Housing Stability & Social Capital:

A Mixed-Method Analysis of the Relationship between Housing Stability, Psychological Integration, and Social Capital among Individuals with Histories of Homelessness

by

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Abstract

Social capital, which encompasses the resources and benefits derived from social networks and community participation, is crucial in improving well-being and societal inclusion. This dissertation examines the relationship between housing stability and social capital among individuals with histories of homelessness, exploring the influence of social support and psychological integration as mediating variables on this relationship. The research comprises two complementary studies: a quantitative observational longitudinal study that examines housing stability over time, and a qualitative study delving into personal narratives of housing and community experiences.

Study one investigates if housing stability predicts social capital, specifically trust and linking social capital, in a sample of 900 homeless and vulnerably housed individuals living in three Canadian cities. Using path analysis, findings reveal that while housing stability is not directly associated with social capital, higher levels of social support and psychological integration mediate this relationship. These results underscore the importance of social support networks and a sense of community belonging to build social capital for those transitioning from homelessness.

Study two explores the narratives of 30 individuals with low and high housing stability through qualitative analysis, focusing on their experiences with social relationships, the communities in which they reside, and interactions with service providers and government institutions. The findings highlight the critical role of family, friends, and community members in providing emotional and instrumental support essential for bonding and bridging social capital. However, challenges such as social isolation, interpersonal conflicts, and substance use are identified as significant barriers to creating social capital. Experiences with service providers

and government organizations are explored, with individual service providers often making substantial positive impacts, while systemic issues remain problematic.

Overall, this research contributes to the literature on housing instability by demonstrating the pivotal role of social support and psychological integration in fostering social capital, thereby improving the well-being and societal participation of individuals with histories of homelessness. The insights gained from this work highlight the necessity for holistic approaches in addressing homelessness, emphasizing the relationship between stable housing and social capital as being fundamental to achieving social inclusion in communities.

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Statement of Co-Authorship

This thesis is comprised of two studies. Data was collected as part of a broader study, entitled, "*The health and housing in transition study: a longitudinal study of the health of homeless and vulnerably housed adults in three Canadian cities*." Funded by the Canadian Institute of Health Research, the Health and Housing in Transition Study (HHiT) was approved by the Research Ethics Board at St. Michael's Hospital (Toronto), the University of Ottawa, and the University of British Columbia (Vancouver).

Dr. Stephen W. Hwang served as the Principal Investigator of the broader study and is a committee member for this thesis. He is listed as a co-author on both manuscripts. Dr. Tim Aubry, a co-principal investigator of HHiT oversaw its implementation in the city of Ottawa. He supervised this doctoral thesis research by offering guidance throughout the research process and assisting with the preparation and review of both manuscripts, on which he is listed as a co-author. Dr. Anita Palepu, a co-principal investigator of HHiT, oversaw its implementation in the city of Vancouver.

For study one in this thesis, Ayda Agha was responsible for conducting the literature review, formulating the research hypotheses, analyzing the quantitative data, and writing the manuscript. She also worked as a Research Assistant, conducting interviews at the Toronto site.

Study two in the thesis was a secondary data analysis project. Dr. John Sylvestre was a co-investigator of the qualitative study and is a committee member for this thesis. He is listed as a co-author on study two. Ayda conducted the literature review, formed the research questions, analyzed the qualitative data and wrote the manuscript. Johnathan Samosh validated the qualitative analysis for study two and reviewed the manuscript. He is listed as a co-author on study two.

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General Introduction

In Canada's National Housing Strategy (2017) the government of Canada has committed to creating affordable and stable housing options for individuals who are homeless or at risk of becoming homeless. It is estimated that an average of 235,000 Canadians are homeless a year, with approximately 13,000 – 33,000 who experience long-term homelessness (Gaetz et al., 2014). For some homelessness can be cyclical, moving between housing and homeless states (Johnstone et al., 2016). As a result, a considerable amount of literature has explored pathways into and out of homelessness (Chamberlain & Johnson, 2013; Piat et al., 2015; Pophaim & Peacock, 2021).

The research suggests that there are a variety of personal, social and economic factors that contribute to becoming homeless, and the time it takes to exit homelessness and become stably housed (Aubry et al. 2021; Roebuck et al., 2024). For these reasons, previous literature has explored negative and positive contributors to housing stability (Beck, 2019; Jakubec et al., 2012; Johnstone et al., 2016). However, it has been difficult to establish the extent to which circumstances for homeless and vulnerably housed individuals improve once they achieve stable housing. While studies have found improvements in health and well-being among those who become housed, additional research is needed to establish long-term effects (Baxter et al., 2019).

Alongside high rates of physical and mental health problems, individuals with histories of homelessness can also face challenges fostering meaningful supportive relationships and community connections important for health and longevity (Fazel et al., 2014; Padgett et al., 2008; Padget, 2020). As a result, some researchers have emphasized the importance of social inclusion and civic participation for individuals with histories of homelessness, mental illness, and substance use, with studies that have explored the extent to which they can reintegrate into

their communities after they become stably housed (Bassi et al., 2020; Patterson et al., 2014; Sylvestre et al., 2017).

Social capital is a multi-dimensional concept that emphasizes the importance of social relations, norms of reciprocity (i.e., mutual exchange), civic engagement, and social trust among individuals within societies (Bourdieu, 1986; Coleman, 1988; Putnam, 2000). Social capital is considered to be a “collective asset" that is accessed through social networks and institutions in the form of shared social norms, values, trust, and beliefs" that “facilitate cooperation and collective action for mutual benefit” (Bhandari & Yasunobu, 2009, p 480).

Research has shown that social capital is important for both individual and collective well-being and upward mobility (Putman, 2000; Rodgers et al., 2019). Examining social capital can shed light on the role of housing stability by exploring the social interactions, resources, and support available to those with a history of homelessness. The main research objective of this thesis is to explore the relationships between housing stability, social support, community integration, and social capital, among individuals with histories of homelessness.

The Structure and Scope of Thesis

This dissertation aims to advance the knowledge base on social capital in the lives of people with histories of homelessness. To achieve this goal, two studies were conducted following an observational mixed-method longitudinal design. Mixed methods research involves the use of both quantitative and qualitative data within a single or multi-phase research project (Greene, 2007). Mixed-method designs are well-suited for research in community psychology as they allow for a greater understanding of complex social issues in real-world settings (Aresi et al 2017; Greene, 2007). The thesis begins with an overview of background research, followed by

manuscripts of the two thesis studies, and ends with a general discussion. The main sections of the dissertation (italicized) are described below.

The *background section* of this thesis explores key concepts such as homelessness, housing stability, social support, community integration, and social capital. It begins by examining the factors contributing to housing instability and the importance of stable housing for health and well-being. The section then delves into social support, emphasizing its role in influencing housing stability and the challenges faced by individuals with histories of homelessness in maintaining supportive networks. It also discusses community integration, highlighting the significance of psychological integration for quality of life and housing stability.

Subsequently, the concept of social capital is introduced, describing different types (i.e., bonding, bridging, and linking) and their relationship to housing stability. This comprehensive overview sets the stage for understanding the factors that support formerly homeless individuals in building social capital. Data for the studies included in this dissertation comes from the Health and Housing in Transition (HHiT) study, a longitudinal cohort study that tracked the health and housing status of approximately 1,200 homeless and vulnerably housed single adults in Toronto, Ottawa, and Vancouver over four years (from 2009 to 2014) (Hwang et.al, 2011).

In s*tudy one,* quantitative data from the HHiT study is used to determine if greater housing stability is associated with greater social capital, and if this relationship is mediated by social support and psychological integration among individuals with histories of homelessness and vulnerable housing. The aim of *study two* is to provide insight and context to the quantitative findings of study one by exploring the relationship between housing stability and social capital through secondary qualitative analysis of participants' narratives describing their social networks, community interactions, and their experiences with service providers and government

organizations. Data for study two comes from the qualitative sub-study of the HHiT study that was designed to complement the larger quantitative study by conducting one-time interviews with a sub-sample of participants (Sylvestre et al., 2018).

The *general discussion* synthesizes the results of both studies, providing an analysis of what they collectively reveal about social capital among people who are homeless, while also addressing the limitations of the research and outlining implications for policy and interventions.

Background

Homelessness & Housing Stability

The Canadian Observatory of Homelessness (COH) defines homelessness as "the living situation of an individual or family who does not have stable, permanent, appropriate housing without immediate prospect, or the means or ability to acquire it" (Gaetz et al., 2014, p.38). This includes individuals or families who are; (1) "unsheltered" (living in public or private places without consent), (2) "emergency sheltered" (staying at over-night homeless shelters), (3) "provisionally accommodated" (temporary housing with no security of tenure; e.g., hotels, rooming houses, or institutional care), or (4) "at risk of homelessness" (precarious housing situations, such as living in housing fails to meet public health and safety standards) (Gaetz et al., 2012).

In efforts to address homelessness, the concept of housing stability has been investigated by community health researchers and policymakers. The purpose of much of this research is to identify strategies that can assist individuals who are homeless (particularly those who experience repeated or long-term homelessness) to find and maintain appropriate and permanent housing (Dickson-Gomez et al., 2016; Johnstone et al., 2016; Tsemberis et al., 2012). Research has identified individual and structural factors that contribute to housing stability and instability. Factors such as income and education, history of incarceration, physical and mental health status, and substance use can influence the course of homelessness and attainment of stable housing (Hanratty, 2017; To et al., 2016; Van Straaten et al., 2017; Volk et al., 2016). Additionally, access to affordable housing, vacancy rates, housing quality, and features of the surrounding neighbourhood, are associated with housing satisfaction and tenure (Adair et al., 2016; Aubry et al., 2016; Colburn & Aldern, 2022; Schapiro et al., 2021).

However, there are differences in descriptions and measures of housing stability (Boland et al., 2018; Frederick et al., 2014). For instance, a previous literature review found variations in the terminology used to refer to the concept, including “residential (in)stability” “housing (in)security” and “housing (in)sufficiency” (Cox et al., 2017). Most often, housing stability is defined based on (1) the type of housing and (2) the length of time spent in housing (e.g., days or percentage of time housed). Additionally, there appear to be inconsistencies in what is considered “housed” and the duration of residency considered “stable”.

Frederick et al. (2014) pointed to these limitations in previous measures of housing stability, where certain types of housing, such as supported housing, group homes, or living with others, are considered “stable” in some studies, and “unstable” in others. A systematic review of determinants of “tenancy sustainment” (i.e., housing stability) showed that “stable” housing has been defined by durations in permanent housing that range in studies from 30 days to 9 months (Boland et al., 2018). In some cases, residential mobility (i.e., a high frequency of residential moves in a certain amount of time) is used as an indicator of housing instability (Cotton & Schwartz-Barcott, 2016; Herbers et al., 2012).

Of the more recent studies examining predictors of housing stability, Van Straaten et al. (2017) examined housing stability among a sample of 324 individuals experiencing homelessness 2.5 years after being admitted to a homeless shelter. Findings indicated that a previous arrest was the strongest predictor of housing instability for study participants. Additionally, lower levels of education, the presence of anxiety and depression, as well as higher levels of somatization (i.e., physical manifestations of psychological distress) were negatively associated with housing stability.

In Canada, To and co-authors (2016a) examined housing instability in a sample of 561 individuals who were vulnerably housed with a history of homelessness. Higher levels of substance use predicted a return to homelessness during the 3-year follow-up period, while a greater number of chronic health conditions and living in higher-quality housing were associated with being housed. In a second study conducted by To and colleagues (2016b), individuals who were homeless and vulnerably housed reporting recent incarceration were less likely to be housed over a 2-year follow-up period.

Similarly, Volk et al. (2016) investigated predictors of housing stability and instability among individuals with histories of homelessness after 12 months in a Housing First program in Canada. Housing stability was operationalized as being housed more than 50% of the time in the previous nine months or 100% of the time in the previous three months of the last year. A longer duration of lifetime homelessness and more time spent in jail before entering the study were predictive of housing instability, while a diagnosis of PTSD and panic disorder were associated with housing stability.

Aubry and co-authors (2016) used an ecological model to examine individual, interpersonal, and community-level resources and risk factors associated with housing stability in a sample of 329 single adults who were homeless in Ottawa, Canada. Housing stability was defined as being housed for 90 days or more at the 2-year follow-up interview. Resources associated with housing stability were greater income and access to affordable housing (via subsidized housing) while having a substance use disorder was a risk factor associated with failure to achieve housing stability. Although there was no association found between greater housing stability and improved mental health, higher perceived housing quality predicted better mental health functioning at follow-up.

Aubry et al. (2021) used the same ecological approach to identify resources and risk factors associated with housing stability among individuals with histories of homelessness in Toronto, Vancouver and Ottawa. Time-patterned trajectory analyses were performed to identify patterns of housing stability for individuals who were homeless and those who were vulnerably housed over four years. Consistent with previous findings participants in trajectories groups with higher housing stability were more likely to live in subsidized housing, have a greater number of chronic health conditions, and report poor mental health functioning (Aubry et al., 2016; To et al., 2016a; Volk et al., 2016). A possible explanation for these findings is the prioritization of those with physical and mental health problems in housing programs. Additionally, individuals with physical and mental health disabilities may have greater access to social benefits compared to those without disabilities, although further research is needed (Aubry et al. 2021).

Previous analysis using qualitative data has investigated barriers and facilitators to housing stability for individuals who are homeless and vulnerably housed. Sylvestre and co-authors (2018) explored how individuals with histories of unstable housing perceive their housing or shelter situations and the impact of these settings on their health and well-being. Analysis was guided by three socioeconomic dimensions of housing identified: (a) materiality, (b) spatiality, and (c) meaning. The spatiality dimension takes into account the location of housing in relation to services, amenities, and the neighbourhood, whereas the material dimension deals with the physical quality of housing. The meaning dimension considers the importance of housing for emotional well-being, and how it can serve as an environment for establishing and sustaining social bonds that provide support.

Sylvestre and co-authors (2018) found that descriptions from participants related to the meaning dimension of housing often overlapped with spatiality. While some participants felt

their housing provided a sense of safety, belonging and identity, others expressed a lack of privacy and security in their living environments. Overall findings indicated that participants face challenges meeting personal needs as a result of poverty, social marginalization, poor quality and unaffordable housing, experiences of violence, as well as limited access to services.

More recently, a second study conducted by Czechowski and colleagues (2022) examined distal and proximal factors contributing to housing instability among study participants. Proximal factors include circumstances that directly result in housing loss (e.g., evictions, leaving an abusive relationship, raises in rent), while distal factors account for a wider range of conditions that indirectly put individuals at risk of becoming homeless. Distal factors include structural or contextual factors such as health issues, limited access to social support, and poverty. Participants described both proximal and distal factors that contributed to housing instability, including chronic health conditions, poor housing and neighbourhood quality, substance use, and poverty. Several participants also described interpersonal conflict and safety concerns as reasons for unstable living conditions. Interpersonal conflict often involved significant others, roommates, neighbours, or landlords, while safety concerns included direct threats to participants' welfare or living environments that were perceived as unsafe due to incidences of violence or theft (Czechowski et al., 2022).

Finally, Roebuck and co-authors (2023) examined predictors of housing instability and stability after 24 months of being enrolled in a Housing First program in Canada. Authors applied the Gelberg-Andersen Behavioral Model for Vulnerable Populations to identify and group predictor variables. The model included predisposing, need, and enabling characteristics of people experiencing housing stability and instability. Findings indicated that a longer duration of lifetime homelessness and higher levels of substance use predicted unstable housing. On the

other hand, older age, being in an ethnic-racial minority group (other than Indigenous), higher income, higher perceived housing quality, and having a family physician predicted stable housing.

Overall, the body of research on housing stability highlights complex factors influencing individuals with a history of homelessness to end their homelessness, where a combination of individual health issues, access to resources, and social and systemic factors influence housing outcomes. For these reasons, some researchers have suggested a more encompassing conceptualization of housing stability, one that takes into account the dynamic relationships between the individual, housing, and available support. In this context, housing stability has been defined as "the ongoing ability of individuals to access housing that promotes their optimal health and quality of life" (Sylvestre et al., 2009, p.199). From this perspective, transitioning from homelessness to stable housing involves more than just obtaining shelter; it also encompasses integrating into society and reaching broader goals of social inclusion and participation.

Social Support

Social support has been defined as "provisions" or necessities that individuals gain through social relationships or connections (Weiss, 1974 as cited by Cutrona & Russel, 1987). More simply, social support is actual or perceived assistance that an individual receives from others (Saegert & Carpiano, 2017, p.297). This can include formal (i.e., social services) and informal social support that provide emotional support through social companionship and connectedness, access to advice and information, and tangible instrumental support like material resources or financial assistance (Cutrona & Russel, 1987; Baiden et al., 2017; Tew et al., 2012).

Social support systems can impact the duration of homelessness and play an important role in accessing and maintaining stable housing (Eyrich et al., 2003). Unfortunately, individuals who experience homelessness are likely to have small social networks and unstable social connections, especially among those who struggle with mental health and substance use problems (Calsyn & Winter, 2002; Padgett et al., 2008; Duchesne & Rothwell, 2015). Past studies have revealed that experiencing social alienation, family breakdown, and relationship conflicts are risk factors for becoming homeless (Chamberlain & Johnson, 2013; Piat et al., 2015; Sylvestre et al., 2018).

On the other hand, being in partnered relationships, receiving higher levels of support from family and friends, and having larger social networks are associated with an increased likelihood of exiting homelessness and achieving housing stability (Aubry et al., 2016; Aubry et al., 2021; Cook-Craig & Koehly, 2011; Mayock et al., 2011; Van Straaten et al., 2017). Moreover, previous research found that frequency of contact with social support has been associated with an increase in the number of days in stable housing in a sample of over 4000 people experiencing homelessness in 18 American cities (Calsyn & Winter 2002). More recently, qualitative research conducted by Gabrielian et al. (2018) found that homeless adults with serious mental illness and substance use disorders relied on both informal (e.g., family and friends) and formal (e.g., service providers and case managers) support to acquire and sustain secure housing.

Access to formal support through social services can be important for housing stability. Limited access to housing programs and service providers is a major barrier to exiting homelessness (Dickson-Gomez et al., 2007). For example, access to formal supports such as subsidized housing or rental assistance has consistently been shown to lead to longer durations of

stable housing and increased housing satisfaction (Aubry et al., 2016; Aubry et al., 2021; Beck, 2019; Dickson-Gomez et al., 2016; Schapiro et al., 2021).

One of the most effective interventions that emphasize the importance of formal social support systems in addressing chronic homelessness has been Housing First programs based on the Pathways model (Tsemberis et al., 2012). Housing First uses a recovery-oriented approach to addressing long-term homelessness among individuals with severe and persistent mental illness often combined with substance use problems. Housing First programs provide scattered-site subsided housing and offer intensive support through Assertive Community Treatment (ACT) or Intensive Case Management (ICM) (Tsemberis et al., 2012; Tsemberis, 2015). Much of this is based on the knowledge that individuals who experience long-term homelessness can benefit from additional community support to maintain stable housing and improve health (O'Campo et al., 2009).

The effectiveness of Housing First programs has been well established by studies conducted in Canada, the United States and Europe (Aubry et al., 2020). One of the largest Housing First randomized controlled trials was the At Home/Chez Soi study, conducted with over two thousand participants from five major cities across Canada (Goering et al., 2011). The study found that Housing First participants experiencing mental illness spent more time in stable housing and showed significant improvements in quality of life and community functioning, compared to treatment-as-usual (TAU) participants (Goering et al. 2014).

Social support is not only important for housing stability but overall health and recovery for those with histories of homelessness and vulnerable housing (Padgett et al., 2008). Strong social ties can mitigate some of the negative effects of having experienced homelessness, buffer against stress, and improve health outcomes and quality of life (Hwang et al., 2009; Thoits,

2011). For instance, Johnstone and co-authors (2016) found that remaining homeless was associated with poorer personal well-being and life satisfaction when compared to individuals living in homeless accommodations (i.e., 3-month crisis homes or 12-month transitional housing for homeless individuals and families).

For participants living in homeless accommodations, perceived social support predicted well-being over and above housing stability. Positive experiences in homeless accommodations were characterized by feeling connected to other residents and supported within the services. Similarly, Durbin and co-authors (2019) found that increased resilience and lower perceived stress were associated with higher levels of social support and social functioning in a large sample of adults with mental illness experiencing homelessness who were part of the Canadian At Home/Chez Soi study.

Golembiewski et al. (2017) conducted a mixed-method analysis of social network decline among individuals in a Housing First program. While quantitative findings demonstrated that Housing First participants reported a reduction in the size of their social networks, qualitative findings revealed a strengthening in the quality of relationships with family and housing providers and withdrawal from troublesome and abusive relationships.

Some researchers have gone beyond immediate formal and informal social support and extended the research to social inclusion and participation once stable housing is achieved. For example, Beck (2019) found that participants receiving rent subsidies were not only more likely to live in their homes for longer periods when compared to unassisted renters but also had more opportunities to build support networks with their neighbours as a result of living in the same place for an extended period.

Finally, a mixed-method analysis of data from the At Home/Chez Soi study examined how changes in social support systems are related to housing stability (Kirst et al., 2020). Results indicated social network size and social interest increased over time for participants. Moreover, the size of social networks significantly increased among Housing First participants when compared to TAU participants, and mediated the effect of the Housing First intervention on the percentage of days in stable housing (Kirst et al., 2020). These findings suggest that individuals with histories of homelessness can socially integrate and improve social relationships when stably housed.

Community Integration

Defining Community Integration

Community integration is a multi-dimensional term that goes back several decades and centers around feelings of membership, belonging, and participation in community life (McMillan & Chavis, 1986). Community integration considers opportunities to connect with people in communities and develop social networks, engage in activities and contribute to society, and access community resources (Aubry et al., 2013; Ornelas et al., 2014).

Much of the literature on community integration is "locality-based", where "community" is defined in terms of participation and residency in neighbourhoods or municipalities (Crowe, 2010; Farrell et al., 2004). However, community integration can also consider interpersonal relationships beyond geographic location, such as participation in religious organizations, student clubs, workplace associations, or online discussion groups (Ecker, 2015).

Segal and Aviram (1978) conducted the first study on community integration among individuals with psychiatric disabilities who were living in sheltered care facilities in California. They developed a measure of *external social integration*, which is defined in terms of accessing

and using community services, and participating in activities with family, friends, and others living in the community (Flynn & Aubry, 1999). Much of the research on community integration among individuals with mental illness is based on this original conceptualization (Aubry et al., 2013).

Types of Community Integration

Some authors believe that community integration extends beyond the physical placement and should consider how individuals participate and socialize within communities (Wong & Solomon, 2002). Aubry and Myner (1996) developed a multi-faceted definition of community integration which includes physical and social integration based on Segal and Aviram's conceptualization of community integration and added a third component called psychological integration (Aubry et al., 2013; Ornelas et al., 2014).

Physical integration is the degree to which an individual initiates and participates in activities and uses services outside their home, while *social integration* involves the extent to which an individual interacts with their neighbours (Aubry & Myner, 1996; Wong & Solomon, 2002). *Psychological integration* is based on the concept of a *sense of community* by McMillan and Chavis (1986), which includes four dimensions; (1) membership, (2) influence, (3) integration and fulfillment of needs, and (4) shared emotional connection. Psychological integration reflects a sense of belonging and membership in a local community (Ecker, 2015). Findings from Aubry & Myner (1996) showed that people with psychiatric disabilities living in care homes and congregate housing reported lower levels of social integration and general life satisfaction than their neighbours living in regular housing.

A focus of this thesis is psychological integration, characterized by an individual's perceived belonging within their community, due to its stronger association with quality of life

and life satisfaction for individuals with histories of homelessness in the literature, as opposed to physical integration (involvement in social activities) or social integration (interaction with neighbours) (Aubry et al, 2013; Gurdak et al., 2019). Psychological integration will be examined as a mediator of the relationship between housing stability and social capital.

Psychological Integration

Psychological integration is defined as the extent to which an individual feels a sense of belonging, membership, and connection to their community (McMillan & Chavis, 1984; Wong & Solomon, 2002). The term was initially conceptualized by Sarason (1974) in his early work on the psychological sense of community. He defined it as a "readily available, mutually supportive network of relationships on which one could depend" (p.1).

