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The Prevalence And Needs Of Homeless Undergraduates At A Large, Urban University

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**THE PREVALENCE AND NEEDS OF HOMELESS UNDERGRADUATES AT A
LARGE, URBAN UNIVERSITY**

by

CORISSA CARLSON

DISSERTATION

Submitted to the Graduate School

of Wayne State University,

Detroit, Michigan

in partial fulfillment of the requirements

for the degree of

DOCTORATE OF PHILOSOPHY

2016

MAJOR: PSYCHOLOGY (Clinical)

Approved By:

Advisor

Date

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DEDICATION

I would like to dedicate this dissertation to my family- Mom, Dad, Clinton, Rejean, Allyson, Kristian, Tea, and Jimmy- who have been there through everything and have made themselves available for phone calls, Facebook messages, visits, and prepared dinners. They have encouraged me and supported me from day one. I would not be the person I am today without them and I certainly would not be writing this dedication page.

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CHAPTER 1: INTRODUCTION

Study Context

For many people within the United States the decision to go to college is the next step in obtaining one's career goal. Many students face difficult decisions, including what to major in, what classes to take, how to pay for their tuition, and where to live on campus. However, for one subset of students, this last question is a difficult one to answer due to the fact that they are homeless and may not have the resources to make this decision entirely on their own.

The United States Department of Housing and Urban Development lists four federally defined types of homelessness: literally homeless, imminent risk of homelessness, homeless under other Federal statutes, and attempting to flee domestic violence (U.S. Department of Housing and Urban Development, 2014). Another definition comes from the McKinney-Vento Homeless Assistance Act and states that homelessness refers to "individuals who lack a fixed, regular, and adequate nighttime residence" and gives some examples of who would fall under these criteria. The U.S. Department of Health and Human Services defines homelessness as the following in Section 330 of the Public Health Service Act:

The term "homeless individual" means an individual who lacks housing (without regard to whether the individual is a member of a family), including an individual whose primary residence during the night is a supervised public or private facility that provides temporary living accommodations and an individual who is a resident in transitional housing.

This definition of homelessness is the commonly understood definition among the general public. However, a larger group of people are those that are considered less often: the precariously housed. The precariously housed include people who rely on temporary housing with friends or relatives, those who are "couch surfing," and those moving from place to place every few months. Haber and Toro (2004) defined literal homelessness as often being cyclical and involving episodes of

precarious housing. They added that the precariously housed include people “who may be one paycheck or another misfortune away from losing their housing” (p. 127). While there is variability among situations of people who scholars would consider homeless, their plights are quite similar and they are often overlapping. An all-encompassing explanation is set forth by Redburn and Terry (1986) where they consider that homelessness is not an “absolute condition” but rather one in which people need to consider how temporary and for how long the situation is endured. For this reason, references to homelessness in this paper refer to both literal homelessness and the precariously housed.

Estimating how many people are homeless or have had bouts of homelessness is difficult. Several methodological issues include: (a) selecting between a point-in-time prevalence count and a period prevalence count, (b) resolving how to handle the fact that not all people utilize homeless shelters and other formal services, (c) considering the short-term instability of housing situations (i.e. a person may not be homeless on the night a count takes place but may be homeless a few days later), and (d) the many practical difficulties researchers may have in identifying homeless people or people in precarious housing situations (National Coalition for the Homeless, 2009). The National Coalition for the Homeless (2009) put together a “fact sheet” wherein they present several different research designs with different homeless estimates ranging from 1.6 million to 3.5 million people experiencing homelessness in the past year. The writers of the fact sheet note that when they discuss homelessness they tend to use the higher end of the range (3.5 million people) due to some of the previously mentioned methodological problems. Other organizations (e.g., the federal government) may often choose to present the lower estimates as a way to keep funding on the lower end of the spectrum (Toro & Warren, 1999).

Homelessness and Education

With regard to higher education, the number of homeless individuals is growing at an alarming rate. In the literature, however, the focus is often limited to children and young adolescents. For example, in 2012 the National Center for Homeless Education stated that the number of students (K-12th grade) in the United States who identified as homeless grew by 13%. This growing population appears to be at an especially high risk in terms of educational outcomes. The National Coalition for the Homeless (2014) reported that 75% of homeless or runaway teenagers drop out of school. Another study examined homeless and “highly mobile” children during elementary school grades in an urban school setting and found that this group showed the greatest risks and the slowest growth in academic achievement (Obradović, Long, Cutuli, Chan, Hinz, Heistad, & Masten, 2009). This finding is consistent even when compared to low-income students, indicating that housing instability may play a role separately from low income. The difficulties with education among homeless children and youth were summarized in research by Hendricks and Barkley (2011): “Researchers have provided evidence that homelessness produces low achievement test scores, poor grades, more grade retentions, and a higher incidence of school dropouts.” (p. 81). The mobility of this population is another issue that comes into consideration when looking at academic achievement. For example, homeless children often switch schools before they are able to grasp a concept in one classroom; homeless children are often moved to a new school without their intact academic record; homeless children are often not in an environment conducive to successfully completing homework assignments (Evans-Attles, 1997). The theme across all of these studies is that students with housing instability suffer in their academic world and often have additional barriers to being successful in school.

To try to address these difficulties, the McKinney-Vento Homeless Assistance Act (42 U.S.C. 11431 et seq.) provides federal funding for many aspects of homelessness, including shelter, and it has a specific section dedicated to providing appropriate education for homeless children. This portion of the McKinney-Vento Act notes, “Each State educational agency shall ensure that each child of a homeless individual and each homeless youth has equal access to the same free, appropriate public education, including a public preschool education, as provided to other children and youths.” The McKinney-Vento Act was originally passed in 1987 and has increasingly provided more services through several amendments and a major revision in 2001, which included easier registration processes for homeless students, having a coordinator at the state level for these students, as well as providing resources such as free lunches and school supplies (Hendricks & Barkley, 2012). However, one has to question how effectively these new amendments have been implemented.

Homelessness among College-Aged Youth

Federal funding for homeless youth considering or attending college is minimal; however, recently, some more attention has been given to this issue. For example, the College Cost Reduction Access Act (CCRAA) was signed into law in 2007 (National Center for Homeless Education, 2012). This law allows unaccompanied homeless youth to be considered independent students when they file for federal financial aid which is important because these youth often do not have any contact with their parents or guardians. However, the implementation of this act is not flawless as many financial aid administrators are not yet familiar with it, nor are there any clear standard procedures for checking a student’s eligibility. Furthermore, attending college is not covered at all under the McKinney-Vento Homeless Assistance Act.

Homelessness in the college population is a new area of study; however, much more has been written about low income students pursuing college education and there is overlap between these two populations. An analysis by Bozick and Lauff (2007) reported that 84% of students coming from families with annual incomes over \$100,000 pursue postsecondary education immediately following their high school graduation. This can be directly compared to the 40% of low income students who enroll immediately after graduating high school. Furthermore, low-income students are outperformed by high-income students in several areas of academic success, including high school completion rates, test scores, and grades (Reardon, 2013). A study by Engberg and Allen (2011) examined decision-making about college choice in low-income students. Their work described various times of different resources and different levels of resources available to low-income students as compared to students from higher income families. Engberg and Allen (2011) described financial capital, which includes income, savings, and other resources; they described cultural capital which has been defined in several ways including the education level of the parental figures, parent aspirations and encouragement to their children, and parents involving their children in cultural activities; they described social capital which essentially talks about the “connections” a family has, including their social networks and community resources. All of this information supports the idea that low-income students, not necessarily with housing instability, have barriers for successful post-secondary education that are not faced by students who come from families with higher incomes.

With regard to higher education, the homeless are an often overlooked subpopulation. There are many barriers to unaccompanied youth achieving a college education, including lack of financial means, limited housing options, and lack of connection to people and resources that could help. Furthermore, many people assume that, if someone is able to be accepted for college, they

likely will not have any problems with obtaining appropriate housing and paying for their education. Others may suggest that a person be able to afford stable housing before they seek a higher level of education. However, there are several areas where people with an undergraduate education, or even some college, benefit more than people who only completed high school or even dropped out of school prior to high school graduation. For example, the largest predictor of workplace success is college completion (McGlynn, 2013). Such success includes employment rates and income. While causality cannot be proven by such correlations, there is a consistent link between higher educational attainment and better job outcomes.

The National Center for Education Statistics (NCES), a division of the United States Department of Education, provides an up-to-date comparison of those with college education and those without. From 2000-2013, among the 20-24-year-old age group, the unemployment rate for those whose highest level of education was high school graduation was 17.5% (NCES, 2014) and is even higher for those who dropped out of high school prior to graduation. With some amount of college education the unemployment rate is 12.2% (NCES, 2014). Compare this to the same age group of people with at least a bachelor's degree, whose unemployment rate was 7.0% (NCES, 2014). This pattern of higher education attainment being related to lower unemployment rates emerged across all age groups. The National Center for Education also reported that not only is overall employment greater among young adults with higher education backgrounds, but full-time employment is reported by 73% of young adults aged 25-34 with bachelor's degrees compared to 60% of young adults with a high school diploma or equivalent (i.e. GED). Overall, one can see that by obtaining a bachelor's degree a person is at a much lower risk of having to deal with unemployment for extended periods of time and has a greater chance of having stable full-time employment.

Beyond employment and unemployment rates, higher educational backgrounds is also related to income. When comparing adults in the age group of 25-34 who reported full-time employment, the median earnings varied substantially across different educational attainments. For example, the 2012 median earnings for a person with a high school diploma or equivalent was \$30,000 per year, whereas adults with a bachelor's degree earned \$46,900 and adults with a master's degree or higher earned even more (\$59,600) (NCES, 2014). To frame this in a different way, this means that people with a bachelor's degree are making 50% more than people with a high school diploma or equivalent and people with a master's degree are making almost double the income of people with a high school diploma or equivalent. This data can also be looked at over a lifetime. Statistics from 2009 show that over a lifetime the median earnings for someone with a bachelor's degree is \$2.27 million compared to \$1.55 million for people with some college credits and \$1.3 million for people with a high school diploma (American Council on Education, 2011). Furthermore, Reardon (2013) reported several findings regarding the income achievement gap including that it has grown over the last three decades and that the income achievement gap is already present when a child enters kindergarten.

Finally, while there are little to no empirical writings on the topic of homelessness in college students, there are several articles being written on the topic in the popular media. An article on the popular website Huffington Post provided one student's experience of facing homelessness when university housing closed for extended periods of time (Briggs, 2016). The student went on to write: "Kicking students out of their dorms with unrealistic housing alternatives only emphasizes that, at certain institutions, these students are not a priority." An article in the Minnesota Daily provided estimates from the Minnesota Office of Higher Education about college students facing "episodic homelessness" and noted this number to be between 3-5% of college

students (Minnesota Daily Editorial Board, 2014). The same article stated that “the main hindrance to positive change is the lack of data.” An article in the San Diego Union-Tribune provided a different estimate. They looked at the FAFSA data from 2013, the first time students were asked if they were homeless, and noted that more than 30,000 students had answered yes (Garrick, 2014). However, the same article pointed out that many students would be reluctant to admit homelessness, they may not see their situation as being homeless (often the case with people who “couch surf”), and it was the first time the question was being asked (Garrick, 2014). While none of these articles provided empirical evidence about the concern of homelessness among college students, they at least began to address the issue and bring it to people’s attention.

Stress and Homelessness

Having housing problems or inadequate funds for college is arguably a stressful event for someone. Stress is a term that is probably familiar to everyone; however, it is important to look at this commonly used term from the unique perspectives of a) college students and b) homeless people. First, looking at stress in general, Lazarus and Folkman (1984) defined it as a person’s appraisal of an event as harmful or threatening; due to this appraisal a person’s experience of an event as stressful may change over time. Additionally, what may be a stressful event to one person may not be as stressful to another person based on different appraisals. Furthermore, a concept in the literature known as the cumulative risk model posits that the number of risks/stressors a person faces is more determinant of their outcomes than any specific one risk or stressor (Garmezy, 1985; Rutter, 1978). This means that as a person has more and more stressors present in their life, those stressors build on one another and the impact of the stressors as a group determines more about the person’s situation than any single stressor.

More specifically, college is a stressful time for most students with the amount of academic and social demands while one is learning to navigate life “on their own.” Weidner and colleagues (1996) had 133 college undergraduates complete surveys including measures of stress, affect, and health at two different time points: times with low academic demands and times with high academic demands. Their findings suggest a significant relationship between times of high academic stress with increased negative affect, as well as decreased positive affect. Again, this reflects the general population of students and does not reflect the additional stressor that housing problems would add to these times of academic stress. Furthermore, a qualitative study by Denovan and Macaskill (2013) allowed for an in-depth look into the stressors associated with college undergraduates through the use of semi-structured interviews. Their research found five major themes: Change, university expectations, academic focus, support network, and difficulties. This last theme, difficulties, had subthemes including difficulty with housemates and academics; however, most notably there was a subtheme about finances and employment. One student in the study noted the disadvantage of going into debt, but then explained this concern away by offering that the debt would be deferred until “you’re earning enough money.” Of note, difficulties with housemates was related to stress in the undergraduate sample; however, this implies that one has some sort of stable housing. While college can be a stressful environment for anyone, it will be important to examine homelessness in this population as one can see the impact that stress has on the general student population.

Given the pervasive impact of homelessness on a person’s life, it would make sense that it would affect multiple aspects including relationships, health, employment, and overall quality of life. Jozefowicz-Simbeni and Israel (2006) summarized key issues among homeless children by stating that they are more likely to experience higher amounts of stress, as well as mental health

problems, including depression and anxiety; they are also more likely to isolate themselves, be aggressive, and use substances. Additionally, Hubley and colleagues (2014) summarized previous research on homeless individuals: “It is widely recognized that individuals who are homeless often suffer from high rates of physical and mental disability, substance misuse/abuse, unemployment, extremely low incomes, victimization, and experience with the criminal justice system.” In another study, 54% of homeless people reported being victimized while homeless and the homeless were disproportionately victimized compared to their housed counterparts (Lee & Schreck, 2005). In a two-city study that included Detroit, Toro et al. (1999) found extremely high rates of stress among homeless adults: The mean number of stressful life events experienced in the prior 6 months was 17-20 across the 2 cities. A group of 18-21-year-olds who were staying in a crisis shelter due to homelessness were interviewed and the results reflected high amounts of distress (Cornsweet-Barber et al., 2005). The same study found that when there was an intervention for the young adults, they were significantly less distressed at a 6-month follow-up interview, thus showing that with the appropriate attention and interventions there can be improvement in the lives of people who are homeless. These studies are just a few examples of the number and range of problems that the homeless and precariously housed populations tend to deal with.

Homelessness is compounded onto the typical stressors faced by many college undergraduates. Cornsweet-Barber and colleagues (2005) summarized that young adults face a developmentally sensitive time after they turn 18 and, within the frame of this discussion, begin pursuing an undergraduate education. The authors stated that this is a time when several aspects of one’s identity are beginning to be negotiated, which can be a stressful and vulnerable time.

