How do you define sex? How is having sex related to being healthy?

4. Have you ever experienced unexpected or unhealthy consequences to having sex?

5. How does the risk of pregnancy influence your decisions to engage in sex?

6. How have your thoughts around sex changed as you've gotten older?

For this next set of questions, I would like for you to reflect on your most recent sexual encounter:

7. Can you describe your relationship with [name]?
   Probes: Is he/she a steady partner (like boyfriend/girlfriend or husband/wife) or a casual partner who you have had sex with once in a while?

Now I would like to ask you some questions regarding your thoughts and feelings related to different time points, before this sexual encounter, during, and after.

Set-up/Pre-Intimacy (Before)

8. Tell me what it was like when you first met [name].
   Probes: When/where did you meet? What was going through your mind at the time? Did you know you would have sex with [name]? How were you feeling (mood)? How do you think [name] was feeling?

Intimacy (During)

9. Tell me what it was like to be intimate with [name].
   Probes: Where did it take place? How familiar were you with this location? Who make the first move? How were you feeling? What do you think [name] was thinking and feeling?

Post-Intimacy (After)

10. Tell me what it was like after you were with [name].

Probes: How typical is this with [name]? How does this compare with others? Did you make plans to meet again? How were you feeling? How do you think [name] was feeling?

Impact of Homelessness

11. Were you experiencing homelessness at the time of this sexual encounter?

12. How do you feel that homelessness impacted your decision to engage in sex?

Alcohol & Drug Use

13. Tell me how alcohol or drugs may have played a part in this sexual encounter.
Probes: Did either or you drink or use drugs? How much? What role did this have in your decision to be intimate?

14. How typical is this?
Probe: How is this similar or different from other times you have engaged in sex?

Perceived Benefits

15. When you hear the term "safer sex", what do you think of?

16. What are some of the reasons couples may want to use a latex or internal condoms, dental dams or plastic wrap?

Condom Use/Non-Use

17. Let's talk about what your thoughts were about whether or not to use a condom.
Probes: Did you bring a condom? Did you use a condom? Whose idea was it to use/not use a condom? Did you think about whether you would use a condom next time?

Perceived barriers

18. Tell me some barriers you might have to using a condom.

Self-Efficacy

19. Describe your confidence in your ability to use a condom.

Perceived Susceptibility

20. What do you know about the risk of getting HIV or other sexually transmitted infections?
Probe: Did you feel that you may be at risk?

Perceived Severity

21. How did you weigh the possibility of HIV or other sexually transmitted infections?
Probes: Do you worry what will happen if you get a STI or HIV?

If transactional sex, survival sex was not previously described:

22. Have you ever exchanged sex for a place to sleep, food, money, or something like that?
    a. Have you ever gotten any of these things from [person named above]?

If sexual victimization was not previously described:

23. Tell me about a time when you were intimate when you didn't want to be.
Probes: Were you ever forced or pressured into doing things you were not comfortable with? Were you ever intimate because you were afraid of your partner?

24. How do you feel that this situation has impacted your decisions to engage in sex since then?

Wrap-up

25. Is there any other information related to what we discussed today that you would like to share?

26. How do you feel after our discussion today?
Probes: Have you ever talked with anyone about the subjects we discussed today?

Probes: Would you like more information or resources related to anything we discussed today, or do you feel like you would want to talk to a counselor?

Thank you for sharing your thoughts and experiences.

CURRICULUM VITA

NAME: Sarah C. Van Heiden

ADDRESS: 1445 Hove Drive
Greenwood, Indiana 46143
(502) 912-0091
Sarah.vanheiden@louisville.edu

EDUCATION: B.A., Health Promotion
University of Northern Iowa
2010 - 2013

M.P.H., Public Health - Health Promotion & Behavioral Sciences
University of Louisville
2014 -2016

Ph.D., Public Health - Health Promotion & Behavioral Sciences
University of Louisville
2016 -2021

CERTIFICATION:

Certified Health Education Specialist (CHES)
National Commission for Health Education Credentialing
April 2016

PROFESSIONAL EXPERIENCE:

Program Administrator
October 2020 – Present
Indiana University, School of Medicine
Indiana Alzheimer's Disease Research Center & Center for Neuroimaging
Indianapolis, Indiana

Research Operations Manager
January 2020 – October 2020
Indiana University, School of Medicine
Indiana Alzheimer's Disease Research Center & Center for Neuroimaging
Indianapolis, Indiana

Community Integrated Health Specialist
July 2018 – January 2020
YMCA of Greater Louisville
Louisville, Kentucky

Clinical Research Coordinating Center Manager
April 2017 – July 2018
University of Louisville Division of Infectious Diseases
Louisville, Kentucky

Instructor
August 2017 – December 2017
University of Louisville School of Public Health and Information Sciences
Louisville, Kentucky
- Public Health in the U.S.

Global Health Research Coordinator
January 2015 – April 2017
University of Louisville Division of Infectious Diseases
Louisville, Kentucky

Teaching Assistant
August 2015 – May 2016
University of Louisville School of Nursing
Louisville, Kentucky
- Community Engagement/Independent Study
- Community Health Nursing
- Community Leadership Practicum

PROFESSIONAL SOCIETIES:

American Public Health Association (APHA)
Indiana Public Health Association (IPHA)
Kentucky Public Health Association (KPHA)
Gerontological Society of America (GSA)
American Society on Aging (ASA)

PUBLICATIONS:

Kotey, S., Carrico, R., Nyantakyi, F., **Van Heiden, S.**, Bosson, R., Mattingly, W., Zierold, K. (2018). Elevated Blood Lead Levels by Length of Time from Resettlement to Health Screening in Kentucky Refugee Children. *American Journal of Public Health. 108(2), 270-276.*

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