Past research has explored the psychological integration among individuals with histories of homelessness and vulnerable housing, as well as those with mental illness and substance use problems. In an early study, Yanos et al (2007) hypothesized that neighbourhood factors would influence the relationship between housing stability and psychological integration among formerly homeless individuals with mental illness after being stably housed for one year. Findings indicated that perceived neighbourhood social cohesion (i.e., living in a "close-knit" neighbourhood) and viewing homes and neighbourhoods as a place for meaningful activity, were associated with greater psychological integration.

In Canada, Patterson and co-authors (2014) used data from the At Home/Chez Soi study to investigate community participation and belonging among formerly homeless adults with mental illness in Vancouver, British Columbia, after one year in the Housing First program. Psychological Integration was measured based on the scale developed by Aubry and Myner (1996). Their results showed that Housing First participants with lower need levels reported

increased levels of psychological integration, and were more likely to report knowing their neighbours, compared to the treatment-as-usual group.

Ecker and Aubry (2016) conducted a longitudinal study evaluating individual, housing, and neighbourhood characteristics associated with psychological integration among individuals who were homeless and vulnerably housed. Participants who were homeless were recruited from homeless shelters and meal programs, while those who were vulnerably housed were recruited from meal programs and rooming houses in Ottawa, Canada. Psychological integration was measured using a six-item version of the Sense of Community Scale used by Farrell, and colleagues (2004). The scale was developed based on the definition of sense of community by McMillan and Chavis (1986) previously described, which assesses an individual's perception of their sense of belonging in their neighbourhood. Significant predictors of higher levels of psychological integration among study participants were older age, greater social support, living in high-quality housing, and perceiving their neighbourhoods as having a positive impact on them (Ecker & Aubry, 2016).

Ecker and Aubry (2017) conducted a secondary study of housing and neighbourhood associations with psychological integration which included a qualitative component. Participants were classified into either "low" or "high" integration groups based on total scores from the social and psychological integration scales used in the previous study. Prominent themes that emerged among participants with high integration included lower levels of substance use, greater satisfaction with neighbourhood location and safety, and higher housing quality. Participants with low integration reported financial constraints, low-quality housing, as well as crime, violence and substance use in their neighbourhoods.

Cherner, Aubry and Ecker (2017) examined predictors of psychological integration among homeless adults with substance use problems in Ottawa, Canada. Health and social functioning measures included physical and mental health functioning, alcohol and substance use, and social skills. Environmental factors consisted of satisfaction with personal safety and social support. Findings indicated that greater psychological integration was associated with better mental health as well as greater satisfaction with personal safety.

In the United States, Gurdak and co-authors (2019) conducted a study exploring psychological integration among individuals transitioning from permanent supportive housing (PSH) to independent housing. PSH includes scattered-site subsidized housing with wrap-around support services for individuals experiencing barriers to housing stability. Participants were recruited from a program that assisted PSH residents with transitioning to mainstream affordable housing (via. housing choice vouchers) without the intensive service requirement. Participants (n=45) were interviewed before and one year after their move into independent housing. Psychological integration was measured using the Brief Sense of Community Index (BSCI) which used three factors to assess a sense of community: social connections, mutual concerns, and community values (Long & Perkins, 2003 as cited by Gurdak et al., 2019).

Findings indicated that subjective social quality of life and sense of community (psychological integration) increased after transitions to independent housing. Additionally, participants reported greater housing and neighbourhood satisfaction in independent housing than they did in PSH. In another recent study of formally homeless participants during their first year of residence in PSH in Los Angeles, California, greater psychological integration was also found to be associated with improvements in mental health symptoms (La Motte-Kerr et al., 2020).

Finally, Bassi, Sylvestre & Kerman (2020) conducted a recent qualitative study documenting the experiences of community integration among a small sample of women with histories of homelessness who had been housed for several months in a Housing First program in Ottawa, Canada. Participants were asked about the physical (e.g., quality and location), social (e.g., relationships and safety), and psychological (e.g., belonging and discrimination) qualities of the neighbourhood. Participants described low levels of psychological integration or sense of neighbourhood belonging, expressing concerns related to safety, limited access to services and experiences of stigma or judgement from others.

Overall, these studies have shown the importance of psychological integration for the health and well-being of housed individuals with histories of homelessness. However, the evidence is mixed on the extent to which greater housing stability is related to greater psychological integration. While some of these studies have found that individuals with histories of homelessness can achieve housing stability and become integrated into their communities (Cherner et al., 2017; Gurdak et al., 2019; Patterson et al., 2014), others have found previously individuals with a history of long-term homelessness face challenges related to their mental health, lack of social support and experiences of loneliness and social isolation (Baumgartner & Herman, 2012; Tsai et al., 2012; Yanos et al., 2012).

Additionally, several factors contribute to the relationship between psychological integration and housing stability for this population, including housing quality, accessibility and neighbourhood safety and satisfaction (Bassi, et al., 2020; Ecker & Aubry 2016; 2017). For example, higher levels of neighbourhood crime are associated with evictions and greater housing instability (Boggess & Hipp, 2010; Desmond & Gershenson 2017). Moreover, perceptions of the neighbourhood an individual resides in can influence their sense of belonging in a community

(Carbone & Clift, 2021). Greater perceived neighbourhood quality has been found to be related to greater psychological integration as well as better health and well-being (Pemberton & Humphris, 2016; Yanos, et al., 2011). Unfortunately, individuals with histories of homelessness may have limited choices in housing they can afford, live in poor-quality housing, or reside in distressed neighbourhoods with limited resources (Dickson-Gomez, et al., 2008; Patterson et al., 2014).

With this in mind, it is important to account for the role that psychological integration can play in other forms of social inclusion and citizenship. Social capital is a concept that is considered to be a social determinant of health (Kawachi et al., 2008). This is especially important when considering populations that have been marginalized as a result of poverty, discrimination, and physical or mental health issues. For these reasons, it is important to explore the relationships between housing stability, psychological integration and social capital among individuals with histories of homelessness and vulnerable housing.

Social Capital

Defining Social Capital

The concept of social capital initially developed in sociology but has been studied in a wide range of disciplines including, economics, social and political sciences, education and health (Elgar et al., 2011; Miller, 2011). Much of the social capital literature across disciplines has been largely based on the works of Pierre Bourdieu (1986), James Coleman (1988) and Robert Putnam (2000).

The term was first introduced by Pierre Bourdieu (1986) in his book *Distinction*. Bourdieu (1986) considered social capital as a means to economic capital and defined it as ‘‘the aggregate of the actual or potential resources which are linked to possession of a durable network

of more or less institutionalized relationships of mutual acquaintance or recognition'' (p. 248). Coleman (1988, 1990) built on the work of Bourdieu examining social capital with commonly addressed constructs of physical (i.e., material objects) and human capital (i.e., skills and intelligence), describing it as a source of collective resources that are available to individuals as a result of their relationships with members of a community (Waverijn et al., 2018, p.9). This form of capital depends on trustworthiness within social environments, social norms and values, and mutual exchange (Irwin et al., 2008b; Elgar et al., 2011). While Bourdieu's work took an "individual level" perspective, Coleman considered how the value of social capital can differ for individuals or small groups (e.g., families) based on social structures and environment (Miller, 2011; Rodger et al. 2019).

However, it was Robert Putnam that greatly advanced social capital literature and provided an empirical base for social capital theory in the field of public health (Szreter & Woolcock, 2004). Building on the works of Bordeau and Coleman, Putnam's (2000) conceptualization of social capital included features of social organizations and structures, such as connections among individuals in social networks, interpersonal trust, as well as norms of reciprocity that foster social engagement and facilitate civic participation and cooperation (Carpiano, 2007; Tsai, 2014). More specifically, Putnam (2000) defines social capital as the "connections among individuals through social networks and norms of trustworthiness that arise from them" (p.19). In his work, Putman (2000) argued for the importance of social capital for health, claiming that "the more integrated we are with our community, the less likely we are to experience colds, heart attacks, strokes, cancer, depression, and premature death'' (p.326).

There are several other authors of note that have defined the term and contributed to social capital research (Table 1). Across definitions, social capital considers the value of social networks and the benefits of membership and participation in social structures.

Table 1

Definitions of Social Capital by Author

Author	Definition
Bourdieu (1986)	"The aggregate of the actual or potential resources which are linked to possession of a durable network of more or less institutionalized relationships of mutual acquaintance or recognition" (p. 248)
Burt (1997)	"The brokerage opportunities in a network' (p. 355)
Coleman (1988)	The value of social norms of reciprocity, social networks and mutual trust
Coleman (1990)	"Social capital is defined by its function. It is not a single entity, but a variety of different entities having two characteristics in common: They all consist of some aspect of social structure, and they facilitate certain actions of individuals who are within the structure" (p. 302)
Fukuyama (2000)	"Social capital is an instantiated informal norm of reciprocity that promotes cooperation between two or more individuals" (p.3)
Nahapiet & Ghoshal (1998)	"The sum of the actual and potential resources embedded within, available through, and derived from the network of relationships possessed by an individual or social unit" (p. 243)
Lin (2002)	"Resources embedded in a social structure that are accessed and/or mobilized in purposive actions" (p.29)
Portes (1998)	"The ability of actors to secure benefits by virtue of membership in social networks or other social structures" (p. 6)
Putman (2001)	"Connections among individuals through social networks and norms of trustworthiness that arise from them" (p.19)
Sampson (1999)	"The resource potential of personal and organizational networks…collective efficacy…, shared expectations…, and mutual engagement" (p.635)
Woolcock (1998)	"The information, trust, and norms of reciprocity inhering in one's social networks" (p.153)

Social Capital and Health

The relationships between social capital and physical and mental health have been extensively explored (Elgar et al., 2011; Kawachi et al., 2008; Moore & Kawachi, 2017). Decades of epidemiological research have established social capital as a social determinant of health that can influence individual and population health and well-being (Marmot, 2005; Raphael, 2009; Wilkinson & Marmot, 2003). In recent literature reviews conducted by Ehsan and colleagues (2019) as well as Rodgers and co-authors (2019) on social capital among the general population, the evidence suggests that having access to social capital is associated with better physical and mental health outcomes.

Community and public health researchers have paid particular attention to social capital among vulnerable or disadvantaged populations (Dominguez & Arford; 2010; Hunter, 2016; MacDonald & Stokes, 2006). Much of this research is related to the relationship between limited social capital, poverty or income inequality, and poor health (Cleaver, 2005; James et al., 2001; Kawachi et al., 1997). These researchers have found that indicators of social capital, including social support, social networks, social integration, and generalized trust are important for both health and happiness (Hamamura et al., 2017; Jen et al., 2010; Turner & Brown, 2010; Rodríguez-Pose & Berlepsch, 2013). Moreover, social capital can provide access to resources and information, such as employment and education opportunities (Seibert & Kraimer, 2001; Simmons, 2011), improve health, well-being, and quality of life (Hassanzadeh et al., 2016; Helliwell et al., 2017), and can lessen some of the effects of poverty on health (James et al., 2001; Story & Glanville, 2019).

Some studies have examined social capital among individuals with physical and mental illnesses (Dimakos et al., 2016; Krishnan, 2015; Waverijn et al., 2014; 2017). These studies

suggest that this population faces challenges in accessing capital. Individuals with physical and mental health problems are likely to have smaller social networks, lower levels of community participation, and are likely to experience discrimination or social exclusion as a result of their health challenges (Krishnan, 2015; Waverijn et al., 2014; Webber, 2014). Webber et al. (2014) found that experiences of discrimination among people with severe mental illness were associated with lower social capital. In another study of adults receiving support from disability organizations across the United States and Canada, individuals with disabilities reported lower levels of social capital when compared with those of the general population (Dimakos et al., 2016).

Among individuals with chronic illness, higher levels of social capital have been ` associated with better self-rated health (Waverijn et al., 2014). Waverijn and colleagues (2017) examined the benefits of social capital for the health of people with chronic illnesses. They wanted to determine whether participants who live in neighbourhoods with more social capital have more access to practical and emotional support from neighbours. Social capital was measured using five questions about social contacts among neighbours, including how well people in the neighbourhood knew each other, and whether there was a friendly and sociable atmosphere in the neighbourhood. Using data from a nationwide panel study in the Netherlands, they collected data on relationships with neighbours among 2272 people with chronic illness in 2015.

Findings indicated that people with chronic illness were not more likely to receive practical and emotional support from neighbours if they had more individual connections to people in their neighbourhood. However, people with chronic illness with moderate physical disabilities or comorbidities, as well as those who lived together with their partner and children,

were more likely to receive support from neighbours. It is possible that more visible and complex disabilities, as well as those with children, are more likely to be offered and/or require support from others (Waverijn et al., 2017).

Overall, previous research has demonstrated that social capital is important for physical and mental health (Kawachi & Berkman, 2000). However, individuals with physical and mental health problems can face challenges in accessing and cultivating social capital (Dimakos et al., 2016; Krishnan, 2015; Webber, 2014). Moreover, it is important to note that there are several types or forms of social capital that can influence, health, well-being, and life satisfaction in different ways (Elgar, et a., 2011). These different types of social capital are important to consider, especially when examining social capital among those from lower socioeconomic or marginalized communities, including individuals with histories of homelessness.

Types of Social Capital

While several types or forms of social capital are discussed in the literature, (e.g., structural, cognitive, civil, and neighbourhood social capital) (Moore & Kawachi, 2017), the three types of social capital of interest for this thesis are known as (1) *bonding*, (2) *bridging*, and (3) *linking* social capital. Bonding, bridging, and linking are commonly known types of social capital based on the work of Putnam (2000) and Szreter, & Woolcock (2004).

Bonding Social Capital. In Bowling Alone, Putnam (2000) described two types of social capital: bonding and bridging. Bonding social capital refers to trusting and cooperative relations among members of a dense network who are similar in backgrounds, social characteristics or positions (e.g., similar age group, ethnicity, religion, socioeconomic status) or who those who share similar interests or identities (Irwin et al., 2008a; Jen et al. 2010; Szreter & Woolcock, 2004). Like social support, these are strong forms of social connections, including

family members and close friendships, that provide both emotional and instrumental support. These are considered to be close high-density relationships among individuals who are interconnected and interact frequently (Claridge, 2018a). Moreover, bonding social capital can involve membership and a sense of belonging to a group (Elgar, et al., 2011).

However, beyond resources accessed through relationships with others (i.e., social support), bonding social capital is also "inward-looking" and reinforces social identities, mutual exchange, and trust within groups (Putnam, 2000; Elgar et al., 2011). In other words, bonding social capital is exclusive, where there is greater trust in those that are part of the same group, share the same social identity, those we feel a close connection with, or see ourselves as similar to (e.g., "in it together" or "people like us") (Claridge, 2018a; Putman, 2000).

Bridging Social Capital. Bridging social capital considers informal relations of respect and mutuality among people who are not alike in the sense of social identity, differing by age, ethnic group, or social class (Szreter & Woolcock, 2004). These can be relationships that exist among people of different religions, ethnic or cultural backgrounds or among groups that are dissimilar but may share connections (e.g., common friends), extended family members, casual acquaintances, and work colleagues (Elgar et al., 2011; Jen et al., 2010). Bridging capital is "outward-looking" and takes a "civil society perspective" and considers social trust towards those that we see as different than ourselves. Bridging social capital is important for creating peaceful and trusting societies, particularly in heterogeneous multi-ethnic countries (Jen et al., 2010, p.1023). These relationships are intended to "bridge" individuals that are "otherwise more or less equal in terms of their status and power" (Szreter & Woolcock, 2004, p. 6).

Putnam (2000) believed that bonding social capital can be useful in helping people "get by" through accessing basic needs, whereas bridging social capital is important in helping people

to “get ahead” and achieve higher goals. Bridging social capital is considered to be important for promoting economic growth by allowing individuals from different groups to access external assets and opportunities and share information and ideas (Putnam, 2000; Elgar et al., 2011; Stone, 2002).

It is important to note that bonding and bridging social capital are not mutually exclusive, particularly when it comes to shared social identities (Claridge, 2018b). For example, individuals from the same ethnic background may see themselves differently based on age, gender, or immigration status. Additionally, individuals may have multiple social identities and belong to various social groups making the distinction between bonding/bridging difficult (Edward, 2004 as cited by Claridge, 2018b). For these reasons, the two are not treated as entirely different concepts and have been grouped together (Elgar, et al., 2011). Overall, the bridging/bonding distinction is useful by capturing both the dynamics of openness within civil society and closure within small exclusive groups (Patulny & Svendsen, 2007).

Linking Social Capital. Szreter & Woolcock (2004) argued that bonding and bridging types of social capital fail to consider status and power dynamics among groups. They suggested a third dimension called *linking social capital* as an extension/subset of bridging capital. Linking social capital is defined as ‘‘norms of respect and networks of trusting relationships between people who are interacting across explicit, formal or institutionalized power or authority gradients in society’’ (p. 655). Simply put, linking social capital considers links formed by communities with economic, political, and social institutions, and the extent of trust in authority and government promotes the health and well-being of all citizens (Elgar et al., 2011). More specifically, linking social capital considers trust and confidence in formal social institutions, such as the government, judicial system, and police. This is especially important when

considering disadvantaged populations, where respect and trust towards formal institutions (e.g., government, police, health care providers) can have a greater implication for the health and welfare of individuals and communities (Szreter, & Woolcock, 2004).

An Ecological Model of Social Capital

Social psychologists have used ecological models for social capital research because they allow for multiple levels of analysis. For instance, Elgar and co-authors (2011) point out that the theoretical descriptions of bonding, bridging and linking social capital present empirical challenges for researchers as they are "broad, overlapping and possibly interacting constructs that span individual and contextual characteristics" (p. 1046).

To address this, Elgar and co-authors (2011) used multi-level modelling to develop a four-factor measure of social capital using the World Values Survey (WVS). The WVS is a comparative social survey that examines how social, political, economic, religious and cultural values can influence the development of societies and countries (World Values Survey Association, 2020). It is one of the most widely used cross-national surveys in social science and has been conducted in over 120 countries over the past 40 years. The survey includes measures of cultural norms and ethical values, attitudes and stereotypes, political interest and participation, as well as societal well-being (World Values Survey Association, 2020). The WVS has been used to study social capital, trust, and organizational membership worldwide (Elgar et al., 2011; Jen et al., 2010; Helliwell, 2017).

Elgar et al. (2011) selected 21 items from the survey that measured bonding and bridging according to Putnam's 2000 definition and linking social capital according to Szreter and Woolcock's (2004) definition. To measure bonding social capital, seven items were selected related to social associations and trust within groups. Measures of bridging social capital

consisted of ten items about general social trust, reciprocity and civic responsibility. Linking social capital was measured using four items regarding confidence in authority and engagement in public and political institutions (Elgar et al., 2011, see Appendix A)

Exploratory factor analysis (EFA) resulted in 17 items across four factors of social capital (Elgar et al., 2011, see Appendix B). These four factors of social capital were labelled (1) trust, (2) group, (3) civic, and (4) linking. *Trust social capital* reflects aspects of trust regardless of whether the target of trust is within one's group or outside one's group. *Group social capital* considers membership in groups or organizations. *Civic social capital* examines attitudes toward civic duty and responsibility. *Linking social capit*al considers confidence in government, police and judicial systems and was both conceptually and empirically distinct.

In this model, trust, group and civic social capital include aspects of bonding and bridging social capital (i.e., interpersonal trust within and between groups, a sense of civic responsibility, reciprocity, and group affiliations), whereas linking social capital includes confidence in authority. Elgar et al. (2011) model provides further evidence that the bonding and bridging dimensions of social capital are not mutually exclusive and are highly correlated.

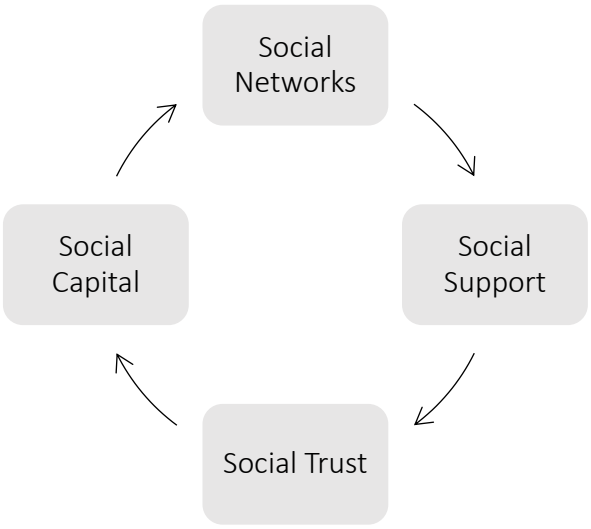
It is also important to examine the relationships between social support, psychological integration, and the different types of social capital to help understand how social ties benefit individuals and groups. Similar to social support, social capital accounts for material and interpersonal support provided to individuals through their social networks. In this way, social support and social capital are intrinsically linked and have often been used interchangeably (Liamputtong et al., 2021; Saegert & Carpiano, 2017). However, there are distinctions to be made. Social support considers resources available to a person on an individual level, whereas social capital takes a societal perspective on social networks by including features such as

citizenship, norms of reciprocity (i.e., mutual exchange), social cooperation, and wider aspects of social participation (Saegert & Carpiano, 2017).

Moreover, a key element of social capital that differentiates social capital and social support is social or generalized trust. *Social trust* is the extent to which individuals within a society are inclined to make positive evaluations of the trustworthiness of others including those they know personally, those in their communities, and their fellow citizens as a whole (Sturgis, et al., 2015, p. 76). The relationship between social support and social capital can be viewed as a feedback loop (Figure 1), where greater social support (via social networks) is considered as a means to or a source of greater social capital (via social trust), and vice versa (Liamputtong et al., 2021).

Figure 1

Relationship between Social Support and Social Capital

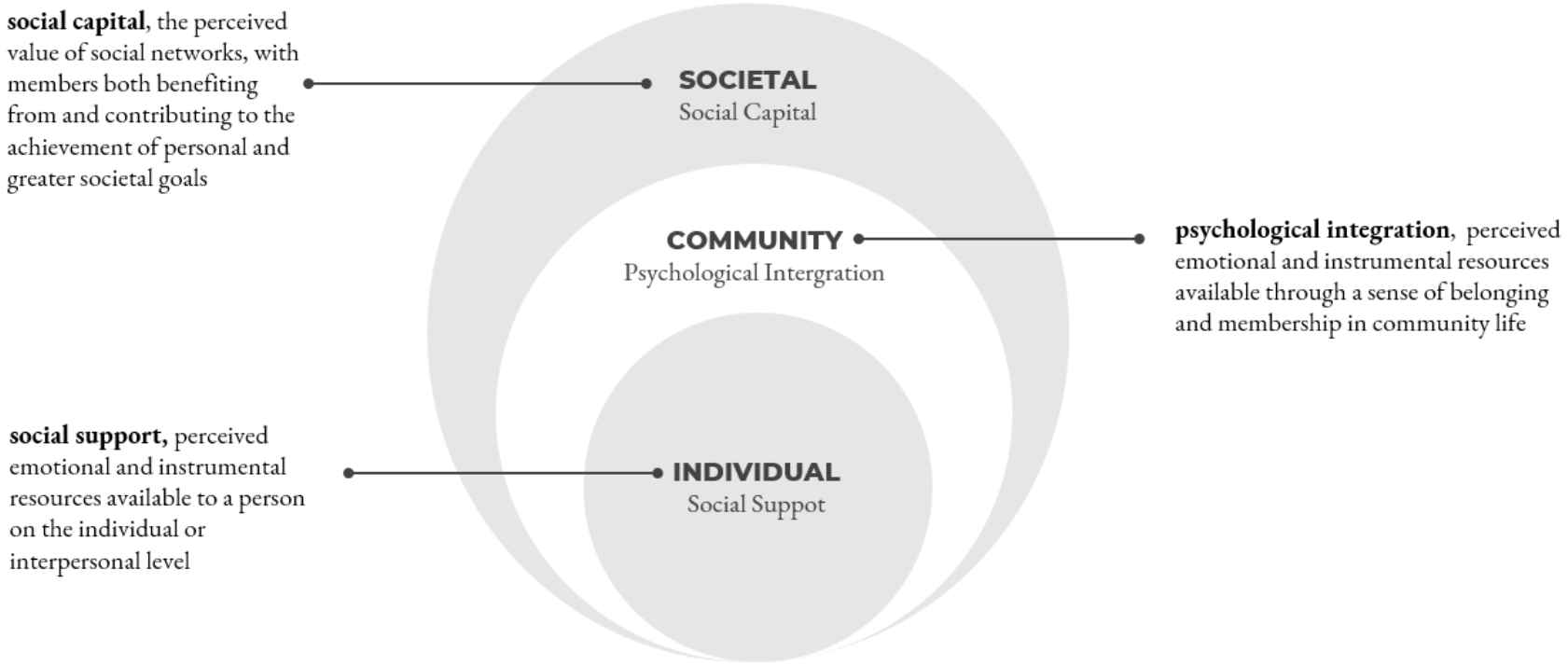


Additionally, a sense of community, and social exclusion/inclusion are integrally linked to the concept of social capital (Saegert & Carpiano, 2017). Psychological integration encompasses elements of social capital by considering access to resources as a result of social participation and the benefits that derive from community membership. Connection to others in communities can serve as a means for accessing bonding, bridging, and linking social capital. A strong sense of belonging within one's community can facilitate the formation and strengthening of these types of social capital by creating opportunities for mutual exchange and support among neighbours and community members, building understanding and trust across diverse groups, and enhancing relationships between individuals and social institutions in their community. Thus, psychological integration can be a crucial component in building and leveraging social capital to support individual well-being and community cohesion.