Current Study

The first part of the current study will interview 30 undergraduates who currently identify or have identified as homeless or precariously housed in the past year. The study aims to look at descriptive information from several domains including service utilization, work history, stressful life events, interpersonal relationships, etc. The main goal of this study is to provide information about undergraduates who are faced with unstable housing situations. To our knowledge, there is no existing empirical study of the needs and characteristics of college students who have experienced homelessness and/or precarious housing.

The second part of this study will compare a sample of 40-50 housed undergraduate students to a new sample of 40-50 homeless or precariously housed students at the same university. The reason for collecting this new sample is to find two samples at similar time points to eliminate any historical confounds or new policies at the university. By doing these comparisons, we will be able to discuss similarities and differences in the two samples and determine what areas homelessness may be having an increased impact on college undergraduates.

Hypothesis and Research Questions

Given the minimal amount of literature about homeless college undergraduates, the first portion of the study will be focused on a research question rather than a hypothesis:

Research Question 1: How do college undergraduates who identify as having been homeless or precariously housed within the past year self-report on various measures including, but not limited to, a housing timeline, current psychological symptoms, physical health symptoms, and social support?

While this research question will report the experiences of a sample of homeless and precariously housed undergraduates, there will be a second research question that explores the

experience of this sample, and particularly how they relate to their undergraduate institution, through their own narratives. Information for these research questions will be taken from the first study and from homeless or precariously housed individuals in the second study:

Research Question 2: How do homeless and precariously housed undergraduates describe their experiences of being homeless and/or precariously housed?

Research Question 3: How do homeless and precariously housed undergraduates believe that their institutions can assist them as they are balancing/have balanced their difficult personal situation in pursuit of their education goals?

The second part of this study was aimed at comparing a sample of homeless undergraduates to a sample of stably housed undergraduates. By doing a comparison of these groups, we will be able to make statements about who fares better with respect to various measures.

Hypothesis 1: Across measures including childhood events, physical health symptoms, mental health symptoms, and risky sexual behaviors; homeless or precariously housed students will report more severe/negative symptoms/experiences than their stably housed counterparts.

CHAPTER 2: METHOD

Study 1

Procedure

The current study collected semi-structured interview data from 30 students at an urban, Midwestern university. Interviewers were given training, practice, and feedback on the administration of the measures before beginning interviews. Homeless students were recruited through fliers, internet advertisements, as well as by word of mouth through programs aimed at students who may have housing problems. The students took a screening survey before they were invited to participate in the study. The survey was a way to ensure the student identified themselves as being homeless or precariously housed in the past year. After completing the survey, participants were invited for a semi-structured interview conducted in person which lasted 90-120 minutes. Participants provided verbal consent and were given \$20 compensation for their time.

During the process of the study, some open-ended questions were added. Beginning with the 21st participant, six open-ended questions were used to gain more understanding of the students' housing situations. Questions included asking the participant to explain their homelessness and/or precarious housing situation in more depth, how the university could help them with their housing situation, and what current needs they had. This was done in hopes of gaining more knowledge about students' specific housing situations as well as their own perceptions of how they could be helped by their university. With respect to coding, the concept of qualitative content analysis was used (Hsieh & Shannon, 2005). This type of analysis discusses the development of codes including directed analysis, which starts with a theory and sees how the data surround that theory, and summative analysis, which uses counting to help make

comparisons. Coding was done by two coders and themes were developed with the questions in mind and analyzed using summative techniques (“1” for theme present and “0” for theme absent).

Measures

Demographic Information. The current study assessed basic background information including age, race, sex, and current housing situation.

Life Circumstances. The Housing, Education and Income Timeline (HEIT) was used to assess participants’ living arrangements, education institutions attended, and employment over the past year. The HEIT is based on the Life History Calendar which was developed as a data-collection method to obtain retrospective data about a participant’s life in a reliable fashion (Freedman et al., 1988). The HEIT has demonstrated adequate reliability and validity in studies of at-risk populations of homeless adolescents and adults (McCaskill, Toro, & Wolfe, 1998; Toro et al., 1997, 1999; Roll, Toro, & Ortola, 1999).

Interpersonal Relationships. The Family Environment Scale (FES) was administered to participants who identified the people they were currently living with as family. The FES consists of 45 items pertaining to the relationships among family members (Moos, 1974). The FES has been used in prior studies of homeless adolescents and adults (e.g., Toro et al., 1999; Toro, Lesperance, & Braciszewski, 2011; Wolfe, Toro, & McCaskill, 1999).

If the participant endorsed ever having a romantic relationship, currently or at any point in the past, intimate partner violence was measured using the Revised Conflict Tactics Scales (CTS2; Straus et al., 1996) a revision from the original CTS (Straus, 1979). Using a Likert scale, participants were asked to estimate the number of times various specific acts of violence, both physical and psychological, as well as instances of injury have occurred. Scores range from 0 (“This has never happened”) to 6 (“More than 20 times in the past year”). If the participant has not

had a romantic relationship in the past year, but has had one in their lifetime, they are asked to respond to items with a “yes” or a “no”. The CTS2 includes Physical Assault, Injury, and Psychological Aggression subscales. The internal consistency of these subscales range from .79 to .95 (Straus et al., 1996). The CTS has been used in prior studies of homeless adolescents and adults (e.g., Haber & Toro, 2009; Roll et al., 1999).

The Inventory of Childhood Events (ICE) is a measure to assess perceived childhood experiences, including whether the participant experienced homelessness with their family. It also asks participants various questions about their mother and father, such as how often they felt they were disciplined and how often their parents said positive remarks to them. This measure was originally designed for homeless adults (Zozus & Zax, 1991). Toro and colleagues (1999) noted three subscales that had emerged through factor analysis in previous research (McCaskill, Wolfe, & Toro, 1998; Toro et al., 1995). These three subscales are Positive Family, Punitive Parents, and Disorganized Home. Additional items were used to determine to what extent, if any, the participant felt they were abused and/or neglected while they were growing up.

Overall perceived social support availability was assessed using 27 items (out of the original 40) from the Interpersonal Support Evaluation List (Cohen & Hoberman, 1983). This measure uses a 4-point Likert scale. Items include statements like, “I have someone that takes pride in what I do” and “In general, people do not have much confidence in me.” A previous study by Bates and Toro (1999) reported that reliability coefficients for the ISEL ranged from .62 to .85 after a one week interval.

Stress and Health Symptoms. The Modified Life Events Interview (MLEI) asked 75 questions about potential stressors pertaining to the last six months of the participant’s life (Lovell, 1984). This scale was developed specifically for the homeless population and addresses five

domains that are of particular interest and importance in this population: housing situations, employment, social relationships, education/job training, and mental/physical health. The MLEI has previously demonstrated good test-retest reliability ($r = 0.84$; Toro et al., 1997).

To assess a range of psychological symptoms and general psychological distress, the Brief Symptom Inventory was used (BSI; Derogatis & Melisaratos, 1983). The BSI asks participants, using a 5-point scale, to rate the amount they have been distressed by individual symptoms in the past two weeks. The BSI yields scores on nine subscales including Interpersonal Sensitivity, Depression, Anxiety, and Hostility (Boulet & Boss, 1991). Three global indices are also calculated with the BSI, including the General Severity Index which examines the sum of the frequencies endorsed across all of the items. Additionally, research shows considerable evidence of internal consistency (alphas range from .71 for Psychoticism to .85 for Depression) as well as test-retest reliability (.90 for Global Severity Index; range from .68 to .91 on symptom dimensions) (Derogatis & Melisaratos, 1983). The BSI has been used in a variety of studies of homeless youth and adults (e.g., Bellavia & Toro, 1999; Toro et al., 1997; 1999).

Physical health symptoms over the past six months were assessed using the Physical Health Symptom Checklist, a 67-item “yes or no” response measure. Reliability coefficients for this measure, among homeless adults, have been above .80 (Wolfe & Toro, 1992).

Risky Sexual Behaviors. This measure asked basic questions about sexual intercourse, including how old the participant was when they first had sex, as well as how many partners they have had sex with in the past six months. A portion of this measure can be parsed out to form a measure of risky sexual behavior (RSB), which assesses a range of self-reported sexual behaviors. A 4 or 5-point scale is used to assess behaviors including, frequency of sexual activity, number of sexual partners, and age at first oral, anal, and vaginal intercourse, such that higher scores reflect

a riskier pattern in sexual behaviors. A composite score has demonstrated good internal consistency in past studies of homeless adolescents ($\alpha = .86$; Lombardo, 2001) and a study of homeless adults (Forney, Lombardo, & Toro, 2007).

Illegal Behaviors. The Illegal Behavior Symptom Count (IBSC) is designed to measure illegal behaviors in the past year. This measure was formed by combining the Conduct Disorder subscale from the Diagnostic Interview Schedule for Children with adult appropriate items from the adult Diagnostic Interview Schedule (Costello, Edelbrock, Kalas, Kessler, & Klaric, 1982; Robins, Cottler, Bucholz, Compton, North, & Rourke, 1999). There are 33 items on this measure, which could be further classified as covert or overt items (Tompsett & Toro, 2010).

Needs Assessment. Finally, various aspects of perceived needs were assessed using the Needs Assessment Questionnaire (NAQ). This measure asks the participant how they would rate their experience with shelters, soup kitchens, and other services in the past year, if applicable. It goes on to ask about a variety of other services including affordable housing, child care, and job training. Participants are asked how important these various services are to them and they rate this on a 5-point Likert scale ranging from “Not Important” to “Extremely Important”. This is followed up by asking how easily they could gain access to these services if they did need them. This, again, uses a 5-point Likert scale ranging from “Always Difficult” to “Always Easy.” The development of the NAQ is described in detail in an article by Acosta and Toro (2000). Briefly, the items were generated by a combination of previous research, consultation with other researchers in the field, and pilot studies. For this study the need of further education was assessed with two additional items: Academic services from the student’s university and general services from the student’s university.

Study 2

Procedure. Recruitment for study 2 was done through advertisements on the website used by students for accessing registration information, grades, financial information, etc. much like it was done in Study 1. Recruitment in Study 2 added the additional method of recruiting through the research participation system in the Department of Psychology at the university.

Interviews were similar to those done in Study 1. Participants completed a semi-structured interview conducted in person which lasted 90-120 minutes. Participants were allowed to choose how they were compensated. Their choices were either extra credit for a psychology course or a \$20 gift card. Approximately 75% of the participants selected to have extra credit rather than payment.

Measures. All of the measures were the same for Study 1 and Study 2, with the exception of one change and a few additions. Also noteworthy was that the six open-ended questions that were added towards the end of Study 1 were included throughout the entire duration of Study 2.

The Interpersonal Support Evaluation List (ISEL) was replaced by the Network Orientation Scale (NOS) in Study 2. The NOS is a 20-item scale that measures how willing a person is to utilize their social network. Items include statements like “I often get useful information from other people” and “If you can’t figure out your problems nobody can”. The psychometric properties of the NOS have been shown to be adequate in a number of samples such as college undergraduates and non-clinical samples (Cecil, Stanley, Carrion, & Swann, 1995).

Two additional measures about college plans, funding, and assessment of a person’s postsecondary education experience were added. The first measure asked eight open-ended questions including, the student’s major, grade point average, their plans for after college, the reason they decided to attend college, how they were funding their education, and their parents’

education and work background. The second measure was adapted from the Casey Life Skills, a measure created for youth in foster care that assesses seven domains, including daily living, career planning, and relationships. The adapted measure, the Casey Life Skills Postsecondary assessment, is a 106-item scale that assesses the following domains on a 5-point Likert scale: Career and Education Planning, Study and Technology, Motivation and Participation, School/Program, Supports, Health, and Financial and Budgeting. One domain (Foster Care Issues) was eliminated as it was not the focus of the study, resulting in a 99-item scale.

CHAPTER 3: RESULTS

Study 1

Twenty-three of the 30 participants identified as female (77%) compared to 7 males (23%). The ages of participants ranged from 18 to 47; however, the average age of a participant was 27.38. Additionally, 21 participants were 30 years old or younger, accounting for nearly three-quarters of the sample. In terms of racial identity, a majority of participants ($N = 17$ or 57%) identified as African American. Six participants identified as white or another race, respectively. Finally, there was one participant who identified as Latino/a.

In the past year, 21 students (70%) had at least one experience considered to be literal homelessness. Participants had lived anywhere from two to nine places, with the average being five places ($M = 5.00$; $SD = 2.24$). Among the 30 participants, 150 housing sites had been reportedly lived in within the past year. Looking at the extreme ends of the range, four people (13%) reported living in two places within the past year while three people (10%) reported living in nine places in the past year.

Participants reported having lived in a wide variety of places, including relatives' homes, personal vehicles, motels, university buildings, "dope houses" (or abandoned buildings), and, at times, their own homes and apartments. Out of the 150 places participants had lived in the past year, the most common place was to live with another relative besides one's parents. This occurred 28 times (19%). This was followed closely by living with one's parents ($N = 27$; 18%) and living with a friend ($N = 25$; 17%). Thirteen instances out of the 150 were places categorized as university housing (9%) while there were 18 instances of participants having their own apartment (12%). There were nine instances for both participants living in a shelter and staying in a motel (6%) while

there were six instances of a participant reportedly sleeping in their car or a street setting overnight (4%).

Of the 150 housing instances reported by participants, 104 instances (69%) were reported to be experienced as homelessness. The 12 reasons given for why they felt they were homeless at the time were: Job loss ($N = 31$; 30%), Lack of affordable housing ($N = 31$; 30%), Trouble with family ($N = 19$; 18%), Disruption of personal relationship/divorce ($N = 6$; 6%), Eviction ($N = 4$; 4%), Drug/alcohol abuse ($N = 3$; 3%), Physical disability ($N = 3$; 3%), Domestic violence ($N = 2$; 2%), Destruction through fire, flood, or other catastrophe ($N = 2$; 2%), Termination of public assistance ($N = 1$; 1%), Trouble with the law ($N = 1$; 1%), and Homicide within the house ($N = 1$; 1%).

Of the 30 homeless or precariously housed students, seven (23%) reported that they had been married at some point in their life. Five of these seven were no longer living with their spouse (71%). Seven students (23%) reported that they had at least one child. The number of children ranged from one (three students) to three (two students). Out of the seven students with at least one child, six reported that their child or children still lived with them (86%). The student whose child did not currently live with them reported that their child had passed away at a month old.

Since it was part of the study criteria, all 30 participants had attended a college/university/technical school/etc. within the past year. Of these 30 participants, eight (27%) had attended two different schools in the past year and one (3%) had attended three different schools. A majority of these students endorsed attending class “Regularly (that is, except when you are sick)” ($N = 16$; 53%) or “Most of the time” ($N = 8$; 27%). Only three students (10%) responded that they attended class “Not very often”. In the past year, most of the students found school to be “Pretty hard” ($N = 11$; 37%) while only six students (20%) found school to be “Very

easy” or “Pretty easy”. Most students reported receiving “Above Average (Bs)” ($N = 13$; 43%) grades in the past year and only two students reported below average grades (7%).

With regard to illegal activities, within the past year one participant (3%) indicated having been charged with a criminal offense. This participant reported that he/she was not convicted of the offense but did spend one day in jail and was put on probation as well as sent to a rehabilitation center. Two of the thirty participants (7%) reported having been asked to participate in gang activity in the past year; however, neither reported participating.