Figure 2 presents an ecological perspective (Bronfenbrenner, 1979) on how perceived social support, psychological integration, and social capital can operate at different levels (individual, community, and societal). From a social-ecological perspective, social support considers an individual's perception of resources available to them on the interpersonal level, psychological integration accounts for one's perception of resources afforded through belonging and membership in community life (community level), while social capital involves the perceived value of social networks, with members both benefiting from and contributing to the achievement of personal and greater societal goals (Saegert & Carpiano, 2017).

Figure 2

An ecological perspective of the relationship between perceived social support, psychological integration, and social capital that operate at different levels (individual, community, societal).



Negative Social Capital

The "dark side of social capital" or *negative social capital* has also been discussed in the literature (Portes, 2014; Villalonga-Olives & Kawachi, 2017). Negative social capital considers the harmful effects that different types of social capital can have on the health and well-being of individuals (Moore & Kawachi, 2017). For example, in Bowling Alone, Putman (2000) discussed how certain sources of bonding capital and social connections can be problematic, such as membership in destructive or dangerous groups (e.g., Mafia or KKK).

However, Portes and Landolt (1996, 1998; 2014) are known for bringing attention to the "downside of social capital". They argued in certain contexts, there can be consequences to social capital such as "bounded solidarity", over-enforcement of rules, excessive demands for membership, and restricting opportunities or limiting individual freedoms as a result of social participation (Portes, 1998). Other examples of negative social capital can include excessive attachment (e.g., "in-group" conformity or groupthink), social exclusion and discrimination, and engaging in harmful behaviours due to social pressure (Portes, 2014; Villalonga-Olives & Kawachi, 2017; Webber et al., 2014). These negative aspects of social capital have been commonly associated with bonding rather than bridging social capital (Villalonga-Olives & Kawachi, 2017). Instead, the lack of or limited access to bridging social capital for some has been described as a negative outcome (Putman, 2000). There can also be negative consequences to high levels of trust and confidence in institutionalized power or authority. In the absence of formal controls and accountability, nepotism, political favouritism, corruption and suppression are examples of negative linking social capital (Grootaert et al. 2003 as cited by Claridge, 2018b; Szreter and Woolcock 2004).

Negative social capital is especially important to recognize when considering individuals from low socioeconomic status or marginalized communities. Some researchers have theorized that inequality and concentration of poor economic conditions can result in social disorganization and the breakdown of social cohesion. This lack of social cohesion in poor communities makes it difficult to establish and maintain social norms and community trust (Kennedy et al., 1998). As a result, these individuals may be at a disadvantage in the types and quality of social relationships and networks available to them, which may limit their access to positive sources of the different types of social capital.

Putnam (2000) believed that bridging capital is especially important for poor minority communities in terms of upward mobility as well as social and economic participation while bonding capital could lead to some of the negative outcomes described (e.g., social exclusion, discrimination, and risky behaviours). In one study, greater bridging capital was associated with lower levels of distress, while greater bonding capital was associated with higher levels of distress among inner-city residents in a high-poverty neighbourhood (Mitchell & LaGory, 2002). A reason for this is that one element of social capital is the expectations of reciprocity, which can leave some at a disadvantage. In his work, Coleman (1988) discussed this obligation to repay the use of social capital. He argued that those dependent on others to meet basic needs can fall into "support debt" and may not be able to return or repay support received from within social networks. This could lead to both social exclusions as well as uneven power dynamics between the giver and receiver of support (Skobba & Goetz, 2015).

Among those who have experienced homelessness and mental illness, the quality of social relationships and connections can have implications for different types of social capital available to them, particularly in relation to negative social capital. Family conflict and intimate

partner violence are common among people who are vulnerably housed or homeless (Padgett et al., 2016; Sylvestre et al., 2018). Additionally, individuals who are homeless are more likely to be exposed to substance use, criminal activity, and victimization within their social environments (Ellsworth, 2019; Tyler et al., 2013). This group is also likely to have negative experiences with law enforcement (Sample & Ferguson, 2020).

Green and colleagues (2013) found that, compared to those who experienced shorter durations of homelessness, men who experienced long-term homelessness described social networks that consisted of individuals who were also homeless, were more likely to use drugs, and showed a tendency to engage in risky sex. Moreover, they had fewer family members within their social networks who had jobs or were in school. Findings indicated that continuous homelessness is associated with social networks that are less supportive and that engage in more risky behaviour. Similarly, Wenzel and co-authors (2009) found that women who were homeless and had a greater proportion of heavy alcohol and drug users in their social networks had greater odds of engaging in binge drinking and using marijuana, cocaine, crack, and methamphetamine. On the other hand, women who had a greater proportion of individuals in their networks whom they had met in school or through work had lower odds of engaging in substance use. For these reasons, it is important to examine social capital in the context of homelessness to better understand the challenges that this population faces.

Social Capital & Homelessness

As previously described, considerable research has investigated social support, social networks, as well as social and community integration, among homeless and vulnerably housed individuals (Durbin et al., 2019; Hwang et al., 2009; Padgett et al., 2008). However, few studies have specifically examined different types of social capital among homeless populations. Some

of the research on social capital has been conducted among homeless youth and young adults (Barker, 2012; Barman-Adhikari et al., 2016; Stablein, 2011; Skobba et al., 2018).

Stablein (2011) explored bonding social capital and the value of street peers among 52 homeless and housed youth and young adults. Qualitative interviews used social capital theory to identify positive and negative aspects of street life for each group. Participants benefited in multiple ways by participating in street life and befriending one another. In particular, participants bonded through perceived commonalities, such as negative experiences at home, in hometown neighbourhoods, and/or at school. Maintaining and nurturing social ties on the streets promoted a sense of solidarity and encouraged participants to support one another and alleviate feelings of alienation and isolation. Social connections also provided access to food, shelter, and income opportunities. However, strong bonds also placed them in potentially harmful and problematic situations, particularly related to drug and alcohol use as well as survival sex for female participants.

Barman-Adhikari and co-authors (2016) conducted a study of sources of bonding and bridging social capital in a sample of 1046 youth, ages 13–24. The analysis examined associations between experiences of victimization and sources of emotional and instrumental social capital from family members, professionals, and home-based peers (i.e., bridging social capital) and street-based peers (i.e., bonding social capital). Overall, sources of both bonding and bridging social capital among homeless youth were low. Findings indicated that homeless youth were more likely to receive emotional support from family members, professionals and peers, but had low levels of instrumental support that could provide access to resources (e.g., food, shelter, money).

In examining correlates of both bonding and bridging social capital, youth who experienced street victimization were considerably more likely than non-victimized youth to report receiving both emotional and instrumental support from all sources. Barman-Adhikari et al. (2016) suggested that street-victimized youth may be more active in seeking support to cope with these negative experiences and access social capital as a result. However, a limitation of this study is the distinction between measures of bonding and bridging social capital is vague. For instance, the authors did not provide a clear explanation for why family members or home-based peers were considered sources of bridging rather than bonding social capital.

Skobba and colleagues (2018) explored the sources of bonding (via social support) and bridging (via social leverage) social capital among post-secondary college students with histories of homelessness. Participants described drawing on social support networks to get into college including family members, high school teachers, and adult mentors. While participants continued to rely on these sources for financial and academic assistance, they also fostered new sources of support through professors, social organizations and campus support programs.

Among homeless adults, Cook and Hole (2020) conducted a study on social capital using a community-based participatory research approach. They examined sources of social capital important for survival among homeless adults living on the streets in British Columbia, Canada. Based on Bourdieu's definition (see Table 1), measures of social capital were broken down into types of social support available to participants (e.g., tangible support, advice or emotional support, sense of belonging, or self-esteem) and types of social networks in which they rely on (e.g., friends, family, formal service networks). Qualitative findings revealed low levels of social capital among participants, with the two main sources being peer relationships with others on the street and service providers. For many, formal social support from service providers was the only

tangible source of support they had (Cook & Hole, 2020, p. 824). However, participants also described having to "perform" or "play up" aspects of homeless identities, such as appearing "appropriately homeless and needy" and emphasizing vulnerabilities and deficits, to gain resources through service providers (p. 825). Cook and Hole (2020) cautioned that policies and practices whereby services are prioritized for those who fit the "homeless identity" based on level of need or being "deserving of care", may cause unintended harm by gatekeeping institutional sources of social capital, reinforcing homeless stereotypes, and inadvertently perpetuating homelessness (p. 827).

There are some limitations to these studies described. First, these studies do not differentiate social support from social capital. In all cases, authors developed their own measure of social capital, often using social support (whether formal or informal and/or instrumental or emotional) as indicators of both bonding and bridging social capital (Barman-Adhikari and co-authors 2016; Cook & Hole, 2020, Stablein, 2011; Skobba, et al., 2018). Additionally, none of these included features of social capital such as social trust, mutual exchange, group membership, or social cooperation or cohesion. Finally, none examined linking social capital.

In a recent study, Ayed and co-authors (2020) conducted a literature review to examine how social capital is conceptualized in the context of homelessness. Eligibility criteria were peer-reviewed studies in English that included homeless individuals over the age of 18 and referenced "social capital" either in the title and/or the abstract. A total of 19 studies were identified. Only two studies examined bonding and bridging social, with no studies that examined linking social capital (Fitzpatrick et al., 2015; Fitzpatrick et al., 2007). The majority of included studies examined social capital in the form of social support (n = 7), interpersonal relations (n = 5), social services (n=3), and group membership (n = 2). Most studies (n = 13) had small sample

sizes ranging from eight to 51 participants. Only five studies had sample sizes larger than 100, with the largest study having a total of 369 participants conducted in Canada (McCarthy, 2002 as cited by Ayed, et al., 2020).

The majority of the studies used qualitative methods or semi-structured interviews with open-ended questions regarding social capital (n = 16). In these studies, participants were asked about resources and service use, as well as romantic partnerships, childhood experiences, or relationships with friends and family. Ayed and co-authors (2020) identified several themes across qualitative studies. Social capital was conceptualized along three dimensions; (1) group membership, (2) access to services, and (3) emotional and instrumental supports embedded in and/or afforded by relationships with others.

Of the studies included in the literature review, three used quantitative measures of social capital (Fitzpatrick et al., 2015; Fitzpatrick et al., 2007; Irwin et al., 2008a). Two of these studies included measures developed by authors that assessed dimensions of bridging and bonding social capital and their relationship to mental distress, depression, and suicide ideation among homeless adults. Additional measures of social capital included questions related to religious participation, group membership, social trust, and perceived social support. Of the three studies, both Irwin et al. (2008a) and Fitzpatrick and co-authors (2015) found that social capital (via participation in religious groups and social support) was associated with lower depressive symptoms.

Findings from Fitzpatrick et al. (2007) were consistent with previous research regarding the distinction between bridging and bonding capital for low-income individuals. While measures of bonding capital were not associated with reduced odds of suicide ideation, bridging capital a had significant negative association with the odds that a person had considered suicide

since being homeless. Overall, these studies found that social capital is important in reducing mental distress and promoting well-being among homeless adults.

Ayed and co-authors (2020) noted some limitations in the included literature. In particular, the operationalization of social capital varied across studies. Social capital was mostly conceptualized in terms of resources afforded through social support or social relationships. Moreover, descriptions were often vague with no clear distinction in the types and forms of social capital. Ayed and colleagues (2020) concluded that findings from the existing research on social capital in the context of homelessness are not meaningful or translatable in terms of guiding policy and that further research is needed to explore the relationships between social capital, exiting homelessness, and housing (p. 129).

Following this literature review, Ayed et al. (2021) conducted a qualitative study exploring how individuals with histories of homelessness in London, UK, describe their communities using a social capital perspective. Using Coleman's (1988) definition, social capital was defined as “the sum of the resources, actual or virtual” available to an individual or a group through “a durable network of more or less institutionalized relationships of mutual acquaintance and recognition” (Ayed et al., 2021, p. 29). Participants were asked “how they would define community” and to describe their experiences in the communities they live in.

Participants defined community in terms of geography (e.g., local area or neighbourhood), but also in terms of connections to people and groups outside of their locality (e.g., social media). Communities were also described as a source of identity and belonging as well as meeting personal needs such as protection, support, and resources. Additionally, participants discussed how community members could be diverse in terms of age, gender or religious orientation with relationships that are grounded in a sense of mutuality and shared

interest. The importance of social services in communities was also frequently mentioned by participants. However, participants also described a "dark side of community" related to accessibility and exclusion in their communities due to social, personal, and structural barriers. These included experiences of discrimination, having to rely on others for basic needs, difficulty building relationships, as well as challenges in accessing support and services as a result of homelessness and housing instability (Ayed et al., 2021).

Social Capital & Housing Stability

In the general population, housing tenure and homeownership have been positively associated with measures of bonding social capital, (e.g., a sense of community belonging and connections with neighbours) and linking social capital (e.g., voting in an election) (Leviten-Reid & Matthew, 2018). However, as previously mentioned, individuals from low-income or marginalized populations may live in areas with poor housing and neighbourhood quality, which can impact how well they integrate into their communities and build social networks. This also ties into experiences of negative social capital and social exclusion previously described. For instance, studies have found that lower social capital and greater everyday discrimination were associated with increased odds of housing instability among individuals who resided in a predominantly African-American metropolitan area in the United States (Priester et al., 2017).

Only one study to date has examined social capital among individuals with histories of homelessness once housed. Hawkins and Abrams (2007) examined bonding, bridging and linking social capital among formerly homeless individuals with co-occurring disorders. They conducted in-depth qualitative interviews with 39 formerly homeless individuals with mental illness in New York City. Social capital was contextualized as the by-product of the size and quality of social networks that provide basic needs (p. 2033). Participants described sources of

bonding social capital through peer relationships and family members. Only two participants described sources of bridging social capital through their service providers. Moreover, participants reported a decrease in the size of social networks as a result of former members of their networks dying prematurely, withdrawing or being pushed away from social relationships, or having friends and family members who could not provide support or resources to the participants because they were facing their own problems as a result of poverty and mental illness.

Overview of Current Research

Previous research has demonstrated that social support can facilitate housing stability for those who experience homelessness (Aubry et al., 2015; Eyrich et al., 2003). While there is research on positive outcomes associated with achieving housing stability for this population, much of the existing literature has been focused on individual-level outcomes such as improvements to health and quality of life (Aubry et al., 2015; Sylvestre et al., 2017). However, having a home is more than just maintaining accommodations. It is about how housing can lead to wider aspects of social participation, including community integration, recovery, and citizenship (Sylvestre et al., 2017 p. xxiii). Moreover, additional research is needed on community integration with homeless and housed participants in different types of homeless and housing accommodations.

The concept of social capital has captured the attention of research scientists and policymakers due to its positive relationship to health, life satisfaction, education, income, and community cohesion (Lin, 2002, p. 1). While social capital is considered to be an important social determinant of health, especially for vulnerable or disadvantaged populations, the research is limited among those with histories of homelessness, with limited research that has been conducted in the Canadian context (Oliver & Cheff, 2014; McCarthy, 2002 & Shantz, 2014 as cited by Ayed et al., 2020).

The objective of the current research is to explore the relationship between housing stability and social capital among individuals with histories of homelessness in Canada. This manuscript-based thesis consists of two studies that follow an explanatory sequential mixed-methods design. Explanatory sequential mixed-methods design is when quantitative research is

completed and analyzed, and based on findings, qualitative analyses are conducted to build on the quantitative results and explain them in more detail (Creswell & Creswell, 2017, p. 348).

The use of quantitative and qualitative methods in these studies is intended to be complementarity to provide "a broader, more comprehensive social understandings that tap into different facets or dimensions of the same complex phenomenon" (Greene, 2007, p. 101). This methodology can be useful in examining if existing measures of a given construct are "culturally meaningful and contextually grounded for the target population" (Campbell et al., 2017, p. 141). There are no studies to date that have provided mixed methods data on housing stability and social capital among adults with histories of homelessness.

This thesis uses an ecological perspective of the relationship between perceived social support, psychological integration, and social capital that operate at the individual, community and societal levels (Figure 2). To investigate social capital in the context of homelessness and housing stability, the measures of social capital outlined by Elgar and co-authors (2011) were used. In particular, trust social capital (which measures dimensions of bonding/bridging via social trust) and linking social capital were explored. In particular, trust social capital examines an individual's level of trust in people they know personally, encounter for the first time, or those in their neighbourhoods and from diverse cultural or religious backgrounds. Linking social capital examines levels of confidence in the police, court system, and government (Elgar et al., 2011, see Appendix A).

Individuals with histories of homelessness often experience trauma, social isolation, stigma and discrimination, which may influence the extent to which they trust others (Mejia-Lancheros et al., 2021; Taylor et al., 2022). While some studies have explored trust in healthcare providers among homeless populations (Becker & Foli, 2022), as well as their experiences with

law enforcement and justice systems (Zakrison et al., 2004), no studies involving people who are homeless have examined social trust and confidence in authority (i.e., linking social capital) using a social capital framework. Moreover, there are no studies to date on social capital and homelessness that have utilized validated quantitative measures of bonding, bridging, or linking social capital conceptualized by the literature.

Data for this thesis comes from the Health and Housing in Transition (HHiT) a longitudinal study of homeless and vulnerably housed single adults in Canada (Hwang et al, 2011). In the HHiT study, single adults who were either absolutely homeless or vulnerably housed were randomly selected from shelters, meal programs, community health centers, drop-in centers, rooming houses, and single-room occupancy hotels in Toronto, Ottawa and Vancouver between January to December of 2009. Participants were interviewed at baseline and 12-month intervals over four years (2009 – 2013). During the final follow-up interview of the 4-year longitudinal quantitative study, a subset of participants were asked if they would like to participate in a one-time qualitative interview.

Study one is an exploratory analysis of the relationships between housing stability and social capital. The goal of the study was to determine whether greater housing stability over a 3-year period predicts greater trust social capital and linking social capital at year four, and if this relationship is mediated by higher levels of social support and psychological integration (see Appendix C for theoretical model).

Mediation models consider how the relationship between two variables is influenced or explained by a third variable (MacKinnon & Luecken, 2008). Multi-step or serial forms of mediation include the sequential effects of two or more potential mediators (VanderWeele & Vansteelandt, 2014). Mediation analysis is becoming more prominent in psychological research

as it allows for a more sophisticated understanding of the processes by which independent variables are associated with dependent variables in social domains (Rucker et al., 2011, p. 359). Moreover, mediation models are appropriate if there is evidence of an existing relationship between the independent, dependent and mediating variables (MacKinnon & Luecken, 2008). In the context of this research, the connections between housing stability social support, psychological integration and social capital have been previously described.

The goal of study two was to explore how participants with low and high housing stability refer to others in the descriptions of the housing and communities in which they have lived. More specifically, bonding, bridging, and linking social capital were examined through a qualitative analysis of interviews with participants in which they described their social networks, community interactions, and their experiences with service providers and government organizations.

This was a secondary data analysis project building on previous analysis done by Sylvestre and co-authors (2018) that explored how individuals with histories of unstable housing perceive their housing or shelter situations and the impact of these settings on their health and well-being. Research questions for study two were as follows: (1) do participants with low and high housing stability describe trusting and supportive relationships with friends, family members, neighbours, community members, and others they interact with, and (2) do participants with low and high housing stability express trust towards government lead institutions and community organizations?

Following a sequential mixed method design, participant selection, thematic analysis, and interpretation of the findings of study two were guided by study one (Creswell& Creswell, 2019,

Greene, 2007). Overall, this research makes a significant contribution to the research on bonding, bridging and linking social capital for individuals who experience homelessness.

My Role in Parent Study

My involvement with the Health and Housing in Transition (HHiT) study began in 2009 when I joined as a research assistant, working closely with the team at the *Center for Urban Health Solutions* at St. Michael's Hospital in Toronto, Ontario. In this role, I participated in data collection and data entry, which included recruiting participants and conducting baseline and follow-up interviews across various locations in Toronto throughout the 5-year study.

Following the completion of the HHiT study, I collaborated with co-investigators on data analysis and co-authorship of several study manuscripts. I served as the first author on a study examining the prevalence of chronic homelessness among single adults in Canada (Agha et al., 2023) and as the second author on research exploring housing trajectories, risk factors, and resources among homeless and precariously housed individuals (Aubry et al., 2021). Additionally, I contributed to qualitative studies on perceptions of housing and shelter (Sylvestre et al. 2018), as well as the cycles of residential instability (Czechowski et al., 2022). Furthermore, I participated in quantitative research that examined unmet healthcare needs among the study participants (Duhoux et al., 2017). These experiences related to the HHiT study have equipped me with a deep understanding of the study's data, which forms the basis for my thesis.

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The Role of Housing Stability in Predicting Social Capital: Exploring Social Support and Psychological Integration as Mediators for Individuals with Histories of Homelessness and Vulnerable Housing

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Abstract

Social capital is a collective asset important for individual and population well-being. Individuals who experience homelessness may face barriers in accessing social capital due to health challenges, small social networks, and social exclusion. Data from a 4-year longitudinal study was used to determine if housing stability predicted greater social capital and if this relationship was mediated by social support and psychological integration for a sample of 855 homeless and vulnerably housed participants living in three Canadian cities. Findings showed that housing stability was not associated with trust and linking social capital. However, higher levels of social support and psychological integration had a mediating effect on the association between housing stability and trust and linking social capital. These findings highlight the importance of social support and psychological integration as means of promoting social capital for people who experience homelessness and vulnerable housing. Social interventions for housed individuals with histories of homelessness may be an avenue to foster greater social capital by building relationships with neighbours and connections to community resources and activities.

Key Words:

Homelessness, Housing Stability, Social Capital, Mediation

Introduction

Social capital is a multi-dimensional concept that emphasizes the importance of social networks, norms of reciprocity, and civic engagement among individuals within societies (Coleman, 1988; Putnam, 2000). Social capital is considered a collective asset that facilitates social trust and cooperation through shared social norms, values, and beliefs. Decades of epidemiological research have established social capital as a social determinant of health important for both individual and population health and well-being (Moore & Kawachi, 2017). Public health researchers have paid particular attention to social capital in vulnerable populations. Much of the research associated with these populations has focused on the relationship between limited social capital, low socioeconomic status, and poor health (Rodgers et al., 2019). A population of particular interest is individuals who have experienced homelessness and who may face barriers accessing social capital due to physical and mental health challenges, small social networks, and experiences of social exclusion (Barman-Adhikari et al., 2016; Cook & Hole, 2020). For this population, social capital can be crucial for navigating systems of care, establishing community ties, and supporting recovery (Ayed et al., 2020).

Previous literature has explored housing stability among individuals with histories of homelessness. This research suggests that there is a combination of individual, interpersonal, and community-level factors that contribute to becoming homeless and the time it takes to exit homelessness and become stably housed (Aubry et al., 2016; Aubry et al., 2021). Therefore, some community psychologists have argued that housing stability should extend beyond simply securing permanent shelter, but also include experiencing opportunities for societal inclusion and participation important for optimal health and quality of life (Sylvestre et al., 2009).

However, it can be difficult to establish the extent to which circumstances for homeless and vulnerably housed individuals improve once they achieve stable housing, particularly in relation to social support and community integration outcomes. Given the importance of social capital on overall well-being, research is needed on the extent to which achieving stable housing can facilitate social capital for individuals with histories of homelessness. The current study attempts to fill this gap by exploring how social support and community integration influence the relationship between housing stability and social capital among individuals with histories of homelessness and vulnerable housing.

Social Capital

Research on social capital finds its roots in sociology, most significantly through the contributions of Pierre Bourdieu and James Coleman. However, Robert Putnam greatly advanced social capital literature in the field of public health in his seminal book *Bowling Alone* (2000). Building on the works of Bourdieu and Coleman, Putnam (2000) defines social capital as the "connections among individuals through social networks and norms of trustworthiness that arise from them" (p. 19). Putnam's conceptualization of social capital includes participating in social organizations and support structures, sharing connections among individuals in social networks, as well as following norms of reciprocity or mutual exchange that foster social engagement and civic participation.

In his work, Putnam (2000) describes two types of social capital: bonding and bridging. *Bonding social capital* refers to the trustworthy and cooperative relationships that exist among members of a dense network. These are social connections between those who share a social identity (e.g., same age group, cultural background, or socioeconomic status) and strong forms of social ties, such as close friends and family, that provide both instrumental and emotional

support. *Bridging social capital* involves informal respect and social trust between those who differ in terms of social identity, but share social connections. These are considered "loose" associations outside of one's immediate social network (Putnam, 2000; Elgar et al, 2011). While bonding and bridging social capital are not mutually exclusive and can be grouped together, the distinction is useful by capturing both the dynamics of openness within civil society and closure within small exclusive groups (Elgar et al., 2011). For the current study, bonding and bridging social capital will be considered together and referred to as *trust social capital*. Building on Putman's work, Szreter & Woolcock (2004) developed a third type of social capital called *linking social capital*. Linking social capital considers generalized trust toward government and social institutions (e.g., police, courts, and social organizations).

Previous research has explored social capital among individuals experiencing homelessness. Findings from existing literature suggest that this group often relies on formal and informal social support as sources of bonding and bridging social capital, such as family members, peers, and service providers that provide instrumental and emotional support (Ayed et al., 2020). Moreover, studies have found that individuals with histories of homelessness describe greater bonding social capital and limited bridging social capital (Hawkins & Abrams, 2007; Fitzpatrick et al., 2007). In many cases, studies describe a reliance on social programs and service providers as the only source of bridging social capital (Cook & Hole 2020). Bridging capital is considered to be particularly important in vulnerable populations for upward mobility and economic participation (Putman, 2000). Bridging social capital is associated with better mental health for individuals who are homeless (Fitzpatrick et al., 2007).

However, individuals experiencing homelessness are more susceptible to *negative social capital* (Ayed et al., 2021; Barman-Adhikari et al., 2016; Stablein, 2011). Negative social capital

refers to the aspects of social networks and relationships that result in adverse outcomes for individuals or groups (Moore & Kawachi, 2017). For instance, several studies have discussed how drug and alcohol use among people who are homeless can undermine social capital by fostering relationships that offer immediate support within substance-using communities, but also expose individuals to risky behaviours or potential exploitation, and limit access to broader, more positive social networks (Neale & Stevenson, 2015; Neale & Brown, 2016; Stablein, 2011).

In the general population, housing tenure and homeownership have been positively associated with bonding and linking social capital (Leviten-Reid & Matthew, 2018). Only one study to date has examined social capital among housed individuals with histories of homelessness. Hawkins and Abrams (2007) conducted a qualitative study of bonding and bridging social capital among formerly homeless individuals with co-occurring disorders. Sources of social capital included peer relationships, family members (bonding), and service providers (bridging). However, participants also reported low levels of social capital due to decreases in the size of their social networks resulting from premature deaths, withdrawing or being pushed away from relationships, and family members being unable to provide support.

It is important to note that most studies on social capital among people who are homeless are qualitative studies with open-ended questions on subjects related to social capital. In a literature review conducted by Ayed et al. (2020), only three studies used quantitative measures of social capital among adults who are homeless (Fitzpatrick et al., 2015; Fitzpatrick et al., 2007; Irwin et al., 2008). In all the included studies, authors developed their own indicators of social capital, with a focus on measures related to social support, service use, social networks, personal relationships, and group participation (Ayed et al., 2020). Additionally, while some studies

explored bonding and bridging social capital, no studies have examined linking social capital in homeless populations. This is a major limitation of the previous literature, given that individuals with histories of homelessness are more likely to rely on government programs, interact with police and court systems, and have a history of incarceration (Piat et al., 2015).

Social Support

Social support includes actual or perceived assistance that an individual receives from others. This can include formal (i.e., social services) and informal social support that provide emotional support, companionship, information, or material resources (Saegert & Carpiano, 2017). Past studies have found that experiencing social alienation, family breakdown, and relationship conflicts are risk factors for becoming homeless (Chamberlain & Johnson, 2013; Piat et al., 2015). Additionally, low levels of social support have also been found to predict greater substance use and exacerbate mental health issues for people experiencing chronic homelessness (Cummings et al, 2022). On the other hand, receiving higher levels of support from family and friends and having larger social networks are associated with an increased likelihood of exiting homelessness and achieving housing stability (Aubry et al., 2016; Van Straaten et al., 2017). Access to formal support through social services (e.g., housing programs, rental assistance, and service providers) has been shown to lead to longer durations of stable housing and increased housing satisfaction (Aubry et al., 2021; Roebuck et al., 2021).

Previous research has also explored social support among individuals with histories of homelessness who are in housing. While some studies have found that individuals with histories of homelessness experience loneliness and social isolation despite achieving housing stability, others have shown that many overcome feelings of isolation once housed, and improve the quality of their relationships over time (Roebuck et al., 2021; Piat et al., 2018). Greater perceived

social support has also been associated with greater well-being and life satisfaction for previously homeless participants who are stably housed (Johnstone et al., 2016).

As previously described, studies on social capital among homeless populations have used sources of social support as measures or indicators of social capital. Like social support, social capital considers material and interpersonal resources available to a person through social networks. In this way, social support and social capital are intrinsically linked and have often been used interchangeably (Liamputtong et al., 2021). However, social capital takes a societal perspective by including features such as citizenship, social trust, and cooperation, as well as wider aspects of social participation (Saegert & Carpiano, 2017).

Psychological Integration

Psychological integration is defined as the extent to which an individual feels a sense of belonging, membership, and connection to the community or neighbourhood in which they reside. Along with social integration (participation in social activities) and physical integration (interactions with neighbours), psychological integration is one of three components that make up the conceptualization of community integration in the field of community mental health (Aubry et al., 2013). In line with social capital, community integration considers opportunities for individuals to develop social networks by connecting with people in the communities they live in, accessing community resources, and engaging in neighbourhood activities.

Of the three components that make up community integration, psychological integration has been found to be associated with better mental health and quality of life for individuals with histories of homelessness that achieve housing stability (Aubry et al, 2013; Gurdak et al., 2019). However, many can also face barriers to psychological integration due to poor mental health, lack of social support, or experiences of loneliness and social isolation (Yanos et al., 2012).

Moreover, several factors contribute to the relationship between housing stability and psychological integration. For instance, older age, greater social support, and living in high-quality housing were found to be significant predictors of greater psychological integration for individuals who were homeless and vulnerably housed (Ecker & Aubry 2016). Other studies have found that housed individuals who were previously homeless and report higher levels of psychological integration also report lower levels of substance use and greater satisfaction with neighbourhood location and safety, while those with lower levels of psychological integration report greater concerns related to safety (e.g., violence or crime in the neighbourhood), greater substance use, limited access to services, and experiences of discrimination (Bassi et al., 2020; Gurdak et al., 2019).

Overall, it is important to account for the role that psychological integration can play in other forms of social inclusion and citizenship. A sense of belonging, or viewing oneself as similar to others within a community, can facilitate social capital by encouraging trust and cooperation within close-knit groups as well as across differing social identities linked by shared connections. This is especially important when considering populations that have been marginalized as a result of poverty, discrimination, and physical or mental health challenges.

The Current Study

The objective of this study is to determine whether greater housing stability predicts greater social capital among individuals with histories of homelessness and vulnerable housing and if this relationship is mediated by social support and psychological integration. Based on the previous research, it is hypothesized that greater housing stability will be associated with higher levels of psychological integration and social support. In turn, higher levels of psychological integration and social support will be associated with greater trust and linking social capital. This

progression is theoretically grounded in the understanding that stable housing provides a foundational platform from which individuals can engage in social networks and community life, thereby enhancing their social support and psychological integration and which will subsequently serve as a basis for developing broader social trust, namely social capital.

Methods

Participants and Recruitment

Data for this research come from the *Health and Housing in Transition (HHiT) study*, a longitudinal cohort study that tracked the health and housing status of approximately 1,200 homeless and vulnerably housed single adults over a 4-year period in three Canadian cities (Toronto, Ottawa, and Vancouver) between 2009 and 2013 (Hwang et al., 2011).

Homeless and vulnerably housed participants were recruited from shelters, meal programs, community health centers, drop-in centers, rooming houses, and single-room occupancy hotels in Toronto, Ottawa and Vancouver between January to December of 2009. Homelessness was defined as living in a shelter, public place, vehicle, abandoned building or temporarily staying with someone without having permanent residence. Vulnerably housed was defined as currently living in one's own room or apartment but having been homeless or have had two or more moves in the past 12 months.

A two-stage recruitment strategy was used to recruit study participants. First, primary sampling units (shelters, meal programs, single-room occupancy hotels, and rooming houses) were randomly selected. Individuals were then randomly selected from primary sampling units. Homeless participants were recruited from shelters and meal programs in each city. As a goal of the study was to include homeless people who were outside of the shelter system, individuals at

meal programs were eligible if they were homeless but had not stayed at a shelter in the last seven days.

Vulnerably housed participants were recruited from randomly selected rooming houses in Ottawa and Toronto, and single-room occupancy hotels (SRO) hotels in Vancouver. However, due to feasibility challenges associated with sampling at SROs and rooming houses (see Hwang et al., 2011), the sampling strategy for recruitment of vulnerably housed participants was modified to include finding individuals for this subgroup from meal programs, drop-in centers, and community health centers in the sampling frame.

Follow-up procedures

Participants were interviewed at baseline and 12-month intervals over a 4-year follow-up period (2009 – 2013). Participants signed informed consent forms at each interview. At the baseline, participants were asked to provide personal contact information as well as that of friends, relatives, service providers, and caseworkers who were most likely to know their future whereabouts and who could be contacted to locate them. Participants were also asked for consent for municipal social services departments, hospitals, homeless shelters, prisons, and treatment centers to disclose their updated contact information to the research team.

Measures

Predictor Variable

Housing Stability. Housing history information was collected using the Housing Timeline Follow-Back Calendar (HTFBC), a self-report measure that allows for the collection of detailed information on housing history (Tsemberis et al., 2007). Data from this measure provided a day-by-day account of the housing history of participants for the duration of the study (see Appendix D for additional details on measures of housing history in the HHiT study). In the

current study, housing stability is a continuous measure of the percentage of time housed over three years (from baseline to follow-up 3).

Outcome Variable

Social Capital. Social Capital was measured at follow-up 4 (FU4) using the adapted World Values Survey (WVS) developed by Elgar et al. (2011). The present study used the trust social capital subscale, which measures bonding and bridging social capital together, and the linking social capital subscale. Trust social capital measures participants' level of trust in people they know personally, meet for the first time, individuals living in their neighbourhoods, and those from other religions or nationalities (Appendix G). Scores range from 5 to 22, with higher scores indicating greater trust social capital. The Cronbach's alpha for trust social capital at FU4 was 0.82. Linking social capital measured participants' level of confidence in the police, court system, and government. Scores range from 3 to 12, where higher scores indicate greater linking social capital. The Cronbach's alpha for linking social capital at FU4 was 0.82.

Mediating Variables

Social Support. Social support was measured at each interview using the Social Provision Scale (Cutrona & Russell, 1987, see Appendix E). The self-report measure assesses participants' perceptions of emotional and instrumental supports available to them through relationships with family and friends. These include statements related to the extent to which they can access guidance or advice, the ability to rely on others, feelings of nurture and intimacy, and reassurances of worth. Possible scores range from 8 to 32 with higher scores indicating greater social support. A composite average score from follow-up 1 (FU1) to follow-up 3 (FU3) was derived. The internal reliability ratings for the Social Provision Scale ranged from 0.76 to 0.80 from FU1 to FU3.

Psychological Integration. Psychological integration was measured at each interview using the Sense of Community Scale (Aubry et al., 2013, see Appendix F). The self-report measure assesses participant perceptions of people who live in their neighborhoods and the neighborhood itself. This includes items related to neighborhood safety, a sense of belonging in their neighborhoods, as well as emotional support and feelings of connectedness with their neighbours. Possible scores range from 6 to 30, with higher scores indicating greater psychological integration. A composite average score from FU1 to FU3 was used. The internal reliability ratings for the psychological integration measure ranged from 0.74 to 0.76 from FU1 to FU3.

Control Variables

Demographic Characteristics. Demographic characteristics, self-reported by participants at baseline, included gender, age, ethnicity/race, and city.

Substance Use. Drug and alcohol use were measured at baseline and follow-up interviews. Drug use was screened using the Drug Abuse Screening Test (DAST-10; Yudko et al., 2007, see Appendix I) which assesses problematic drug use based on the participant's use in the past 12 months. Alcohol use was screened using the Alcohol Use Disorders Identification Test (AUDIT; Higgins-Biddle and Babor 2018, see Appendix J), which is used to identify hazardous drinking based on alcohol intake and adverse experiences due to alcohol use in the past 12 months. Possible scores ranged from zero to 10 for drug use and zero to 40 for alcohol use. Composite scores (FU1-FU3) were used. The internal reliability ratings for DAST ranged from .72 - .75 and 0.90 - .92 for AUDIT.

Analysis

Descriptive statistics and missing data analysis were conducted using IBM SPSS Statistics 28. Pearson correlations were conducted to examine linear relationships between predictor, mediator, and outcome variables. Pearson correlations were conducted to examine linear relationships between predictor, mediator, and outcome variables. Path analysis was conducted using SPSS AMOS 28 statistical software to examine the mediating effects of social support and psychological integration on the relationship between housing stability and trust and linking social. Both social support and psychological integration were included as mediators in the model analyzing their hypothesized effects simultaneously. Demographic characteristics (city, age, gender, ethnicity) and drug and alcohol use were included as control variables. Bootstrap percentile confidence intervals (CI) were used to determine the significance of the direct and indirect effects.

To evaluate the overall model fit, chi-square test (reported as CMIN), Comparative Fit Index (CFI), Normed Fit Index (NFI), Root Mean Square Error of Approximation (RMSEA), and the CMIN/DF ratio were used. Conventional cut-off criteria for fit indexes were used to indicate goodness of fit including a non-significant chi-squared value, CFI and NFI values >.9, RMSEA value < .08, and CMIN/DF value below three (Browne & Cudeck, 1993).

Results

Sample Characteristics

Of the total HHiT study sample (N = 1,190), 900 (76%) participants who completed the FU4 interview were included in the study. A comparison of the respondents who participated in FU4 interviews with non-respondents found the two groups to be similar on demographic characteristics collected at the baseline interview except for gender. A higher proportion of non-respondents (72.8%) were male (vs 65.3% of respondents). Table 2 presents sample characteristics for study participants (n = 900). Participants who were homeless and vulnerably housed spent an average of 76% (SD = 28.8) of the time housed over three years. Participants reported moderate to high levels of social support (M = 23.3, SD = 3.4, range 8 - 32) and psychological integration (M = 19.4, SD = 3.4, range 6 - 30). Similarly, both groups reported moderate levels of trust (M = 12.1, SD = 3.2, range 5 - 22) and linking social capital (M = 6.4, SD = 2.4, range 3 - 12).

Table 2

Characteristics of Study Sample (N = 900)

	M	SD
Housing Stability		
% of time housed over 4 years	76	28.8
City: n (%)		
Vancouver	303	(33.7)
Toronto	291	(32.3)
Ottawa	306	(34.0)
Age:	42.25	10.4
Gender: n (%)		
Female	307	(34.1)
Male	579	(64.3)
Transgender	14	(1.6)
Ethnicity: n (%)		
White	550	(61.1)
Black/African-Canadian	77	(8.6)
First Nations/Aboriginal	164	(18.2)
Mixed ethnicity / Other	85	(9.4)
Not Specified	24	(2.7)
Substance Use		
Alcohol Use (AUDIT)	7.9	9.1
Drug Use (DAST)	3.2	2.6
Social Support		
Social Provision Scale	23.3	3.4
Psychological Integration		
Psychological Integration Scale	19.4	3.4
Social Capital		
Trust Social Capital	12.1	3.2
Linking Social Capital	6.4	2.4

Demographic characteristics (City, Age, Gender & Ethnicity) were measured at baseline. Housing Stability was measured over 3 years (FU1-FU3).

Mean of composite scores (FU1-FU3) are presented for measures of substance use, social support, and psychological integration.

Higher scores represent greater levels of alcohol use (range 0 to 40), drug use (range 0 to 10), social support (range 8 to 32), psychological integration (range 6 to 30), and trust (range 5 to 22) and linking social capital (range 3 to 12).

Table 3 presents Pearson correlations for variables included in the model. No significant associations were found between housing stability and trust social capital and housing stability and linking social capital. A total of 855 participants were included in the analysis. A small percentage (1.7%) of missing data was imputed using Expectation-Maximization on continuous variables (Tabachnick & Fidell, 2019). Participants were excluded from the analysis if they were missing data on the ethnicity variable and both trust and linking social capital variables (n = 31). Additionally, due to their small number (n = 14), participants who identified as transgender or a gender other than male or female were not included.

Table 3

Pearson Correlation of Associations between Housing Stability, Social Support, Psychological Integration, and Social Capital (N = 855)

Variables	r	p-value
Housing Stability & Trust Social Capital	.01	0.72
Housing Stability & Linking Social Capital	.02	0.53
Housing Stability & Social Support	.13*	<.001
Housing Stability & Psychological Integration	.09*	0.006
Social Support & Trust Social Capital	.22*	<.001
Social Support & Linking Social Capital	.13*	<.001
Psychological Integration & Trust Social Capital	.26*	<.001
Psychological Integration & Linking Social Capital	.11*	<.001

* Correlation is significant at the 0.01 level (2-tailed).

Model Goodness of Fit

The chi-square associated with the proposed models was not significant ($p = .114$), suggesting that the model was consistent with the observed data. The indices showed good model fit of the data (CFI = .99, NFI = .97, RMSEA = .03, and CMIN/DF = 1.7).

Regression Analyses

Standardized coefficients for associations between predictors, mediators, and outcome variables are presented in Table 4. Of control variables included in the study, older age was significantly associated with greater trust social capital ($\beta = .11$, 95% CI = .04; .18, $p \leq .001$) and linking social capital ($\beta = .16$, 95% CI = .09; .24, $p \leq .001$). Additionally, identifying as First Nation / Indigenous ethnicity was associated with lower levels of trust social capital ($\beta = -.07$, 95% CI = −.14; −.01, $p \leq .05$) and linking social capital ($\beta = -.10$, 95% CI = −.17; −.03, $p \leq .01$). Finally, drug use was associated with lower levels of linking social capital ($\beta = -.12$, 95% CI = −.19; −.05, $p \leq .001$).

Table 4

Standardized Regression Coefficients of Associations between Housing Stability, Social Support, Psychological Integration, and Social Capital (N = 855)

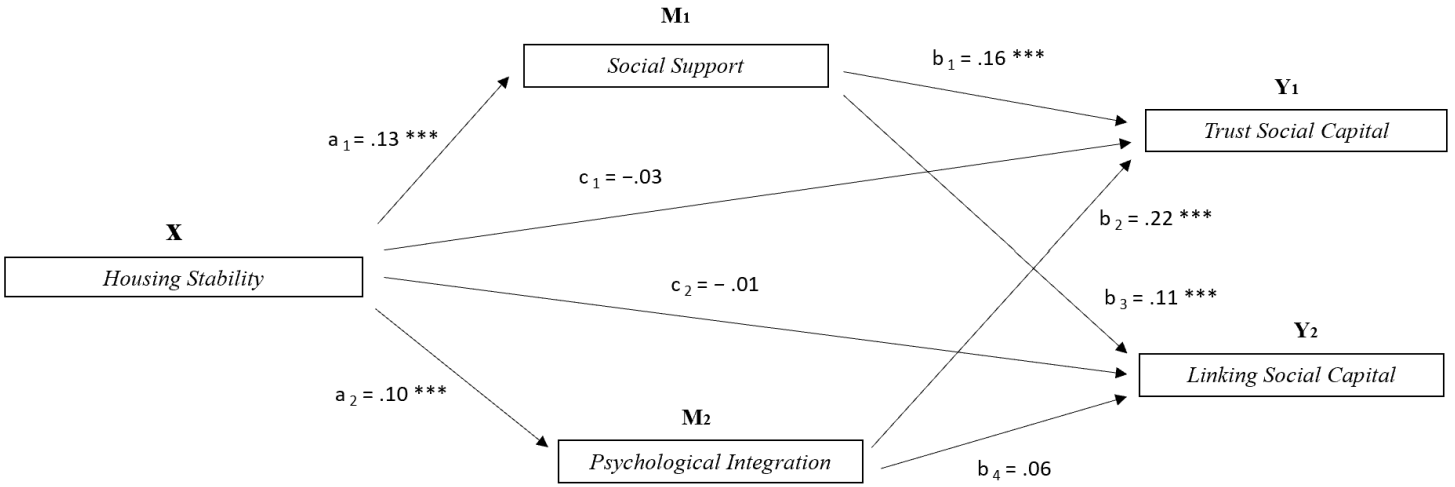
	Trust Social Capital				Linking Social Capital			
	β	SE	95%	CI	β	SE	95%	CI
Predictor Variables								
Housing Stability	-0.03	0.03	[-0.10	0.04]	-0.01	0.03	[-0.07	0.06]
Mediator Variables								
Social Support	0.16	0.04	**[0.07**	**0.24]**	0.11	0.04	**[0.04**	**0.18]**
Psychological Integration	0.22	0.04	**[0.14**	**0.29]**	0.06	0.04	[-0.01	0.13]
Control Variables								
City (reference: Vancouver)								
Toronto	0.02	0.04	[-0.05	0.09]	-0.03	0.04	[-0.11	0.04]
Ottawa	-0.04	0.04	[-0.11	0.04]	0.03	0.04	[-0.06	0.11]
Age	0.11	0.04	**[0.04**	**0.18]**	0.16	0.04	**[0.09**	**0.24]**
Gender (reference: Male)								
Female	0.03	0.03	[-0.04	0.09]	0.02	0.03	[-0.05	0.09]
Ethnicity (reference: White)								
Black / African-Canadian	-0.02	0.04	[-0.09	0.05]	0.04	0.04	[-0.04	0.11]
First Nations / Indigenous	-0.07	0.03	**[-0.14**	**-0.01]**	-0.10	0.04	**[-0.17**	**-0.03]**
Mixed ethnicity / Other	-0.02	0.03	[-0.08	0.04]	0.04	0.04	[-0.03	0.12]
Substance Use								
Alcohol Use	0.04	0.03	[-0.03	0.10]	0.01	0.03	[-0.05	0.07]
Drug Use	-0.05	0.04	[-0.12	0.03]	-0.12	0.04	**[-0.19**	**-0.05]**

Note: Bolded 95% CIs indicate statistically significant associations

Figure 3 presents standardized path coefficients of the theoretical model for study participants. As hypothesized, greater housing stability over three years was found to be associated with greater social support ($\beta = .13$, 95% CI = .07; .20 $p \leq 001$) and greater psychological integration ($\beta = .10$, 95% CI = .03; .17, $p \leq .01$). Additionally, greater social support predicted greater trust social capital ($\beta = .16$, 95% CI = .07; .24, $p \leq .001$) and linking social capital ($\beta = .11$, 95% CI = .04; .18, $p \leq .005$). Greater psychological integration was positively associated with greater trust social capital ($\beta = .22$, 95% CI = .14; .29, $p \leq .001$) but no association was found between psychological integration and linking social capital ($\beta = .06$, 95% CI = −.01; .13, $p = .12$).