Finally, participants were asked about various services they may have utilized, including shelters, soup kitchens, and psychological services. Some services had been used by very few participants. For example, using an outreach center had been utilized by two participants (7%). Conversely, staying with a friend or relative, had been utilized by every participant. Several other services had been used by a majority of participants, such as professional psychological services ($N = 18$; 60%) and medical services since the age of 18 ($N = 22$; 73%).

Of particular interest to this study is the amount of participants who utilized homeless shelters, street settings (i.e. sleeping in a car, on a park bench, etc.), and soup kitchens, as well as the perceived outcome of using such services. Twelve participants (40%) had utilized a homeless shelter. Participants reported their first age of use ranging from 7 to 44, with 10 of the 12 (83%) reporting seeking help from a homeless shelter prior to the age of 20. Of the 12 participants, 4 (36% of the 12) had not used a homeless shelter in the past year, and 3 (27%) reported using a homeless shelter for more than 60 days in the past year with one person reporting they had been in a homeless shelter every night for the past year. Finally, with regard to how beneficial the participant perceived the service to be, nine participants (75%) reported a positive effect and no one reported a negative effect (two people reported no effect and one person did not answer).

For the 12 participants who reported having used a street setting in the past, the range of ages of first use were between 16 and 47, with 5 participants (42%) reporting their first use prior to the age of 22. With regard to how many days a participant had used a street setting in the past year, the range was from 0 days to 25 days, with 11 participants (92%) reporting 4 days or fewer. Half of the 12 participants reported that being in a shelter had no effect on them while the other half reported it having a negative effect.

Finally, the age of first use of the five participants who have utilized soup kitchens ranged from 8 to 47, with the ages having a wide amount of variance (ages 8, 17, 28, 30, and 47). Participants had used the soup kitchen anywhere between one time and sixty times in the past year, with one person reporting they had not utilized a soup kitchen in the past year. Finally, two people reported it having a positive effect on them, one person reported a negative effect, and two people reported no effect.

Interpersonal Relationships. The screening question for the Family Environment Scale (FES) asks if the participant considers the people with whom they currently live to be family and 18 participants answered “yes”. The items on the FES result in four subscales ranging in scores from 1 to 4, with higher scores indicating a more positive family environment. The first subscale, Cohesion, includes items that ask about the family being a source of support. The 18 participants ranged in their results from 2.3 to 3.4 ($M = 2.80$, $SD = 0.29$). Expressivity is a subscale that measures how freely and comfortably families communicate, where higher scores indicate one’s feeling of being able to freely express themselves to the family unit. On average, participants reported a subscale score of 2.75 ($SD = 0.31$) and responses ranged from 1.92 to 3.42. High scores on the Conflict subscale indicate that a participant reported that conflict was handled in a healthy way in their family. This subscale showed the widest range with scores from 1.64 to 3.73

($M = 2.45$, $SD = 0.50$). Finally, on the Independence subscale, a measure which includes items about feeling encouraged to be independent and volunteering to help other members of the family, participants had an average response of 2.77 ($SD = 0.37$).

The Revised Conflict Tactics Scales (CTS2) includes Negotiation, Physical Assault, Injury, and Psychological/Verbal Aggression subscales. Of the 30 participants, two (7%) reported never being in a romantic relationship, so they did not complete the rest of the measure. Ten (33%) reported having been in a romantic relationship before but not within the past year. Of the remaining 18 participants, three (10%) were married at the time of the interview, one (3%) was living with someone as though they were married, and 14 (47%) had a romantic relationship within the past year.

With respect to examining the items and subscales, there are two main questions to look at: has the act ever happened before and how often have acts occurred in the past year. Looking at whether items had ever happened before, acts of negotiation from both the participant and their romantic partner was quite frequent, happening among 28 (93.3%) and 27 (90.0%) participants, respectively. Looking at the sum of acts of negotiation in the past year, it ranged from 12 to 36 among the participants and 3 to 36 among the romantic partners of participants ($M = 24.83$, $SD = 8.08$; $M = 23.33$; $SD = 9.54$, respectively).

Unfortunately, verbal aggression was also a common occurrence. Twenty-seven (90%) of participants reported at least one act of verbal aggression in their lifetimes and the number of acts in the past year ranged from 0 (which was only reported by one participant) to 41 (also only reported by one participant; $M = 14.56$, $SD = 13.00$). With regard to romantic partners, twenty-six (87%) participants reported that a romantic partner had been verbally aggressive toward them in their lifetime. The number of verbal aggression acts performed by romantic partners in the past

year ranged from 0 to 42 ($M = 11.83$, $SD = 12.42$). Three of eighteen participants (17%) reported zero acts of verbal aggression by their romantic partner in the past year.

Physical aggression and injuries were less common than these other two subscales but still occurred in roughly half the sample. Fourteen (47%) subjects reported having been physically aggressive with a romantic partner at some point in their life, while seventeen (57%) reported that a romantic partner had been physically aggressive to them. Fourteen (47%) and eight (27%) participants reported having caused an injury and a partner causing an injury, respectively, at some point in their lifetime. Looking at the past year, the amount of physically aggressive acts from participants ranged from 0 to 20 ($M = 3.50$, $SD = 5.96$) while the amount for romantic partners ranged from 0 to 36 ($M = 4.67$, $SD = 9.74$). With regard to injury, participants reported a range of 0 to 9 ($M = 1.00$, $SD = 2.30$) acts that resulted in injury within the past year and reported that romantic partners' acts that resulted in injury ranged from 0 to 6 ($M = 0.61$, $SD = 1.50$).

The Inventory of Childhood Events (ICE) was completed by 27 participants, 9 (30%) of which reported having lived with both biological parents from birth to age 16. Three participants (10%) reported having been in foster care sometime prior to the age of 16. Two of these participants as well as an additional participant ($N = 3$; 10%) reported being in a group home or other institutionalized setting prior to the age of 16. Seven participants (23%) indicated that they had experienced being homeless with their parents while growing up, with frequencies of this experience ranging from one to six times. Additionally, five participants (17%) indicated having been homeless on their own prior to the age of 16.

The average response to items related to Positive Family was 2.41 ($SD = 0.58$). In other words, participants, on average, indicated that they had positive family experiences more frequently than "Sometimes" but not quite to the point where they said these experiences occurred

“Often”. The mean responses to items regarding Positive Family experiences had a range from 1.21 to 3.21. With regard to the subscales of Punitive Parents and Disorganized Home the average responses were 1.25 and 0.67, respectively ($SD = 0.66$ and 0.67 , respectively). The mean responses to items involving Punitive Parents ranged from 0.10 to 2.60 and for items involving Disorganized Home the mean responses ranged from 0.00 to 3.00. There were no studies available with a comparable sample to provide insight into how the sample of college undergraduates compares to other homeless populations.

With regard to questions about maltreatment prior to the age of 16, nine participants (33%) indicated having some amount of physical abuse while they were growing up, with three (10%) reporting that it happened “Often” and one (4%) reporting that it “Always” happened. Nine participants also reported having experienced some amount of sexual abuse prior to the age of 16. Two reported that it happened “Often” and one participant reported that it “Always” happened. Experiences of feeling neglected, emotionally or physically, were more common occurrences with 15 participants (56%) reporting neglect prior to the age of 16. Of these fifteen participants, six (22%) reported that they “Often” felt they were being neglected and two (7%) indicated that they “Always” felt this way. Finally, there was a question asking how often the Department of Social Services visited the participant’s home prior to the age of 16. Six participants (22%) indicated that this happened with one participant reporting that they were “Always” being visited.

On the Interpersonal Support Evaluation List (ISEL) 28 participants provided responses. The ISEL results in four subscales (Appraisal, Belongingness, Tangible Support, and Self-Esteem) and a sum of all of the items provides an overall Interpersonal Support scale. On the subscales scores can range from 1 to 4, with higher scores indicating a higher feeling of belongingness, more tangible support, etc. On the Appraisal subscale, a scale with items indicating that the participant

feels they have people whose advice they can trust and people they can share their worries and fears with, the average response was slightly over 3 ($M = 3.25$, $SD = 0.43$). On the Belongingness scale items include asking participants about if they have people they feel they enjoy spending time with or with whom they can do activities. Participants' responses indicated medium to high amounts of a feeling of belongingness ($M = 3.10$, $SD = 0.61$). On items measuring Tangible Support (i.e. feeling like someone would drive the participant to the doctor, feeling like someone would bail the participant out of jail), the average response was, again, slightly over 3 ($M = 3.10$, $SD = 0.69$). Items gauging the participants' Self-Esteem within social relationships, while still over 3, was the lowest average score among the subscales ($M = 3.09$, $SD = 0.61$). Items on this scale measure to what extent participants feel like they have people who have confidence in their decisions, take pride in them, etc. Finally, with regard to the total level of Interpersonal Support, participants ranged from 6.43 to 15.00. Of note, the lowest possible score was 4 and the highest possible score was 16. The average score of 12.53 ($SD = 1.77$) indicated that participants generally felt that they had adequate positive social support.

Stress and Health Symptoms. Responses to the Modified Life Events Inventory (MLEI) indicated that participants had between five and thirty-seven stressful events within the last six months. Of the 29 participants who responded, the average response was almost 18 stressful events ($M = 17.83$, $SD = 8.93$). The reported average number of stressful life events is very similar to what was obtained in a recent study of representative samples of homeless adults (aged 18 or older) from Detroit (Israel, Toro, & Ouellette, 2010). Some of the stressful events were experienced by almost all of the responding participants including, "Made a new friend" ($N = 26$, 87%) and "Could not go out with friends because I did not have enough money" ($N = 22$, 73%). Conversely, there were five items that zero participants endorsed: "Forced to leave a shelter because it was closed",

“Got married”, “Birth of a child”, “Had an abortion”, and “Got arrested”. Finally, some items reflected stressful events that happened to about half of the participants and reflect items that are likely to be seen in many cases of the undergraduate precariously housed population. Items endorsed by approximately half of the participants included, “Could not find a job”, “Had belongings stolen”, “Felt I did not fit in at school/work” (All $N = 14$, 47%), and “Had to live or stay in a place without privacy” ($N = 16$, 53%).

The Brief Symptom Inventory (BSI) measures how distressing a range of mental health symptoms have been over the past two weeks. Someone is considered to have clinically significant distress on the BSI if they have Global Severity Index (GSI) T scores greater than 63 or if they have two or more subscales with T scores greater than 63. One of the thirty participants did not answer every question so subscales were calculated only when they answered every item on the subscale. This also meant that a GSI could not be calculated for this participant.

When looking at the GSI scores, four of twenty-nine participants had a T score greater than 63 (14%) and the highest GSI score was a 75.6 (2.5 standard deviations above average). Looking at all of the individual subscales, there were 23 instances of people having T scores greater than 63. These 23 instances were covered by nine participants, reflecting that those with distress had high amounts of distress. Notably, one participant had elevations on eight of the nine subscales (they were not elevated on Interpersonal-Sensitivity) and was even three standard deviations above the average on the Hostility (81.8) and the Phobia subscales (82.2).

All of the subscales ranged from two to five participants above a T score of 63. Five participants (17%) of participants were above the cut-off for the Paranoia subscale. Four participants (13%) of participants had T scores greater than 63 on the subscale known as Phobia. Four subscales had three participants (10%) over the clinically significant cutoff. These subscales

were Somatization, Interpersonal Sensitivity, Anxiety, and Hostility. Finally, the remaining subscales (Obsessive-Compulsive, Depression, and Psychoticism) had two participants (7%) above the 63 cut-off.

One more interesting number to look at is the Positive Symptoms Total score which reflects the number of symptoms that were marked above a 0, meaning that the symptom had caused some level of distress. Of the 30 participants, the average person marked nearly 25 symptoms (out of 53) as having some level of distress ($M = 24.90$, $SD = 12.90$). Participants ranged from indicating that no items had caused any amount of distress to fifty-two items had caused some level of distress.

The Physical Health Symptom Checklist (PHSC) can be broken down into two types of questions: physical symptoms experienced and medical services sought. Respondents had an average of 12.5 ($SD = 6.8$) health problems. The reported average number of health symptoms is similar to what was obtained in a recent study of homeless adults in Detroit (Israel et al., 2010). The minimum number of health symptoms reported was one, while the most health symptoms reported by a participant was twenty-five. With regard to physical symptoms, one item that summarizes the respondent's perception of their overall health, "Poor health", was endorsed by 10 participants (33%). Some items were endorsed by a majority of participants including "Trouble sleeping" ($N = 22$, 73%), "Get tired easily" ($N = 23$, 77%), and "Back pain" ($N = 19$, 63%). There were five items no respondents endorsed: "Sores in or around mouth", "Vomiting blood", "Jaundice", "Diabetes", and "Tested HIV positive". Some items were only endorsed by one or two participants: "Pain in, itching, or discharge from eyes", "Lips or fingernails turn blue", "Swelling of legs or ankles", "Frequent vomiting", "Excessive bruising", "Blackouts, fainting, or seizures", "Blood in urine", and "Cancer". Finally, there were some items endorsed by about half of the

participants including, “Skin breaking out in blemishes” ($N = 14, 47\%$), “Runny or stuffed up nose” ($N = 17, 57\%$), “Neck sore, tender, or stiff” ($N = 17, 57\%$).

Examining the responses to medical services sought also provided some insight into the physical health of undergraduates with unstable housing. Half of the participants ($N = 15, 50\%$) indicated that they had seen a doctor for any medical problem and 19 (63%) reported that they had seen a doctor for a physical examination in the last six months. Of the 30 participants, 12 (40%) reported that they, at some point, needed to see a doctor, but were unable to. Looking at hospitalizations, 11 (37%) of participants had been hospitalized for medical reasons since the age of 16. Six of the participants (20%) reported being hospitalized for emotional or mental reasons since the age of 16 and four participants (13%) had been hospitalized for substance abuse treatment since the age of 16.

Risky Sexual Behaviors. Twenty-one participants (70%) endorsed having had sexual intercourse (including oral and/or anal sex) in the last six months, eight participants indicated that they had not done this in the past six months, and one participant declined to answer. Participants averaged over three partners in the past six months ($M = 3.60, SD = 6.62$) with answers ranging from one to thirty. The median response to this question was one partner ($N = 11, 55\%$). On average, participants were almost 16 years old when they had their first sexual encounter ($M = 15.81, SD = 3.08$), with a range from six to twenty years old.

A total score for risky sexual behaviors was calculated. The number of such behaviors ranged from 0 risky behaviors ($N = 6; 20\%$) to 17 risky behaviors ($N = 1; 3\%$). The median response was seven risky behaviors and the average was similar ($M = 6.63, SD = 5.12$). Toro and colleagues (2014) found an average of 5.76 risky sexual behaviors ($SD = 5.39$) among 219 homeless adults. Even though the sample from Toro et al. (2014) was an older sample (Age: $M =$

42.3), they were reporting fewer risky sexual behaviors than the current sample of undergraduates with housing instability.

Illegal Behaviors. The scores on the Illegal Behavior Symptom Count ranged from 0 to 17 with the average participant indicating they had participated in a little over four of the behaviors in the past year ($M = 4.17$, $SD = 4.27$). The median response was three behaviors. Some of the behaviors were relatively common. For example, 19 participants (63%) reported that they had taken off work or skipped class without asking. Conversely, one behavior was not endorsed by any participants: purse-snatching. However, there were several items which only one or two participants indicated having done in the last year. These behaviors included using an alias, finding customers for prostitutes, torturing animals, and breaking into a house, building, or car.

Needs Assessment. Assessment of needs is examined from three perspectives: the person's experience receiving certain services in the past six months, the person's perception of the importance of a list of needs, and the person's perception of the ease in which they can obtain fulfillment of the same list of needs.

With regard to examining participants' experiences, services are broken down into three groups: shelter, soup kitchen, and other services. Of the 30 participants, 9 (30%) reported having used a homeless shelter in the past six months and 4 (18%) reported using at least two homeless shelters in the past six months. Conversely, only three participants (14%) used a soup kitchen in the past six months and no one reported using more than one soup kitchen. In the "other" category, five people (29%) reported having used some other service in the past six months, but no one reported a second service used. These other services included Planned Parenthood, Job Corps, and a religious mentorship program.

Participants were asked questions about the services they received at each of these sites. Questions included “I would go back to this site” and “I do not feel respected when I use services at this site”. Responses were coded and reverse coded in a way that lower numbers reflected more negative experiences with the services received. The responses for each site were then summed where the lowest possible sum could be 18 and the highest could be 72.

The average sum for the shelters (12 total) was 40.63 ($SD = 10.91$) with sums ranging from 20 to 53. Four of the twelve responses (25%) were less than 35, indicating a more negative than positive experience. Experiences appeared to be slightly more negative with regard to the three soup kitchen experiences ($M = 35.67$, $SD = 11.93$) with a range from 22 to 44. Conversely, experiences with other services tended to be rated more positively ($M = 62.00$, $SD = 10.49$) with scores ranging from 49 to 71.

Three needs were ranked as the most important as evidenced with respondents indicating them as “Extremely Important”: Finding affordable, permanent housing ($N = 27$), job placement ($N = 19$), and furthering one’s education ($N = 24$). Conversely, five needs were consistently rated as “Not at All Important” by a majority of participants: Parenting training ($N = 21$), Affordable childcare ($N = 22$), Drug/Alcohol treatment ($N = 21$), Case management ($N = 23$), and Assistance with English fluency ($N = 22$). With regard to two specific questions about the university participants were attending, 16 indicated that receiving academic services from their university was “Extremely Important” and 15 indicated that receiving general services from their university was “Extremely Important”.

When asked about the ease in which one could obtain the services if needed, 17 students noted that they found it “Always Difficult” to obtain affordable, permanent housing. Getting public benefits was also noted to be “Always Difficult” by 11 participants. With regard to the questions

about academic and general services at the university they were attending, 17 students for each question responded that it was “Always Easy” to receive these services.

Study 2

Study 2 had a total of 113 participants. Fifty-seven participants were considered stably housed, that is, they had no experience of precarious housing or literal homelessness in the past year. Twenty-four participants had experienced literal homelessness in the past year, while 27 experienced precarious housing. Before running the main analyses, the groups were compared on basic demographic variables. We grouped the sample into three racial groups of roughly equal size: White ($N = 32$), African American ($N = 44$), and People of Color (not African American) ($N = 37$). This third group was made up of people who identified as Asian, Middle-Eastern, Latino, Multi-racial, etc.

An analysis of variance (ANOVA) was done to compare the three samples on age and two chi square goodness-of-fit tests compared the three samples on gender and racial group. While the three groups did not differ significantly on gender ($\chi^2(2, N = 113) = 0.69, p = .71$) or racial group ($\chi^2(4, N = 113) = 4.92, p = .29$), there was a significant difference among the three housing groups on age $F(2, 105) = 5.51, p = < .01$. Five participants did not report their birthday so their ages could not be calculated. Post hoc analyses using the Tukey post hoc criterion for significance indicated that stably housed students were significantly younger ($M = 22.82, SD = 5.95$) when compared to homeless students ($M = 27.25, SD = 2.05$) and precariously housed students ($M = 28.37, SD = 9.43$).

Because of this significant difference in age, a matched group of participants was also created where one stably housed student, one homeless student, and four students from the precariously housed group were eliminated from further analyses (total $N=107$). In this matched

sample, no significant differences emerged with regard to gender ($\chi^2(2, N=107) = 0.58, p = .75$), race ($\chi^2(4, N=107) = 5.29, p = .26$), or age ($F(2, 102) = 2.24, p = .11$). Analyses were done on both the matched and unmatched samples throughout the rest of the study. More information on the demographics of the sample can be found in Tables 1, 2, and 3.

All three housing groups varied significantly with respect to the number of housing sites they had lived at in the past year (Matched: $F(2, 104) = 59.95, p < .01$; Unmatched: $F(2, 110) = 49.82, p < .01$). In both the matched and unmatched samples, homeless students averaged around five housing sites in the past year, while precariously housed students averaged nearly four, and stably housed students averaged one housing site in the past year. These differences were significant based on Tukey's post-hoc test.

Both the matched ($\chi^2(2, N=107) = 0.68, p = .71$) and unmatched analyses ($\chi^2(2, N=113) = 2.44, p = .29$) indicated that the three housing groups did not differ significantly on marital status. There were also no significant differences among the three groups with regard to having children, both for the matched ($F(2, 104) = 1.00, p = .37$) and unmatched analyses ($F(2, 110) = 2.07, p = .13$).

In the unmatched sample, homeless students had significantly more jobs on average ($M = 1.81, SD = 1.44$) than both precariously housed ($M = 1.62, SD = 1.50$) and stably housed students ($M = 1.09, SD = 0.88$) ($F(2, 110) = 3.94, p = .02$). The same pattern held in the matched sample ($F(2, 104) = 5.18, p = .01$) (See Table 4 for means and standard deviations). These differences were significant based on Tukey's post-hoc test.

In terms of how responsible the participants perceived themselves, in the unmatched sample there was a significant difference between homeless students ($M = 41.77, SD = 8.52$) and

stably housed students ($M = 46.33$, $SD = 7.78$) ($F(2, 110) = 3.27$, $p = .04$). However, this pattern did not remain in the matched sample ($F(2, 104) = 2.13$, $p = .12$).

While groups did not differ in how involved they were in extra-curricular activities (Matched: $F(2, 104) = 0.32$, $p = .73$; Unmatched: $F(2, 110) = 0.934$, $p = .39$), there were significant differences with respect to the amount of time the participant spent with their extracurricular activities during the week. In the unmatched sample there was a significant difference between the precariously housed students ($M = 7.21$, $SD = 3.08$) and the stably housed students ($M = 9.47$, $SD = 4.59$) ($F(2, 110) = 3.56$, $p = .03$). In the matched sample a significant difference among the three groups ($F(2, 104) = 3.53$, $p = .03$) emerged but Tukey's post hoc analyses did not reveal any significant differences at the group comparison level. Tables 5 and 6 summarize information about responsibility and extracurricular activities.

There was no significant difference among the three housing groups on whether or not the participant had been convicted of an offense in the past year (Matched sample: $\chi^2(2, N = 107) = 3.43$, $p = .18$; Unmatched sample: $\chi^2(2, N = 113) = 3.54$, $p = .17$). However, significant differences emerged with respect to whether a participant had been asked to participate in any gang activities: homeless students were more likely to answer "Yes" (Matched sample: $\chi^2(2, N = 107) = 6.69$, $p = .04$; Unmatched sample: $\chi^2(2, N = 113) = 6.81$, $p = .03$). No participants reported participating in gang activity within the past year.

Education. There was not a significant difference in the number of schools attended in the past year based on housing status (Matched: $F(2, 104) = 1.87$, $p = .16$; Unmatched: $F(2, 110) = 1.73$, $p = .18$). The perceived difficulty of school in the past year did not differ significantly (Matched: ($\chi^2(10, N = 107) = 10.14$, $p = .43$; Unmatched: $\chi^2(10, N = 113) = 10.67$, $p = .38$), nor did the reported attendance at school (Matched: ($\chi^2(6, N = 107) = 12.08$, $p = .06$; Unmatched: χ^2

(6, N =113) = 11.51, $p = .07$) (Table 7). Finally, there was not a significant difference between stably housed and unstably housed students with regard to mother's education (χ^2 (6, N =67) = 8.56, $p = .20$) or father's education (χ^2 (6, N =62) = 9.68, $p = .14$) (Table 8). Of note, the same participants provided answers to this question for both the matched and unmatched sample so only one statistic is reported.

In terms of funding one's college education, there were some significant differences between the stably housed students and the unstably housed students. This measure was not added until the middle of the study so it has a smaller sample size and, thus, homeless and precariously housed students were combined into one group. Furthermore, the sample was the same for matched and unmatched analyses so only one statistic is reported. While there was not a significant difference between the two groups in who took out student loans ($p = .69$) and who received scholarships ($p = .06$), there was a significant difference between the two groups with regard to personal savings ($p = .04$), being funded by a parent or other family member ($p < .01$), and other funding which included things like the GI bill and Pell grants ($p = .02$) (Table 9).

Grades differed significantly among the housing groups (Matched: (χ^2 (10, N =107) = 19.57, $p = .03$; Unmatched: χ^2 (10, N =113) = 21.15, $p = .02$). Homeless students were most likely to report grades that were "Mostly Cs", precariously housed students reported "Mostly Bs", and housed students were the most likely of the three groups to report getting "Mostly As". This result was not reflected in the self-reported grade point averages of participants ($t(70) = .43, p = .52$ in the matched sample); however, this measure was introduced later in the study and, thus, did not have all of the precariously housed and homeless students reporting on it.

Looking at the subscales to the Casey Life Skills Postsecondary assessment in the matched sample there were no significant differences with respect to Study and Technology ($p =$

.66), Health ($p = .69$), or Financial Aid and Budgeting ($p = .17$). Significant differences did emerge in Career and Education Planning ($p = .03$), Motivation and Participation ($p = .02$), School/Program ($p < .01$) and Supports ($p = .05$). In the unmatched sample the only significant differences emerged in Motivation and Participation ($p = .03$) and School/Program ($p < .01$). More statistics can be found in Table 10.

Interpersonal Relationships. Relationships in childhood, as assessed using the Inventory of Childhood Events (ICE), revealed several differences among the three housing groups. Homeless students were more likely than precariously housed students who were more likely than stably housed students to not live with both biological parents during childhood (Matched sample: $\chi^2(2, 104) = 19.62, p < .01$; Unmatched sample: $\chi^2(2, N=109) = 19.27, p < .01$). While the differences among the groups in terms of having a history of being in foster care was not significant, there was a significant difference in the matched sample of experience being in an orphanage, group home, or other institutional setting ($\chi^2(2, 104) = 6.51, p < .04$). Homeless and precariously housed students reported more such experience than stably housed students. Additionally, there was a significant difference among the housing groups with respect to experiencing homelessness with one's family prior to the age of 16 (Matched sample: $\chi^2(2, 104) = 10.74, p < .01$; Unmatched sample: $\chi^2(2, N=109) = 7.72, p = .02$). Again, with homeless and precariously housed students reporting more of these experiences.

The ICE also determined significant differences among the housing groups with regard to abuse, neglect, and social services involvement (Table 11). While there were no significant differences among the groups regarding a history of sexual abuse, significant differences emerged on physical abuse (Matched sample: $\chi^2(8, 104) = 21.58, p < .01$; Unmatched sample: $\chi^2(8, N=109) = 20.43, p < .01$). Both the precariously housed and homeless students indicated

more experience of physical abuse than the stably housed group, and the homeless group reported experiencing physical abuse more frequently than the precariously housed group. Neglect was also more frequently experienced by precariously housed and homeless students (Matched sample: $\chi^2(8, 104) = 37.55, p < .01$; Unmatched sample: $\chi^2(8, N = 109) = 35.99, p < .01$). However, precariously housed students reported feeling neglected more frequently than homeless students. Finally, the stably housed students were more likely to report no social services involvement compared to the precariously housed and homeless students (Matched sample: $\chi^2(8, 104) = 22.69, p < .01$; Unmatched sample: $\chi^2(8, N = 109) = 19.27, p = .01$).

There were no significant differences among the three groups on the ICE Punitive Parenting subscale. There were significant differences with respect to Positive Family experiences in both the matched and unmatched samples (Matched: $F(2, 99) = 19.19, p < .01$; Unmatched: $F(2, 104) = 17.78, p < .01$). Tukey's post hoc tests within the matched sample indicated that the precariously housed ($M = 2.07, SD = 0.56$) and the homeless ($M = 2.25, SD = 0.70$) had fewer positive family experience than the stably housed ($M = 2.89, SD = 0.57$). There was also a significant difference on the Disorganized Home subscale (Matched: $F(2, 96) = 9.96, p < .01$; Unmatched: $F(2, 101) = 10.30, p < .01$). Again, the difference was that stably housed students (Matched: $M = 0.31, SD = 0.37$) were less likely to experience disorganization within the household when compared to the homeless (Matched: $M = 0.77, SD = 0.79$) and precariously housed (Matched: $M = 0.93, SD = 0.83$) as analyzed by Tukey's post-hoc test (Tables 12 and 13).

Current family household dynamics were measured using the Family Environment Scale (FES; Tables 14, 15, 16, and 17). Only students who stated that their current living situation involved people they considered to be family were asked to complete this measure. There were

no significant differences among the three housing groups in either the matched or unmatched samples.

Participants completed the Conflict Tactics Scale-2nd Edition, which provided information about participants and their romantic partners. There were two separate types of analyses that this produced: number of instances of behaviors in the past year and if a behavior had ever occurred before. In both the matched and unmatched samples, the only subscale that was not significant with respect to if the behaviors had ever happened before was the Partner Negotiation scale. Subject Negotiation, Verbal Aggression (subject and partner), Physical Aggression (subject and partner), and Injury (subject and partner) were all significantly different across housing groups; the homeless students and precariously housed students were more likely to have experienced the behaviors before when compared to the stably housed students (Table 18).

The amount of certain behaviors over the past year was analyzed using an ANOVA and the only significant difference that emerged was the matched sample's Subject Injury scale ($F(2, 78) = 3.17, p = .05$). However, after examining the Tukey post-hoc test there were no significant differences between groups. The highest average was the precariously housed group ($M = 0.19, SD = 0.43$), whereas the lowest average was the stably housed group ($M = 0.02, SD = 0.08$). The larger message here is that even the "significantly" higher group produced less than one injury in a romantic partner within the last year. This argues against the practical significance of this finding which will be explored more in the discussion section (Tables 19 and 20).

On the Network Orientation Scale (NOS), there was not a significant difference with willingness to utilize one's social network ($t(76) = 1.29, p = .26$). Again, since this measure was added later in the study only two groups were compared: stably housed and unstably housed.