Figure 3

Standardized Path Coefficients for the Theoretical Model



* p < .05, ** p < .01, *** p < .001
a, Standardized coefficient of association between predictor and mediator;
b, Standardized coefficients of association between mediator and outcome;
c, Standardized coefficients of association between predictor and outcome;
X, predictor variable; M, mediator variable; Y, outcome variable.
Control variables not shown.

Mediation Analysis

Table 5 presents direct and indirect effects of the mediation model. Direct effects did not find significant associations between housing stability and trust social capital nor with linking social capital. However, the mediation analysis showed significant total indirect effects between housing stability and trust social capital ($\beta = .04$, 95% CI = .02; .07, $p \leq .001$) and linking social capital ($\beta = .02$, 95% CI = .02; .08, $p \leq .001$), suggesting a combined mediating effect of social support and psychological integration on the relationship between housing stability and the two types of social capital.

Table 5

Standardized Coefficients of Direct and Indirect Effects of Mediation Analysis

	β	SE	[95% CI]	
Direct Effects				
X →Y1	-0.03	0.03	[-.10; .04]	p = .37
X →Y2	-0.01	0.03	[-.07; .06]	p = .81
Specific Indirect Effects				
X → M1 → Y1	0.02	0.01	[.01; .04]	p ≤ .001
X → M1 → Y2	0.01	0.01	[.01; .03]	p ≤ .002
X → M2 → Y1	0.02	0.01	[.01; .04]	p = .007
X → M2 → Y2	0.01	0.01	[-.00; .02]	p = .062
Total Indirect Effects *				
X → M1 & M2 →Y1	0.04	0.01	[.02; .07]	p ≤ .001
X → M1 & M2 → Y2	0.02	0.01	[.01; .04]	p ≤ .001
Total Effects **				
X →Y1	0.01	0.04	[-.06; .08]	p = .73
X →Y2	0.01	0.03	[-.05; .08]	p = .80

* Total indirect effect is the sum of specific indirect effects through all mediators simultaneously
** Total effects are the sum of direct effects and total indirect effects
X = predictor (housing stability), M1 = Mediator 1 (social support), M2 = Mediator 2 (psychological integration), Y1 = Outcome 1 (trust social capital), Y2 = Outcome 2 (linking social capital)

Discussion

The present study investigated the relationships between housing stability and social capital among individuals with histories of homelessness and examined if social support and psychological integration mediate the association between housing stability and trust social capital and linking social capital. The overall model showed that social support and psychological integration had a combined positive mediating effect on the association between greater housing stability and greater trust social capital and greater linking social capital. This provides evidence for the relationships between social support, psychological integration, and social capital.

In this study, participants reported moderate levels of trust and linking social capital. Trust social capital examines bonding and bridging social capital by considering an individual's level of trust in people they know personally, meet for the first time, neighbours, and those of other religions or nationalities. Linking social capital examines confidence in the police, court system, and government (Elgar et al., 2011). Only a handful of quantitative studies have examined trust social capital among people who experience homelessness (Fitzpatrick et al., 2015; Fitzpatrick et al., 2007; Irwin et al., 2008). Our findings align with this prior research, indicating that despite facing challenges, individuals with histories of homelessness can develop trust social capital facilitated by experiencing interpersonal trust, social support, and community participation.

As hypothesized, greater housing stability was associated with higher levels of social support. In turn, greater social support was positively associated with both greater trust social capital and linking social capital. While some studies have shown that a higher level of housing stability is related to greater social support, others have found that many experience loneliness

once housed (Johnstone et al., 2016; Roebuck et al., 2021). Our findings are in line with previous research highlighting the importance of stable housing in enhancing social connections for individuals moving away from homelessness (Beck, 2019; Kirst et al., 2020). Moreover, the relationship between social support and social capital has been established in previous research (Ayed et al. 2020). Studies examining social capital among people who are homeless have used social support networks (e.g., sources of emotional and instrumental support) as measures of social capital (Barman-Adhikari et al., 2016; Cook & Hole, 2020, Stablein, 2011). Overall, these findings support the previous research that has identified social support as an important associated factor with both trust social capital and linking social capital for individuals who have experienced homelessness.

Our findings also showed that greater housing stability was positively associated with higher levels of psychological integration, which in turn was positively associated with greater trust social capital. However, psychological integration was not associated with linking social capital. Psychological integration examines a sense of community and belonging in a neighborhood (Aubry et al., 2013). While no studies have previously examined the relationship between psychological integration and social capital among homeless populations, qualitative research has shown that communities are described as a source of social capital for individuals with histories of homelessness by providing a sense of identity and belonging as well as responding to personal needs such as protection, support, and resources (Ayed et al., 2021). Additionally, research examining social capital among individuals with chronic illnesses has found greater contact with neighbours and viewing one's neighbours as friendly and sociable was associated with better self-rated health (Waverijn et al., 2014). These findings indicate that a sense of belonging in one's community is important for the development of social capital for

people leaving homelessness, particularly in relation to experiencing perceived trust in others. In order to increase social capital, our findings suggest that social interventions targeting previously homeless individuals need to focus on building relationships with neighbours, connecting to community resources in their area, and engaging in community activities.

A few control variables were found to be associated with social capital. For instance, older age was associated with greater linking social capital. This is consistent with past literature among the general populations that show social capital increases with age (Putnam, 2000). Additionally, participants engaging in greater drug use reported having lower linking social capital. It is possible that individuals who report high levels of drug use are more likely to have adverse encounters with the police and court system, which may negatively influence their perceptions and levels of trust towards these institutions. The findings suggest the importance of decriminalization and harm reduction approaches for addressing substance use among individuals who experience homelessness and vulnerable housing to reduce negative experiences with the criminal justice system and promote better access to substance use treatment.

Finally, our study found that participants identifying as Indigenous was associated with lower levels of both trust social capital and linking social capital. This finding is consistent with previous research that has identified the negative impact of colonization and historical trauma on Indigenous individuals' social capital (Levesque & Quesnel-Vallée, 2019). For example, displacement and separation from cultural and community structures can be expected to contribute to lower levels of trust social capital and linking social capital for this group. Additionally, past research in Canada has also shown that Indigenous populations in Canada have poor perceptions of the police and the criminal justice system and report more negative interactions compared to the general population (Cotter, 2022). Outreach efforts that include peer

support with individuals who identify as Indigenous and have experienced housing instability, along with improving police-community relations in Indigenous communities may serve to improve trust and linking social capital outcomes for this group.

Our study has some limitations. Firstly, while the research team made significant efforts to recruit a representative sample of single adults who were homeless or vulnerably housed in each of the cities, there were sampling challenges that made it difficult to achieve this objective entirely. Specifically, recruitment of unsheltered individuals was limited to meal programs, drop-in centers, or community health centers, resulting in the exclusion of individuals in this group who do not use any services.

Additionally, vulnerably housed individuals who lived in inaccessible, unidentified SROs or rooming houses and did not frequent community services were also likely missed. As a result, the sampling strategy may have overlooked extremely marginalized or hard-to-reach populations who are homeless but are not connected in any way to the service system (Hwang et al., 2011).

Finally, self-reported retrospective interview data were used to estimate the duration of homelessness. While the use of the validated Housing Timeline Follow-Back Calendar (Tsemberis et al. 2007) tool allowed for the collection of detailed housing history information retrospectively for a past year, estimates of the percentage of the time housed over the study period may be imprecise.

Overall, the findings of our study highlight the importance of providing stable housing and facilitating social support and psychological integration as a means of increasing social capital among people with a history of homelessness. Understanding this dynamic is essential for comprehensively addressing homelessness, highlighting that successful outcomes involve both securing housing and fostering social connections that enable full participation in society. This is

particularly important for individuals who are Indigenous, as well as those who face challenges related to substance use and have limited access to social capital.

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A Qualitative Study of Housing Stability and Social Capital among Individuals with Histories of Homelessness Vulnerable Housing

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Abstract

This study explores the relationship between housing stability and social capital among individuals with histories of homelessness and vulnerable housing. Bonding, bridging, and linking social capital were examined through a qualitative analysis of interviews with participants in which they described their social networks, community interactions, and their experiences with service providers and government organizations. Findings highlight the critical role of family, friends, and community members as essential sources of bonding and bridging social capital, providing both emotional and instrumental support during periods of housing insecurity. However, the research uncovers challenges related to social isolation, interpersonal conflicts, and drug use, pinpointing these as significant barriers to housing stability and social capital. Examination of linking social capital revealed mixed experiences with government and service organizations, with individual service providers often having a substantial positive impact on participants. There were also significant negative experiences with social services, healthcare, and police, leading to distrust. Overall, the study illustrates how stable housing facilitates social engagement, enabling the rebuilding of relationships and community integration, which are pivotal for fostering social capital. Moreover, these findings underscore the importance of supportive services and the use of interventions that target both housing needs and the more general social determinants of well-being.

Introduction

Homelessness is a complex social issue that poses significant challenges to individuals and communities. In recent years, the concept of housing stability has been explored by community psychologists as a key outcome for individuals transitioning out of homelessness. Based on this research, several individual, interpersonal, and community-level factors have been shown to influence housing stability for individuals with histories of homelessness (Aubry et al., 2021). Factors such as income and education, physical and mental health status, social support, as well as neighbourhood and housing quality, influence the course of homelessness and access to stable housing (Adair et al., 2016; Aubry et al., 2016; To et al., 2016). For these reasons, some researchers have suggested a conceptualization of housing stability that accounts for the dynamic relationships between the individual, housing and communities they live in, and the availability of resources and support. In this context, housing stability has been defined as "the ongoing ability of individuals to access housing that promotes their optimal health and quality of life" (Sylvestre et al., 2009, p.199). Therefore, transitioning from homelessness to stable housing involves more than just obtaining shelter; it also encompasses integrating into society and reaching the broader goals of social inclusion and participation.

Social capital is a multi-dimensional concept that emphasizes the importance of social networks, norms of reciprocity, civic engagement, and social trust among individuals within societies (Putnam, 2000). Social capital has been shown to be important for the health and well-being of individuals and societies (Moore & Kawachi, 2017). A substantial body of research in this domain has explored the link between limited social capital, low socioeconomic status, and negative health outcomes (Rodgers et al., 2019). As a result, social capital has been a topic of interest among public health researchers, particularly in vulnerable populations. The concept of

social capital can serve as a useful framework for understanding the complex landscape of housing stability by examining opportunities for social engagement as well as resources and support accessible to individuals with histories of homelessness.

There is limited research on people with backgrounds of homelessness and housing instability who may face challenges in accessing social capital due to physical and mental difficulties, limited social networks, and social marginalization (Ayed et al., 2021; Cook & Hole, 2020). The goal of this research is to explore narratives of individuals with histories of homelessness and housing instability and examine how they perceive the nature and quality of their social capital, namely their relationships with others, their experiences with people in neighbourhoods and communities they have lived in, and their experiences with service providers and government organizations.

Defining Social Capital

Social capital is defined as actual and potential resources individuals access through social participation and associations with others which facilitates social trust and cooperation through shared social norms and values, (Moore & Kawachi, 2017). In his seminal book *Bowling Alone*, Robert Putnam (2000) describes two types of social capital: bonding and bridging. *Bonding social capital* pertains to the reliable and collaborative relationships that exist within a closely-knit network. It involves social connections among individuals who share a common social identity, such as belonging to the same age group, cultural background, or socioeconomic status. These connections encompass strong types of social ties, such as close friends and family, that offer both instrumental (e.g., tangible aid or resources) and emotional support (e.g., empathy, love, trust). *Bridging social capital* considers informal mutual respect and social trust among individuals with differing social identities but who share social connections. These

connections are characterized as “loose” associations that exist beyond one’s immediate social network. Bonding and bridging social capital are not mutually exclusive and have been grouped together. Previous research has combined bonding and bridging under the umbrella of *trust social capital* which captures both the dynamics of trust within exclusive groups and greater social trust and openness within civil society (Elgar et al., 2011). Finally, based on Putman’s work, Szreter & Woolcock (2004) developed a third type of social capital called *linking social capital*. Linking social capital considers generalized trust toward government and social institutions such as police, courts, and social organizations.

Social Capital and Homelessness

There is qualitative research that has explored bonding and bridging social capital among homeless populations. Some of these studies have been conducted among homeless youth and young adults. Stablein (2011) investigated the role of bonding social capital and street peers among youth and young adults who were homeless and housed. The study revealed that maintaining social ties on the streets fostered solidarity and encouraged mutual support, reducing feelings of social isolation. These social connections also provided access to essential resources such as food, shelter, and income opportunities. However, strong bonds also placed them in potentially harmful and problematic situations, particularly related to drug and alcohol use as well as survival sex for participants who identified as female. Skobba and colleagues (2018) examined bonding and bridging social capital among post-secondary college students with histories of homelessness. Findings indicated that participants drew on existing networks, such as family and mentors, for ongoing support. They also developed new sources of assistance through connecting with professors and engaging in social organizations and campus programs.

Among homeless adults, Cook and Hole (2020) conducted a community-based participatory research study on social capital among adults who were homeless. Qualitative findings showed that participants had low levels of social capital. Social capital was primarily derived from peer relationships within the homeless community and formal support from service providers. For many individuals, the support received from service providers was their sole tangible source of support. However, some participants described having to conform to a "homeless identity" and emphasize their vulnerabilities and deficits to receive resources through service providers. Cook and Hole (2020) advise that policies and practices should ensure that individuals who do not fit the stereotypes of homelessness are not overlooked when prioritizing services. Recently, Ayed and co-authors (2020) conducted a literature review to examine how social capital is conceptualized in the context of homelessness. The majority of included studies (84%) were qualitative, with several themes that were identified. Across qualitative studies social capital was conceptualized along three dimensions; (1) group membership, (2) access to services, and (3) emotional and instrumental supports embedded in and afforded by relationships with others. Overall, the study highlights the importance of social capital for people who are homeless as it provides access to resources and supports through relationships and networks. Ayed et al. (2020) identified limitations in the existing literature on social capital, particularly the inconsistent operationalization of social capital across studies and vague descriptions without clear distinctions among its types and forms. The authors concluded that future research is needed to explore the relationships between social capital, exiting homelessness, and housing.

In a follow-up study, Ayed et al. (2021) conducted a qualitative study exploring how individuals with histories of homelessness in London, UK, describe their communities using a social capital perspective. Communities were described as a source of identity and belonging as

well as meeting personal needs such as protection, support, and resources (i.e., bonding social capital). Participants discussed how their communities could be diverse in terms of age, gender, or religious orientation, with social connections that were grounded in a sense of mutuality and shared interest (i.e., bridging social capital). However, participants also described barriers to community participation, experiences of exclusion, and concern over how their communities are changing over time. The authors concluded that a greater understanding of the communities can offer insight into how social capital may manifest specifically for this group.

In a qualitative study, Hawkins and Abrams (2007) investigated bonding and bridging social capital for participants with co-occurring disorders who were formerly homeless. Social capital was defined as the outcome of the size and quality of social networks that fulfill basic needs. Participants identified peer relationships and family members as sources of bonding social capital, while service providers served as sources of bridging. However, the study also revealed that participants reported limited social capital and reductions in their social networks due to factors such as premature deaths, strained relationships, and a lack of family support.

Overall, findings from the previous research indicate that individuals with histories of homelessness rely on formal and informal social support as sources of bonding and bridging social capital, including family members, peers, and service providers. However, this group can face several barriers accessing social capital and is likely to be exposed to negative social capital (Barman-Adhikari et al., 2016; Skobba et al., 2018; Stablein, 2011).

Negative social capital considers the harmful effects that certain social connections can have on the health and well-being of individuals (Moore & Kawachi, 2017). This negative social capital can be a result of poor-quality social relationships, experiences of discrimination or social exclusion, or being part of social networks that engage in problematic behaviours (e.g., high

levels of drug use) (Ellsworth, 2019; Tompsett et al., 2009; Tyler et al., 2013). Still, the literature shows that individuals with histories of homelessness can foster greater social capital by making social connections, engaging in community activities, and utilizing social services, particularly once they are housed. With this in mind, it is important to explore the role that housing plays in perceptions of social capital for this population.

It is important to note, that in much of the literature on social capital among homeless populations, social capital is conceptualized in terms of resources afforded through social support or social relationships (Ayed et al., 2020). Furthermore, although certain studies have explored elements of bonding and bridging social capital, none have investigated linking social capital among people who experience homelessness. This significant gap in the existing literature is particularly noteworthy considering that individuals with homelessness histories often depend on government programs, frequently interact with law enforcement and judicial systems, and may have a background involving incarceration (Gabrielian et al., 2018; Kouyoumdjian et al., 2019).

The Health and Housing in Transition Study

The present study is part of the *Health and Housing in Transition (HHiT) study*, a longitudinal cohort study that tracked the health and housing status of homeless and vulnerably housed single adults in three Canadian cities longitudinally between 2009 and 2013 (Hwang, et.al, 2011). The study randomly selected 1,190 single adults from shelters, meal programs, community health centers, drop-in centers, rooming houses, and single-room occupancy hotels in Toronto, Ottawa, and Vancouver, Canada. Homelessness was defined as living in a shelter, public place, vehicle, abandoned building or temporarily staying with someone without having permanent residence. Vulnerably housed was defined as currently living in one’s own room or

apartment but having been homeless or have had two or more moves in the past 12 months. Participants were interviewed at baseline and approximately every 12 months following the baseline interview for 4 years. During the final follow-up interview of the 4-year longitudinal quantitative study, a subset of participants was asked if they would like to participate in a one-time qualitative interview.

Previous analyses of HHiT qualitative data explored the barriers and facilitators to housing stability. Sylvestre and colleagues (2018) examined how people with histories of unstable housing perceive their housing or shelter situations and the impact these settings have on their health and well-being. The analysis was structured on three socioeconomic dimensions of housing; materiality, spatiality, and meaning. The material dimension involves the physical quality of housing, while the spatiality dimension considers the location of housing relative to services, amenities, and neighbourhood. The meaning dimension explored the role of housing on emotional well-being and fostering social bonds. The study found that participants' descriptions overlapped across dimensions. While some participants reported that their housing provided a sense of safety, belonging, and identity, others highlighted issues such as lack of privacy and security in their living environments. Overall, the findings indicated that participants face numerous challenges in meeting their personal needs due to factors like poverty, social marginalization, poor quality and unaffordable housing, experiences of violence, and limited access to services.

In a previous analysis, quantitative data from the HHiT study was used to determine if greater housing stability predicted greater trust social capital and linking social capital and if this relationship was mediated by social support and community integration for a sample of 855 homeless and vulnerably housed participants (Agha et al., 2024). Trust social capital

conceptualized bonding and bridging social capital together demonstrated by an individual's level of trust in people they know personally, meet for the first time, neighbours, and those of other religions or nationalities. Linking social capital examined perceived confidence in the police, court system, and government. Results showed that higher levels of social support and psychological integration had a combined positive mediating effect on the association between greater housing stability and greater trust social capital and linking social capital. Additionally, identifying as Indigenous and engaging in greater drug use was associated with lower levels of trust and linking social capital.

Overall, the findings highlighted the importance of social support and a sense of belonging in one's community in the development of trust and linking social capital for individuals with histories of homelessness. Moreover, the findings provided evidence that a homeless and vulnerably housed population faces barriers to accessing social capital due to marginalization and social exclusion.

The Present Study

The overall objective of this study is to explore how participants refer to others in the descriptions of the housing and communities they have lived and to examine positive and negative sources of support in the context of social capital. This is a secondary data analysis project building on previous qualitative analysis completed by Sylvestre, et al. (2018). Moreover, the current qualitative research is intended to complement findings from quantitative research previously described (Agha et al., 2024) to provide a more in-depth understanding of the relationship between housing stability, and bonding, bridging and linking social capital (Greene, 2007).

Thus, the following research questions were examined in this study:

(1) Do participants with low and high housing stability describe trusting and supportive relationships with friends, family members, neighbours, community members, and others with whom they interact?

(2) Do participants with low and high housing stability express trust toward government-led institutions and social service providers?

The first question examines different levels of bonding and bridging social capital by exploring sources of instrumental and emotional support as well as positive and negative descriptions of experiences and interactions with others. The second question examines different levels of linking social capital, by exploring positive and negative descriptions of experiences and interactions with government organizations including the police and court systems, social service providers or community organizations, as well as healthcare.

Methods

Data for this study comes from a qualitative sub-study of the HHiT study. This qualitative study was designed to complement the larger quantitative study by conducting one-time interviews with a sub-sample of study participants. Additional details on the study context and participant recruitment strategies for the quantitative study are available in the HHiT study protocol paper (Hwang et. al., 2011). As well, details about the HHiT qualitative study are presented in the article by Sylvestre and his colleagues (2018).

Study Sample

During the final follow-up interview of the 4-year longitudinal quantitative study, participants were asked if they would like to participate in a one-time qualitative interview. To be included in the study, participants were required to have a minimum of two housing transitions in the two years prior to recruitment. A housing transition was considered as transitioning from being housed to homeless, from homeless to housed, or moving from one housing to another. Efforts were made during the recruitment process to have an equal representation of men and women. Additionally, half of the participants were purposively sampled to have a self-reported lifetime mental health diagnosis. A total of 64 participants were recruited from the larger HHiT study, in three cities: Ottawa (n = 22); Toronto (n = 20), and Vancouver (n = 22).

Data Collection

Semi-structured interviews were completed with each participant. Interviews were approximately one hour in length and were conducted by trained research assistants in participants' homes or at the research institution affiliated with the study (e.g., St. Michael's Hospital, University of Ottawa, University of British Columbia). Participants were provided with written informed consent before each interview and received a $20 honorarium for participation. A semi-structured interview protocol was developed to guide interviews (Appendix K) Participants were asked about their current and past housing situations, barriers and facilitators in maintaining housing, experiences with services, as well as their overall health.

Quantitative Measures

Housing Stability. At each follow-up interview of the quantitative study, housing history was evaluated from the date of the last interview to the date of the current residence. Housing

history information was collected using the Housing Timeline Follow-Back Calendar (HTFBC), a self-report measure that allows for the collection of detailed information on housing history (Tsemberis et al., 2007). Data from this measure provided a day-by-day account of the housing history of participants over the 4-year period of the study. In the current study, housing stability is a continuous measure of the percentage of time housed over four years. The percentage of time housed over four years was used to select participants with low and high housing stability for the analysis.

Social Capital. Social Capital was measured during the follow-up 4 (FU4) interview of the quantitative study using the adapted World Values Survey (WVS) developed by Elgar and his colleagues (2011). The present study used the trust social capital subscale, which measures dimensions of bonding and bridging social capital together, and the linking social capital subscale. Trust social capital measures participants' level of trust in people they know personally, meet for the first time, individuals living in their neighborhoods, and those from other religions or nationalities. Scores range from 5 to 22, with higher scores indicating greater trust social capital. The Cronbach's alpha for trust social capital at the FU4 was 0.82. Linking social capital measures participants' level of confidence in the police, court system, and government. Scores range from 3 to 12, where higher scores indicate greater Linking social capital. The Cronbach's alpha for linking social capital at the FU4 was 0.82.

Participants

A total of 64 participants were interviewed in the qualitative portion of the HHiT study. Participants with missing data on quantitative data for measures trust and linking social capital at follow-up 4 were (n = 14) removed. Of the remaining sample, cases (n = 50) were sorted in descending order according to the percentage of time stably housed over the 4-year study period

(i.e., housing stability). Based on frequency distribution, 15 participants with the highest percentage of time housed (high housing stability) and 15 participants with the lowest percentage of time housed (low housing stability) were selected for the analysis.

Analysis

The secondary qualitative data analysis built upon the work of Sylvestre et al. (2018) and was conducted using directive thematic coding based on frameworks established by Miles et al. (2014) and Saldana (2013). First, an initial set of six transcripts was reviewed using NVivo, allowing for an inductive generation of a preliminary list of codes aligned with the study's research questions. This initial coding phase supported relevance to study objectives and established consistency in the analysis. Themes and codes were developed collaboratively and verified by the second author to create a structured coding scheme (see Table 6). This peer verification step enhanced the reliability of the codes and minimized the potential for primary coder bias. Additionally, the analysis utilized validated quantitative measures of trust and linking social capital by Elgar, et al. (2011) to guide the development of codes, aligning qualitative insights with standardized constructs.