Stress and Health Symptoms. The analyses of the number of stressful life events experienced in the last six months indicated significant differences among all three of the groups in both the matched ($F(2, 104) = 38.84, p < .01$) and unmatched samples ($F(2, 110) = 34.01, p < .01$). The average number of events in the matched sample ranged from 35.44 in the precariously housed group to 8.56 in the stably housed group. The homeless group had an average of 21.32 events. In the unmatched sample, the same pattern emerged: The average number of events was 34.24 and 8.76 among the precariously housed and stably housed group, respectively.

With regard to overall mental health, the GSI for the stably housed students in the unmatched group was an average of 47.03 ($SD = 7.85$) which was significantly lower (and indicating better mental health than both the precariously housed group ($M = 53.86, SD = 11.19$) and the homeless group ($M = 52.50, SD = 11.18$). The overall ANOVA for the GSI within the unmatched analysis was $F(2, 107) = 5.81, p < .01$. This pattern did not emerge when the same analysis was run with the matched group, $F(2, 103) = 1.80, p = .17$.

Among the subscales of the BSI, the unmatched dataset had significant differences on Interpersonal Sensitivity ($F(2, 109) = 4.30, p = .02$), Depression ($F(2, 109) = 8.14, p < .01$), Anxiety ($F(2, 109) = 3.95, p = .02$), Paranoia ($F(2, 109) = 3.96, p = .02$), and Psychoticism ($F(2, 110) = 4.42, p = .01$) (see Table 25). The matched dataset produced significant ANOVAs with only the Depression ($F(2, 103) = 6.34, p < .01$) and the Psychoticism subscales ($F(2, 104) = 4.72, p = .01$) (see Table 26).

There were significant differences among the three housing groups on physical health symptoms. A significant difference was found on the total number of symptoms in both the matched ($F(2, 104) = 3.49, p = .03$) and unmatched samples ($F(2, 110) = 3.22, p = .04$). Tukey post hoc tests indicated that the significant difference was between precariously housed (Matched:

$M = 13.96, SD = 7.01$; Unmatched: $M = 13.72, SD = 8.00$) and the stably housed group (Matched: $M = 9.68, SD = 6.96$; Unmatched: $M = 9.55, SD = 7.00$) (Table 24 and 25).

A single item, Poor Health, was also examined and revealed a significant difference among the groups in both the matched ($\chi^2 (2, N = 107) = 12.18, p < .01$) and unmatched samples ($\chi^2 (2, N = 113) = 13.51, p < .01$). The stably housed students were more likely to indicate that they had poor health. Finally, participants were asked if, in the last year, they had needed to see a doctor but could not. Again, significant differences emerged in both the matched and unmatched samples (Matched sample: $\chi^2 (2, N = 107) = 16.97, p < .01$; Unmatched sample: $\chi^2 (2, N = 113) = 16.07, p < .01$) (see Table 26).

Risky Sexual Behaviors. There were no significant differences with regard to the number of risky sexual behaviors within the sample of matched participants who reported sexual activity within the past six months ($F(2, 63) = 0.77, p = .47$) or the unmatched sample ($F(2, 64) = 0.68, p = .51$). However, age of first sexual encounter differed significantly in both samples (Matched: $F(2, 68) = 3.99, p = .02$; Unmatched: $F(2, 71) = 3.75, p = .03$). Tukey post hoc results indicated that the homeless students were, on average, significantly younger at their first sexual encounter (Matched: $M = 15.00, SD = 3.34$; Unmatched: $M = 15.14, SD = 3.32$) than stably housed students (Matched and Unmatched: $M = 17.70, SD = 3.64$) (See tables 27 and 28).

Illegal Behaviors. Both the unmatched and matched samples produced ANOVAs with significant differences among the housing groups when examining illegal behaviors over the past year. For the unmatched group ($F(2, 109) = 6.63, p < .01$), Tukey post hoc tests indicated that the homeless group reported significantly more illegal behaviors ($M = 4.42, SD = 4.58$) than the stably housed group ($M = 2.02, SD = 1.84$) and the precariously housed group did not differ significantly from either group ($M = 3.54, SD = 2.99$). The matched group indicated slightly different, yet still

significant results. For the matched group ($F(2, 104) = 7.544, p < .01$), the Tukey post hoc tests indicated that the stably housed group had significantly fewer illegal behaviors in the past year ($M = 1.98, SD = 1.84$) than both the precariously housed group ($M = 3.76, SD = 3.06$) and the homeless group ($M = 4.56, SD = 4.62$) (See tables 24 and 25).

Needs Assessment. Participants were asked to rank how important certain needs were for them at the time of the interview. Significant differences emerged in the unmatched sample on the following needs: Finding affordable permanent housing ($F(2, 109) = 24.52, p < .01$); Job placement ($F(2, 109) = 5.73, p < .01$); Job training ($F(2, 109) = 3.79, p = .03$); and Getting public benefits ($F(2, 109) = 3.52, p = .03$). Significant differences for the matched sample were found on the same four needs: finding affordable permanent housing ($p < .01$), job placement ($p < .01$), job training ($p = .03$), and getting public benefits ($p = .01$). In addition, more needs emerged as a significantly different in the matched sample: Getting free meals ($F(2, 104) = 3.48, p = .03$); Short-term shelter ($F(2, 104) = 3.38, p = .04$); and Individual counseling ($F(2, 104) = 3.42, p = .04$). Means and standard deviations for the three housing groups are reported in Tables 29 and 30. Overall, homeless students tended to endorse needs involving housing, jobs, and assistance as significantly more important than the stably housed students endorsed. Precariously housed students only differed significantly in their rankings of important from the stably housed group when it came to affordable, permanent housing.

In addition to ranking the importance of certain needs, participants were also asked the ease in which they are able to obtain the services when they are needed. Significant differences in the unmatched sample emerged with respect to getting free meals ($p < .01$), short-term shelter ($p < .01$), transitional housing ($p < .01$), getting public benefits ($p < .01$), parenting training ($p < .01$), individual counseling ($p < .01$), family counseling ($p = .01$), drug/alcohol treatment ($p < .01$), case

management ($p = .03$), and mental health care ($p = .02$). The same needs were significantly different among the three housing groups in the matched sample (see Table 31 and 32 for additional statistics).

There is a portion of the Housing, Income, and Education timeline that assesses treatment utilization. There was a significant difference among the housing groups for all services except medical (Matched sample: $\chi^2(4, N=107) = 1.64, p = .80$; Unmatched sample: $\chi^2(4, N=113) = 2.41, p = .66$) and religious counseling (Matched sample: $\chi^2(2, N=107) = 0.75, p = .69$; Unmatched sample: $\chi^2(2, N=113) = 1.45, p = .48$). For all of the other services, the precariously housed and homeless students were significantly more likely to have used the service in the past (see Table 33 for statistics).

Open-ended Survey Findings. The three questions that were asked of all of the students provided some insight into what differences stably housed students reported from the unstably housed students. (Because this measure was added later in the study all of the participants analyzed were a part of the matched sample). The three groups of students did not differ in reporting money, relationships, time management, health, or classes as barriers to their successful completion of college. However, unstably housed students were significantly more likely to explain living environment as a barrier to graduation ($\chi^2(2, N=94) = 18.51, p = <.01$). Living environment included explanations like needing to have quiet housing, transportation, or feeling like one had to live in an unsafe environment. See Table 34 for additional information.

Students were asked what needs they felt they had at the time of the interview. There were no differences among the groups on transportation needs, balancing extracurricular and social activities, financial needs, health needs, and needs for motivation and time management. Where unstably housed students differed from the stably housed students were their reports of needing

housing and basic needs such as food and clothes. Conversely, stably housed students were more likely to report needs of educational assistance such as tutoring, needing to get good grades, and help getting into graduate school (See Table 35).

Finally, both groups were asked how they felt their institution could help them. Again, a pattern emerged where both groups of unstably housed students were more likely to note their institution could help with housing and basic needs. For example, some students noted that providing cheaper housing as well as providing meals over university breaks would be helpful. No homeless students noted how the university could help with academic support; however, approximately 30 percent of both the precariously housed and stably housed students endorsed this as a way the university could help them (See Table 36).

There were three questions (Results are reported in Table 37, 38, 39) that were only asked of students who noted some sort of unstable housing in the past year ($N = 32$). First, students were asked their perceived reason for being homeless. Four main themes emerged: Family Conflict, Financial Reasons, Lack of Support, and Personal Reasons. Half of the sample noted Family Conflict as their reason for homelessness, while a third noted some sort of Financial Reason which included foreclosure or eviction. Seven participants (22%) explained Personal Reasons for being homeless, which included difficulty with problem solving, drug addiction, and personal crisis. Finally, four participants (13%) noted Lack of Support as their reason for unstable housing. This included explanations such as the military not providing adequate housing support after discharge and lack of institutional support, such as difficulty with section 8 housing.

The second question asked participants what would have been helpful for them while they did not have stable housing. Thirteen of the thirty-two students indicated that help with housing and basic needs, as well as help with money and other resources would have been the most helpful.

Seven students indicated that having support, whether from their family or from the school, would have helped them. Three students noted that they could have used help with institutional barriers such as how to handle their Medicaid when they switched counties or how to use section 8. Finally, three students reported that they felt the only help they could have used would have been changing internal characteristics about themselves, for example, being better prepared.

Finally, students were asked to describe their homeless/precarious housing situation. Most frequently ($N = 12$; 38%) students reported “couch surfing”, that is, living with friends or relatives for an indeterminate amount of time, and usually going from place to place. The next most common occurrence was living in an uncomfortable and/or overcrowded place (19%). Staying in a car, park, hotel, etc. was endorsed by five participants (16%), while only one student explained that they stayed at school as much as possible to avoid their unstable housing situation, sometimes sleeping in the library. Four participants explained that they felt they were living beyond their means while another four participants utilized a homeless shelter. These results show a variety of ways students handled their unstable housing.

CHAPTER 4: DISCUSSION

Study 1

Overall, the results provided insight into the housing situations, other stressors, and the needs of college undergraduates who have had some form of unstable housing over the past year.

The average age of participants, slightly over the age of 27, differed from the traditional age of 18-22 that many people consider to be “normal” for college students. This finding suggests that people with unstable housing may delay their college education until they are older. The majority of students who participated in this study reported going to class regularly and earning above average grades (Bs); however, a majority of the students still found classes to be “pretty hard.” This suggests that students who have housing instability are making an effort to attend class and to earn the best grades possible, but may still be subjectively struggling with their coursework. These struggles could include things like not having appropriate places to study, not being able to miss work to study, or not having the financial resources to purchase textbooks or study aids.

Questions about housing revealed that students had changed their living situation at least twice and up to nine times within the past year. These places included other relatives’ houses, motels, “dope houses,” and university buildings. Job loss, lack of affordable housing, and trouble with family were the top reasons that students gave to explain why that had been homeless or precariously housed. Taken together, these findings suggest that housing instability may reflect a variety of factors: number of housing sites, places where the student ended up staying, and the reason for their housing problem.

Services used by students provided interesting findings on amount of services used, types of services used, how important services were perceived to be, and how easy it was to obtain services. Soup kitchens were only utilized by a handful of students. Additionally, reported

experiences of soup kitchens tended to be more negative than experiences at shelters or with other services. Housing services were more frequently used and also perceived to be extremely important as well as often difficult to find. This discrepancy is something that would need to be focused on in addressing work with students who have housing instability. It may not necessarily be that housing programs do not exist; however, the perception of their existence and/or attainability may be disheartening to students. Furthermore, when asked about their experiences with homeless shelters, participants, on average, reported more negative than positive experiences.

With regard to the importance of services, job placement and furthering one's education were ranked almost as highly as the importance of finding affordable, stable housing (which is consistent with findings from Acosta and Toro, 2000); however, job placement and furthering education were not noted to be very difficult to obtain. On a positive note, a majority of participants reported that, while they found receiving academic and general services from their university to be extremely important, these services were generally easy to obtain.

Different types of relationships were assessed in the interview: familial (past and present), friendships, and romantic relationships. Rather than examine these as individual measures it will help put information together if we examined it from two perspectives: negative social relationships and positive social relationships.

First, nearly a quarter of the participants reported having been homeless with their parents while growing up and five other participants noted they had been homeless on their own prior to the age of 16. This suggests that housing instability is not new to many of our students but, rather, is a chronic feature of their lives.

A third of the participants in Study 1 reported having been physically abused while they were growing up, a third reported being sexually abused prior to the age of 16, and over half

experienced being neglected as children. Overall, 60% of the sample reported experiencing at least one of the three. Among the 28 participants who had been in a romantic relationship, nearly 90% reported experiencing verbal aggression from a romantic partner. Of those who had experienced verbal aggression in the past year, a total of up to 41 instances were reported. Over half of the participants indicated that a romantic partner had been physically aggressive to them and one participant reported that in the past year they had experienced 36 physically aggressive acts by their romantic partner. Nearly half of the participants had been physically aggressive to a romantic partner and one person reported they had done so 20 times in the past year. The main point of these findings is that experiencing abuse (sexual, verbal, and/or physical) is more common than not in this population's childhood and also in their current intimate relationships. Additionally, almost half of the sample indicated that they had been aggressive to their romantic partner, suggesting a certain cyclical relationship to being abused as a child and becoming abusive in adulthood that has been supported in the research literature (Linder & Collins, 2005).

With regard to parental relationships during childhood, participants reported more positive experiences, on average, than punitive parenting or living in a disorganized home. Additionally, participants generally reported high amounts of social support from friends, including tangible support and emotional support. Furthermore, over 90% of participants indicated high amounts of negotiation between their romantic partners and themselves. It would appear that, overall, students with housing instability report having social support throughout their lives and in several different types of relationships; though they also report plenty of abuse and neglect in their lives as well.

Stressful life events such as not fitting in at school/work, living in a place without privacy, and not being able to go out with friends due to lack of money were experienced by many of the participants. Participants, on average, reported nearly 18 stressful events in the past six months,

which means an average of three stressful events per month. While some of the stressful events were positive (i.e. made a new friend), this was not the case for a majority of items. These stressful events are beyond what stressors school may bring as only a few items were specific to school (i.e. failed a class or training program). The level of stressful events reported in our sample was similar to what is typically seen in broader samples of homeless adults (including those who are older), suggesting that homelessness among college students can be as difficult as among other homeless subsamples.

A third of the sample noted that they had poor health and a majority reported concerns with sleep and back pain. Nearly half reported that they had needed to see a doctor but were unable to within the past six months. With regard to more recent mental and emotional concerns, all but one of the participants reported having at least one symptom. It is important to point out that the measure used involved a very recent time period (the past 2 weeks) and does not reflect the ebbs and flows of emotions and mental stress throughout a whole semester. Without a comparison group, it is hard to say whether these are average reports of symptoms for college undergraduates or not.

Participants reported an average of four “illegal” behaviors in the past year; however, the behaviors that a majority of participants reported included things like skipping class or taking off work without asking. Reports of risky sexual behaviors were more common than not among the participants, and while some participants did not report any behaviors that would constitute risky sex, a substantial number did. Without comparison data from a “normal” undergraduate population, it is difficult to make any global statements about this behavior.

Study 2

The findings from Study 2, by adding a comparison group, allow for more conclusions and possibilities to be explored. It is important to note that, in the original sample, students who had unstable housing were significantly older than student who were stably housed. Addressing this with a matched sample where age was no longer significantly different among the groups allowed us to explore the measures without having a confound of age involved. It was decided that analyses would be done with both the unmatched sample to capitalize on the maximum sample size and on the unmatched sample to eliminate age as a confound variable. Even though the sample differed on age, no significant differences among gender or the three groups of race emerged.

On educational outcomes, there were no differences in reported difficulty, class attendance, or grade point averages, nor did the groups differ on their parents' levels of education. However, the two groups differed on their subjective reports of their grades (i.e. homeless students were more likely to report that they received mostly Cs while stably housed students reported receiving mostly As). The groups also differed significantly with respect to how they were funding college. On average, stably housed students could rely on about a quarter of their education being funded by parents or other relatives, whereas students with unstable housing only relied on this for six percent of their funding, on average. The two groups did not differ in terms of loans or scholarships though.

On average, stably housed students reported more confidence about future careers and planning their education. They also agreed more strongly with statements reflecting one's motivation to attend school, participate in decisions about their education, and one's drive to go above classroom expectations (i.e. meeting for office hours, meeting with academic advisors, etc.). Students with unstable housing reported less agreement with respect to feeling connected with

their school, including instructors at their institution. They also were less likely to feel supported by other people with respect to their educational goals and to feel connected with services that would help them with their academic success. These findings support the main hypothesis of this study which is that students with unstable outcomes have more difficulty with various aspects of life, including their education.

With respect to activities outside of school, homeless students had significantly more jobs than precariously housed and stably housed students over the past year. This may reflect the homeless students trying to address their lack of monetary resources; however, they are either underpaid, do not work enough hours, or are prioritizing school above working more often to cover housing. Additionally, stably housed students reported spending more hours per week on extracurricular activities than students with housing instability. Combining this knowledge with the previously reported differences suggests that students with housing instability are prioritizing classes and jobs ahead of additional activities that could make for a more productive and fulfilling college experience.

Various measures on interpersonal relationships provided insight into differences, as well as similarities among the three student housing groups. The groups did not differ on utilizing one's social network, nor did they differ on current familial relationships, if applicable. Additionally, with respect to romantic relationships, the groups did not differ on the amount of certain behaviors, positive or negative, over the past year. All of these measures shared the commonality that they assessed more temporally recent relationships. Significant differences emerged with respect to relationships during childhood and romantic relationships in the past. For example, students with unstable housing were more likely to report experiences of abuse in romantic relationships as well as experiences of abuse as children. Additionally, they were more likely to experience neglect,

homelessness as children with their parents, and exposure to social services visiting their home as a child. Conversely, stably housed students reported higher amounts of positive family experiences than both precariously housed and homeless students. Taken together, these findings provide additional support for the hypothesis of this study: when there are differences among the housing groups, precariously housed and homeless students report more negative experiences than stably housed students.

Health (both mental and physical) as well as amount of stress differed among students with different housing experiences. Precariously housed and homeless students reported significantly more stressful events over the past six months as well as more mental health problems over the last two weeks. Depressive symptoms were some of the mental health problems that showed the greatest disparity among housing groups. Additionally, precariously housed students reported more physical health symptoms than housed students. While there was no difference between these two groups and the homeless group, it provides evidence that even students who are not faced with literal homelessness are at greater risk of negative outcomes than stably housed students. Additionally, stably housed students were less likely to endorse having poor health, in general, as well as not being able to see a doctor when they needed to. While there were no differences among the groups with regard to total risky sexual behaviors, the homeless were younger than the stably housed in terms of the age at first intercourse (averages of about 15 vs. 18 years, respectively). In the matched sample, the stably housed group engaged in fewer illegal behaviors than the other two housing groups. In the unmatched sample, only the homeless students engaged in more illegal behaviors than the stably housed group, while the precariously housed group did not significantly differ from either other group.

Seeking help and having various needs was assessed across different measures. Students with unstable housing were significantly more likely to utilize a variety of services including psychological services, shelters, and vocational training. The only services where there was not a significant difference among the housing groups were medical services and religious counseling. Looking at the measure of needs, precariously housed and homeless students were much more likely to rate needs as “Very Important” to them compared to housed students. They were also significantly more likely to report various needs as difficult to meet. On a positive note, all three groups of students felt they were able to get university services with ease and these services were important to them. All of this information suggests a level of willingness to seek services on the part of students who have housing instability; however, they do not see their needs for services as always being easy to fill, particularly with respect to services like job placement, free meals, and counseling.

Findings from the open-ended survey section of the study provided some insight into differences among stably housed, precariously housed, and homeless students. Precariously housed and homeless students were more likely to be concerned with finding housing and basic needs. With respect to barriers, unstably housed students were more likely to have concerns about their living environments and their health, including substance abuse concerns. Conversely, stably housed students did not see these as barriers but rather focused on “traditional” barriers to graduating college, things like time management and having success in classes. Stably housed students were also more likely to state that the university could help them with additional academic resources, whereas unstably housed students were more concerned with basic needs like housing. These three questions reveal a common theme that helps to explain a potential reason behind differences in academics among the different housing groups: stably housed students are not

focused on meeting basic needs so they are able to put more focus and attention toward their education, a luxury that is not always present for students with unstable housing.

Conclusions and Future Directions

Overall, the findings confirm one thing for sure: unstable housing has a negative impact on college students in many different domains of their lives. The hypothesis of this study was supported on most measures assessed. Several analyses indicated that homeless and precariously housed students differed significantly from stably housed students. These measures include educational outcomes, experiences of childhood abuse, recent stressful events, and physical health. When the groups differed significantly, there was not a single instance where stably housed students, on average, were reporting worse outcomes or more severe experiences than either of the unstably housed groups. The study also found relatively few differences between the two unstably housed groups, suggesting that precarious housing may be a problem for college students that is as serious as the ostensibly more severe experience of homelessness.

The findings from this study support that homeless and precariously housed students are at great risk as compared with stably housed students. This provides evidence that more attention needs to be directed at college undergraduates with unstable housing, so that the cycle of poverty may begin to diminish and these students may also be set up for academic and career success.

There are several limitations to the study that should be noted. The main limitation of Study 1 was corrected in Study 2: There was no comparison group of stably housed students to compare with the unstably housed. There were two notable limitations with respect to the measures in Study 1. First, open-ended questions were not added until toward the end of the study. It would have been ideal to have these data on all 30 participants. Additionally, study 1 lacked any substantial measures about educational outcomes. Both of these shortcomings were addressed in study 2.

Finally, both Study 1 and Study 2 were performed using a semi-structured interview. As such, the studies relied on self-report data which is frequently discussed as a methodological limitation because responses could be shaped by social desirability, poor memory, confusing wording, and other biases.

Now that there is a foundation of empirical information on the precariously housed student population, there are several directions future research could take. A study that measures the prevalence of student homelessness and precarious housing would be one direction. The present studies informed us about the needs and characteristics of homeless and precariously housed students, but told us nothing about the size of the populations. Replication studies would be an effective direction of study, particularly at different types of college campuses. This study focused on a four-year research university in an urban setting. It would be informative, for example, to examine colleges in rural settings and community colleges. Finally, once more studies are completed to form a basis of information, studies could evaluate the impact of various interventions assisting homeless and precariously housed students. Once the problem has been described it would make sense that the next step examines how the problem can be addressed.

APPENDIX: TABLES

Table 1*One-Way Analysis of Variance for Age*

Variable	Homeless (H)		Precariously Housed (P)		Stably Housed (S)		<i>F</i> (2,102)	<i>p</i>	Tukey's HSD
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>			
Age in Matched Sample	25.75	8.25	25.80	7.27	22.95	5.93	2.24	.11	
Age in Unmatched Sample	27.25	10.05	28.37	9.43	22.82	5.95	5.51	.01*	P>S

**p* value < .05

Note. In the column reporting Tukey's HSD post-hoc tests, the ">" sign indicates a significant mean difference ($p < .05$) and a comma indicates the lack of a significant difference.

Table 2*Chi-Square Test for Housing Group by Gender*

	Matched Sample	
	Male	Female
Homeless	8 (29%)	17 (22%)
Precariously Housed	6 (21%)	19 (24%)
Stably Housed	14 (50%)	43 (54%)
	Unmatched Sample	
	Male	Female
Homeless	9 (28%)	17 (21%)
Precariously Housed	8 (25%)	21 (26%)
Stably Housed	15 (50%)	43 (53%)

Note, Matched: $\chi^2 = 0.58$, $df = 2$; Unmatched: $\chi^2 = 0.69$, $df = 2$. Numbers in parentheses indicate column percentages.

Table 3*Chi-Square Test for Housing Group by Race*

Matched Sample			
	White	African American	Person of Color (Not African- American)
Homeless	4 (13%)	13 (32%)	8 (23%)
Precariously Housed	8 (26%)	11 (27%)	6 (17%)
Stably Housed	19 (61%)	17 (41%)	21 (60%)
Unmatched Sample			
	White	African American	Person of Color (Not African- American)
Homeless	4 (13%)	13 (30%)	9 (24%)
Precariously Housed	9 (28%)	13 (30%)	7 (19%)
Stably Housed	19 (59%)	18 (40%)	21 (57%)

Note, Matched: $\chi^2 = 5.29$, $df = 4$; $p = .26$; Unmatched: $\chi^2 = 4.92$, $df = 4$; $p = .29$. Numbers in parentheses indicate column percentages.

Table 4*One-Way Analysis of Variance of Number of Housing Sites and Jobs (Past Year)*

Matched Sample									
	Homeless		Precariously Housed		Stably Housed				Tukey's HSD
Variable	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>F</i> (2,104)	<i>p</i>	
Number of Housing Sites	5.28	2.21	3.96	2.15	1.46	0.63	59.95	<.01**	1 > 2 > 3
Number of Jobs	1.84	1.46	1.72	1.46	1.05	0.85	5.18	<.01**	1 > 3
Unmatched Sample									
	Homeless		Precariously Housed		Stably Housed				Tukey's HSD
Variable	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>F</i> (2,105)	<i>p</i>	
Number of Housing Sites	5.12	2.32	3.66	2.14	1.48	0.66	49.82	<.01**	1 > 2 > 3
Number of Jobs	1.81	1.44	1.62	1.49	1.09	0.88	3.94	.02*	1 > 3

*p value < .05; ** p value < .01

Table 5

One-Way Analysis of Variance of Responsibility and Extracurricular Activities by Housing Groups (Matched Sample)

Variable	Homeless		Precariously Housed		Stably Housed		F (2,104)	p	Tukey's HSD
	M	SD	M	SD	M	SD			
Responsibility Total	42.20	8.41	44.32	7.90	46.09	7.75	2.13	.12	
Hours Spent on Extracurricular	7.40	3.45	7.48	3.12	9.53	4.61	3.53	.03*	
Extracurricular Active Involvement	13.56	6.85	12.92	6.56	14.18	6.69	0.32	.73	

*p value < .05

Table 6

One-Way Analysis of Variance of Responsibility and Extracurricular Activities by Housing Groups (Unmatched Sample)

Variable	Homeless		Precariously Housed		Stably Housed		F (2,104)	p	Tukey's HSD
	M	SD	M	SD	M	SD			
Responsibility Total	41.77	8.52	43.59	7.66	46.33	7.78	3.27	.04*	1 < 3
Hours Spent on Extracurricular	7.73	3.78	7.21	3.08	9.47	4.59	3.56	.03*	2 < 3
Extracurricular Active Involvement	13.65	6.73	12.21	6.37	14.26	6.66	0.93	.39	

*p value < .05

Table 7*Chi-Square Test for Educational Experiences (Past Year)*

	Matched (N = 107)		Unmatched (N = 113)	
	χ^2	<i>p</i>	χ^2	<i>p</i>
Difficulty of School	10.14	.43	10.67	.38
Grades	19.57	.03*	21.15	.02*
Attendance	12.08	.06	11.51	.07

*p value < .05

Table 8*Chi-Square Test for Parent Education*

	χ^2	<i>p</i>
Mother's Education	8.58	.20
Father's Education	9.68	.14

*p value < .05

Table 9*T-Tests of Funding for College by Housing Group*

	Unstable Housing (N = 21)		Stable Housing (N = 57)		<i>F</i>	<i>t</i>	<i>p</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>			
Percentage Loans	51.90	39.92	42.54	39.24	0.16	0.93	.69
Percentage Scholarships	25.71	37.59	22.33	29.75	3.57	0.41	.06
Percentage Savings	1.90	5.12	4.86	13.46	4.26	-0.98	.04*
Percentage Parents, Guardians, or Other Relatives	5.71	21.81	26.04	36.28	19.05	-2.41	<.01**
Percentage of Other Funding	14.76	31.40	5.72	20.94	6.21	1.47	.02*

*p value < .05; ** p value < .01

Table 10*T-Tests for GPA and Casey Skills by Housing Group*

	Unstable Housing (<i>N</i> = 25)		Stable Housing (<i>N</i> = 58)		<i>F</i>	<i>t</i>	<i>p</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>			
Grade Point Average	3.25	0.50	3.26	0.47	0.43	-.07	.52
Career and Education Planning	3.90	0.94	4.14	0.69	3.10	-1.26	.08
Study and Technology	4.14	0.51	4.39	0.46	0.95	-2.26	.33
Motivation and Participation	4.11	0.73	4.39	0.54	4.86	-1.88	.03*
School or Program Supports	3.90	0.89	4.28	0.50	12.25	-2.48	<.01**
Health	3.75	0.84	4.33	0.57	2.43	-3.62	.12
Financial Aid	3.61	0.64	4.08	0.63	0.13	-3.10	.72
	3.13	0.97	3.60	0.82	0.76	-2.28	.39

**p* value < .05; ** *p* value < .01

Table 11*Chi-Square Analyses for the Inventory of Childhood Events*

	Matched (<i>N</i> = 107)		Unmatched (<i>N</i> = 113)	
	χ^2	<i>p</i>	χ^2	<i>P</i>
Lived with Biological Parents	19.62	<.01**	19.27	<.01**
Foster Care	4.22	.12	3.71	.16
Death of Parental Figures	0.29	.86	1.29	.52
Orphanage/Group Home	6.51	.04*	5.71	.06
Homeless with Parents	10.74	<.01**	7.72	.02*
Physically Abused	21.58	<.01**	20.43	<.01**
Sexually Abused	12.33	.14	13.89	.09
Neglected	37.55	<.01**	35.99	<.01**
Social Services Visited Home	22.69	<.01**	19.27	.01*

**p* value < .05; ** *p* value < .01

Table 12

One-Way Analysis of Variance of Subscales from the Inventory of Childhood Events (Matched Sample)

Variable	Homeless		Precariously Housed		Stably Housed		<i>F</i> (2,99)	<i>p</i>	Tukey's HSD
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>			
Positive Family	2.25	0.70	2.07	0.56	2.89	0.57	19.19	<.01**	S > H,P
Punitive Parents	1.29	0.66	1.16	0.63	1.05	0.82	0.91	.41	
Disorganized Home	0.77	0.79	0.93	0.83	0.31	0.37	9.96	<.01**	S > H,P