To provide a clear and transparent audit trail, individual summary matrices were created for each remaining transcript (n = 24) based on the coding scheme (Appendix M). These matrices included rows representing codes and themes for each study question, with columns capturing participant statements and illustrative quotes. Using these matrices, a cross-case summary was developed to compare findings between participants with low and high housing stability. By organizing data into columns for each stability group, this approach enabled a cross-case comparison, enhancing the depth and reliability of the findings through methodological triangulation. A second round of coding was then conducted to refine and consolidate themes,

with the second author providing collaborative validation to check for interpretive rigor and further reduce potential bias.

Researcher Positionality and Reflexivity

As the primary researcher, I approached this study with a commitment to reflexivity. As someone who has worked extensively within community psychology and homelessness research, I recognize that my background and perspective on social capital and housing stability are deeply personal. This has likely influenced my interpretation of participants' experiences, particularly my empathy for those navigating social and housing instability.

Based on guidelines by Olmos-Vega and co-authors (2023), I engaged in personal reflexivity by examining how my identity, experiences, and values may shape the research process, and approach participants' experiences with sensitivity to their unique contexts. Interpersonal reflexivity was maintained through open discussions with a secondary coder on how personal biases could have affected participants' responses and my interpretations of them.

From a methodological reflexivity standpoint, directive thematic coding and cross-case comparisons were informed by a theoretical framework and previous findings in the field. Finally, contextual reflexivity considered the broader socio-cultural factors affecting homelessness, and understanding that participants' experiences are shaped by systemic issues that extend beyond individual agency.

By engaging in these reflexive practices, I aim to provide a transparent account of how my positionality and methodological choices have influenced this research and present findings that genuinely reflect participants' lived experiences.

Table 6

Study Research Questions and Coding Scheme

Research Question	Pre-ordinate Concepts	Codes
Bonding & Bridging Social Capital: Do participants with high and low housing stability describe trusting and supportive relationships with family members, friends, neighbours, and others with whom they interact?	Positive and negative descriptions of experiences and interactions with people they know personally (i.e., family members, friends, neighbours, landlords, roommates) and people in general	**Positive:** • Receiving/providing help, support, and resources from others (instrumental support) • Having people to turn to/rely on and/or being there for others (emotional support) • Positive views of people (e.g., people in general or people from different ethnicities, religions, nationalities) • Participation in community and social activities • Sense of belonging in neighbourhood/community **Negative:** • Lack of instrumental/emotional support • Interpersonal conflict with others • Lack of trust in others/people in general • Discrimination, exclusion, social isolation • Death or loss of loved ones
Linking Social Capital: Do participants with high and low housing stability express trust toward government-led organizations and social service providers?	Positive and negative descriptions of experiences and interactions with police, court system, and governmental organizations (social services, community organizations, healthcare providers)	• Receiving help, support, and resources from service providers (e.g., healthcare providers, case managers, social workers, housing workers, shelter staff etc.) • Positive/Negative descriptions of social services/community organizations (e.g., shelters, food banks, meal programs, housing programs, disability support, etc.) • Positive/negative descriptions of police and court system • Positive/negative descriptions of the healthcare system

Results

Table 7 presents descriptive statistics for homeless and vulnerably housed participants with low (n = 15) and high (n = 15) housing stability. For participants with low housing stability, the mean percentage of time stably housed was 55.2% (SD = 17.5%) vs 99.9% (SD = 0%) for participants with high housing stability. The gender distribution in both groups was varied, with 60% of participants in the high stability group identifying as female (n = 9) compared to 27% in the low stability group group (n = 4). Both groups reported moderate levels of trust (bonding/bridging) social capital (low stability: M = 11.9, SD = 2.8 vs. high stability: M = 13.8, SD = 2.6) and linking social capital (low stability: M = 6.3, SD = 2.4 vs. high stability: M = 6.2, SD = 2.2). Independent-sample t-tests were conducted to compare trust and linking social capital scores between the low and high housing stability groups. No statistically significant differences were found between the groups on measures of trust social capital ($t [9.88] = -1.89$, $p = .10$) or linking social capital ($t [27.14] = 0.248$, $p = 0.81$).

Table 7

Descriptive Statistics for Participants with Low Housing Stability (n = 15) and High Housing Stability (n = 15)

	Low n = 15		**High** n = 15	
Housing Status, n (%)				
Homeless	7	(47%)	2	(13%)
Vulnerably Housed	8	(53%)	13	(87%)
City, n (%)				
Vancouver	4	(27%)	4	(27%)
Toronto	6	(40%)	4	(27%)
Ottawa	5	(33%)	7	(47%)
Age Categories, n (%)				
25 – 30	1	(7%)	1	(7%)
30 – 40	6	(40%)	3	(20%)
40 – 50	2	(13%)	6	(40%)
50 +	6	(40%)	5	(33%)
Gender, n (%)				
Female	4	(27%)	9	(60%)
Male	9	(60%)	6	(40%)
Transgendered	2	(13%)	0	(0%)
Ethnicity, n (%)				
White	9	(60%)	9	(60%)
Black / African – Canadian	1	(7%)	1	(7%)
First Nations / Aboriginal	4	(27%)	2	(13%)
Mixed / Other Ethnicity	1	(7%)	3	(20%)
Housing Stability, m (sd)				
% of time stably housed	55.2%	(17.5%)	99.9%	(0.0%)
Social Capital, m (sd)				
Trust (bonding/bridging)	11.9	(2.8)	13.8	(2.6)
Linking	6.3	(2.4)	6.1	(2.0)

Participants were considered vulnerably housed if they reported living in their own room, apartment, or place and had been homeless in the past 12 months and/or had two or more moves in the past 12 months.

Demographic characteristics (City, Age, Gender & Ethnicity) were measured at baseline. Housing Stability was measured over 4 years (FU1-FU4).

Higher scores represent greater levels of trust social capital (range 5 to 22) and linking social capital (range 3 to 12).

Bonding & Bridging Social Capital

In examining bonding and bridging social capital, we explored how participants with low and high housing stability described their experiences and interactions with people they know personally (i.e., family members, friends, landlords, roommates, neighbours, community members) and people in general. Across both groups, participants highlighted the importance of receiving instrumental support from others. In particular, friends and family members, such as parents, grandparents, siblings, and children, were described as important for offering a wide range of resources, such as food or money for groceries, help in finding housing and employment, or providing participants with a temporary place to say during periods of housing instability. Additionally, friends and family were often involved in helping with recent or upcoming moves into homes.

In a few cases, receipt of support extended beyond immediate social circles to include landlords, neighbours, and community members (i.e., bridging social capital). This was illustrated by one participant with low housing stability who received assistance from a community grocery store owner that would allow her to extend credit to buy groceries near the end of the month when she was low on income. The norms of reciprocity were also evident as several participants mentioned offering support to people within their networks. For example, one participant described wanting to provide financial support to his son and grandchild, while others spoke about "*taking care*" of their friends and family, volunteering, or expressing the desire to "*help other people*".

Participants from both groups also talked about sources of emotional support, such as having people to "*turn to*" or "*rely on*". The importance of having a social network of friends was frequently mentioned. Friends contributed to emotional well-being, helping with transitions

to stable housing and offering support during challenging times. A common theme, particularly among participants with high housing stability, was reconnecting or rebuilding relationships with family members since becoming housed, especially those who had children. In this context, housing was described as a place to "*have family over for dinner*" or have their children visit. Across both groups, being housed provided participants with opportunities for socialization. For instance, participants described being able to have visitors as a positive aspect of their housing. Some participants appreciated their neighbours and felt a sense of belonging in their communities. Others talked about their housing in proximity to friends and community programs they participate in such as support groups (e.g., Alcoholics Anonymous, Women's group) or indoor and outdoor activities (e.g., bingo, pool, fishing, biking, etc.).

Unfortunately, there were also participants with low and high housing stability who described low levels of bonding and bridging social capital, indicated by a lack of emotional and instrumental support and negative perceptions of other people. Many described either having no family or being estranged from them for years. For example, one participant with low housing stability expressed having "*no one to rely on*", saying "*Where am I? I have nobody, and when you're in a world alone, it's not exactly a rosy place to be.*" A number of participants recounted the impact of losing social support, particularly through the death or loss of loved ones. In some cases, the loss of a loved one was described as a catalyst for housing instability in the past. The grief associated with such losses, including the death of a spouse or separation from children, was described as having a deep negative effect on their lives.

Several participants also described a loss of social capital after recent moves into housing. These participants expressed experiencing social isolation and loneliness in their housing and felt separated from their social network in previous communities. For some

participants in the low housing stability group, this separation sometimes resulted in home takeovers highlighting the negative attributes of certain social ties, reflecting negative social capital. These participants described inviting people into their housing units for company, who would then stay for long durations or refuse to leave. Guests were often friends or acquaintances participants knew from when they were living on the streets or in homeless shelters. In one case, a participant experienced an eviction after allowing others who engaged in using and selling drugs in their unit.

On the other hand, several participants expressed a desire for independence, preferring to be self-reliant or "*on their own*. This preference to "*keep to one-self*" was common among both groups. Some described not wanting to "*get involved in other people's problems*", staying away from "*toxic*" people, or preferring to spend time alone. Often, participants expressed a desire to distance themselves from others who engage in drug use. In this context, housing was described by some participants as a place to "*get away from other people*".

Additionally, many participants spoke about a lack of social capital or exposure to negative social capital which led to feelings of distrust. For example, a salient theme, particularly in the low housing stability group were experiences of interpersonal conflict with others and its contribution to housing instability. For example, conflict with an intimate partner or a breakup with a significant other was often cited as a reason that participants would leave housing. Others described major disagreements or incidences of physical altercations with roommates, neighbours, or landlords that resulted in participants having to move. In some cases, participants spoke about experiences of discrimination in housing, highlighted by one participant who felt that she was arbitrarily being fined by building management for having visitors, stating "*I'm*

being stereotyped because of my past lifestyle. I'm being fined for things that are completely simple things to do..."

The negative impact of drug use on bonding social capital, either personal or within one's social network, was a prominent theme across both groups. For instance, one participant expressed feeling peer pressure to engage in drug use while staying in a shelter for women, while another spoke about struggling to tell his family that he was HIV positive due to sharing needles with friends. Many participants described avoiding or staying away from other people to prevent personal use, challenges with sobriety due to being around others who use drugs, or the negative impact of drugs being readily available in the housing, neighbourhood, or community they live in. This was highlighted by one participant explaining that drug use can lead to letting "*the wrong people into your life*" or allowing "*the wrong people [to] make choices for you*".

Many participants from both groups expressed positive views of people in general (i.e., generalized trust). Principles such as '*the golden rule*' (i.e., treating others how they wanted to be treated), '*Karma'* or the fundamental belief in treating others with respect were frequently emphasized by participants. This is exemplified by one participant who stated "*I would never take nothing from nobody…or ever treat anybody badly…I believe what goes around comes around…you're never given more than you can take, but you're also never given more than you deserve".* Moreover, a few participants described themselves as "*a people person*" and believing in the "*goodness of humanity*". In some cases, participants expressed empathy for others, with one participant explaining that people who partake in harmful behaviours, are "*lost souls*" often struggling with issues related to mental health and addiction.

There were also participants who expressed negative views of people in general and revealed challenges in trusting others, often stemming from past negative experiences such as

exploitation, witnessing or experiencing violence, theft in shelters or on the streets, and childhood abuse. A few participants openly admitted to a general distrust of people in statements like "*I don't trust other people*", "*people don't help each other*", "*people don't share*" or "*people don't have morals*".

These perspectives were more common among the low housing stability group, usually in the context of their experiences with individuals in shelters, on the streets, or in low-income neighbourhoods. Criticisms were generally directed at fellow homeless individuals concerning behaviours like engaging in drug use or criminal activity. In some cases, participants would attempt to differentiate themselves from what they termed as "*other*" homeless people. This was emphasized by one participant with low housing stability that described people who are homeless or living in shelters as "*low-class*", "*degenerate*" and having a "*poverty mentality*".

However, some participants spoke about their efforts to overcome past trauma and prejudices and learn to trust people. This was highlighted by one participant with low housing stability who stated *"I've learned to adapt by sharing and talking with people. I've had to learn to trust people. I don't trust people. When I get down to the deepest, darkest side of me, it's just I really don't care and I don't trust anyone. You know, I used to think that the world was a very evil place, you know? There was nobody good in it."*

Finally, a few participants mentioned people from other ethnicities, religions, and nationalities. For example, one participant in low housing stability had positive descriptions of living in diverse family-oriented communities, while another mentioned how it can be challenging to live with people of different ethnicities due to language barriers and differences in diet.

Linking Social Capital

In exploring linking social capital, we examined how participants with low and high housing stability levels described their experiences with government organizations including social services providers, community programs, police, courts, and healthcare. Many participants in both groups described receiving support and resources from a variety of service providers, including support workers (e.g., outreach, housing, or social workers), case managers and/or counsellors. In most cases, participants indicated how one specific support worker played a crucial role.

For instance, several participants from both groups spoke positively about their housing workers as a major source of support, helping them find housing, prepare for their move, and assist with moving and settling into their units. One participant with low housing stability frequently mentioned a particular social worker who "*saved his life*" and changed his perspective on people in general, stating "*I thought, you know, I couldn't make a difference...but he made a huge difference in my life, you know. There are people that care, there are people that do their jobs to their fullest, and they love their job*".

A few participants talked about the compassion and care provided by shelter staff that made them feel "*listened to*" and "*cared for*" when receiving help to find housing as well as other resources. One participant described how being treated well by shelter staff "*shattered*" his "*shell*" stating "*Just by talking to me…not treating me like that grubby hermit under the bridge. They treated me like a human being, and I sort of snapped out of it*". Another expressed how staff at shelters cared about her well-being and did not treat her like "*a client*" but as though she was "*part of the team*".

Others appreciated the support and care they received from staff in supportive or transitional housing. One participant with high housing stability revealed that she no longer had the desire to use drugs as a result of the support and stability she has been given by her support worker and others in her building. Another participant spoke about positive change in supportive housing that led to more optimistic views and greater trust of others; "*I say hi to people. I feel like ... I'm part of society, living in this building because of the way they treat me here. Even the staff in this building... treat us with respect*".

However, while many participants had positive experiences with specific individual service providers, views on overall social and community services were mixed. More specifically, many participants described their experiences in emergency homeless shelters. The most frequently mentioned positive aspect of staying in homeless shelters was the access they provide to support services including social programs, employment and housing support, and healthcare. Others appreciated the food security and opportunities to social network. A couple of participants indicated that social services could be helpful if the individual is "*willing to do the work*", while a few others mentioned how were not aware that these services were available for a long time, and wish they'd accessed them sooner.

On the other hand, participants also described negative aspects of staying in homeless shelters such as the lack of cleanliness, theft, drug use, as well as exposure to people with mental health challenges. One participant with high housing stability claimed that having your belongings stolen in shelters contributed to a sense of distrust and a lack of safety. Another participant with low housing stability felt that there was little support and advocacy for clients in shelters stating that there is "*no one to fight for you*".

Finally, some participants spoke about experiences of violence and discrimination in shelters. For example, one participant who identified as transgender recounted being treated poorly by staff and other shelter users, describing the shelter system as "*nothing but a dumping ground for the psych wards…that makes people sicker*" and that the staff is "*not here to help people*" but to "*express their power over people*".

A number of participants with high housing stability spoke positively about substance use and addiction programs. More specifically methadone maintenance programs and community support groups (e.g., AA) were frequently mentioned by participants as having a large positive impact as well as providing a place for social connections. Other participants mentioned improved access to treatment and care in transitional housing, as well as supportive recovery programs in long-term healthcare units. One participant stated that staying in a long-term healthcare unit "*was very helpful for me to heal*" and felt that he was "*taken care of*" by the nurses on-site. On the other hand, another participant found it challenging to be in a recovery program for drug and alcohol use with individuals who did not take their sobriety seriously.

When it came to experiences with the healthcare system as a whole, responses were mixed, often based on the severity of health problems participants were experiencing and the type of care they required. A few participants spoke about their doctors (i.e., family physicians) or psychiatrists as a source of support. In some cases, doctors supported patients in getting disability income support or into supportive housing programs. One participant described their doctor as "*wonderful*" stating that "*I trust him more than my own brother*". Participants from both groups also spoke generally about actively seeking healthcare or making efforts to prioritize their health by reaching out to healthcare providers.

However, while participants in both groups discussed barriers to accessing care, this issue was more prevalent in the low-housing stability group. For example, one participant with low housing stability expressed that they had "*no faith in the healthcare system*" while several others explicitly stated that they "*do not trust doctors*" and avoid visits. This was emphasized by one participant who declared "*I'll never go to a doctor...you [will] have to take me there on my death bed*". Other participants spoke about being denied care or being treated poorly by healthcare providers. This was exemplified by one participant who specified that they were denied pain medication following a procedure due to their drug use, stating that the doctor's "*exact words*" were "*We don't cater to junkies*".

Finally, some participants spoke about their experiences and interactions with police and courts. In most cases, participants discussed how a history of incarceration was a barrier to housing stability. For instance, one participant with low housing stability mentioned missing an opportunity for subsidized housing due to being arrested. Others spoke about their negative experiences or problematic encounters with police during street sweeps, arrests, and evictions. One participant described being assaulted by police officers after being involved in a traffic accident, "*I was angry, because you know, I was totally unarmed, and they pulled guns on me, and they tasered me, and they had a party with it*". This participant also mentioned that they did not receive adequate representation from their court-appointed lawyer during their trial, indicating that "*he was no help*" and did not show up to appointments.

Others expressed bureaucratic frustrations with the police and court system as a whole, with one participant calling it "*a bunch of mumbo-jumbo…bureaucracy at its finest*". Overall, the general distrust for government organizations was highlighted by one participant with low housing stability that stated "*I don't care if you're a cop if you're a doctor if you're a lawyer –*

who the fuck you are! I do not trust you. When somebody comes up and says "trust me", I turn and run."

Patterns of Social Capital Across Stability Groups

Table 8 presents a summary of the generalized similarities and differences between participants with low and high housing stability, focusing on bonding and bridging social capital, and linking social capital. The similarities between the two groups were more prominent than the differences, highlighting shared reliance on family, friends, and service providers for emotional and instrumental support. Both groups described housing as a social space, challenges with social isolation, and difficulties accessing institutional resources like healthcare.

Differences, while less pronounced, reflected some unique experiences within each group. For example, participants with low housing stability more frequently reported negative social capital, such as the destabilizing effects of drug use, interpersonal conflict, and negative perceptions of other individuals who were homeless. In contrast, participants with high housing stability described housing as a safe space for recovery and reconnection with family and community. These patterns offer insight into how both similarities and nuanced differences shape the social capital experiences of participants across varying levels of housing stability.

Table 8

Similarities and Differences Between Participants with Low Housing Stability and High Housing Stability

	Similarities	Differences
Bonding & Bridging Social Capital *Positive & negative descriptions of experiences with people they know personally, people in their communities and people in general*	• Participants in both groups relied on close social networks, such as family and friends, for instrumental and emotional support (e.g., food, housing assistance, emotional encouragement). • Participants in both groups emphasized the importance of treating people with respect, often invoking ideas of the "golden rule" or karma to highlight mutual reciprocity in relationships. • Participants in both groups described experiences of social isolation or a preference for keeping to oneself, with some expressing a lack of trust in others. • Participants in both groups described the negative impact of drug use (either personal or within their social network).	• Participants with high housing stability described housing as a safe place for recovery and stability. Housing was viewed as a place to socialize and host visitors and provided opportunities to reconnect with friends and family. • Some participants with high housing stability highlighted a sense of community belonging and the importance of getting along with neighbours. • Participants with low housing stability cited drug use and interpersonal conflict as significant sources of instability, contributing to evictions, home takeovers, and difficulty maintaining sobriety. • Participants with low housing stability often expressed negative perceptions of people in shelters or 'other' individuals experiencing homelessness.
Linking Social Capital *Positive & negative descriptions of experiences with police, court system, and governmental organizations (social/community services, healthcare).*	• Participants in both groups described receiving support and resources from social workers, shelter staff, and family physicians, with many highlighting one specific service provider who had a positive impact. • Positive experiences with social service providers sometimes led participants to develop greater trust in people in general.	• Participants with high housing stability described greater trust and reliance on institutional support, including positive relationships with housing or outreach workers or support staff. • Participants with low housing stability described experiencing discrimination, exclusion, and unmet needs in accessing institutional services, exacerbating distrust toward systems like healthcare and law enforcement.

Discussion

The present study explored the relationship between housing stability and social capital among individuals with histories of homelessness. More specifically, bonding, bridging, and linking social capital were examined through analysis of participant narratives describing the nature and quality of their relationships, experiences with other people in their neighbourhoods and communities, and interactions with government organizations. Findings from this research provide insights into how individuals with low and high housing stability access social capital via sources of social support and relationships within communities, highlighting the complex nature of these interactions.

Overall, quantitative measures of trust (bonding/bridging) social capital and linking social capital remained moderate for study participants, indicating that despite facing challenges, individuals with histories of homelessness do access some level of social capital. Additionally, bivariate analysis revealed no significant differences between low and high housing stability groups, which suggests that factors other than housing stability alone influence the levels of social capital among these individuals. This aligns with previous findings demonstrating that without the mediating effects of social support and psychological integration, greater housing stability does not necessarily translate to enhanced social capital (Agha et al., 2024).

In exploring bonding and bridging social capital, participants described varied experiences with people they knew personally and people they encountered in their community. Consistent with the existing literature, participants described peer relationships and family members as crucial sources of bonding social capital who provided instrumental and emotional support during periods of housing instability (Ayed et al. 2020; Hawkins & Abrams 2009). Additionally, being housed allowed for opportunities for social engagement. This included

reconnecting with family and friends, having space to host visitors, socializing with neighbours, and feeling a sense of belonging in the communities they lived in.

Communities have been found to be an important source of bonding and bridging social capital for individuals who experience homelessness by providing a sense of identity as well as responding to personal needs such as support, resources and protection (Ayed et al. 2021). Our findings align with previous studies suggesting that higher housing stability enhances community integration opportunities for those with a history of homelessness, which in turn, can foster increased bonding and bridging social capital (Agha et al., 2024).

Our findings add to the existing literature that draws attention to barriers to bonding and bridging social capital for people who are homeless (Cook & Hole, 2020). Some participants described a loss of bonding social capital and expressed feeling isolated from their social networks after moving into housing. Others spoke about the loss or death of a loved one as a contributor to their housing instability. Social isolation and loneliness in housing are prominent themes identified in qualitative studies among recently housed individuals with histories of chronic homelessness (Macnaughton et al., 2015; Roebuck et al., 2021). Additionally, research conducted by Hawkin & Abrams (2007) found that housed individuals who were previously homeless reported a loss of social capital due to the death or loss of a loved one. This suggests a fragility in their social networks due to fewer members and weaker connections, leading to unstable social capital in this population. On-going support and continued access to care for individuals transitioning from homelessness into housing may be an important way to address limitations in social capital.

Findings from this study emphasize the detrimental effects that can be associated with social capital for people who have experienced homelessness. Other studies have reported the

negative aspects of some social capital for this population (Portes, 1998; Moore & Kawachi, 2017). For example, several participants spoke about experiences of home takeovers because of inviting people from their previous social networks while homeless into their units (Roebuck et al., 2021). Others mentioned incidences of interpersonal conflict with this network after becoming housed demonstrating the real-life implications of strained relationships and their contribution to housing instability (Czechowski et al., 2022). Additionally, the negative impact of drug use was a salient theme across both groups. Participants expressed pressure to engage in drug use within their social networks, challenges with maintaining sobriety due to the influence of others, and a lack of safety due to high levels of drug use in their communities. Similar to findings from Stablein (2011), our study highlights the complexities of social networks in the context of homelessness, where drug use can both be a source of bonding and a barrier to forming positive social connections once individuals are housed.