**p* value < .05; ** *p* value < .01

Table 13

One-Way Analysis of Variance of Subscales from the Inventory of Childhood Events (Unmatched Sample)

Variable	Homeless		Precariously Housed		Stably Housed		<i>F</i> (2,104)	<i>p</i>	Tukey's HSD
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>			
Positive Family	2.27	0.70	2.14	0.59	2.91	0.57	17.78	<.01**	S > H,P
Punitive Parents	1.29	0.65	1.08	0.64	1.06	0.82	.86	.43	
Disorganized Home	0.77	0.77	0.89	0.79	0.31	0.36	10.30	<.01**	H,P > S

**p* value < .05; ** *p* value < .01

Table 14*One-Way Analysis of Variance of Subscales from Family Environment Scale (Matched Sample)*

Variable	Homeless		Precariously Housed		Stably Housed		<i>F</i> (2,76)	<i>p</i>	Tukey's HSD
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>			
Expressivity	2.78	0.35	2.73	0.29	2.91	0.30	2.47	.09	
Conflict	2.43	0.43	2.49	0.29	2.28	0.34	2.63	.08	
Independence	2.72	0.34	2.85	0.37	2.67	0.24	2.36	.10	
Cohesion	2.80	0.32	2.88	0.23	2.77	0.21	1.36	.26	

p* value < .05; ** *p* value < .01Table 15***T-Tests for Family Environment Subscales with Two Housing Groups (Matched Sample)*

	Unstable Housing (<i>N</i> = 30)		Stable Housing (<i>N</i> = 49)		<i>F</i>	<i>t</i>	<i>p</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>			
Expressivity	2.75	0.32	2.31	0.30	0.01	-2.19	.96
Conflict	2.46	0.36	2.28	0.34	0.08	2.25	.78
Independence	2.79	0.36	2.67	0.24	5.87	1.86	.02*
Cohesion	2.85	0.27	2.77	0.21	2.55	1.35	.11

**p* value < .05; ** *p* value < .01

Table 16

One-Way Analysis of Variance of Subscales from Family Environment Scale (Unmatched Sample)

Variable	Homeless		Precariously Housed		Stably Housed		<i>F</i> (2,81)	<i>p</i>	Tukey's HSD
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>			
Expressivity	2.78	0.34	2.76	0.29	2.91	0.29	2.08	.13	
Conflict	2.44	0.42	2.50	0.43	2.28	0.34	2.87	.06	
Independence	2.71	0.34	2.88	0.38	2.67	0.24	3.89	.02*	2 > 3
Cohesion	2.83	0.33	2.87	0.22	2.77	0.21	1.46	.24	

*p value < .05; ** p value < .01

Table 17

T-Tests for Family Environment Subscales with Two Housing Groups (Unmatched Sample)

	Unstable Housing (<i>N</i> = 34)		Stable Housing (<i>N</i> = 50)		<i>F</i>	<i>t</i>	<i>p</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>			
Expressivity	2.77	0.31	2.91	0.29	0.01	-2.05	.92
Conflict	2.47	0.42	2.28	0.34	0.91	2.35	.34
Independence	2.81	0.37	2.67	0.24	7.29	2.17	.01*
Cohesion	2.85	0.27	2.77	0.21	1.79	1.64	.18

*p value < .05; ** p value < .01

Table 18*Chi-Square for Conflict Tactics Scale (Ever Before)*

	Matched (<i>N</i> = 107)		Unmatched (<i>N</i> = 113)	
	χ^2	<i>p</i>	χ^2	<i>p</i>
Subject Negotiation	6.77	.03*	7.83	0.2*
Romantic Partner Negotiation	4.24	.12	5.17	.08
Subject Verbal Aggression	11.91	<.01**	12.04	<.01**
Romantic Partner Verbal Aggression	9.86	<.01**	10.19	<.01**
Subject Physical Aggression	6.32	.04*	6.08	.05
Romantic Partner Physical Aggression	7.62	.02*	8.26	.02*
Subject Injury	17.59	<.01**	17.04	<.01**
Romantic Partner Injury	9.16	.01*	6.20	.05

**p* value < .05; ** *p* value < .01

Table 19

One-Way Analysis of Variance of Subscales from the Conflict Tactics Scale in the Past Year (Matched Sample)

Variable	Homeless		Precariously Housed		Stably Housed		<i>F</i> (2,78)	<i>p</i>	Tukey's HSD
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>			
Subject Negotiation	19.00	11.75	20.90	9.80	23.05	9.84	1.09	.34	
Romantic Partner Negotiation	3.01	2.05	3.29	1.81	3.61	1.67	0.77	.47	
Subject Verbal Aggression	1.56	1.77	1.29	1.04	0.88	0.81	2.44	.09	
Romantic Partner Verbal Aggression	1.29	1.63	1.09	1.09	0.79	0.83	1.39	.25	
Subject Physical Aggression	0.24	0.49	0.26	0.42	0.06	0.13	3.12	.05	
Romantic Partner Physical Aggression	0.34	0.79	0.25	0.46	0.06	0.11	2.75	.07	
Subject Injury	0.17	0.37	0.19	0.43	0.02	0.08	3.17	.05	
Romantic Partner Injury	0.09	0.24	0.17	0.39	0.03	0.16	1.87	.16	

*p value < .05; ** p value < .01

Table 20

One-Way Analysis of Variance of Subscales from the Conflict Tactics Scale in the Past Year (Unmatched Sample)

Variable	Homeless		Precariously Housed		Stably Housed		<i>F</i> (2,78)	<i>p</i>	Tukey's HSD
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>			
Subject Negotiation	18.35	11.89	19.44	10.41	23.27	9.79	1.88	.16	
Romantic Partner Negotiation	2.91	2.07	2.92	1.88	3.61	1.65	1.53	.22	
Subject Verbal Aggression	1.49	1.76	1.22	0.98	0.93	0.86	1.68	.19	
Romantic Partner Verbal Aggression	1.24	1.61	1.07	1.05	0.84	0.86	0.95	.39	
Subject Physical Aggression	0.23	0.48	0.22	0.39	0.06	0.13	2.69	.07	
Romantic Partner Physical Aggression	0.32	0.77	0.26	0.44	0.06	0.11	2.85	.06	
Subject Injury	0.17	0.36	0.17	0.39	0.02	0.08	3.07	.05	
Romantic Partner Injury	0.09	0.24	0.14	0.36	0.06	0.22	0.73	.49	

**p* value < .05; ** *p* value < .01

Table 21*T-Tests for the Network Orientation Scale*

	Unstable Housing (N = 21)		Stable Housing (N = 57)		F	t	p
	M	SD	M	SD			
NOS Total	44.29	4.39	44.49	3.55	1.29	-.52	.26

*p value < .05; ** p value < .01

Table 22*One-Way Analysis of Variance of the Brief Symptom Inventory (Matched Sample)*

Variable	Homeless		Precariously Housed		Stably Housed		F (2,105)	p	Tukey's HSD
	M	SD	M	SD	M	SD			
Somatization	53.16	11.17	50.79	9.90	48.28	9.28	2.22	.11	
Obsessive-Compulsive	50.21	9.21	53.47	11.33	48.45	9.53	2.18	.12	
Interpersonal Sensitivity	52.97	11.09	53.16	11.94	47.37	7.81	4.56	.01*	H,P > S
Depression	52.16	11.46	54.59	10.87	46.99	7.82	6.34	<.01**	P > S
Anxiety	52.43	12.51	52.51	10.38	47.83	8.11	2.97	.06	
Hostility	52.55	12.01	50.55	8.43	48.64	9.59	1.39	.25	
Phobia	52.35	12.19	51.58	11.93	48.28	7.62	1.88	.16	
Paranoia	52.29	12.55	53.18	9.28	47.66	8.51	3.60	.03*	
Psychoticism	54.86	14.07	50.29	7.08	47.74	8.19	4.72	.01*	H > S
General Severity Index	53.33	11.92	53.06	9.77	47.20	8.37	5.07	<.01**	H,P > S

*p value < .05; ** p value < .01

Table 23*One-Way Analysis of Variance of the Brief Symptom Inventory (Unmatched Sample)*

Variable	Homeless		Precariously Housed		Stably Housed		<i>F</i> (2,104)	<i>p</i>	Tukey's HSD
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>			
Somatization	52.48	10.25	51.63	11.91	48.09	8.58	2.27	.11	
Obsessive- Compulsive	49.80	8.96	53.74	11.58	48.28	9.28	2.91	.06	P > S
Interpersonal Sensitivity	52.96	10.87	52.63	12.04	47.40	7.74	4.30	.02	H > S
Depression	51.63	11.04	55.07	10.94	46.68	7.63	8.14	<.01	P > S
Anxiety	51.51	11.53	53.57	11.92	47.59	7.48	3.95	.02	P > S
Hostility	52.31	12.01	50.73	8.51	48.60	9.64	1.34	.27	
Phobia	51.41	10.73	52.11	13.68	48.31	6.92	1.76	.18	
Paranoia	51.72	12.09	53.44	10.28	47.57	8.20	3.96	.02	P > S
Psychoticism	54.04	13.36	51.34	9.27	47.52	7.83	4.42	.01	H > S
General Severity Index	52.49	11.18	53.86	11.19	47.03	7.85	5.81	<.01	H,P > S

**p* value < .05; ** *p* value < .01

Table 24

One-Way Analysis of Variance of Illegal Behaviors, Physical Symptoms, and Stressful Events (Matched Sample)

Variable	Homeless		Precariously Housed		Stably Housed		<i>F</i> (2,104)	<i>p</i>	Tukey's HSD
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>			
Illegal Behaviors	4.56	4.62	3.76	3.06	1.98	1.84	7.54	<.01	H,P > S
Physical Health Symptoms	12.40	7.64	13.96	7.01	9.68	6.96	3.49	.03	P > S
Stressful Events	21.32	14.42	35.44	21.08	8.56	5.49	38.84	<.01	P > H > S

**p* value < .05; ** *p* value < .01

Table 25

One-Way Analysis of Variance of Illegal Behaviors, Physical Symptoms, and Stressful Events (Unmatched Sample)

Variable	Homeless		Precariously Housed		Stably Housed		<i>F</i> (2,110)	<i>p</i>	Tukey's HSD
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>			
Illegal Behaviors	4.42	4.58	3.54	2.99	2.02	1.84	6.63	<.01	H > S
Physical Health Symptoms	11.96	7.81	13.72	8.00	9.55	7.00	3.22	.04	P > S
Stressful Events	16.87	3.31	21.13	3.92	5.65	0.74	34.01	<.01	P > H > S

**p* value < .05; ** *p* value < .01

Table 26*Chi-Square Test for Selected Dichotomous Items from the Physical Health Symptom Count*

	Matched (N = 107)		Unmatched (N = 113)	
	χ^2	p	χ^2	p
Poor Health	12.18	<.01**	13.51	<.01**
Unable to See Doctor but Needed to	16.97	<.01**	16.07	<.01**

*p value < .05; ** p value < .01

Table 27*One-Way Analysis of Variance of Risky Sexual Behaviors (Matched Sample)*

Variable	Homeless		Precariously Housed		Stably Housed		F (2, 63)	p	Tukey's HSD
	M	SD	M	SD	M	SD			
Risky Sexual Behaviors	9.28	3.68	10.12	3.10	9.00	2.46	0.77	.47	
Age at First Sexual Encounter	15.00	3.34	16.33	2.95	17.70	3.64	3.99	.02*	S > H

*p value < .05; ** p value < .01

Table 28*One-Way Analysis of Variance of Risky Sexual Behaviors (Unmatched Sample)*

Variable	Homeless		Precariously Housed		Stably Housed		F (2,64)	p	Tukey's HSD
	M	SD	M	SD	M	SD			
Risky Sexual Behaviors	12.00	2.47	11.94	2.58	11.26	2.46	0.68	.51	
Age at First Sexual Encounter	15.14	3.32	16.45	2.86	17.70	3.64	3.75	.03*	S > H

*p value < .05; ** p value < .01

Table 29*One-Way Analysis of Variance of Importance of Needs (Matched Sample)*

	Homeless		Precariously Housed		Stably Housed		<i>F</i> (2,104)	<i>p</i>	Tukey's HSD
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>			
Affordable Housing	4.72	.84	4.56	.71	2.79	1.75	23.72	<.01**	H,P > S
Free Meals	2.60	1.47	2.72	1.34	1.96	1.34	3.48	.03*	
Short Term Shelter	2.44	1.42	2.00	1.44	1.61	1.26	3.38	.04*	H > S
Transitional Housing	2.40	1.58	2.08	1.53	1.63	1.26	2.82	.06	
Job Placement	4.12	1.24	3.32	1.75	2.84	1.66	5.63	<.01**	H > S
Job Training	3.92	1.15	2.84	1.70	3.09	1.54	3.75	.03*	H > P
Getting Public Benefits	2.48	1.58	3.16	1.59	2.07	1.37	4.75	.01*	P > S
Assistance with Budgeting	2.84	1.72	3.00	1.38	2.42	1.49	1.49	.23	
Transportation	3.68	1.77	3.28	1.51	2.75	1.64	2.97	.06	
Parenting Training	2.12	1.54	1.48	1.23	1.88	1.45	1.30	.28	
Available Child Care	1.88	1.48	2.04	1.74	1.89	1.58	0.09	.92	
Individual Counseling	2.96	1.62	2.48	1.53	2.05	1.37	3.42	.04	H > S
Family Counseling	2.32	1.70	2.48	1.64	1.84	1.32	1.94	.15	
Drug/Alcohol Treatment	2.04	1.46	1.32	.99	1.79	1.49	1.79	.17	
Case Management	1.84	1.46	1.60	1.32	1.70	1.36	0.19	.83	
Mental Health Care	2.36	1.47	2.40	1.63	2.04	1.55	0.66	.52	
Life Skills Training	2.72	1.77	2.76	1.54	2.56	1.51	0.17	.84	
Furthering Education	4.88	.44	4.40	.76	4.47	.97	2.65	.08	
Increasing English Fluency	2.13	1.73	1.76	1.56	1.86	1.43	0.38	.68	
Medical/Dental Services	4.08	1.38	3.80	1.38	3.61	1.41	0.97	.38	
Legal Assistance	2.64	1.80	2.32	1.55	2.23	1.46	0.61	.55	
Support Groups	2.80	1.41	2.04	1.06	2.23	1.39	2.33	.10	
Information on Agency Services	3.46	1.38	2.72	1.59	2.11	1.41	7.57	<.01**	H > S
Health Care Information	3.50	1.32	3.00	1.50	3.26	1.58	0.68	.51	
Improving Physical Safety	3.04	1.57	3.44	1.53	3.46	1.58	0.63	.53	
University's Academic Services	4.48	.71	4.00	1.00	3.96	1.18	2.23	.11	
University's General Services	4.20	.96	3.72	1.17	3.77	1.21	1.45	.24	