However, despite challenges, participants actively sought to distance themselves from negative sources of social capital and seek healthier social environments to foster new opportunities for accessing bonding and bridging social capital. While some participants expressed a lack of trust in others due to adverse experiences in their past, others also spoke about efforts to overcome past traumas and prejudices to rebuild trust. Positive views of others were often expressed by citing values like the golden rule and the importance of respecting others. These results highlight the resilience shown by those overcoming homelessness in the previous literature and underscore the importance of encouraging initiatives for positive social interaction and support for this group (Durbin, et al., 2019; Marzana et al., 2023). Community development initiatives, such as resident volunteer committees, education and employment programs, as well as community gardens and public art projects may be promising avenues to

facilitate bonding and bridging social capital by encouraging opportunities for individuals to forge new connections within their communities (Halstead, et al., 2022; Houle, et al., 2017).

In exploring linking social capital, our findings revealed mixed experiences with government organizations, including social services, healthcare, police, and courts. A prominent theme was the significant positive impact that individual service providers (e.g., social workers, shelter staff, and healthcare providers) had on participants. In some cases, the compassion and support they received from service providers not only made them feel valued but also led to more positive perceptions of people and greater trust in others. These findings are in line with previous research indicating that support from social services is a primary source of social capital for people who are homeless (Cook & Hole, 2020). Moreover, they emphasize the importance of the therapeutic alliance, where trusting relationships with service providers and healthcare professionals are important for positive outcomes (Sandu et al., 2021). This also highlights the value of Housing First programs that combine housing with relationship-based services through intensive case management or assertive community treatment, which has been shown to improve housing stability for people who were chronically homeless (Aubry et al., 2020). These relationships with support workers can ultimately improve linking social capital for individuals with histories of homelessness by encouraging positive perceptions and greater trust towards service providers and healthcare professionals.

However, while some participants reported receiving valuable support and resources, others recounted negative experiences with healthcare services. A few participants reported negative treatment by healthcare professionals, including being denied care and expressing widespread distrust towards both healthcare workers and the system at large. This aligns with a systematic review indicating that individuals experiencing homelessness face significant barriers

to health care and social services, exacerbated by bureaucracy, limited access, discrimination, and stigma (Omerov et al., 2020). Such experiences of discrimination and stigmatization not only undermine their well-being but also erode linking social capital by fostering distrust towards government organizations designed to support them. Outreach efforts, combined with education and training for social service and healthcare professionals on the unique needs of homeless populations can be a way to build trust and encourage individuals to access the care they need.

Finally, some participants spoke about their experiences and interactions with law enforcement. In most cases, participants discussed how a history of incarnation was a barrier for them to achieve housing stability. Negative encounters with police officers were also reported during street sweeps and evictions, alongside expressions of frustration with the bureaucracy inherent in the law enforcement and court systems. This aligns with previous research indicating that individuals with histories of homelessness often have had adverse experiences with law enforcement (Sample & Ferguson, 2020). A recent study documented that men who are homeless tend to distrust law enforcement and actively avoid interactions with them (Donley et al. 2020). Initiatives to enhance police-community relations and promote law enforcement practices to address the specific needs of homeless communities could be instrumental in fostering improved trust and enhancing linking social capital outcomes for this group.

Our findings revealed some differences between individuals with high and low housing stability over the 4-year period of the study. For instance, participants with high housing stability more consistently described their housing as a place for recovery and spoke about reconnecting with loved ones once housed. They also exhibited a stronger sense of community integration, which facilitated engagement in positive social interactions and greater trust in others (Hawkins & Abrams, 2007; Ayed et al., 2021).

Conversely, individuals with low housing stability spoke about the negative impact of drug use and interpersonal conflicts leading to higher levels of distrust of others and services (Stablein, 2011; Czechowski et al., 2022). They also spoke more frequently about challenges accessing healthcare services (Omerov et al., 2020). However, the similarities between the groups align with previous qualitative research that finds living conditions for many individuals with histories of homelessness remain challenging, even when they are stably housed (Sylvestre et al., 2018). Therefore, these findings emphasize that while stable housing can provide a foundation for maintaining and rebuilding supportive relationships, there is also a need for ongoing support for recently housed individuals to encourage community integration and provide access to essential services (Aubry et al., 2021; Gabrielian et al., 2018).

Our study, while offering valuable insights, has its limitations. Firstly, the recruitment approach, primarily through shelters, meal programs, drop-in centers, and health centers, will not include individuals who avoid accessing services. Additionally, the qualitative interview protocol did not explicitly inquire about participants' social capital; consequently, participants were not specifically prompted to discuss the various dimensions of social capital we aimed to investigate. Instead, deductive qualitative methods guided by a social capital framework were employed (Saldana, 2013).

Future research should aim for broader recruitment strategies and explicitly explore social capital dimensions using an interview protocol specifically tailored to assess bonding, bridging, and linking social capital to ensure a more comprehensive representation of the homeless population. This will help in developing more targeted and inclusive interventions that address the varied needs of all individuals facing homelessness.

Overall, the findings of our study provide insight into how individuals with histories of homelessness and housing instability perceive and experience social capital, focusing on the role of personal relationships, community interactions, and encounters with service providers and government organizations in building this social capital. Our findings also suggest the need for improved access to social support and healthcare services as well as community development initiatives for housed individuals with histories of homelessness to enhance their social capital and their well-being.

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General Discussion

Overview

This thesis explores the relationship between housing stability and social capital among individuals with histories of homelessness, using an ecological approach to understand social and community factors influencing this relationship. Social capital was explored based on the works of Putnam (2000) and Szreter & Woolcock (2004), emphasizing the importance of social networks, norms of reciprocity, civic engagement, and institutional trust among individuals within societies. The research is comprised of two complementary studies: a quantitative analysis of longitudinal data on housing stability and social capital (study one) and a qualitative study of in-depth interviews focused on social capital with individuals who have experienced low and high levels of housing stability (study two).

Study one examined whether greater housing stability predicts greater trust social capital (i.e., bonding & bridging) and linking social capital, among individuals who are homeless or vulnerably housed. The findings revealed that while greater housing stability is not directly associated with greater social capital, higher levels of social support and psychological integration (i.e., a greater sense of community belonging) mediate this relationship.

Study two provides insights into the personal narratives of individuals with high and low levels of housing stability over a 4-year period, exploring their experiences with social capital through their social networks, community interactions, and relationships with service providers and government organizations. The analysis highlights the critical role of family, friends, community members, and service providers in providing emotional and instrumental support essential for bonding, bridging, and linking social capital.

Overall findings from this thesis indicate that while stable housing is important, supportive relationships, opportunities for social inclusion, and access to essential services are critical for building social capital for individuals with histories of homelessness (Bassi et al., 2020, Sylvestre et al., 2009).

Integration of Study Findings

This research makes a significant contribution to the body of knowledge on social capital among those who experience homelessness (Ayed et al., 2020). The use of widely used quantitative measures from Elgar and co-authors (2011) indicates that our study population experiences moderate levels of social capital, as reflected in the scores of trust social capital (bonding and bridging) and linking social capital. Given the importance of social capital on health and well-being (Rodgers et al., 2019), these findings demonstrate how housing stability is mediated in its relationship with social capital through social support and psychological integration and identify the barriers that those who experience homelessness face in building social capital.

The results of this research emphasize the critical role of social support networks in developing social capital for individuals with histories of homelessness who are stably housed. Study one found that greater housing stability was positively associated with greater social support which in turn positively associated with greater trust and linking social capital. In study two, participants described how emotional and instrumental support from close friends and family members helped them navigate challenges related to housing and homelessness. Stable housing provided a safe space for social interactions, allowing participants to host visitors and reconnect with family members. The norms of reciprocity were also evident as several participants mentioned providing support to people within their social networks. This aligns with

Putnam's (2000) concept of bonding social capital, and the importance of close-knit relationships and strong social ties on individual well-being.

Additionally, these findings are consistent with previous research that draws attention to the role of communities in providing identity, belonging, and essential resources that make up social capital (Ayed et al., 2021). Findings from study one show that greater housing stability is associated with a higher level of psychological integration, which in turn is associated with a higher level of trust social capital. In study two, participants noted the positive impact of supportive neighbours and the proximity to community programs, which contributed to their sense of belonging and social well-being. This supports the idea that opportunities for community participation and integration can enhance bridging social capital, and help individuals access resources and support beyond their immediate social networks.

These are the first studies to investigate linking social capital (i.e., trust in institutions such as government agencies and service providers) among people who experience homelessness. Study one shows that greater social support is positively associated with higher levels of linking social capital. Study two provides qualitative insights, revealing that a positive relationship with service providers and positive experiences with government organizations, including social services and healthcare, are perceived as having a positive impact on participants. These interactions were viewed as not only helping them access essential resources but also fostering more positive views of organizations and institutions. However, there were also descriptions of negative experiences with social services, healthcare, and police, that led to distrust of these services.

This thesis presents an ecological model outlining the linkages between social support, community integration, and social capital (see Figure 2, p. 33). Study one found significant

correlations between measures of social support, psychological integration and trust social capital (bonding & bridging) and linking social capital. In study two, positive experiences with service providers helped participants access and maintain stable housing, which encouraged institutional and generalized trust (linking and bridging social capital). In turn, stable housing enabled participants to distance themselves from problematic social networks (negative social capital), reconnect with friends and family members (bonding social capital), and encouraged social engagement and community participation (bonding and bridging). The interdependence of social support, community integration and the three types of social capital underscore the importance of comprehensive support systems that enhance close-knit relationships, broader social connections, and trust in institutions to improve social capital for housed individuals with histories of homelessness.

Finally, the findings from both studies highlight significant barriers faced by individuals experiencing homelessness, particularly related to having a lack of social capital and being exposed to negative social capital because of their housing instability. In study one, drug use was associated with lower levels of linking social capital, suggesting that substance use can erode trust in institutions and hinder access to broader support networks (Gabrielian et al., 2016; Stablein, 2011). Study two further illustrated these challenges as participants described how exposure to drug use, the loss of a loved one, and experiences of violence and discrimination contributed to social isolation and distrust of others (Sylvestre et al., 2018; Czechowski et al., 2022).

Moreover, some participants expressed a desire to disconnect or differentiate themselves from their identity of being someone who has experienced homelessness, which can limit their access to resources and complicate their ability to form close ties (bonding social capital) with

others who have experienced homelessness (Cook and Hole, 2020). Additionally, interactions with service providers were mixed; while positive relationships could foster trust and integration, negative encounters could reinforce feelings of distrust and marginalization. These barriers underline the need for helping people who experience homelessness to develop comprehensive support systems that help them build positive social capital in the context of becoming stably housed.

Implications for Policy & Practise

The findings of this thesis highlight several critical areas for practice and policy development that can enhance housing stability and social capital for people who have experienced homelessness. Effective solutions to homelessness must go beyond providing housing (Sylvestre et al., 2009). This highlights the importance of Housing First programs for people who are chronically homeless. These programs offer housing plus support, particularly through Intensive Case Management (ICM) and Assertive Community Treatment (ACT) (Tsemberis, 2015). In addition to ending homelessness, the supportive relationships developed through ICM and ACT can serve to provide consistent emotional and instrumental support and enhance trust in institutions and are important for bonding, bridging, and linking social capital. Additionally, access to physical and mental healthcare including substance use programs is essential for addressing the holistic needs of homeless individuals (Carnemolla & Skinner, 2021). This approach should include social prescribing, a method where healthcare providers refer patients to non-clinical services and community activities, that can effectively link individuals to community resources (Hassan et al., 2020). Moreover, recovery colleges, which offer educational courses on mental health and well-being further support the integration and

recovery of homeless individuals by providing structured learning environments tailored to personal development (Whitley et al., 2019).

Future policies should also focus on facilitating community integration for formerly homeless individuals, particularly through community development initiatives in low-income housing (Houle, et al., 2017). Enhancing community participation and engagement can help rebuild strong social ties and encourage generalized trust essential for building social capital. Additionally, community development initiatives that provide opportunities for social activities, volunteerism, education, and employment can encourage a sense of belonging and mutual aid, essential for both long-term housing stability and social capital (Halstead et al., 2022; Marshall et al., 2020).

Substance use is a significant barrier to achieving housing stability and building social capital among formerly homeless individuals (Stablein, 2011; Roebuck et al., 2024). To overcome this challenge, policies must prioritize access to recovery programs that are tailored to the needs of this population (Magwood et al., 2020). Additionally, harm reduction approaches may improve linking social capital for homeless individuals who use substances by fostering connections with social institutions and services through non-judgmental, supportive environments (O'Leary et al., 2024). This is particularly important for those who have a history of incarceration or face institutional barriers due to experiences of discrimination and marginalization (Shearer et al, 2022). Moreover, community-based programs like Integrated Dual Disorder Treatment, Alcoholics Anonymous (AA) and Narcotics Anonymous should be made available as avenues for addressing substance use problems that include peer support. Given that many individuals continue to struggle with substance use even when housed , embedding these services within housing programs is essential (Nelson et al., 2024). This

comprehensive approach can enhance social capital, promote long-term recovery, and improve the overall stability and well-being of formerly homeless individuals.

Limitations & Future Research

Several limitations to this study should be acknowledged. First, the reliance on self-reported data in study one may introduce response biases, particularly in the reporting of sensitive issues such as perceived social support and social capital. It is important to note that the measures in the HHiT study were selected based on their psychometric properties and previous use with the population. Study one significantly contributes to the limited quantitative research on social capital among homeless populations (Fitzpatrick et al., 2015; Fitzpatrick et al., 2007; Irwin et al., 2008). To the best of our knowledge, it is the first study to use validated measures of social capital (Elgar et al., 2011). Future research examining the social capital of people who are homeless should continue to use validated measures of social capital to ensure consistency and reliability in findings.

Another limitation is the potential for sampling bias. Despite significant efforts in study one to recruit a representative sample of single adults who were homeless or vulnerably housed in each city, there were challenges that prevented this objective from being fully met. Specifically, the recruitment of unsheltered individuals was restricted to meeting them at meal programs, drop-in centers, and community health centers, which excluded those who do not use any services. This limitation may restrict the generalizability of the findings. Future research should aim to include these hard-to-reach populations by employing more inclusive recruitment strategies, such as outreach efforts that engage individuals in non-service settings, to provide a more comprehensive understanding of the issues faced by the entire spectrum of the homeless population.

The data collection period for the HHiT study concluded in 2014, meaning it has been 10 years since the data was gathered. During this time, populations may be facing additional challenges related to housing and homelessness, such as increased in-affordability issues and limited access to resources. Furthermore, the COVID-19 pandemic has introduced new dynamics that could significantly impact social capital. Recent research among the general population has shown that COVID-19 may affect social capital because of increased social isolation, disruption to social relationships, and diminished community engagement and trust in institutions (Alizadeh et al., 2023). Additionally, the opioid crisis has worsened among homeless people since the onset of COVID-19, exacerbating health disparities and further hindering the building of social capital by increasing social isolation and diminishing connections to supportive services (Liu et al., 2022). These evolving challenges underscore the importance of this research, highlighting the need for ongoing study in this area.

Finally, in study two, the use of secondary data analysis meant that participants were not asked directly about social capital, potentially limiting the depth and specificity of the findings. However, the mixed-method approach adopted in the thesis, which incorporates quantitative measures of social capital developed by Elgar et al. (2011) alongside the application of an ecological framework, helps to provide a broader context to study findings. Future research should enhance this approach by including primary qualitative data collection with specific questions on social capital, and directly explore how experiences of homelessness influence relationships with others and trust in health and social services and institutions.

Conclusion

Taken together, the studies in this thesis provide insights into the dynamics of housing stability and social capital among individuals with histories of homelessness. The research highlights the importance of providing stable housing along with facilitating social support and psychological integration to enhance social capital. It underscores how personal relationships, community interactions, and encounters with service providers and government organizations shape individuals' experiences and perceptions of social capital. These findings advocate for policies and practices that improve access to social support, healthcare services, and community development initiatives that promote housing stability, social capital, and overall well-being for individuals with histories of homelessness.

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Glossary of Terms

Homelessness
The living situation of an individual or family who does not have stable, permanent, appropriate housing without immediate prospect or the means or ability to acquire it

Housing Stability
The ongoing ability of individuals to access housing that promotes their optimal health and quality of life

Social Support
Social functions or "provisions" as that can be acquired through relationships with or connections to others. This includes formal and informal sources of support including emotional provision, access to advice or information, and tangible assistance

Community Integration
Community integration considers opportunities to connect with people in the communities they live in, develop social networks, engage in activities and contribute to society, and access community resources

Physical Integration. Physical integration is a sub-component of community integration and considers the degree to which an individual initiates and participates in activities and uses services outside their home

Social Integration
The extent to which an individual interacts with their neighbours

Psychological Integration
The extent to which an individual feels a sense of belonging, membership and connection to their community

Social Capital
The value of social networks, norms of reciprocity, and mutual trust among individuals and the greater society. It includes the groups we belong to, social connections, and personal relationships that enable access to resources as a product of association

Bonding Social Capital
Trusting and cooperative relations among members of a dense network who see themselves as being similar in backgrounds and interests such as those who are in the same social position or who share social identities (e.g., family members, close friends, neighbours).

Bridging Social Capital
Informal relations of respect and mutuality among people are not alike in the sense of social identity, differing by age, ethnic group, or social class (e.g., extended family members, loose associations, casual acquaintances, work colleagues)

Linking Social Capital
Norms of respect and networks of trusting relationships between people who are interacting across explicit, formal or institutionalized power or authority gradients in society

Negative Social Capital
The harmful effects that some types of social capital can have on the health and well-being of individuals

Appendix A

Figure A

World Values Survey (WVS) items (n=21) selected by Elgar et al., (2011) to measure Bonding, Bridging and Linking Social Capital for Factor Analysis

Bonding social capital

- Member in church or religious organisation
- Member in sport or recreational organisation
- Member in art, music or educational organisation
- Member in humanitarian or charitable organisation
- Trust people in family
- Trust people in neighbourhood
- Trust people known personally

Bridging social capital

- Trust people met for the first time
- Trust people of another religion
- Trust people of another nationality
- Most people can be trusted
- Most people try to be fair
- Would not mind having as neighbours: people of different race, different religion, different language, immigrants
- Not justified to claim government benefits to which you are not entitled
- Not justified to avoid a fare on public transport
- Not justified to cheat on taxes if you have the chance
- Not justified to accept a bribe

Linking social capital

- Confidence in police
- Confidence in the courts
- Confidence in government
- Voted in recent election to the national parliament

Note: Retrieved from "Social capital, health and life satisfaction in 50 countries" by Elgar, F. J., Davis, C. G., Wohl, M. J., Trites, S. J., Zelenski, J. M., & Martin, M. S., 2011, *Health & Place*, *17*(5), 1044–1053.

Appendix B

Figure B

Confirmatory factor analysis by Elgar et al., (2011) on WVS items selected to measure Bonding, Bridging and Linking Social Capital (n=17)

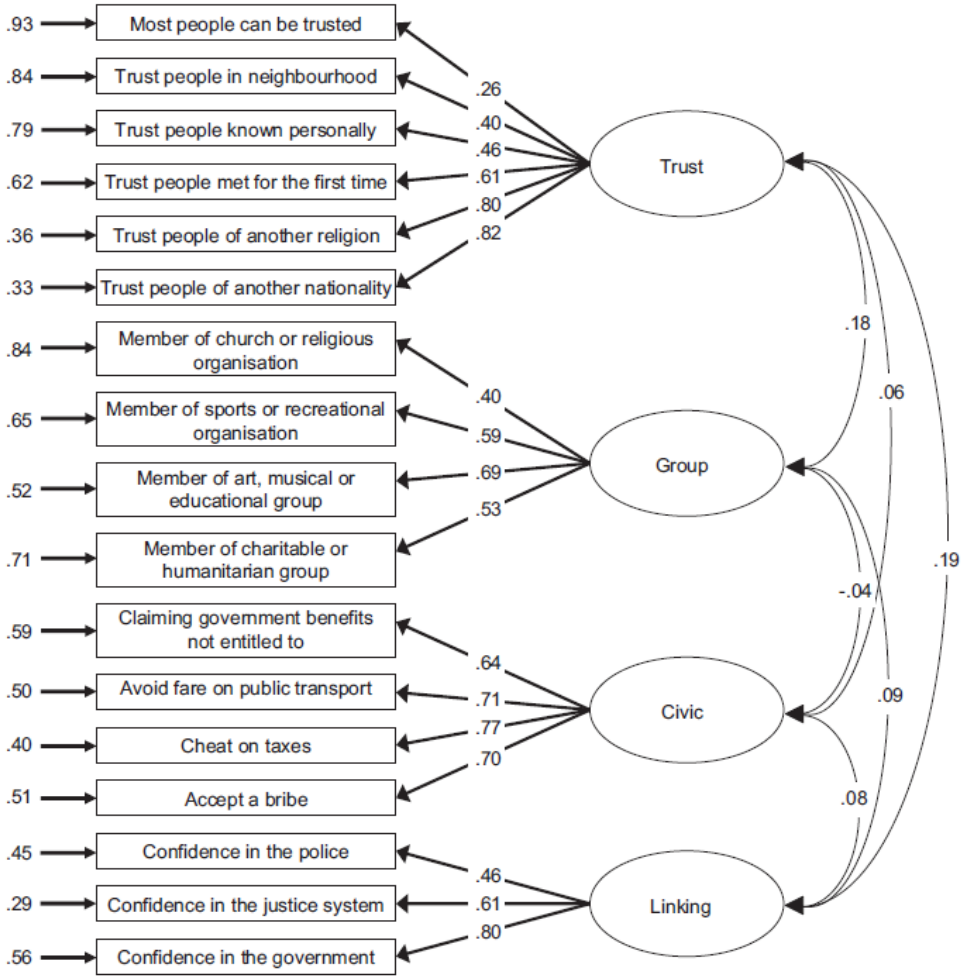


Fig. 1. Confirmatory factor analysis of the WVS Social Capital Scale ($n=34,910$). Values shown on paths between variables represent standardized β coefficients. Other values are error terms. $\chi^2(df=113)=14,086.37$; NFI = .94; NNFI = .92; CFI = .94; RMSEA = .06.

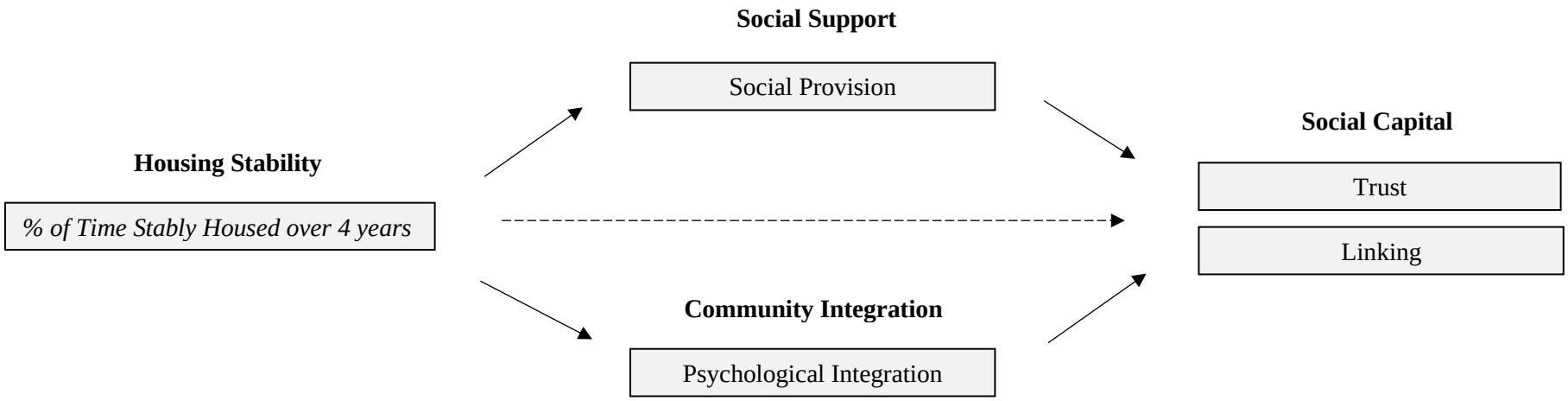
Note: "Four of the original set of 21 items (trust in people in family; most people try to be fair; would not mind having people of different race religion language or immigrants as neighbours; voted in a national election) yielded weak loading on all factors and so subsequent analyses" (p.1047)

Retrieved from "Social capital, health and life satisfaction in 50 countries" by Elgar, F. J., Davis, C. G., Wohl, M. J., Trites, S. J., Zelenski, J. M., & Martin, M. S., 2011, *Health & Place*, *17*(5), 1044–1053.

Appendix C

Figure C

The Theoretical Model for Study One



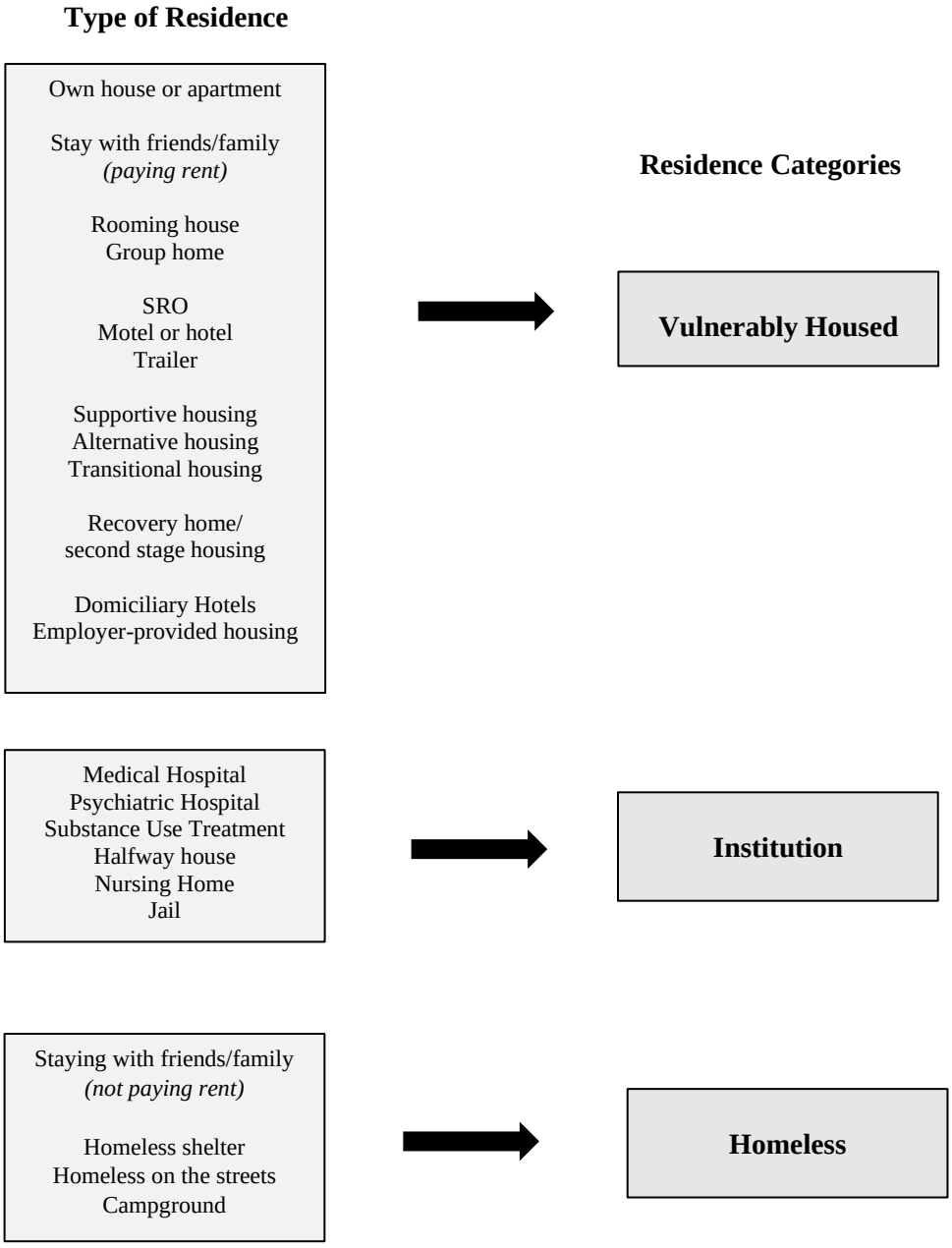
Appendix D

Measuring Housing History in the HHiT Study

Housing history information was collected using the Housing Timeline Follow-Back Calendar (HTFBC), a method that allows for the collection of detailed information on housing history (Tsemberis et al., 2007). Using this measure, participants are asked to recount their living accommodations over a period of time. Participants were presented with a calendar, and working backwards from their current place of residence at each interview point, were asked to list all living situations since their last interview, including the date of entry and date of exit into each living situation reported. Each residence in a participant's housing history was classified into one of 25 types of residence (Figure D). These types of residence were further classified into one of three mutually exclusive residence categories: housed, institution, or homeless. The HTFBC has demonstrated high test-retest reliability (ICC = 0.80-0.93) and concurrent validity among client and agency reports of client housing statuses in a study of 1, 381 participants in the *Collaborative Program to Prevent Homelessness* in the United States (Tsemberis et al., 2007).

Figure D

Types of Residence and Residence Categories



Appendix E

Table E

Social Provision Scale

11.1 Social Provisions Scale

I'm going to read you some statements about your relationships with others. For each, could you please tell me whether you strongly disagree, disagree, agree, or strongly agree? **[REFER TO SCALE]**

		Strongly agree	Agree	Disagree	Strongly disagree	N/A	Refused	DK
A	If something went wrong, no one would help me.	1	2	3	4	996	997	998
B	I have family and friends who help me feel safe, secure and happy.	1	2	3	4	996	997	998
C	There is someone I trust whom I could turn to for advice if I were having problems.	1	2	3	4	996	997	998
D	There is no one I feel comfortable talking about problems with.	1	2	3	4	996	997	998
E	I lack a feeling of intimacy with another person.	1	2	3	4	996	997	998
F	There are people I can count on in an emergency.	1	2	3	4	996	997	998
G	I provide support to my friends and/ or my family.	1	2	3	4	996	997	998
H	I have a lot of serious disagreements and arguments with my family.	1	2	3	4	996	997	998

Appendix F

Table F

Psychological Integration Scale

10.2 Psychological Integration Scale. Next, I want to ask you about your beliefs about the people who live in the neighbourhood and about the neighbourhood itself. By neighbourhood, we mean the surrounding area within normal walking distance of where you are currently living. These next questions I'm interested in knowing how much you agree or disagree with the following statements when it comes to your neighbourhood. **[REFER TO SCALE]**

(If the person is in a hospital or jail AND has given up their previous place of residence, SKIP 10.2 and 10.3
If the person is in a hospital or jail AND still maintains their previous place of residence, ASK 10.2 and 10.3, but specify that they should base their answers on the place where they were living prior to entering hospital or jail. If the person's previous place of residence was a shelter or treatment facility, then we would consider them to have "given up their previous place of residence" unless their bed at the shelter or treatment facility is being held open for them while they are in hospital or jail).

		Strongly disagree	Disagree	Neither	Agree	Strongly agree	N/A	Refused	DK
A	Compared to other neighbourhoods, I view this neighbourhood as a safe place	1	2	3	4	5	996	997	998
B	I like to think of myself as similar to the people who live in this neighbourhood.	1	2	3	4	5	996	997	998
C	If I had an emergency, even people I do not know in this neighbourhood would be willing to help.	1	2	3	4	5	996	997	998
D	I plan to remain a resident of this neighbourhood for a number of years.	1	2	3	4	5	996	997	998
E	There are people in this neighbourhood who really care about me.	1	2	3	4	5	996	997	998
F	People in this neighbourhood don't get too friendly with each other	1	2	3	4	5	996	997	998

Appendix G

Table G

Social Capital Scale; Trust Social Capital

11.2C Social Capital Scale The questions in the following section ask about your opinions as it relates to different kind of people, community organizations, and government. Please note that there are no right or wrong answers to these questions and we expect that different people will have different opinions depending on their background and experiences.			
1	Generally speaking, would you say that most people can be trusted or that you need to be very careful in dealing with people?	1. Most people can be trusted 2. Need to be very careful	996. Not applicable 997. Refused 998. Don't know

Tell me for each whether you trust people from each of these groups completely, somewhat, not very much or not at all **[REFER TO SCALE]**								
2		Trust completely	Trust somewhat	Do not trust very much	Do not trust at all	N/A	Refused	DK
A	Your neighbourhood	1	2	3	4	996	997	998
B	People you know personally	1	2	3	4	996	997	998
C	People you met for the first time	1	2	3	4	996	997	998
D	People of another religion	1	2	3	4	996	997	998
E	People of another nationality	1	2	3	4	996	997	998

Appendix H

Table H

Social Capital Scale; Linking Social Capital

11.2C Social Capital Scale
The questions in the following section ask about your opinions as it relates to different kind of people, community organizations, and government. Please note that there are no right or wrong answers to these questions and we expect that different people will have different opinions depending on their background and experiences.

How much confidence do you have in the following organizations? **[REFER TO SCALE]**

5		A great deal	Quite a lot	Not very much	None at all	N/A	Refused	DK
A	The police	1	2	3	4	996	997	998
B	The courts	1	2	3	4	996	997	998
C	The government	1	2	3	4	996	997	998

Appendix I

Table I

Drug Abuse Screening Test (DAST-10)

9.1 DAST

The following questions concern information about your potential involvement with drugs NOT including alcoholic beverages during the **past 12 months**. When the words "drug use" are utilized, they refer to the use of prescribed or over-the-counter drugs in excess of the directions, and any nonmedical use of drugs. The various classes of drugs may include cannabis (marijuana, hashish), solvents (paint thinner), tranquilizers (Valium), barbiturates, cocaine, stimulants (speed), hallucinogens (LSD), or narcotics (heroin). Remember that the questions do not include alcoholic beverages.

		Yes	No	N/A	Refused	DK
A	In the **past 12 months**, have you used drugs other than those required for medical reasons?	1	2 **(go to 9.3)**	996	997	998
B	In the **past 12 months**, did you use more than one drug at a time?	1	2	996	997	998
C	In the **past 12 months**, were you always able to stop using drugs when you wanted to?	1	2	996	997	998
D	In the **past 12 months**, have you had 'blackouts' or 'flashbacks' as a result of drug use?	1	2	996	997	998
E	In the **past 12 months**, did you ever feel bad or guilty about your drug use?	1	2	996	997	998
F	In the **past 12 months**, have you had any contact with your partner (or spouse or parents)?	1	2 **(go to H)**	996	997	998
G	If **YES**, did your partner (or spouse or parents) ever complain about your involvement with drugs?	1	2	996	997	998
H	In the **past 12 months**, have you neglected your family because of your use of drugs?	1	2	996	997	998
I	In the **past 12 months**, have you engaged in illegal activities - other than buying the drugs - in order to obtain drugs?	1	2	996	997	998
J	In the **past 12 months**, have you ever experienced withdrawal symptoms (felt sick) when you stopped taking drugs?	1	2	996	997	998
K	In the **past 12 months**, have you had medical problems as a result of your drug use (e.g., memory loss, convulsions, bleeding)?	1	2	996	997	998

Appendix J

Table J

Alcohol Use Disorders Identification Test (AUDIT)

9.3 Now I am going to ask you some questions about use of alcoholic beverages such as beer, wine, vodka, during the **past 12 months**. Please remember that one drink is: ½ pint average strength beer OR one glass of wine OR one single measure of spirits.		
A	During the **past 12 months**, how often did you have a drink containing alcohol? **[REFER TO SCALE]** 1 Never **(Go to 9.3K)** · 2 Monthly/less than monthly · 3 2-4 times per month · 4 2-3 times per week · 5 4 or more times per week	996. Not applicable 997. Refused 998. Don't know
B	During the **past 12 months**, how many drinks containing alcohol did you have on a typical day when you were drinking? **[REFER TO SCALE]** 1 1-2 · 2 3 or 4 · 3 5 or 6 · 4 7-9 · 5 10 or more	996. Not applicable 997. Refused 998. Don't know
C	During the **past 12 months**, how often did you have six or more drinks on one occasion?**[REFER TO SCALE]** 1 Never · 2 Less than monthly · 3 Monthly · 4 Weekly · 5 Daily or almost daily	996. Not applicable 997. Refused 998. Don't know
D	How often during the **past 12 months** have you found that you were unable to stop drinking once you started? 1 Never · 2 Less than monthly · 3 Monthly · 4 Weekly · 5 Daily or almost daily	996. Not applicable 997. Refused 998. Don't know
E	How often during the **past 12 months** have you failed to do what was normally expected of you because of drinking? 1 Never · 2 Less than monthly · 3 Monthly · 4 Weekly · 5 Daily or almost daily	996. Not applicable 997. Refused 998. Don't know
F	How often during the **past 12 months** have you needed a first drink in the morning to get yourself going after a heavy drinking session? 1 Never · 2 Less than monthly · 3 Monthly · 4 Weekly · 5 Daily or almost daily	996. Not applicable 997. Refused 998. Don't know
G	How often during the **past 12 month** have you felt guilt or remorse after drinking? 1 Never · 2 Less than monthly · 3 Monthly · 4 Weekly · 5 Daily or almost daily	996. Not applicable 997. Refused 998. Don't know
H	How often during the **past 12 months** have you been unable to remember what happened the night before because of drinking? 1 Never · 2 Less than monthly · 3 Monthly · 4 Weekly · 5 Daily or almost daily	996. Not applicable 997. Refused 998. Don't know

I	Have you or someone else been injured as a result of your drinking? **[REFER TO SCALE]** 1 No 2 Yes, but not in the **past 12 months** 3 Yes, during the **past 12 months**	996. Not applicable 997. Refused 998. Don't know
J	Has a friend, or relative, or doctor or other health worker been concerned about your drinking or suggested you cut down? **(go to 9.4)** 1 No 2 Yes, but not in the **past 12 months** 3 Yes, during the **past 12 months**	996. Not applicable 997. Refused 998. Don't know
K	Looking back **before the past 12 months**, have you or someone else been injured as a result of your drinking? **[REFER TO SCALE]** 1 No 2 Yes, but not in the **past 12 months**	996. Not applicable 997. Refused 998. Don't know
L	Has a friend, or relative, or doctor or other health worker been concerned about your drinking or suggested you cut down? 1 No 2 Yes, but not in the **past 12 months**	996. Not applicable 997. Refused 998. Don't know

Appendix K

Participant Interview Guide
The Health and Housing in Transition Study: A Qualitative Study of Health and Housing Transitions

Introduction and Preamble

Thanks so much for speaking to me in more detail about your housing moves. In today's interview, we will focus on one move that you made between 2006 and now. As you might recall, in the regular interviews for this study, you were asked about your history of housing moves. In preparing to talk to you today, we have put together a list of all the moves you told us about. We would like you to pick a move that you found especially important or significant. Importance might mean a strong positive change or a strong negative change or it might mean a move that had both positive and negative elements that were significant.

Part 1: Your Move

1. Let's begin by talking about this move and why it was significant for you. What is it about this move that is so significant for you?

    - Was this move something you expected or wanted? Whose idea was it?
    - What changed for you because of this move?
        - Did something change about you?
        - About the people around you?
        - About your plans for yourself?
        - About your ability to meet your needs or look after yourself?
        - About how you felt about yourself?

2. Now I'd like to learn more about this move, and why it affected you the way that it has.

Before the move:

- Where were you living before the move?
- What was the place like before you moved?
- What specifically did you like or dislike about the place?
- Were you happy or unhappy there? What made you feel this way?
- How did living there affect you?
-

Preparing for the move:

- Thinking back, what was it that happened that led to this move?
- Was it a move you wanted or not?
- Did you know where you were going before you moved?
- If yes, how did you know? If not, why not?
- Did any help you plan the move out of this place or help you find a new place?
- How did you feel as you prepared to move?

Moving:

- Now tell me, how did the move take place? What were the steps like? Was someone else involved with you?
- What was this change like for you? How did this affect you?

Completing the move:

- Now tell me about the place you moved to.
    - Is this a place you liked or did not like?
    - What did you like or not like about the place?

- What was it like for you moving to the new place?
    - What was it like settling in to this new place?
    - What was helpful or unhelpful during this settling in process?
    - Were there things that you did or that others did that made it easier or more difficult?

- Did anyone help you settle in?
    - What did they do?
    - What was helpful or unhelpful?

- How long did you stay there?
    - Was it a good place for you to be, or not?

- After the move was over and you were settling in, what thoughts or feelings did you have?
- Thinking back to the time as you settled in after this move, how were you affected by the move?

Feelings about the move:

- You've given quite a lot of detail about the move. Thanks so much. Some of the things you've told me about were about how you felt about the move. Thinking back over everything that you've told me, how would you sum up or explain your feelings about the move?

Part 2: Your move and your health

Now I'd like to spend some time talking about your health, and whether your health was in any way related to or affected by this move.

3. To begin, let's spend a few minutes thinking about what health means. What does the word "health" what does it mean to you?

- Do you consider yourself to be healthy?
    - Why or why not?
    - Are there some ways in which you are healthy and some ways in which you are unhealthy?

- Are there times since 2006 that you think you have felt relatively healthier?
    - Why would you say you were healthy then?
    - Were there some things you were able to do that you could not do when you felt healthy?

    - What was different about how you felt then?

- Are there times since then that you think you have been unhealthy?
    - Why would you say you were unhealthy then?
    - Were there some things were unable to do that you could do at other times?
    - Was there something about how felt that was different?

4. Now that I have a good understanding of what health means to you, I'd like to think about how your health may have been related to the housing move we were just talking about.

- Thinking about this move, was it a time when you would say were feeling healthy, unhealthy, or somewhat healthy but also somewhat unhealthy?
    - Why would you say this?

- Did your health have anything to do with the move you described earlier?
    - Did it make it more likely that you would move?
    - Did it make it easier or more difficult to move?

- Did your health have anything to do with your experiences during the move?
    - Did it make it easier or more difficult to move?

- Did your health have anything to do with how you settled into the new place you moved to?
    - Did it make settling in easier or more difficult?

- Think back over this period of time did your health change at all during or after the move?
    - Did it get better or worse?

- Why do you think this move had (or did not have) an effect on your health?
    - Was it something about the process of change, or the place you were moving to or from, about the people who may have played a role in the change?

Part 3: Your move and the health and social services you receive

5. Thinking about this move, did it affect the health or social services you receive?
    - Did it make it easier or harder to get services you wanted or needed?
        - Were there some services that started or stopped receiving because of the move?
        - Which ones? How did this affect you, if at all?

    - Did the health and social services you received help in any way with your move?
        - Did they give you the idea to move or help you to move, in any way?
        - Did they help you settle in, in any way?

    - Thinking back how were the health and social services most helpful and unhelpful during this time?

Part 4: Facilitators and barriers of housing transitions

6. Thank you for sharing all of these thoughts about your housing moves. As someone who has had a number of moves in your life, I wonder if you might share with me your thoughts about some of the most significant barriers that you have experienced to getting and keeping the housing you want.
    - What is it that in your experience has made it most difficult to get the housing you want?
    - What is it that in your experience has made it most difficult to keep the housing you have had?

7. Thinking about the things you have just told me, along with all the other things you have told me during this interview today, what would help someone who has had the kind of experiences you have had?
    - What would help you to find and to get the kind of housing you want?
    - What would help you to keep the housing you want?

Appendix L

Table L

Qualitative Individual Summary Matrix

Interview Summary	Codes	Summary	Quotes
1. Current Living Situation	CODE: Current Housing (location, setting, privacy, quality, type) CODE: Landlords CODE: Partner, Room mates, Tenants CODE: Visitors, Friends CODE: Neighbours		
2. Change in living situation – past 5 years	CODE: Housing History (everything about past housing) CODE: Housing Moves (5 years)		
3. Change in living situation	CODE: Future living situation/Desire for different housing in the future		
3. Reasons for amount of change?	CODE: Same as Above		
4. Description of Health	CODE: Health Description (general) CODE: Substance abuse (Drugs and Alcohol)		
5. Influence of living situation on health	CODE: Housing and Health (general)		
6. Overview of living situation a. What was the change in housing?	CODE: Housing Change: description		
b. Why did the change happen?	CODE: Housing Change: Reason		
c. How did the change affect the participant?	CODE: Housing Change: Effect		
d. How did the change happen?	CODE: Housing Change		

e. Settling into the new setting	CODE: Housing Change		
f. feelings about the change	CODE: Housing Change: Feelings		
g. Effect on health	CODE: Housing Change: Health		
7. Effect on services (ODSP, case worker, shelter staff)	CODE: Housing Change: Services		
8. Services: helpful/unhelpful	CODE: Housing Change: Services		
9. Other effects	CODE: Housing Change – Other		
Thematic Analysis	Codes		
1. Personal characteristics Sex/Gender	CODE: Gender		
Age	CODE: Age		
Social Inclusion/Exclusion	CODE: Social Determinants: Social Inclusion CODE: Social Determinants: Social Exclusion		
Poverty	CODE: Social Determinants: Poverty		
Neighbourhood	CODE: Social Determinants: Neighbourhood		
Employment	CODE: Social Determinants: Employment		
Education	CODE: Social Determinants: Education		
Leisure/Volunteering	CODE: Social Determinants: Leisure/Volunteering		
Healthcare	CODE: Social Determinants: HealthCare		
Social Services	CODE: Social Determinants: Social Services/Service Providers		

Food Security	CODE: Social Determinants: Food Security		
Transportation	CODE: Social Determinants: Transportation		
Childhood/Past Events	CODE: Social Determinants: Childhood/Past Events		
Family	CODE: Social Determinants: Family		
Other Social Determinants/Experiences	CODE: Social Determinants: Intimate Relationships CODE: Social Determinants: Daily Associates/Social Network/Absence of social contacts or loneliness CODE: Institutions/Prisons CODE: Victimization CODE: Criminality/Violence (participant as perpetrator) CODE: Pets CODE : Legal Involvement		
Religion/Spirituality	CODE: Social Determinants: Religion/Spirituality		
Agentic/Acted Upon	CODE: Agency CODE: Acted Upon		
Self-Identity/Definition	CODEL: Self-Identity		
Other Changes/Transitions	CODE: Other Changes/Transitions		
Stigma/Discrimination	CODE: Stigma		
Other things to note that are important/unique about this participant			

Appendix M

Table M

Study Two Individual Summary Matrix

Research Questions	Codes	Summary	Quotes
1. The extent to which they describe trusting and supportive relationships with family members, friends, neighbours, and others they socially interact with	**CODE**: Positive descriptions of interactions/experiences with other people; **CODE**: Receiving/Providing help, support, and resources from others (instrumental support); ***Subcode:*** friends, family, intimate partner, neighbours, landlords, roommates; **CODE**: Having people to turn to/rely on or being there for others (emotional support) ***Subcode***: friends, family, intimate partner, neighbours, landlords, roommates; **CODE**: Positive descriptions of people in general (including from different ethnicities, religions, and nationalities)		
	CODE: Negative descriptions of interactions/experiences with other people; **CODE**: Interpersonal conflict		

	Subcode: friends, family, intimate partner, neighbours, landlords, roommates **CODE**: Lack of trust in others/or people in general **CODE**: Drug use (personal or in their social networks) as a barrier to social interactions **CODE**: Discrimination, exclusion, or social isolation **CODE**: Death or loss of loved ones.		
2. The extent to which they feel a sense of belonging in neighbourhoods and communities they live in and trust others that live there (both past and current housing)	**CODE:** Positive/Negative descriptions of the neighbourhoods and people that live there **CODE**: Neighbourhoods/ Housing Safety: Safe/Unsafe **CODE**: Current neighbourhood/ housing tenure (plans to stay or move) **CODE**: Neighbourhood Friendliness: friendly/ Unfriendly **CODE**: Participation in community and social activities (present or future)		

3. Experiences with the police, court system and other government organizations (e.g., social services, community organizations, healthcare providers)	**CODE**: Receiving help, support, and resources from service providers (both instrumental/ emotional support) ***Subcode***: e.g., healthcare providers, case managers, social workers, housing workers, shelter staff etc. **CODE**: Positive/Negative interactions/ experiences with social services/ community organizations ***Subcode***: Shelters, food banks, meal programs, housing programs, ODSP, etc. **CODE**: Positive/Negative interactions/ experiences with police and court system ***Subcode***: History of incarceration **CODE**: Positive/Negative interactions/experiences with the Health Care System		