**p* value < .05; ** *p* value < .01

Table 30*One-Way Analysis of Variance of Importance of Needs (Unmatched Sample)*

	Homeless		Precariously Housed		Stably Housed		<i>F</i> (2,109)	<i>p</i>	Tukey's HSD
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>			
Permanent Housing	4.73	.83	4.57	.69	2.83	1.76	24.58	<.01**	H,P > S
Free Meals	2.65	1.47	2.68	1.42	2.02	1.38	2.97	.06	
Short Term Shelter	2.42	1.39	2.04	1.50	1.67	1.33	2.72	.07	
Transitional Housing	2.38	1.55	2.25	1.65	1.69	1.33	2.60	.08	
Job Placement	4.15	1.22	3.29	1.74	2.88	1.67	5.73	<.01**	H > S
Job Training	3.92	1.13	2.86	1.69	3.12	1.55	3.79	.03*	H > P
Getting Public Benefits	2.46	1.56	3.04	1.62	2.12	1.42	3.52	.03*	P > S
Assistance with Budgeting	2.81	1.69	2.93	1.46	2.47	1.51	1.00	.37	
Transportation	3.73	1.76	3.29	1.54	2.79	1.65	3.06	.05	H > S
Parenting Training	2.08	1.52	1.54	1.26	1.93	1.49	1.06	.35	
Available Child Care	1.85	1.46	2.04	1.71	1.95	1.62	0.09	.91	
Individual Counseling	2.92	1.59	2.50	1.50	2.10	1.41	2.86	.06	
Family Counseling	2.31	1.67	2.54	1.62	1.90	1.37	1.88	.16	
Drug/Alcohol Treatment	2.00	1.44	1.39	1.07	1.84	1.53	1.43	.24	
Case Management	1.85	1.43	1.64	1.34	1.76	1.42	0.14	.87	
Mental Health Care	2.31	1.46	2.43	1.64	2.09	1.58	0.49	.61	
Life Skills Training	2.69	1.74	2.71	1.58	2.60	1.53	0.06	.95	
Furthering Education	4.88	.43	4.46	.74	4.48	.96	2.52	.09	
Increasing English Fluency	2.24	1.79	1.82	1.61	1.91	1.48	0.52	.59	
Medical/Dental Services	4.12	1.37	3.64	1.52	3.64	1.41	1.11	.33	
Legal Assistance	2.62	1.77	2.39	1.57	2.28	1.49	0.42	.66	
Support Groups	2.81	1.39	1.93	1.05	2.28	1.42	2.98	.05	H > P
Information on Agency Services	3.44	1.36	2.64	1.55	2.16	1.45	6.88	<.01**	H > S
Health Care Information	3.48	1.29	2.93	1.49	3.29	1.58	0.96	.39	
Improving Physical Safety	3.04	1.54	3.36	1.57	3.48	1.58	0.69	.50	
University's Academic Services	4.46	.71	4.00	.98	3.98	1.18	2.08	.13	
University's General Services	4.19	.94	3.71	1.12	3.79	1.21	1.46	.24	

**p* value < .05; ** *p* value < .01

Table 31*One-Way Analysis of Variance of Ease of Meeting Needs (Matched Sample)*

	Homeless		Precariously Housed		Stably Housed		<i>F</i> (2,104)	<i>p</i>	Tukey's HSD
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>			
Permanent Housing	1.56	1.12	1.48	0.92	1.51	1.63	0.02	.98	
Free Meals	2.24	1.42	1.36	1.25	1.00	1.50	6.55	<.01**	H > S
Short Term Shelter	1.92	1.49	1.00	1.56	0.44	1.07	11.34	<.01**	H,P > S
Transitional Housing	1.68	1.44	0.64	1.19	0.25	0.69	16.96	<.01**	H > P,S
Job Placement	1.80	1.26	1.32	1.18	1.26	1.48	1.39	.25	
Job Training	2.16	1.43	1.32	1.35	1.58	1.59	2.11	.13	
Getting Public Benefits	2.16	1.25	1.32	1.15	0.61	0.99	17.82	<.01**	H > P > S
Assistance with Budgeting	1.88	1.48	1.96	1.39	1.32	1.32	2.07	.13	
Transportation	2.36	1.22	1.84	1.25	1.91	1.74	0.93	.39	
Parenting Training	1.36	1.87	0.28	0.79	0.47	1.21	5.11	<.01**	H > S > P
Available Child Care	0.96	1.54	0.44	0.92	0.60	1.29	1.12	.33	
Individual Counseling	2.44	1.58	1.72	1.65	1.21	1.59	5.19	<.01**	H > S
Family Counseling	2.00	1.66	1.04	1.39	0.96	1.45	4.44	.01*	H > S
Drug/Alcohol Treatment	1.72	1.75	0.48	1.23	0.51	1.17	7.99	<.01**	H > P,S
Case Management	1.20	1.41	0.64	1.19	0.39	1.01	4.30	.02*	H > S
Mental Health Care	2.20	1.63	1.52	1.66	0.98	1.55	5.16	<.01**	H > S
Life Skills Training	1.96	1.57	1.92	1.58	1.56	1.66	0.73	.48	
Furthering Education	3.24	1.01	2.88	0.88	2.70	1.19	2.13	.12	
Increasing English Fluency	1.40	1.85	0.80	1.53	0.91	1.49	1.08	.34	
Medical/Dental Services	2.64	1.08	2.12	1.39	2.47	1.55	0.90	.41	
Legal Assistance	1.88	1.72	1.20	1.26	1.33	1.69	1.34	.27	
Support Groups	1.68	1.57	1.76	1.62	1.51	1.71	0.23	.79	
Information on Agency Services	2.00	1.56	1.56	1.42	1.11	1.67	2.89	.06	
Health Care Information	2.32	1.31	2.28	1.40	2.79	1.49	1.57	.21	
Improving Physical Safety	2.12	1.33	2.08	1.32	2.04	1.65	0.03	.97	
University's Academic Services	3.16	1.14	3.12	1.09	3.16	1.19	0.01	.99	
University's General Services	3.36	1.04	2.88	1.30	3.12	1.19	1.02	.36	

**p* value < .05; ** *p* value < .01

Table 32*One-Way Analysis of Variance of Ease of Meeting Needs (Unmatched Sample)*

	Homeless		Precariously Housed		Stably Housed		<i>F</i> (2,109)	<i>p</i>	Tukey's HSD
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>			
Permanent Housing	1.58	1.10	1.57	0.99	1.50	1.61	0.04	.96	
Free Meals	2.23	1.39	1.39	1.32	1.02	1.49	6.48	<.01**	H > S
Short Term Shelter	1.92	1.47	0.96	1.50	0.47	1.08	11.48	<.01**	H > P > S
Transitional Housing	1.69	1.41	0.64	1.16	0.28	0.72	17.04	<.01**	H > P > S
Job Placement	1.77	1.24	1.21	1.17	1.28	1.47	1.46	.24	H > P,S
Job Training	2.15	1.41	1.21	1.32	1.59	1.58	2.77	.07	
Getting Public Benefits	2.15	1.22	1.21	1.13	0.64	1.00	17.46	<.01**	H > P,S
Assistance with Budgeting	1.85	1.46	1.96	1.43	1.33	1.61	2.05	.13	
Transportation	2.31	1.23	1.86	1.29	1.91	1.72	0.75	.48	
Parenting Training	1.38	1.84	0.25	0.75	0.50	1.22	5.87	<.01**	H > P,S
Available Child Care	1.00	1.52	0.39	0.88	0.59	1.29	1.65	.19	
Individual Counseling	2.42	1.55	1.64	1.59	1.22	1.58	5.20	<.01**	H > S
Family Counseling	2.00	1.63	1.04	1.35	0.98	1.45	4.66	.01*	H > P,S
Drug/Alcohol Treatment	1.65	1.74	0.57	1.35	0.55	1.20	6.31	<.01**	H > P,S
Case Management	1.15	1.41	0.57	1.14	0.41	1.03	3.75	.03*	H > S
Mental Health Care	2.12	1.66	1.61	1.69	1.02	1.56	4.40	.02*	H > S
Life Skills Training	2.00	1.55	1.96	1.59	1.59	1.66	0.84	.44	
Furthering Education	3.19	1.02	2.93	0.86	2.69	1.19	2.02	.14	
Increasing English Fluency	1.42	1.82	0.71	1.46	0.90	1.48	1.54	.22	
Medical/Dental Services	2.58	1.10	2.07	1.44	2.47	1.54	1.01	.37	
Legal Assistance	1.88	1.68	1.25	1.32	1.36	1.69	1.26	.29	
Support Groups	1.69	1.54	1.71	1.58	1.52	1.69	0.18	.83	
Information on Agency Services	2.00	1.52	1.57	1.45	1.12	1.66	2.93	.06	
Health Care Information	2.31	1.29	2.29	1.44	2.78	1.48	1.59	.21	
Improving Physical Safety	2.12	1.31	2.11	1.37	2.03	1.63	0.04	.96	
University's Academic Services	3.12	1.14	3.14	1.04	3.17	1.19	0.23	.98	
University's General Services	3.31	1.05	2.93	1.25	3.14	1.19	0.71	.49	

**p* value < .05; ** *p* value < .01

Table 33*Chi-Square Test for Treatment Utilization*

	Matched (N = 107)		Unmatched (N = 113)	
	χ^2	p	χ^2	p
Shelter	35.95	<.01**	31.47	<.01**
Housing with Friend	75.25	<.01**	74.25	<.01**
Street Setting	23.58	<.01**	24.47	<.01**
Outreach Center	6.69	.04*	4.21	.12
Soup Kitchen	14.48	<.01**	14.54	<.01**
Medical Care (after age 18)	1.64	.80	2.41	0.66
Psychological Care	18.39	<.01**	20.12	<.01**
Self-Help	12.69	<.01**	12.28	<.01**
Vocational Training	16.22	<.01**	16.52	<.01**
Transportation (Bus Passes, Shuttle, etc.)	14.59	<.01**	12.79	<.01**
Childcare	8.08	.02*	8.63	.01*
Religious Counseling	0.75	.69	1.45	.48
Family Independence Agency	17.09	<.01**	15.22	<.01**

*p value < .05; ** p value < .01

Table 34*Chi-Square for Barriers to Graduation*

Barriers	χ^2	<i>p</i>
Money	0.45	.79
Relationships	5.09	.08
Living Environment	18.51	<.01**
Time Management	2.17	.34
Classes and School	2.85	.24
Health	6.27	.04*

*p value < .05; ** p value < .01

Table 35*Chi-Square for Current Needs*

Barriers	χ^2	<i>p</i>
Housing and Basic Needs	14.97	<.01**
Transportation	1.23	.54
Extracurricular	1.84	.39
Money and Finances	1.72	.42
Health	2.05	.36
Educational Assistance	10.06	<.01**
Motivation and Internal Characteristics	0.93	.63

*p value < .05; ** p value < .01

Table 36*Chi-Square for How the University Could Help*

Barriers	χ^2	<i>p</i>
Housing and Basic Needs	8.66	.01*
Finances and Money	1.19	.55
Health	0.17	.92
Future Career	0.98	.61
Academic	6.51	.04*
Campus Climate	0.35	.84

*p value < .05; ** p value < .01

Table 37*Frequency Table for Reasons Homeless (N = 32)*

Reason	Yes	%	No	%
Family Conflict	16	50	16	50%
Financial Reasons	11	34.4	21	65.6
Lack of Support	4	12.5	28	87.5
Personal Characteristics	7	21.9	25	78.1

Table 38*Frequency Table for What Would Have Been Helpful During Periods of Unstable Housing (N = 32)*

	Yes	%	No	%
Help with Institutional Barriers	3	9.4	29	90.6
Housing and Basic Needs	13	40.6	19	59.4
Money and Other Resources	13	40.6	19	59.4
Support	7	21.9	25	78.1
Internal Changes	3	9.4	29	90.6

Table 39*Frequency Table for Descriptions of Precarious Housing Situations (N = 32)*

Situation	Yes	%	No	%
Shelter	4	12.5	28	87.5
“Couch Surfing”	12	37.5	20	62.5
Living Beyond One’s Means	4	12.5	28	87.5
Uncomfortable and/or Overcrowded Living Situation	6	18.8	26	81.3
Staying on Campus or At Work for as Long as Possible	1	3.1	31	96.9
Staying in a Car, Park, Hotel, etc.	5	15.6	27	84.4

*p value < .05; ** p value < .01

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ABSTRACT**THE PREVALENCE AND NEEDS OF HOMELESS UNDERGRADUATES AT A
LARGE, URBAN UNIVERSITY**

by

CORISSA CARLSON**August 2017****Advisor:** Dr. Paul Toro**Major:** Psychology (Clinical)**Degree:** Doctor of Philosophy

Empirical research has been limited with respect to homelessness among college undergraduates. Research on educational outcomes has been limited to K-12th grade, but what is known points to worse outcomes for people who are homeless. The National Coalition for the Homeless (2014) reported that 75% of homeless or runaway teenagers drop out of school. Furthermore, while federal funding through the McKinney-Vento Homeless Assistance Act has been able to help younger students, funding for homeless youth considering or attending college is minimal. Recently, some more attention has been given to this issue through the College Cost Reduction Access Act (CCRAA) which allows unaccompanied homeless youth to be considered independent students when they file for federal financial aid. FAFSA data from 2013, the first time students were asked if they were homeless, noted that more than 30,000 students had answered yes (Garrick, 2014). However, the same article pointed out that many students would be reluctant to admit homelessness or they may not see their situation as being homeless (Garrick, 2014).

The current study aimed to first describe a sample of college undergraduates who had any experience of homelessness or precarious housing in the previous year ($N = 30$), then the study

compared an additional sample of homeless or precariously housed undergraduates to a group of students with stable housing ($N = 113$). Overall, the findings confirm one thing for sure: unstable housing has a negative impact on college students in many different domains of their lives. Several analyses indicated that homeless and precariously housed students differed significantly from stably housed students with respect to educational outcomes, physical health, recent stressful events, etc.

The current study provides evidence that more attention needs to be directed at college undergraduates with unstable housing, so that the cycle of poverty may begin to diminish and these students may also be set up for academic and career success. Hopefully, the findings from this study allow for further exploration of homeless undergraduates including learning what the prevalence of this problem is as well as how it can be effectively addressed.

AUTOBIOGRAPHICAL STATEMENT

Corissa Carlson was raised in Flint, Michigan. She went on to the University of Michigan where she earned her bachelor's degree in psychology through the honors program. She completed an honors thesis about reality television and the role it plays in relational aggression among adolescents with Dr. L. Monique Ward, a developmental psychologist. Throughout her undergraduate career Corissa was heavily involved in the Program on Intergroup Relations, a social justice education program. Corissa was then accepted to Wayne State University (WSU) working with Dr. Paul Toro in the Community Research Group.

As a graduate student, Corissa continued to develop her interests in research and clinical work and remained active in social justice issues. She continued to seek out new research opportunities while remaining active in the Community Research Group. She became especially involved in research involving low-income pregnant women who were on methadone maintenance treatment. Clinically, Corissa spent a year developing her interest in forensic psychology at a practicum through the Center for Forensic Psychiatry, working with people who had severe and persistent mental illness within the legal system. She also spent two years working within a methadone clinic, specifically focusing on work with women who were pregnant or mothers. Corissa will be starting her pre-doctoral internship at Yale University (New Haven, CT) in July and plans to continue working with marginalized groups.